

**European Association  
of Establishments for Veterinary Education**



**VISITATION REPORT**

**To the Faculty of Veterinary Medicine, University of Liège, Belgium**

**On: 13 – 17 May 2019**

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## **Introduction**

### **Brief history of the Establishment and of its previous ESEVT Visitations**

The Faculty of Veterinary Medicine (FMV) is over 180 years old having been established in Brussels in 1836. After being integrated during 1969 into the University of Liège (ULiège), the Establishment moved to its present location in Sart Tilman, Liège in 1993.

Politically, the French speaking and Dutch speaking communities in Belgium separated, and then the responsibility for Higher Education in the French speaking part of Belgium fell to the Wallonia-Brussels Federation (FWB).

One of the main edicts that the FWB promulgated was to promote internal cooperation and synergy between the different higher education Establishments and so improve the teaching quality between such Establishments. As a result of such an approach, the veterinary medicine education programme in Belgium, which lasts for 6 years (360 credits), the first 180 credits result in a Bachelor's degree which is organised by four universities (ULiège, UNamur, UCLouvain and ULB). The second degree is the Master's in veterinary medicine consisting of 180 credits which leads to a professional degree termed Doctor in veterinary medicine. This second degree is only organised in the FMV of Liège.

Another major factor to be considered at the FMV concerns the large number of French students who come to study in French-speaking Belgium, including for veterinary medicine. The ruling that within Belgium there is free access to higher education, has led to the Bachelor's being organised in four locations (including Liège). As a result of successfully completing their Bachelor's degree, a plethora of students now wished to complete the Master's veterinary programme organised by ULiège. This plethora has seriously threatened the quality of clinical training, due firstly to lack of staff to manage the vast cohort of students and then the finite number of clinical cases. The ULiège, supported by the 3 other Establishments organising the bachelor's degree, has repetitively and unsuccessfully pressured the FWB government to issue decrees to control this surge/excess of students. However, currently a decree has been made to limit the number of non-resident students to 20%. In addition, since 2016, competitive exams have been put in place at the end of the first year of Bachelor studies to limit to 276 the number of students admitted each year to the Bachelor's second year for the whole FWB. However, it will take some years before the positive effects of these two decisions will be seen at the master's degree level.

### **Previous ESEVT Visitation**

The FMV was last visited by ESEVT in 2009 and as a result two major deficiencies were identified by ECOVE:

1. An Inadequate necropsy room
2. Lack of adequate isolation facilities (small animals) and isolation facilities in general (large animals)

In addition to the two major deficiencies, four minor deficiencies were identified:

1. Lack of a common adequate patient recording system
2. Lack of a steering group for the four Establishments
3. Lack of adequate teaching and training in milk, milk products and fish
4. Lack of compliance with EU-legislation in housing animals on the experimental farm

## **FINAL REPORT AS ISSUED BY ECOVE ON 11 DECEMBER 2019**

These conclusions by ECOVE, as well as the discussions with the visitation experts, has resulted in the following developments at FMV which are summarised in the current SER:

- The creation of a “Faculty Biosecurity Unit”, with the mission to reorganise of the entire faculty in order to improve biosecurity for students and teaching activities (autopsy access and labs, labs); creation of an on-line biosecurity course available to all students in veterinary medicine; financial support for personal protection equipment
- New isolation units for contagious small and large animals
- The creation of a steering committee gathering academic staff members from the 4 Establishments organising the bachelor’s programmes in veterinary sciences in the FWB
- A new educational orientation and new statutes given to FEPEX (experimental farm)
- A pilot unit for agro-food processing under BSL2 biosecurity status
- Students admission depending on the results of a competitive entrance exam at the end of the first year
- A new management system of the CVU (including a centralised computerised recording and archiving system)
- A new companion animal clinic
- The creation of the "Fundamental and Applied Research for Animals & Health" (FARAH) research centre;
- The introduction of a new curriculum (Bachelor’s and Master’s) in 2015-2016
- The creation of a skills lab. The skills lab includes several dogs, cats, calf, cow and horse full-size and realistic manikins, as well as numerous self-made anatomical pieces. This allows the students to have a risk-free hands-on experience in practical simulation training (currently included in the preclinical activities)

### **Summary of current challenges at the FMV**

Within their SER, the FMV identify two major areas which they regard as problematic for the future development of their Establishment:

1. The first problem is the excessive number of students admitted to the Master’s programme. Although the introduction of competitive exams at the end of the first year of the Bachelor course should gradually resolve this issue, there is always the danger that although this exam has been fixed for a period of 4 years, it might not be renewed by the government
2. The second problem are the financial restrictions imposed by the FWB and the University, restricting the renewal of retiring staff.

The self-evaluation report (SER) from the Faculty of Veterinary Medicine, University of Liege was prepared in accordance with the instructions of ESEVT SOP (Uppsala 2016). Before the finalization of the SER, it was sent as a draft to the members of the Faculty Council for their comments and corrections.

In addition, the final SER has resulted from the collaboration and efforts of all the Faculty members, including support staff and academic staff.

The ESEVT SOP 2016 is valid for this Visitation.

## **1. Objectives and Organisation**

### **1.1. Findings**

#### **1.1.1. Brief description of the Strategic Plan**

Persons who hold the overall responsibility for the delivery of the Strategic Plan include:

- Prof. Dr G. DAUBE, Dean
- Prof. Dr H. AMORY, Vice-Dean for Education
- Prof. Dr L. GILLET, Vice-Dean for Research

The Decanal Office (BD) was elected in 2015 and formulated a set of objectives for the Faculty of Veterinary Medicine (FMV). These objectives formed the basis for the Strategic Plan 2016-2021. The Faculty Council (CF) approved the Strategic Plan in 2016. The Strategic Plan was amended in 2018 based on faculty-wide SWOT analysis (Fig. 1.1.2 in the SER, page 15-17).

The SWOT analysis point to a number of perceived Strengths such as motivated, creative, adaptable staff, involvement of assistants and students in the life and organisation of the FMV, excellent biosecurity education and control system, and Opportunities such as introduction of a competitive exam at the end of BAC1 to limit the number of students in Master's programme to 250, creation of a skills lab, construction of the a new hospital for companion animals.

However, the SWOT also points to perceived Weaknesses and Threats, e.g.:

- Excess of students: loss of quality of teaching with loss of recognition by OMV and loss of accreditation by ESEVT (disappearance of specialisation Master's as well as a potential problem of graduates registering for EBVS Residencies)
- Too many hours of theoretical lessons, not enough practice, not enough self-study activities
- High workload for students and scheduling problems during the year
- Complicated exam management: too busy periods of examination
- Lack of crossover / integration + duplicates / contradictions within the UE, cycles or between cycles + inadequacy with realities of the field
- Overload of work including administrative work, lack of support and scientific staff, accumulation of functions and missions with risk of demotivation or "burn-out"
- Low interaction / exchange / collaboration between teachers of basic and clinical sciences

#### **1.1.2. Brief description of the Operating Plan**

The Operating Plan is listed in Annex 1.1. The Operating Plan contains five strategic aims:

- Teaching; containing a number of activities to achieve three objectives (Improve the veterinary medicine program; Extend the training offer; Improve the supervision rate for veterinary students)
- Research; containing a number of activities to achieve two objectives (Improve the organisation of research; Establish incentives for research)
- Management; containing a number of activities to achieve one objective (Improve governance)
- Infrastructure and equipment; containing a number of activities to achieve one objective (Improve infrastructures and equipment)
- Community, welfare and security; containing a number of activities to achieve one objective (Improve human resource management)

#### **1.1.3. Brief description of the organisation of the Establishment**

The FMV is one of 11 faculties at the University of Liège. Within each Faculty, the management of teaching activities is entrusted to the Departments, and the management of

research activities, to the Research Units.

A department is a coherent whole that, within a Faculty, brings together all those who identify with the same discipline or a single field of study, as well as the administrative, technical and labour staff who are administratively attached.

A department includes:

- a general assembly bringing together all members of the teaching, scientific and administrative, technical, and labour staff that are attached to it as well as the postgraduate student representatives
- a council that ensures the departmental management, and an executive office. Each department sets its own internal regulations.

The research units are either faculty (URf) or interfaculty (URi). They include researchers around specific and promising themes, in a dynamic of pooling of resources. ULiège currently has 45 faculty research units and 10 interfaculty research units.

The FMV has seven departments:

- Clinical department for Companion Animals and Equids (DCA)
- Clinical department for Production Animals (DCP)
- Department for Functional Sciences (DSF)
- Department for Morphology and Pathologies (DMP)
- Department for Infectious and Parasitic Diseases (DMI)
- Department for Veterinary Management of Animal Resources (DRA)
- Department for Food Sciences (DDA)

Departments are responsible for delivering the educational programme of the FMV according to the FMV planning.

The clinics are divided into three “poles” (companion animals (AC), equine (EQ) and ruminants and pigs (RP)). There is a board for each pole headed by a president. The role of the pole is operational and consists mainly to manage the day-to-day life of the clinics.

The Rector is the head of the ULiège and chairs the Board of Directors (CA). Representatives of internal and external stakeholders are members of the Board, including the representatives of the academic body, the staff and the students. The Board of Directors (CA) is the decision-making body of the University of Liège.

The Rector and the Rectoral College (CR) define and implement the institutional strategy and the action plan and manage the University’s budget.

A number of structures advise the Rectoral College (CR): the "Research and Education University Council (CURE)" brings together the 11 deans with the College, the Chairs of Research Sector Councils, the "University Commissions", one for "Education and Training" (CUEF) and the other for "Research and Valuation" (CURV) bring together the respective vice-rectors and others concerned.

The FMV oversees the academic and administrative management of the various degrees, including the programming of academic activities, the revision of the study programmes, the issuing of academic certificates and the management of the budget. The Dean and the Dean’s team head the FMV and they are elected for a period of four years by Faculty Council (CF).

The CF is the decision-making body of the faculty, and staff (teachers, researchers and support staff) and students are represented in the Faculty Council at the FMV ULiège. In the case of equal votes within the FC, the Dean who is a veterinarian has the final decisive vote.

The persons responsible for professional, ethical and academic affairs of the Veterinary Teaching Hospitals are all veterinarians.

The FMV has several structures in place, e.g.:

- Two boards of studies (CE), one for the Bachelor's graduates and the other for the Master's, with an equal number of students and teachers from each cycle to exchange. The two boards give advice to the CF on all subjects affecting teaching and student life
- The doctoral college is an advisory body of the CF, which proposes rules, analyses the files of the PhD students and organises the viva presentations of PhD thesis within the Faculty. It is composed of members elected by the CF among the members of the Faculty, who hold a PhD.
- The juries (one per cycle with a sub-jury for the first year of Bachelor's) participate in the FMV of annual student study programmes, set the rules of deliberations and organise them. They bring together all the teachers involved.
- The Pedagogical Unit (CP) is an informal group composed by members of the academic and support staffs. They provide technical support to the jury and give advice to students in the following situations: creation by the students of their annual curriculum, give information about the rules of the jury, analyse the appeals by the students, play an active part in the organisation of practical work activities, work out the Pedagogical Day and analyse the EVALENS surveys.
- The External Advisory Board (EAB, nine members, created in 2018) composed by veterinarians working in private practice, industry, administration and other professional areas. This board gives advice on all aspects of societal needs regarding student veterinary training.
- The Staff Welfare Committee is chaired by the administrator of ULiège. It brings together the members of the staff of the FMV elected by the CF and representatives of the Human Resource Management Authority and of the Psycho-social Risks Prevention services of ULiège. Its mission is to study all the points relating to staff well-being and report to the appropriate bodies.
- Biosafety Committee (CB) and Faculty Biosecurity Unit (CFB). The CB deals with biosafety in relation with contained use of pathogens and genetically modified organisms and the CFB which is in charge of biosecurity in all teaching activities where a biological risk is assessed (clinics, necropsy and dissection rooms, FEPEX and teaching microbiology labs in close collaboration with CB).
- All four Establishments are part of a university. In each Establishment, there are internal structures in the form of Boards, Councils, groups etc. In most of these, student representatives participate as regular members, though at UCLouvain students are only invited to specific points to be discussed at the Board. Although students are present in the Faculty Council of the 4 institutions, at UCLouvain and ULB the elected students are not necessarily from the veterinary sector.

#### **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 Decanal Office (BD) formulates a set of objectives for the FMV. These objectives form the basis for the Strategic Plan. The Faculty Council (CF) approved the Strategic Plan in 2016. The Strategic Plan was amended in 2018 based on faculty-wide SWOT analysis where students and external stakeholders were also involved.

To assist in coordination and collaboration between the four universities providing the Bachelor course, a steering committee has been set-up and comprised by equal representation

from all participating universities, i.e., the dean or a representative for the dean and a teacher from each university; the chairmanship rotates between the participating universities. Furthermore, in some areas, e.g. ecology, biosecurity, nutrition, and virology, there are shared teaching positions between two or more of the participating universities.

## **1.2. Comments**

The External Advisory Board has been recently established, i.e. in 2018, and has so far only met once.

## **1.3. Suggestions for improvement**

None

## **1.4. Decision**

The Establishment is compliant with Standard 1, except for Substandard 1.5:

The Establishment is partially compliant with Substandard 1.5 because of insufficient formal involvement with external stakeholders at the faculty-level; need to establish timetable of twice-yearly meetings with the minutes available to staff and students.

## **2. Finances**

### **2.1. Findings**

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

- All the FMV's income and expenditure are clearly laid out in Annex 2.3.
- The FMV is financed by:
  1. An annual budget granted by ULiège to pay both academic and support staff (this budget is influenced by the actual number of students)
  2. From fees paid by students
  3. The University Veterinary Clinic (CVU) is mainly financed by clinical revenue, although the CVU academic staff are themselves paid directly by ULiège.
- The ULiège also covers all fixed costs related to documentation, water, electricity, heating, maintenance, human resources, financial and real estate resources as well as the management of student admissions and registration.
- The educational and experimental farm (FEPEX) was directly managed until 2017 by ULiège. Since 2018, it has become a support unit for Faculty research and teaching (CARE). Its financial plan aims to achieve a balance between its income (milk, meat) and its current operating expenses, excluding staff and investments which are supported by ULiège.
- As mentioned above, the FMV continues to suffer from a large influx of students, and as a result has received additional funds in order to recruit additional teaching staff.
- The FMV appears to have total autonomy for the allocation of its own operational budget and any further credits granted to it.
- As far as the clinical income is concerned after deduction of the overhead costs levied by ULiège, the monies generated by CVU, research and services are freely managed by the structures that generated them.
- The regulations of the FWB (which is the public body that exercises supervision over the ULiège) state a minimum of 15% of overhead costs on all activities financed by bodies outside the ULiège. In practice, ULiège levies this percentage of 15% on all

services and research agreements (except for certain public subsidies for which lower percentages are required).

- As far as tuition fees are concerned, students from the EU pay an annual fee of 835€ (2018- 2019). Depending on their socio-economic situation, some students may benefit from an intermediate rate of 374€ or a scholarship rate of 0€. Non-EU students are required to pay an annual tuition fee of 4,175€. These amounts are set by the FWB and ULiège cannot claim higher amounts.

### **2.1.2. Brief description of the budget (expenditures, revenues, balance) of the last 3 years**

Tables 2.1.1, 2.1.2 and 2.1.3 from the SER clearly outline the budget over the last three years:

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

Due to the moratorium on student numbers accepted by the FWB and which runs until 2021, the FMV's strategic plan provides for the continuation of the 2015-2016 personnel budget when student numbers are so reduced

The major reason for this decision to keep staff at the level found in the academic year 2015-2016 is a desire to guarantee a sufficient level of supervision in line with the ESEVT Indicators

As a result, the FMVs expenditure should not undergo any major changes in the next three academic years until a planned new law of funding for higher education is due to be implemented.

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

Major investments are underway or planned for the FMV. These developments are partly financed by the FWB and the Walloon Region (supervisory public authorities) and also by the ULiège from its own funds. Grants of 800,000€ for 30 years were granted in 2014 to build a new companion animal clinic and to upgrade research facilities of the Faculty. The ULiège added approximately 7.7 million € for these building developments and 2.6 million € for equipment (MRI, scanner, surgery rooms, skills lab, furniture etc.)

Further details of the estate and investments made within this framework in the last three years and for future commitments is included in the Annex 2.4 of the SER

### **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 annual allocation of operating and staff budgets within the faculty can only be marginally adjusted because the main budgets are allocated to fixed costs (faculty's staff and running costs)

In 2016-2017, an inventory of the resources dedicated to teaching was carried out by the Dean to compare the staff costs of the different departments. From this observation, the Decanal Office and the department presidents discussed changes in the staff framework. Proposals are further discussed in CPFE / CPFR and lastly submitted to the Faculty Council for decision.

## **2.2. Comments**

- The negotiations on funding decisions made by the FWB are influenced by the rectors of the universities. Although the clinical services function as instructional resources, there is a need to review the allocation of funds, raised through clinical income, to the

differential needs of the different clinical areas, including those that are instrumental in raising such income. However, it is important that clinical areas that have a low profitability (for example: neonatology of horses, orthopaedics of cattle, external practical training in shelters), but are really useful for students to learn basic clinical skills, should still receive sufficient funding.

### **2.3. Suggestions for improvement**

- It should be emphasised that although the level of staff which was stabilized at the level of 2015-2016 is in the strategic plan of the FMV, it has **not** been guaranteed by the authorities of the ULiège
- It is essential that this level of staffing should continue in order to comply with the ESEVT/EAEVE Indicators

### **2.4. Decision**

The Establishment is compliant with Standard 2, except for Substandard 2.4:

The Establishment is partially compliant with Substandard 2.4 because of the need to clarify the allocation of funds raised through clinical income, including a greater distribution of funds to those areas responsible for raising such additional income.

## **3. Curriculum**

### **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**

The curriculum in the visited Establishments is organised to take place over 6 years (360 ECTS). The course of study is divided into two blocks of 180 ECTS each. The first 3 years (B1, B2, B3) fulfil the requirements of a 180 ECTS Bachelor degree. Four universities (ULiège, UNamur, UCLouvain and ULB) deliver this degree. Students from all four Universities who complete the requirements of the Bachelor may proceed to the three year “Master” programme (M1, M2, M3) delivered only by ULiège. This final degree award is “Master in Veterinary Medicine”.

Commencing in 2020-2021, a new 120 ECTS Master degree will be implemented in ULiège, dedicated to "One Health - management of public and animal health".

The veterinary curriculum is based on Day-One Competences mentioned in the 2016 ESVET SOP, and the steering committee has defined the six main day one skills that the veterinary students must have acquired at the end of their bachelor curriculum (Annex 3.1. Appendices p. 20).

The student accumulates ECTS through the process outlined by the 2013“Decret Paysage”, as legislated by the Wallonia-Brussels Federation. This legislation was implemented across all University disciplines in 2015 with the goal to produce a more coherent vision of the higher education system. The student may choose a range of courses to match their own needs and pace. Each student follows an annual individual programme (corresponding generally to one block) of at least 60 ECTS - and a maximum of 75 ECTS- which must be approved by the establishment's jury, who also ensure that prerequisites are adhered to.

The legislation allows the student to transition from the Bachelor cycle to Master cycle with 165 ECTS at a minimum. The remaining 15 ECTS must be completed in the original establishment and must be acquired before commencing M3. The net effect for Veterinary Medicine is that students can take longer than the standard 6 years to complete the full programme.

The last year of study (M3) is exclusively dedicated to the acquisition of clinical skills and the fulfilment of the master thesis (with no theoretical courses).

The academic year is divided into three semesters (Q1: September to January; Q2: February to July, and Q3: July to September). Didactic teaching (except clinics during holidays and examination periods) occurs only in Q1 and Q2, and re-assessment occurs during Q3.

A major stated concern is the large number of students (in general) admitted to B1. Entry to B2 is limited by a competitive examination which was first introduced in 2016-2017. The aim was to have a maximum of 250 Masters candidates on graduation. This selection system will stay in place until 2019-2020 when its efficiency and efficacy will be assessed.

The Steering Committee maintains oversight of the curriculum of the four Bachelor Programmes and ensures that a minimum of 60% of the subjects are the same in all four universities. Annex 3.3 (SER p. 23) presents the harmonization of the study programme between the four universities.

The main subjects of study, present in all four faculties, comprise the following: Basic Sciences, Life Sciences, Morphology, Interactions animal-environment and Scientific practice and culture.

- **Basic Sciences** includes Physics-mathematics and Chemistry and have in common 26 ECTS, varying from 26 to 40 between the faculties
- **Life Sciences** includes Biology, Physiology, Nutrition, Biochemistry, Genetics and Immunology, have in common 53 ECTS, varying from 53 to 65
- **Morphology** comprises Histology, Anatomy, Splanchnology, Appreciations, Ethnography and Embryology, 40 ECTS, varying between 40 – 50
- **Interactions animal-environment**, formed by Microbiology (bacteriology, virology, parasitology); Epidemiology – public health – biosecurity; Ethology and Ecology – Zootechnics, 20 ECTS, with limits from 20 to 26
- **Scientific practice and culture** includes English & literature search; Statistics – data processing; EPT – personal work; Animal and society – interdisciplinary approaches and Transversal activities consists of 15 ECTS with range varying between 15 and 30.

The curriculum underwent a major revision in 2015-2016 (CF meeting n°153 of 25/03/2015 for the BAC & minutes of the CF meeting n°154 of 29/04/2015 for the masters) and minor modifications are performed annually.

### **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)**

Each block of education includes a given amount of teaching units (“unité d’enseignement”: UE) which may be delivered by one or several staff members. Table 3.1.2 in each SER of the four establishments presents all EU-listed subjects which are taught. These comprise: Basic Subjects, Basic Sciences, Clinical Sciences, Animal Production, Food Safety and Quality and Professional Knowledge. All EU-listed subjects are covered.

**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.**

The information about curriculum are analysed by different committees, such as EVALENS working group, alumni working group, the education cell (CP), CE, EAB. There are two programme committees (one for Bachelor and one for Master) who produce reports and also guidelines for programme modification proposals. These reports are discussed in CPFE meetings with the department chairs. Next, these proposals are discussed and analysed by CP and CF. CF decides about the implementation or not of the new proposals, and in the case of positive vote they are further submitted to CA and implemented if they are approved. (see Annex 11.3).

A steering committee was created in order to harmonize the content of teaching in each four feeder universities providing Bachelor studies. The “Decret Paysage” imposes a minimum rate of harmonisation of 60%, although the curriculum 2016-2017 reached a harmonisation of 87%.

**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)**

In M3 there are 520 – 524 hours of clinical rotations as electives (13 weeks), up to now not limited by the number of places. The students make a list of their choices, eight months before and a draw is organized to assign the option and the semester of the module for each student. If they don't get the first option, they can exchange their clinical rotation semester with each other, and they can be placed on a waiting list. Apparently, according to SER “all students who have been put on the waiting list have had access to their first option choice”.

The electives are taken by students during academic periods for the clinical rotations of M3.

**During academic periods** there are available 3 clinical rotations including:

- Companion animal clinic, taken by approximately 56% of M3 students, 524 hours;
- Equine clinic, approx. 22% of M3 students, 520 hours;
- Ruminant and pig clinic, also about 22% and 520 hours.

**During holidays and exams periods**

Until 2017-2018 clinical rotations during these periods were elective, but since 2018-2019 they become compulsory, 320 hours (with 40 to 60 hours/week), as follows: four weeks in the companion animal clinic, and two weeks, in equine, ruminants, pigs' clinics and in necropsy.

The EPT (Bachelor cycle) activities consist of two weeks of pre-clinical EPT (B2) in a breeding, shelter or boarding facility hosting at least ten adult animals of a given species (50 for poultry and rabbit facilities); one week in a pet facility, and one week in an animal production facility (ruminant, rabbits or poultry).

There is free choice of EPT activities in M3 which may consist partially or entirely of research activities. EPT consists of 12 weeks in one location, or in two locations each for a period of 6 weeks, under supervision of a named training supervisor. The students seek out and establish their own EPT. The supervisors must be veterinary medicine graduates with at least five years' experience and must also sign a contract with the establishment regarding the placement. The placement(s) can be performed within veterinary structures (practice, centre, clinic) or within a faculty of veterinary medicine, public agency, or a private company in Belgium or abroad.

Optional courses: (annex 3.7)

1. Conscious communication in medicine and veterinary medicine: approach to interpersonal relationships based on mindfulness
2. Pathology and necropsies of marine mammals
3. Introduction to the main diseases and pathologies of fish in aquaculture
4. Animal husbandry and health in southern countries.

### **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**

The development, implementation, assessment and revision of the curriculum are made at different levels and involves input from students, teachers, stakeholders and steering committee.

Following the ESVET visitation in 2009, the Steering Committee, comprising staff from all four contributing Bachelor programmes, has maintained an overarching role to harmonise the four programmes and implement yearly changes in the Bachelor curriculum. The notes below indicate the further activities within the four establishments.

#### ***ULiège***

The processes involved in identifying overlaps, issues and redundancies appears highly complex, but involves students, staff, stakeholders and the steering committee.

The students complete annual anonymous evaluations and global surveys are obtained from the graduation students of M3.

The teaching staff take part in a pedagogical day each January which provides opportunities for feedback from the teachers regarding pedagogical improvement and exploration of new teaching methods. The Permanent Faculty Commission for Education (CPFE) meets monthly and mandates working groups for each specific identified problem. Finally, their resolution is discussed and voted on by the Faculty Council (CF) and finally endorsed by the Board of Directors (CA).

External stakeholders are mainly represented by alumni and supervisors of EPT. Yearly organised alumni surveys and feedback from EPT supervisors are considered. An external advisory board (EAB) was recently created, and also has an input.

#### ***ULB***

Based on feedback from students, teachers, Steering Committee, and from Master students, the curriculum veterinary commission decides minor changes or makes propositions to the Academic council in the case of major changes.

#### ***UCLouvain***

The establishment operates “year committees”, one for the B1, and one for the subsequent years. These meet twice-yearly to discuss student and curriculum issues. Secondly, the School’s Board, whose main missions is to constantly improve the quality of teaching, acts in response to the remarks of the Steering Committee.

#### ***UNamur***

The veterinary department council analyses and discusses learning strategies and aims at

maintaining a coherent teaching framework, and the curriculum commission analyses and discusses content and consistency of the existing programme and of new projects.

### **3.1.2. Comments**

- The Decret Paysage imposes many constraints regarding the curriculum, the progression of the students and number of the students. The staff involved are to be commended for their dedication to teaching the large numbers of students entering B1, and for dealing with the constraints imposed by the Decret Paysage. The competition that limits the number of students entering B2 also appears to impose a psychological burden on the staff teaching these students.
- Although the bachelor studies are provided by four feeder universities, there are no special difficulties in adaptation to M1 by the students provided by the other three Establishments.
- The staff in the M1 do not note any differences between the feeder Establishments regarding the students' knowledge and practical abilities, and there is evidence, in the form of student academic success data, to support this statement. This points to the commendable efforts of the Steering Committee.

### **3.1.3. Suggestions for improvement**

- There is a complex set of committee structures involved in evaluation, identification of content overlap, and in revision of the curriculum. This applies particularly to the programmes delivered in ULiège. It is recommended that the process is streamlined.
- There is a requirement that programme learning outcomes must be clearly visible, and that all units of study should be aligned to these programme outcomes. This means that for the Bachelor programmes, and the Master programme, all content, teaching and assessment practices must match to the stated objective of the programme concerned. Achievement of the programme learning outcomes must be supported by evidence.
- It is recommended that the establishments involved in the Bachelor programmes should establish a process whereby the attainment of Bachelor Day One Competences are identified for each student.
- The establishment must establish a mechanism to clearly identify that the Professional Day-One competencies have been attained by each student within the core curriculum and by the end of M3.
- 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). Although a useful adjunct to the clinical teaching, there is a need for the Establishment to formalise the clinical skills obtained during EPT as they cannot replace the core intramural training nor the extramural training under the close supervision of academic staff.
- A record of the students experience during EPT should be by the mandatory introduction of a logbook (either paper or online). Fulfilment of the logbook must be checked after EPT.

## **3.2. Basic sciences**

### **3.2.1. Findings**

#### **3.2.1.1. Brief description of the theoretical and practical education in basic sciences (*In Liege and the three feeder universities*)**

The basic sciences are taught during Bachelor studies (B1, B2 and B3) in all four universities: ULiège, UNamur, UCLouvain, ULB.

In all four universities the teaching activities in B1, B2 and B3 include basic sciences and life sciences, and teaching is dedicated to study the normal function and structures of the domestic animals.

There is a harmonised Bachelor of Veterinary Medicine study programme across the four Establishments, with a “*minima d’harmonisation*” fixed to 60% by decree within the Federation of Wallonia-Brussels. The steering committee provided a harmonization of 87% for the curriculum 2016-2017.

However, there are some differences between the different courses, including differences in timing of the presentation of material. Due to these differences, the “competition” examination to regulate entry into B2 differs between institutions.

### **ULiège**

All of the basic subjects, and all of the basic veterinary sciences are listed. Some basic veterinary sciences, i.e. Pharmacology, pharmacy and pharmacotherapy and Pathology and Toxicology are completed in the Master cycle.

The balance of lecture versus practical hours in physiology is 106h vs 13h; in anatomy, histology & embryology, 204h vs 213h; in biochemistry 68h vs 0h; microbiology 59h vs 23h; parasitology 39h vs 21h.

Pathology is listed to include 64 hours of lectures and 6 hours of “clinical animal work”, although separately, “diagnostic pathology” is listed to include 77 lecture hours, 42.5 hours of laboratory practical work and 16h of clinical work. There are 19 lectures in total listed for pharmacology and pharmacy. (all above from table 3.1.2, pg. 36-37).

As ULiège is the main establishment that is the subject of this visitation, clinical sciences, facilities and staffing etc will be dealt with in later chapters in this report.

## **Overview and Curriculum in the remaining three Bachelor “Feeder” establishments**

### ***ULB***

#### **Overview**

The Université libre de Bruxelles (ULB) has 12 faculties that cover all the disciplines and has a student body of over 24,000. Veterinary medicine/science resides within the Faculty of Medicine, alongside medicine, dentistry, and biomedical science, and as part of the “Health Pole” of the University (faculties of medicine, pharmacy and motricity sciences, public health school, paramedical high school). This combination leads to interprofessional opportunities for staff and students.

There is typically a total of 255 veterinary students, and on average, 44 veterinary students graduate per year.

Veterinary science is not financially autonomous: the University makes a technical calculation to allocate a budget to each Faculty. Every five years, the Faculty develops a strategic plan for the staff, with respect to its priorities and to the needs of the different domains (including Veterinary Sciences).

Shared facilities for teaching include large, medium and small auditoria, all fully equipped. More specialised teaching areas include “wet” laboratories. The well-equipped histology laboratory is shared with other “health” programmes, and has 114 seats and microscopes, including a demonstration microscope connected to a data projector.

The anatomy room is unusual in that it is not on the ground floor. Euthanised animals (including Equidae) must be carried in an elevator to the dissection room. The dissection room has 8 tables for small animals, 2 tables for large animals, hoods, footbath, and locker room. About fifteen skeletons are available for osteological demonstrations as well as plastinated anatomical pieces and mouldings of dog and cat vascular beds.

Physiology, in the animal premises has 2 examination tables per room. Student owned dogs are used for non-invasive examination.

Student groups are brought on farm visits (24 students per farm) and these visits are used for animal examination. Other institutions visited include to a riding school or to gendarmerie horses.

At a result of student feedback, the veterinary commission is considering increasing practical animal handling experience.

There is a single library department serving the Campus. Normal period: Open 6/7 days, Monday – Friday 9.00–22.00, Saturday 9.00-18.00. Exams period: Open 7/7 days, Monday – Friday 8.00–22.00, Saturday and Sunday 9.00-22.00.

The establishment is well-equipped with IT facilities and uses Moodle as the e-learning platform, although the SER reports that WIFI etc needs modernisation, and a plan is in place for this.

Several assessment methods are combined to evaluate theoretical and practical and pre-clinical skills: group work with oral presentations, writing papers, practical work reports, short evaluations at the end of practical work sessions, practical examinations (dissections), oral exams, written exams with different kinds of questions (open questions, MCQs). The SER reports that students have complained that the description of the method of assessment for some courses is not sufficiently precise.

The continuing education of teachers is provided by the unit PRAC-TICE (Pedagogy, Research-Action and Information and Communication Technologies for Education) through 55 different workshops (teaching to large or small groups, learning outcomes assessment, learning portfolio, etc.). Since 2007-08, all new teachers, academic as well as scientific staff, receive a specific pedagogic training.

There are 31 permanent staff FTE associated with the Veterinary programme; 16.5% are veterinarians (5 FTE). The establishment notes that a lot of courses are not specific of the veterinary medicine and are taught by non-veterinarians, but competent teachers in their field. The staff report that research is given greater prominence for promotion than teaching.

## **Curriculum**

All of the basic subjects are listed for coursework hours (i.e. medical physics, chemistry, animal biology, plant biology and statistics). The Bachelor programme covers most of the Basic veterinary sciences, but does not include pharmacological topics, pathology, professional communication or ethics.

The balance of lecture versus practical hours in physiology is 172 h vs 82 h; in anatomy, histology & embryology 237 h vs 256 h; biochemistry 92 h vs 40 h; genetics 70 h vs 15 h; microbiology 60

h vs 15 h; parasitology 24 h vs 7 h.

Mapping of the Bachelor competences to the programme units of learning are shown at:  
<http://medecine.ulb.ac.be/cellpeda/competences/competencepsante-ba-vete.php>

## ***UCLouvain***

### **Overview**

This establishment has on average 233 veterinary students within the school in any year, and graduates on average 58 veterinary Bachelor students per year. The University has a student body of over 30,000 students. The establishment reports that the space available is more than adequate for the numbers of students current in the course, due to the relatively small numbers.

The School of Veterinary Medicine is part of the faculty of sciences which also includes schools of mathematics, physics, chemistry, geography, biology and statistics & actuarial science, and is located on the Louvain-la-Neuve campus. This site was built as a University City and has a large range of facilities available for sport and recreation.

The main strength of the Faculty of Sciences is stated as its interdisciplinary characteristic, allowing a very good education in different fields (i.e. mathematics, physics, chemistry, biology, geography and veterinary medicine).

The establishment reports that lack of linkage with clinical staff to be an issue in terms of maintaining clinical relevance and developing evidence-based research.

UCLouvain has almost absolute autonomy to allocate its budget, and claims to have a sound financial structure, excellent solvency and a low debt ratio. The School of Veterinary Medicine must, for each of its expenses, produce a precise rationale to the accounting department. For larger expenses (eg the new dissection room), the projects must be submitted to the sector board which presents them to the commission in charge of major works. The SER reports that the process of approval is quite slow.

Only osteology and dissection rooms are reserved for veterinary students- all other facilities, including laboratories are shared, limiting the spaces for use by the students for extra activities, such as histology revision. General teaching spaces are equipped with all necessary technologies.

The establishment maintains an experimental farm, but this appears to be little used by veterinary students, except for topographical anatomy and physiology. There are two mandatory internships in a professional environment, the first with a livestock farmer (10 days) and the second in a companion animal environment (breeder or rescue centre, 5 days), and therefore handling skills are largely obtained extramurally prior to the Master programme.

There is a main library facility/combined learning centre, 5 days/week from 08:00 - 20:00 (up to 22:00 Exam periods), which is closed during the weekend. The establishment is well equipped with IT facilities and uses Moodle as the e-learning platform.

There is an academic advisor to mentor, advice, and encourage students who ask for help. This replaces a tutoring system which was found to be ineffective.

Regarding staffing, Table 9.1.1 (pg. 64) shows a permanent academic staff of 10 FTE. This number is based on a calculation of an average duty of an academic of the faculty of Sciences at UCLouvain, which is 117 hours in lecture rooms per year. The number of academic equivalent full time corresponds to the number of hours in lecture rooms of the bachelor program divided by

this average duty. In fact, there are 9 veterinary academic teachers are involved in the program, 3 are permanent members of UCLouvain, the others are visiting professors. The assistants who supervise the students for the practical work and the exercise seminars are engaged to carry out a a doctoral thesis which is normally completed in 6 years. Three assistant researchers who supervise veterinary students are veterinarians. Pedagogical support for staff is provided by the Louvain Learning Lab.

The SER reports a heavy workload for academics and assistants, with a difficulty in ensuring both excellent research activity and quality supervision for students.

Assessment of student learning in B1 is on the basis of written examinations, including in some cases, a mix of multiple-choice exams and open-ended questions. In B2 and B3, examinations are primarily oral or based on personal and team written reports. Each teacher is free to decide how to evaluate the knowledge and skills of the students she/he teaches.

UCLouvain states that these examinations verify that students have attained the Bachelor Day-One skills.

### **Curriculum**

All of the basic subjects are listed for coursework hours. The Bachelor programme in Louvain covers most of the Basic veterinary sciences, and includes veterinary certification and report writing, and professional communication and ethics. The Bachelor does not include pharmacological topics, toxicology or pathology.

The balance of lecture versus practical hours in physiology is 172.5 h vs 34 h; in anatomy, histology & embryology, 233.5 h vs 219 h; in biochemistry 74 h vs 37.5 h; genetic 45 h vs 15 h; microbiology 40 h vs 15 h; parasitology 25 h vs 7 h.

### ***UNamur***

#### **Overview**

UNamur accepts 33% of all Bachelor students of the French-speaking region of Belgium and has on average 550 Bachelor students, graduating 73 students annually. The total number of students in UNamur is 6,500. The Veterinary Department belongs to the Faculty of Sciences.

There is financial autonomy at Department level. There is considerable ongoing investment in infrastructure, with new Faculty of Sciences buildings planned, and a new anatomy teaching laboratory construction project about to commence (€3.6M). All lecture and seminar rooms are fully equipped with appropriate technology and are of an appropriate size for the cohort.

The Establishment maintains a research and teaching farm, with 400 sheep, 3 horses and 2 cows, and animals are housed and managed according to European directives. Caretakers live on-site and are also qualified for work with experimental animals.

The library is located on the same site as the Faculty of Sciences, is staffed with 29 librarians, open 300 days in the year, and open from 7:00 to 24:00 during exam times. The establishment maintains appropriate ICT and web platforms for learning support, although staff report that students are poorly prepared to electronic communication and use of e-learning resources when starting the curriculum. There is pedagogic support for teaching and learning innovation.

The Establishment is proactive in offering student advisory services throughout the academic year (p. 36 SER).

A range of assessment methods are used, including written examinations (multiple choice, open questions) and oral examination (oral for assessment of theoretical knowledge and/or practical skills). Anatomy examination include the use of “steeplechase” style of examination. For each course, the teacher undergoes periodic evaluation (at least once every 3 years, more frequently if the teacher requests it) by use of an electronic questionnaire. The results are provided to the teacher and the Dean. Teaching and course evaluations are used for promotion of the teaching staff.

The proportion of veterinarians teaching in B1 is low, but increases in the subsequent years. There are three European diplomates (surgery, ethology, VPH) that are member of the veterinary department and that almost all assistants and didactic collaborators are veterinarians.

Bachelor students are afforded the opportunity to take part in fundamental or applied research, and there are numerous research peer-reviewed publications where students are listed as co-authors.

### **Curriculum**

The list of topics included in Basic Subjects includes Medical physics, Chemistry (inorganic and organic sections), Animal biology, zoology and cell biology, Feed plant biology and toxic plants and Biomedical statistics, 312 h of lectures in total, 38.5 SDL and 171.3 labs and desk-based work.

Basic Sciences are represented by Anatomy, histology and embryology 176 h theory, 24 h SDL, 67 h practical and 45 h team-based learning (TBL); Physiology with 112 h, 8 SDL, 77 h practical and 15 TBL; Biochemistry 90 h vs 30 h; General and molecular genetics 35 h vs. 15 and 15 TBL; Parasitology 25 h vs. 6 h; Microbiology 41 h theory, 5 SDL vs. 10 h practical activities and 14 TBL; Immunology 30 h vs. 12 h; Immunology 30 h theory vs. 12 h; Epidemiology 17 h theory; Professional ethics 67 h theory and 30 TBL; Professional communication 5 SDL; Animal ethology 30 h vs. 12 h; Animal welfare 15 h vs. 20 h; Animal nutrition 30 h vs. 4 h.

### **3.2.2. Comments**

- In general, the presence of four institutions for Bachelor studies permits greater attention to the B1 students than would be possible if all students were admitted into a single institution.
- All institutions are to be commended for coping with the large intake into B1 in the respective establishments. Most establishments commence anatomy teaching in B1, and the large student numbers pose logistical problems in teaching this group safely, and also create a heavy, and in some establishments, an apparently disproportionate workload burden (i.e. > 300 hours teaching per year) for the staff involved.
- However, the continuing large intake of students into B1 may well in the longer term affect their combined ability to deliver on quality teaching and basic hands-on training.
- The Steering committee are to be commended for their extraordinary efforts in aligning the curriculum across the institutions.
- To further ensure that students are equally prepared for the Master cycle, it is important that establishment investment in appropriate facilities, and specimen availability should also be matched as much as is reasonably possible. There is also an opportunity to combine resources in anatomy material preparation, such as the use of plastination techniques.
- The initiative to bring together students from the different Bachelor programme for an event (held in Namur in 2019) is to be commended. Every effort should be made to

encourage the students to continue this event on a yearly basis, with the possibility of rotation between the four establishments.

- During the visit to the establishments, many instances of excellent and innovative practice in teaching the basic sciences were noted. The enthusiasm of the students for their chosen profession was evident in all establishments.

**Specific areas worthy of particular praise and specific areas of concern in the different feeder universities providing the Bachelor programme can be outlined:**

**ULiège**

The visitors noted the following:

- Dedication of the academic staff to didactical and clinical activities;
- Facilities in Small Animal Clinic, isolation facilities, and facilities in general;
- Equine clinic and implementation of the logbook
- Increase number of European Diplomates (54 in different EBVS fields);
- Histology laboratory, activities and on-line tutorial for students;
- Large number of necropsies and necropsy hall;
- Implementation of the skills lab

The visitors noted no particular concerns regarding facilities for basic sciences.

**ULB**

The visitors noted the following:

- Engaged and motivated students
- Strong interprofessional connections for research and teaching
- Dedicated, and approachable teaching staff
- Strong support for developing pedagogy
- Innovative teaching practices, particularly in histology/histopathology
- Small groups sizes for teaching
- Adaptation of the “Anatomage Table” for veterinary teaching

The visitors noted no particular concerns regarding facilities for basic sciences, but did not have the opportunity to visit the animal premises. Both students and staff expressed an interest in increasing the animal contact within the programme.

**UCLouvain**

The visitors noted the following:

- Enthusiastic and motivated students
- Dedicated and hard-working veterinary staff
- Familiar teaching and learning environment for the students;
- Good anatomy dissection facilities, and fine anatomy lecture theatre
- Excellent new library/ BST Learning Centre
- Excellent on-site facilities for student life and recreation.

The visitors did not have the opportunity to visit the research farm.

The visitors had some concern regarding the number of rooms available which were dedicated to teaching veterinary students, and suggest that extra didactic space for veterinary studies

would be useful, and could be used for example for histological study and revision. Expansion of the osteology room specimens, as well as investment in further plastinated specimens would add to the learning resources.

Consideration should also be given to increasing the number of staff available to teach the veterinary-specific material. Consideration should also be given to improved access to animals on the research farm. These, together with increased veterinary didactic resources, may alleviate the student's impression that they are not considered important within the University. Note that students were clear that this feeling was not a reflection on all of their teachers.

### ***UNamur***

Courses were ongoing at the time of the visit, and students were available to display their work to the visitors. The visitors particularly noted the following areas:

- Familiar atmosphere for the students, friendly environment;
- Dedication and involvement of the students
- Dedication and involvement of the teachers in didactical activities and in farm animal
- The availability and use of the farm for student animal experiences in handling and research
- large number of research and research papers in which students are involved
- Availability of the library for students
- Innovative methods for preparation of specimens in anatomy and their availability for students;
- Innovative methods for on-line study of 3D specimens for anatomy and radio-anatomy
- Transversality of the studies and innovative, clinical approaches to help integration of subject areas for bachelor students

The visitors had no particular concerns regarding facilities for students.

### **3.2.3. Suggestions for improvement**

- To ensure quality education in the Masters, the number of students in the Bachelor programmes should continue to be controlled using appropriate mechanisms.
- All establishments should seek sufficient funding to access cross-species anatomical material from abattoirs, for example fresh reproductive tracts from a range of production species. Currently such material is available in only two of the four establishments.
- There is also considerable variation in access to materials in the different Anatomy museums in the different institutions, and efforts should be made to harmonise this, as appropriate to the numbers of students taught in the different establishments.
- The Steering Committee should pursue opportunities to combine resources in anatomy material preparation, such as the use of plastination techniques.
- The Steering Committee should implement a strategy to assess the achievement of DOC after Bachelor studies and at the end of Master studies in all four universities. Also, a logbook for the practical activities should be implemented in all clinics.

### **3.2.4. Decision**

The Establishment is partially compliant with Basic Sciences at the four Establishments delivering the Bachelor course due to the continuing need to ensure quality education in the Master programme by a continuation of the scheme limiting the number of students within the Bachelor programmes.

### **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**

Courses are integrated in order to encourage multi-disciplinary practice, a species-oriented approach and case-based decision making. While this has many strengths, it makes it difficult to determine the precise amount of time devoted to theoretical and practical studies in clinical sciences in companion animals in some parts of the overall programme (mainly for the Bachelor's degree).

In the second year of the bachelor's degree, students gain experience in animal handling and management. Students undertake an immersive placement in animal environment for 1 week (EPT in a breeding, shelter or boarding facility for pets). In addition, there are clinical exercises, practicals and seminars about practical animal handling, clinical examination and ancillary tests in physiology, topographic anatomy, "knowing how to see". Practical activities include the description and identification of horses (narrative and diagram), as well as handling poultry, rabbits, pigeons and guinea pigs.

In the Masters programme students practice on live animals becomes more clinical in focus, particularly in the second and third year. In the first Masters year the education in clinical sciences in companion animals is mostly theoretical; in contrast the final year is devoted entirely to practical experience gained in the VTH and on EPT-programmes.

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

None of the university Bachelors programmes are designed to fully prepare students for clinical rotations. They provide a grounding in the basic sciences and animal management, including practical experience in animal handling and anatomy.

In the first Masters year (M1), practical classes include clinical examination and practical techniques used in diagnostic testing, which are practised on live animals or mannequins, post-mortem sampling techniques, radio-anatomy, and practical activities to learn basic surgical procedures on cadavers. This is spread across 14 of the 17 courses throughout the M1 year, and extended in the M2 year, alongside the development of case-based clinical reasoning.

##### **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...)**

From M1 onwards, students can attend some clinical activities on a voluntary basis (nights, weekends, holidays). Undergraduate students are not definitively involved in the clinical rotations and emergency services in companion animals.

In the second Masters year (M2), half of the student cohort attend clinical rotations in the morning on a daily basis for one semester, of which six weeks take place in the VTH for companion animals (105 hours) and three weeks (52.5 hours) in the VTH for equine. The students do not have clinical responsibilities. A maximum of practical training is given when possible, but the M3 students have priority. During the semester the other half of the students attends paraclinical courses, such as necropsy and professional knowledge courses. Besides this, students must also attend seminars of the 8 mainly theoretical courses during this year, go to transversal services and participate in on-call services.

In the third Masters year (M3), students have clinical rotations during holidays and exam periods (320 hours), which have included all species since the academic year 2018-2019.

Groups consist of three to twelve students, 40 to 60 hours per week for six weeks. Four weeks (60 hours/week) are spent in the companion animal clinic. Two weeks are spent in equine, ruminant and pig clinics and necropsy. In companion animals, more than 50 % of the time is spent in medicine and surgery including anaesthesiology. Students make the first contact with the owners, perform clinical examinations, participate in ancillary tests, decisions, follow up and the treatment of hospitalised cases. They are not on the first line, but have to participate in the on-call services and patient's care.

In addition to this grounding in the main domestic species, the students have thirteen weeks of elective rotations in either small animals (chosen by 56 % of the students), equine or production animals. The module for pets is 524 hours in total, of which 64 hours is involved with the ambulatory clinics. The module for horses is 524 hours in total, of which 4 hours is involved with the ambulatory clinics.

Students also have two weeks of rotations in necropsy (20 hours) and imaging (40 hours). Lastly, students have two six-week periods of EPT. Students decide for themselves where the EPT takes place and the veterinary field on which to focus. They can complete 12 weeks of research activities if they so wish. An agreement is signed between the faculty and the EPT supervisor, and the supervisor fills out an EPT evaluation sheet for the student.

According to the ULiège SER, at the end of the VTH clinical rotations (even if performed abroad), M3 students have to present (in front of two or three senior clinicians) a file of clinical reports of thirteen challenging cases: ten of these cases have to be presented summarised in an Excel table ("case log"), and the three others have to be presented as clinical reports according to a predetermined pattern. The model of the "case log" with the ten cases and the clinical report with the other three detailed cases are common to the three options of clinical rotations.

### **3.3.2. Comments**

- The clinic for companion animals is newly opened and just entering into use. The isolation facilities and facilities in general are very good. In addition to the companion animal clinic, the Establishment in Liège has its own kennel of 28 dogs for teaching purposes (sampling semen, ultra-sound, semiology applications) with a good computerized system to check the use of each dog
- Beside the Clinic for Horses is a unit dedicated to sport horses and their evaluation. This unit is linked to the Physiology Department. There is also a skills lab for Bachelor students. The skills lab is not yet fully used because of the need for more support staff
- It appears that, at least in part, EPT replaces intramural training and the achievement of hands-on training, mainly during M1 and M2. There are no selection criteria implemented for EPT supervisors, as the only requirement is that they have to be graduates of vet school for a minimum of 5 years. No additional training of the EPT supervisors is implemented within the Establishment
- Regarding the achievement of DOC, there are no practical logbooks implemented in the Companion Animal Clinics, although teachers assess the practical competences. The students complain of an apparent lack of transparency regarding grading and evaluation of the practical activities
- There is no monitoring programme to assess the student's practical competences at the end of their bachelor studies and furthermore the legislation allows the students to enrol from B3 in M1 with a maximum leftover of -15 ECTS, so with only 45 ECTS accomplished during B3. Regarding the achievement of hands-on training the teachers

in ULiège complain about the large number of students and the increase workload for the teachers

- According to the Decree, the academic year is divided into three periods of about four months each, named “quadrimestre” in French: Q1 = October - January; Q2 = February -May/June; Q3 = June/July to end of September. Q3 is not for teaching activities, it is only for re-assessments and for clinical co-rotation.

### **3.3.3. Suggestions for improvement**

- It is suggested that the Establishment establish a log book and clinical reflection system. This would be for both students on clinical rotations as well as when students are participating in EPT. The data collected and recorded could be either paper based or on-line
- Such an introduction would allow both the students and the relevant clinically qualified teaching staff to monitor the development of clinical skills training
- Although many students do currently and actively participate in the out of hours and emergency rotations, it is not mandatory. An organised and compulsory rotation should be introduced.

## **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**

Courses are mixed together in order to encourage multi-disciplinary practice, a species-oriented approach and case-resolution. This makes it difficult to exactly determine the amount of time of theoretical and practical classes in clinical sciences.

In the second year of the bachelor’s degree there is an immersion placement in animal environment for 1 week (EPT in a breeding, shelter or boarding facility for production animals). Besides this, there are clinical exercises, practicals and seminars about practical animal handling, clinical examination and ancillary tests in physiology, topographic anatomy, “knowing how to see” and practical activities to identify horses (narrative and diagram) and describing coats and handling poultry, rabbits, pigeons and guinea pigs.

In the masters programme students gradually get to practice more with live animals. In the first masters year the education in clinical sciences in production animals is mostly theoretical, while in the final year it is education by gaining practical experience either in the VTH or EPT-programmes.

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

In the first masters year (M1) pre-clinical activities consisting of practicing clinical exams and ancillary tests on live animals or dummies, dissection and post-mortem sampling techniques, practical activities to learn basic surgical procedures on cadavers and conducting visits to the faculty’s farm, are organized to prepare for clinics. This is divided over 13 of the 17 courses throughout the M1 year.

#### **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...)***

From the first masters year onwards student can attend some clinical activities on a voluntary basis (nights, weekends, holidays).

In the second masters year half of the total number of students attend clinical rotations in the morning on a daily basis for one semester, of which four weeks (17.5 hours per week) is in ruminants and pigs. The students do not have clinical responsibilities. A maximum of practical training is given when possible, but the M3 students have priority. During this semester the other half of the students attends paraclinical courses, such as necropsy and professional knowledge courses. Besides this, students must also attend seminars of the 8 mainly theoretical courses this year, go to transversal services and participate in on-call services.

In the third masters year (M3) students have elective clinical rotations during academic periods (520 hours) and clinical rotations during the holidays and exam period (320 hours), which includes all species since the academic year 2018-2019. The group of rotations during the holidays and exam periods consist of three to twelve students, 40 to 60 hours per week for six weeks. Two weeks are spent in equine, ruminant and pig clinics and in necropsy. They consist of practical training like care and emergencies. No theoretical courses or seminars take place. In ruminants and pigs, these hours are divided into the pig and ruminant clinics, ambulatory clinics and activities at the farm FEPEX.

Besides the rotations mentioned above, the students have thirteen weeks of elective rotations in either small animals (chosen by 56% of the students), equine or production animals. The production animal curriculum includes 160 hours in the pig and ruminant ambulatory clinics. Students also have two weeks of rotations in necropsy and imaging. Lastly, students have two six-week blocks of EPT. Students decide themselves where the EPT takes place and which veterinary field is focused on. The EPT supervisor fills out an EPT evaluation sheet for the student.

**3.4.1.4. Brief description of the theoretical and practical education in Animal Production**  
See 3.4.1.3. above and 3.1.2, 3.1.3 and 3.1.5. in the SER (pages 36 – 40).

**3.4.2. Comments**

- The Establishment should take every opportunity to communicate with EPT providers to enhance the quality of the training they deliver to students.

**3.4.3. Suggestions for improvement**

- It is suggested that the Establishment organise a log book and reflection system, either paper or on-line for students on clinical rotations and EPT to allow them to monitor the development of their clinical skills training.
- The learning outcomes of the individual units of teaching need to be clearly mapped and linked to the programme learning outcomes and the required competencies.
- All core learning (Day One Competences) must be supported within intramural teaching. No student should be required to use EPT to replace core teaching. EPT is currently replacing some elements of intramural training for some of the students.

### **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**

FSQ is taught at master's level 1, 2 and 3 (M1, M2 and M3), in the respective courses Food quality and safety management, paraclinics in Food Sciences and clinics in Control of the food chain. In M1, the students do practical work in a bovine slaughterhouse, and in M2, the students go in groups to bovine, pig and poultry slaughterhouses. The students get a detailed explanation of the responsibility of the official veterinarian both at ante mortem and post mortem level, but the teaching is of an observational character. In M1, the students also visit the food pilot plant in the faculty, but they get little practical training in food microbiology diagnostics. They get, however, some virtual training by using a software program in M2/M3. In M3, the teaching is focused on food inspection, and during one week, every student does several auditing visits at different levels in the food chain, from primary production to distribution companies and restaurants, guided by either an inspector of the Belgian Food inspection agency, a private of inspection or certification body.

##### **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**

The students go in groups of 13-14 students, for some activities these groups are divided into two. The students are accompanied by teachers in FSQ from the faculty on their visits, who are responsible for the teaching. During the food control inspection course in M3, the students do their inspections individually, while the first day of preparation for the rest of the week and the summarizing of the week is done groupwise.

#### **3.5.2. Comments**

According to the indicators, the number of hours of FSQ and VPH training is low (157 for FMW, while EAEVE median is 287 and minimal is 174.40). The level of practical training is low both in the laboratory and in the slaughterhouses, and there is also little training in risk assessments. The FMV-argument for this situation is that "The Master's programme is too busy and does not allow for more time for these disciplines". To remedy for some of this, FMV has established an advanced-level master programme of 60 ECTS in specialised veterinary medicine, consisting of two modules of food science and emerging infectious diseases.

#### **3.5.3. Suggestions for improvement**

- FMV should make efforts to increase the amount of FSQ and VPH teaching. To increase the practical training in slaughterhouses, FMV could for example require that some time for EPT is spent in a slaughterhouse.
- FMV has plans for the creation of virtual visits for students to rabbit and poultry farms in collaboration with the Veterinary School in Toulouse, these plans should be realized as soon as possible.
- The food pilot plant could be further utilized in the veterinary training, and also used to attract the students to participate in food safety research.

### **3.6. Professional knowledge**

#### **3.6.1. Findings**

##### **3.6.1.1. Brief description of the theoretical and practical education in Professional Knowledge**

Students have genuine contacts with owners mainly during M3 (1 week) clinical rotation at the Veterinary Dispensary (the Foundation) and in the clinical activities at the Clinic at the CVTH. They work under the supervision of interns and assistants. They perform clinical examinations, as well as the first client contact, clinical records preparation, clinical tests, and discussing their thoughts on diagnosis. The diagnosis is “challenged” by the supervisors, followed by the treatment and proposed follow up.

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

External Practical Training is carried on during M3 in 2 periods of 6 weeks under the responsibility of a non-academic person. The two periods may cover different types of training. A list of possible options (Vet Clinics, Practitioners, etc.) is available at FMV but students may choose other options. There is no procedure to select training supervisors (the only criteria is >5 years form graduation) but in any case, the training supervisor has to sign a contract with the FMV. An example of a signed contract with a small animal clinic was presented. At the end of the EPT, the supervisor has to complete a student evaluation sheet which includes the criteria set by the FMV for the students’ evaluation. No formal attendance verification is performed by the FMV (i.e. logbook).

##### **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)**

There is no evidence (i.e. logbook) of core preclinical activities recordings.

The practical/clinical activities are performed in the internal clinics and at some external facilities (the Foundation and the ambulatory clinics at the shelters) and logbooks are available. At the Foundation, 4 main aspects (motivation, precision, relationship, technical skills) are evaluated (5 points each= overall 20 points max) by the local supervisor. At the Ambulatory clinic, the number of anaesthesia/neutering and a summary evaluation (Poor, Satisfactory, Good, Excellent, etc.) of the student is performed by the local supervisor and the scoring is transformed into a 0-20 points scoring system.

There is no formal recording of evaluation or discussion between the FMV coordinator and the students or local EPT supervisor.

The score of the two clinical rotations is averaged and contributes 30% of the final score, while the remaining 70% of the final score is based on the oral evaluation (30 min). During this final exam, M3 students have to present (in front of two or three senior clinicians) a file of clinical reports of 13 challenging cases: 10 summarised in an Excel table (“case log”), and 3 as clinical reports.

Some aspects of Professional knowledge (client management, negotiation, organization, economics) appears not to be part of the overall evaluation, and this finding was confirmed through the feedback received from the external stakeholders. Feedback from students suggests that some activities performed at EPT are intended to compensate difficulties to acquire practical skills during the internal activities (i.e. blood samples, etc.).

### **3.6.2. Comments**

- EPT cannot replace the core intramural training nor the extramural training under the close supervision of academic staff (ESEVT standard 3.6). There was a lack of a complete record of the core competences taught by the academic staff leading to a potential confusion between skills taught intramurally and those within EPT.
- Verification of EPT, as well as that obtained intramurally, should include more understanding of the economics and management of animal units and veterinary practices and the communication skills for all aspects of veterinary work.
- Proper record of student's experience during EPT should be ensured by using a logbook provided by the Establishment (ESEVT standard 3.10). Limited evidence of such a Logbook, and the evaluation of acquired skills, was found.

### **3.6.3. Suggestions for improvement**

- Assessment of competences before entry into clinical practice would be useful to address any specific needs and make the students more confident with clinical activities.
- Contact with the “real world” such as the external practical activities performed at the Foundation are very useful and should be encouraged and verified by the academic staff, in order to confirm the acquisition of vital skills (communication, client management etc.) and economics.

### **3.7 Decision**

The Establishment is compliant with Standard 3, except for Substandards 3.3, 3.4, 3.6, 3.7 and 3.10:

- The Establishment is partially compliant with Substandard 3.3 because of a requirement that programme learning outcomes must be clearly visible and all units of study should be aligned to these programme outcomes. Achievement of the programme learning outcomes must be supported by evidence.
- The Establishment is partially compliant with Substandard 3.4 because of the complex set of committee structures involved in evaluation, identification of content overlap, and revision of the curriculum should be streamlined (especially in ULiège).
- The Establishment is partially compliant with Substandard 3.6 and 3.7 because of a need to formalise the clinical skills obtained during EPT in comparison to clinical skills obtained during the core intramural training.
- The Establishment is partially compliant with Substandard 3.10 because of the need to introduce a mandatory EPT logbook (either paper or online). Fulfilment of the logbook must also be checked after EPT.

## **4. Facilities and equipment**

### **4.1. Findings**

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

The Establishment is located on the Sart Tilman site of the University of Liège, 15 km outside Liège. Seven of the eleven faculties that make up the university are located on the same site. Three other faculties and the central administration of the university are located in the centre of Liège. The final faculty, agronomy, is located on a third site. Public buses provide a

connection between the centre of Liège and the Sart Tilman site. Parking for students is also available around the buildings of the FMV.

The FMV occupies a total area of approximately 50 000 m<sup>2</sup>, and houses various classroom facilities, including those for dedicated, discipline-related practical classes, and the veterinary teaching hospitals. Most recently, a new small animal clinic has been completed, which provides improved reception facilities for clients and better teaching facilities for the development of clinical skills.

A farm (FEPEX), located less than 500 m from the main faculty building, is also available for teaching all subjects related to animal production.

The Establishment also uses some lecture halls at 3km distant to the main site. Students access these by public transport or in their own vehicles.

There are plans for future developments now that the small animal hospital has been completed. The vacated ground floor space in the old hospital will be transformed into teaching laboratories where practical activities related to microbiology (bacteriology, virology, parasitology and food microbiology) will take place, and the first floor to research laboratories.

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

##### **-) lecturing, group work and practical work**

The Establishment has five lecture halls with capacities ranging from 80-200 students. This means that the largest cannot handle even 50% of the largest student cohort currently enrolled. The Establishment also uses other nearby university lecture theatres. There are seven of these, ranging in student capacity from 250-585. Therefore, two of these can accommodate whole classes. All lecture halls are equipped with data projectors and wi-fi internet services.

The Establishment has a range of paraclinical and clinical practical laboratories with capacities ranging from 12-60. There are five computer rooms with capacities ranging from 16-74, and a small number of seminar rooms, capacities 4-16.

##### **-) housing healthy, hospitalised and isolated animals**

The Establishment houses healthy animals for teaching on both its main site and its farm. On its main site it can accommodate dogs (25-32), horses (12) and pigs (35-45). FEPEX accommodates dairy (99) and beef (41) cattle, as well as teaching cows (12) and sheep (12), chickens (120), rabbits (30), pigeons (30) and guinea pigs (30).

Clinical housing is available for small animals (41), horses (31), large ruminants (10), small ruminants (12), and exotics (16) including birds.

Isolation facilities are available for small animals (4) and various sizes of large animals (12)

##### **-) clinical activities, diagnostic services and necropsy**

A range of facilities are available for consultations, advanced diagnostic work, and surgical and medical treatments, including intensive care, supported by sterilisation service facilities. Dedicated spaces are available for chemotherapy, physiotherapy, exercising horses, and farriery.

Imaging facilities include: radiography, ultrasonography, MRI and CT, together with reading rooms.

There are facilities for parasitology, anatomic and clinical pathology, and necropsy.

**-) FSQ & VPH**

The Establishment has agreements with several slaughterhouses near to Liège to provide training facilities for students. These include:

- a slaughterhouse for cattle, Droixhe (15 km from the FMV): 400 to 500 animals / week
- a slaughterhouse for cattle (especially Belgian Blue), “Roche4meat”, Rochefort (70 km from the FMV)
- a slaughterhouse for pigs, Aubel (46 km from the FMV): +/- 12,000 pigs / week
- a slaughterhouse for chickens, Maasmechelen (+/- 65 km from the FMV): 1,000,000 chickens / week.

The students also have access to two meat cutting facilities (beef and pork) located at Droixhe (15 km from the FMV).

Practical activities also include hygiene controls of the different catering facilities of the university and herd examination at the teaching farm.

Lastly, an experimental unit for meat processing is available at the Establishment and is used for both teaching and research activities.

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

Students can work in the libraries of the Establishment, as well as of the other faculties of the university.

The Establishment has a restaurant on its site that accommodates 380. Prices for students and staff are reasonable as they are subsidised by the social budget of the university. Other restaurants and cafeterias are also available for students, at other locations on the university campus.

Two changing rooms (one for men and one for women) are available in the new clinic. For the other clinics, lockers are available at the entry of auditoriums A&B, of the necropsy room and the anatomy rooms.

Six rooms are available in the establishment for on call undergraduate students; the remaining 36 are dedicated to the interns. These rooms are located near (or within) each clinic.

Kitchenettes (n=10) and showers (n=20) are also provided.

A secure room is available to allow students and staff to park their bicycles.

There is a large recreation room for students, with small rooms to rest and eat available for students in the clinics. Benches and tables have recently been installed on the lawns.

A multisport centre and a swimming pool are located near the Establishment (500 m). Fees for affiliation are very low for both students and staff.

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

The Establishment has dedicated vehicles for: student transport (6), ambulatory clinics (1), live animal transport (1) and cadavers (2).

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

The whole Establishment site has Wi-Fi internet connection, the lecture theatres are equipped with data projectors and speakers, and most of them offer the opportunity to record the lectures for podcasts. The majority of the seminar rooms are also equipped with projectors, and some of them with a computer.

Most of the laboratories are equipped with the basic equipment and materials required to perform the relevant practical tasks in safety.

The clinics are well equipped with standard equipment for routine examination and surgery, as commonly performed in general practice, along with state-of-the-art imaging, laparoscopy, arthroscopy, and endoscopy equipment. This equipment is routinely used for teaching as the students participate in all surgical and diagnostic procedures. In the small animal clinic, surgical rooms are equipped with intra-operative cameras, allowing students to view the surgical procedure in real time in the rounds rooms.

The equipment necessary for teaching at the Establishment is partly funded by the university and partly from the surpluses on clinical activity. Each year teaching grants are allotted to the departments to buy equipment. For large items of equipment, the university can pre-finance the purchase (MRI, CT scan).

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

Newer facilities are being designed with biosecurity as a key consideration, and there is an appropriate management structure at both University and Establishment levels, together with appropriate protocols for biosecurity in all areas.

#### **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**

Facility needs are identified by the users (staff and students) or by the senior management of the Establishment. After approval by the university, it assigns a working group to develop a project which, depending on the nature of the project, is discussed in CPFE and / or CPFR and then approved (or not) by the Board of Studies. Implementation is the responsibility of Building Services, in consultation with a user group appointed by the Dean's Office. All staff members and students are informed via a specific agenda item at each CF.

In addition to building projects, the university has a central budget for teaching equipment (classroom equipment, computing, eLearning) and decentralised budgets to finance specific needs of faculties (e.g. Personal protective Equipment). Senior management of the Establishment and the departments decide on the allocation of the delegated educational budget. Specific budgets are also available for research equipment (FNRS, special university funds for research, external research agreements) and are allocated according to agreed procedures.

Within the Veterinary Teaching Hospital, equipment needs are identified by the clinical services, and discussed with all relevant parties before decisions are taken by the hospital management board.

For FEPEX, decisions on self-financed equipment are made by a specific management board. From 2017-2018, the management board has had to inform the Establishment when there is a need for equipment whose value exceeds its capacity for self-financing, so that a decision can be made on whether to relay the request to the university via the CEB.

## **4.2. Comments**

- The establishment is **commended** on its facilities development plans, but the visiting team noted that the capacities of the buildings, linked to the design of the teaching, all depend on maintenance of the reduced student numbers to deliver a high-quality educational student experience. As noted elsewhere, on student numbers, it will be

important for the Establishment to continue to work with the University to ensure that these are controlled to the benefit of both staff and students.

- The Establishment is **commended** on the successful delivery and recent opening of its new small animal hospital, which provides a state-of-the-art learning environment for both undergraduate and postgraduate students. Considerable thought has gone into the design of the diagnostic and treatment facilities, as well as the housing for small animal clinical cases of all types. The design has clearly benefitted from staff knowledge and experience of best practice elsewhere, and this has allowed the creation of a facility of which the Establishment can be proud.
- The Establishment is **commended** on all its isolation facilities for animals. Considerable thought has gone into the protocols for their use, and the disposal of carcasses, and the operating procedures are posted for users in clearly illustrated explanatory notices.

#### **4.3 Suggestions for improvement**

- The small animal hospital is clearly very new, and it is suggested that the management team quickly develop plans for optimal use of this facility for all aspects of teaching and clinical services for the benefit of referring veterinarians and the public.
- In some of the older clinical units, the duty student overnight accommodation is quite basic. It is suggested that the Establishment develops a plan for sequential improvement of these facilities.
- The Establishment is encouraged to continue to develop and expand the use of the Clinical skills laboratory.
- It remains urgent to initiate as soon as possible the very necessary work on the changing rooms within the necropsy facility.

#### **4.4. Decision**

The Establishment is compliant with Standard 4.

### **5. Animal resources and teaching material of animal origin**

#### **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 Establishment aims to offer optimal hands-on pre-clinical and clinical training to all students, while seeking to replace, reduce and refine the use of animals in keeping with the European directive on the protection of animals (2010/63/EU). This has resulted in the increased use of cadavers, anatomical specimens and mannequins in recent years.

Despite this, pre-clinical training is still undertaken on “educational animals” and on the teaching farm. To maximise the availability of clinical cases the clinical services operate 365 days a year and ambulatory clinics are in operation for all major veterinary species, alongside agreements with external facilities such as animal shelters.

For cattle, pigs and poultry access is more problematic. Cattle are transported to Liège to the VTH by the Establishment itself. The current on-going problems with African Swine Fever are limiting, or totally preventing, access to pig farms. Only virtual tours of poultry farms are available to students.

Students also undertake twelve-weeks of external practical training (EPT).

**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 for the teaching of pathology is very good although the diversity of anatomical specimens in some of the bachelors programmes was limited.

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

This was variable between bachelors programmes.

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

The numbers of visits to cattle herds was good in the masters programme but access to pigs and poultry was very limited, in part due to the ongoing African Swine Fever outbreak.

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

Generally, this was good although it was evident that for some students there was an overreliance on EPT.

**-) 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 new VTH and the equine, porcine and ruminant facilities give a good balance of case material, with the exception of pigs and poultry.

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

The VTH is open for emergencies 24 hours a day, with appointments scheduled 8.00 am – 5.00 pm on week days. The out-of-hours service seems to be run in the most part by interns and students with residents in some disciplines, although senior clinicians are also available on-call when necessary. Only interns and M3 students are listed on the out-of-hours staffing of production animals.

The ruminant ambulatory clinic reports seeing around 500 animals per year – this number seems low, although cases are also reported on page 62 of the SER in table 5.1.4.

The equine ambulatory service seems to be limited to 300 horses / year in a sanctuary – recording keeping here is reported to be poor but improving.

**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**

Students in M2 work in quite large groups of between 11-13. It is difficult from the SER to gauge the effect of this on student learning, but throughout the document the excessive number of students is repeatedly mentioned as being problematic. In M3 groups sizes vary from 2-8 students per group.

For FSQ, the group size is 12-14 students per group in M1; in M2, 10-12, 5-6 and 10-12 students per group for cattle, pig and poultry abattoir, respectively, and one student per teacher (official inspector) in M3.

**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 university uses SAP software which has been adapted to the specific needs of the clinic: for patient registration, clinical record keeping and statistics of the clinical activities. Students has special ‘student’ access to these data. Some records are kept in Excel outside this system.

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

Animal welfare is audited quarterly by the well-being manager of the FMV in accordance with the required legislation.

Animals for teaching purposes (horses, dogs, pigs, and cattle herds from the farm) are also regularly monitored, both during the teaching activities for which they are used and their day-to-day welfare.

All experimental protocols must be approved by the university ethics commission, with experiments carried out only by recognised researchers and technicians holding a FELASA diploma (animal worker (category A FELASA), technician (category B FELASA), experienced master (category C FELASA)).

#### **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 provision of animals and material of animal origin across the masters programme in particular is good. The new VTH is expected to significantly increased caseloads in small animals and particularly exotic species.

#### **5.2. Comments**

- The Establishment must be commended for the caseload in several areas, but particularly the availability of material for necropsy.
- However, due to the current high volume of clinical students and an insufficient number of both clinical cases and staff linked to the number of students, as clearly set out in the Indicators (Section 12), there is at the present time insufficient exposure of students to clinical cases. This situation cannot be fully rectified by EPT.

#### **5.3. Suggestions for improvement**

- Maintain funding to support the provision of necropsy material.
- Establish a network between the bachelors programmes to develop anatomical specimens (e.g. plastination and 3D printing) to reduce the need to use fresh material in some instances. For example, the development of standardised specimens for examination purposes.
- Allocate funding to purchase more specimens from abattoirs when required e.g. horse heads, bovine feet and uteri.
- Consider stopping the keeping of animals maintained just for teaching where possible, for example on the farm commercial animals can equally well be used for teaching.
- The development of the clinical skills lab should be prioritised and supported, including the provision of technical staff. Access to the lab by students also should be maximised.
- The 'Student run farm' initiative should also be encouraged and developed at the earliest opportunity.
- Seek ways of getting students onto pig and poultry farms when the national disease situation allows.
- Try to find ways of utilising the new aquaculture facilities in teaching.

#### **5.4. Decision**

The Establishment is compliant with Standard 5, except for Substandard 5.1:

The Establishment is not compliant with Substandard 5.1 due to the current high volume of clinical students and an insufficient number of both clinical cases and staff linked to this

number of students. This lack of compliance is also linked to Substandard 9.2

## **6. Learning resources**

### **6.1 Findings**

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

The Life Sciences Library (BSV) has two physical locations: the main entity located into the University Hospital (CHU) and the other within the FMV, at a distance of 500 meters from the CHU. The BSV contains the library and documentation services for different Faculties (medicine, veterinary medicine, psychology biology, botany and zoology). Paper veterinary books are still accessible at the FMV Library, but all periodicals in paper form are accessible at the BSV.

FMV gives support to students through library staff by means of specific courses (outlined in the SER), tutorial, email and a physical presence (2 half days per week), to access materials for specific training activities or research, scientific information and medical information.

The BSV is open every day (except Sunday) from 8:30 to 21:00, but the opening hours at the FMV are limited to morning 9-12,30 (Monday to Friday), 1 day in the afternoon (Wednesday) and on Monday Tuesday (17:30-19:30). The BSV/MV is closed for 1.5 months per year (during July and August). Information on opening hours are shown on the FMV web site ([https://www.fmv.uliege.be/cms/c\\_4759374/fr/fmv-resources-documentaires](https://www.fmv.uliege.be/cms/c_4759374/fr/fmv-resources-documentaires)).

The budget is managed by the BSV, which covers the electronic journal of the veterinary area. FMV has a specific budget for paper books to keep this library only for veterinary paper books. The description of the BSV/MV has been further clarified during the visit. The FMV library has 1 room with 6 seats with 2 PC seats. Other rooms (study rooms) are available in the same area but with no PC seats. They are open from 8:00 to 20:00. A new computer room will soon be available (50+20 seats). The reported number of available veterinary books is 2,484. There is a library catalogue and the loan system is connected with other libraries. A booking system for meeting rooms is available in the web portal.

The Wi-Fi network is satisfactory.

#### **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.**

Teachers upload the course materials on a web-based platform (e-Campus), that centralises all the material dedicated to education. On e-Campus, students can download lessons, take tests, have access to educational contents. Educational contents are mainly ppt presentations. The training material is available in advance to students and in some cases, podcasted lectures are available during the academic year to students to help students that were absent to follow the lessons. A tool (SQORE) was developed to help teachers to assess open-ended questions exams. State-of-the-art histology and histopathology virtual microscopy platform is available (Cytoscope) for teaching and consultation.

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

Access to information (search and retrieval of online documents) is handled by the general service of ULiège Library network (<https://lib.uliege.be>), through BSV/MV computers, Wi-Fi network in university buildings and VPN (from outside of the campus).

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

Information literacy and available resources (books, periodicals, and databases) are taught to students through mandatory courses: 2 courses during the Bachelor years (introduction and critical appraisal of scientific literature) and 1 course during the Master years (information literacy and evidence-based vet medicine). A further course is foreseen during the doctoral training. Overall, 18 hours theory and 8 hours of practical activities are foreseen in the 6-year curriculum. Professional librarians are available on site at the FMV library (2 half days per week) and at the BMV library to give advice. Specific tutorials have been developed. A system to check plagiarism of literature sources is available (<https://www.turnitin.com/>).

#### **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.**

Communication of new learning resources is made through a variety of ways (information screen at the entrance of the BSV, Facebook, emails etc.). The BSV is administered by a steering committee (which includes an academic representative of the Faculty) which meets on average twice a year.

New book acquisition is decided based on request made by students or based on loan requests. Students can give feedback anytime on development/revision of learning resources (i.e. feedback on didactic material, proposal for improvement, etc.) although there is no direct request for a feedback through structured surveys (last one was conducted 10 years ago).

#### **6.2. Comments**

- The Library is one of the core structures of a University: it should be the main point of aggregation and discussion, especially during the bachelor period. The current setting of the FMV Library does not fully meet its institutional mission. It appears that since it is not particularly appealing, students tend to move to other meeting rooms and other libraries. Spaces are not well equipped for PC seats.
- The new Computer room is intended to expand the availability of space and infrastructure, but appears to lack some of the students expectations (division of spaces, increased opening hours etc.).
- Students needs should be monitored through regular surveys and a feedback to their requests should be given in a transparent way. Complaints should be monitored and analysed for continuous improvement.
- Students should be involved in the Library steering committee.

#### **6.3. Suggestions for improvement**

- The opportunity to elaborate a mission statement for the library at FMV should be considered, in order to reflect on the opportunity that the library may become a base for collaborative working and knowledge management, instead of a simple “loan service”.
- To ensure ESEVT requirements, staff and students must have full access **on site** to an academic library and the Establishment must provide students with unimpeded access to learning resources.
- This could be done by creating a more “attractive” studying environment including separate small rooms for group work with increased opening hours - in order to give students the access to the library during the whole day and weekend - at the current place of the BSV library within the Establishment.
- An alternative would be to move all the Vet paper book collection to the BSV Library, since the BSV Library is being refurbished in the near future and already has broader opening hours. A small on-site book collection and the collections at each department (discipline based libraries) and in the clinics should remain available.

#### **6.4. Decision**

The Establishment is compliant with Standard 6, except for Substandards 6.2. and 6.3:

The Establishment is partially compliant with Substandards 6.2 and 6.3 due to the need to upgrade the library based at the FMV (the BSV) to provide a greater number of textbooks, longer opening hours and an increase in study places.

### **7. Student admission, progression and welfare**

#### **7.1. Findings**

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

The Government (FWB) decides on the admission procedures, the admission criteria, and the number of admitted students.

Students may visit the FMV's website to find necessary information.

Written documentation (ABC) about the FMV is updated every year by the FMV. ULiège also organises open days: information sessions about the studies, and guidance activities.

Secondary school students may attend to university courses during "open courses" days.

Students and teachers from the FMV participate in information sessions in secondary schools, in events where students can ask questions about the studies and the opportunities, in agricultural fairs, and in veterinarian events.

There is no selection committee in the FMV at the beginning of the veterinary program. An admission commission is in place at ULiège for students wishing to be admitted during studies.

A certificate of higher secondary education is needed to register as a student of veterinary medicine. Students also have to obtain a medical certificate of aptitude in order to register for the first year.

Before registration, students have to pass a mandatory, but informative and non-binding test on the subjects taught in the general orientation of secondary school. This test aims to inform students about their competencies compared to the background needed to begin their first year. A number of Non-resident students, i.e. students living outside of Belgium, are admitted to the programme based on a lottery under the control of a bailiff. The number of positions available to non-resident students is 20% of the total number of resident students registered for the first time the preceding year.

After the first year, students have to pass a competitive examination about the subjects of the second semester of the year. Students are then ranked based on their results. There are 276 places in the second year for all the students registered in the first year of veterinary medicine in FWB. 20% of these places are dedicated to "non-resident" students. All students that acquired at least 45 ECTS and that are high enough in the rank are admitted to the second year. The ranking is done by the Jury gathering all the teachers of the first Bachelor's programme.

Each university can deliver a fixed number of students to the second year: 40 for ULB, 51 for UCL, 80 for UNamur, and 105 for ULiège. Students may only sit the competitive examination twice in two consecutive years at most.

The FMV does not have any full fee-paying students.

The Establishments ESEVT status is available at the Establishments website.

The students see the EVALENS system as a big improvement and it also gives them an opportunity to submit suggestions and complaints anonymously. Students know about the EAEVE, they know the ESEVT accreditation status of the Establishment, and they know about the Day One competences.

**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**

A large number of international, mainly from France, come to study in French-speaking Belgium for various fields, including veterinary medicine. This has progressively led to a plethora of students following the Master's programme organised by ULiège, with a peak of non-resident students in Liege in 2010. This situation seriously threatened the quality of clinical training, due to lack of staff to manage the vast cohort of students on the one hand, and also to the limited number of clinical cases as regards to the large number of students in the clinics. The FMV also finds that excessive admission of students in clinics increases the risk at the level of security and biosafety.

The annual uptake of new students is around 370 (approx. 200 at the Bachelor's level and 170 at the Master's level). Annual admissions at the Bachelor's programme is expected to increase to 300.

Approx. 280 students graduate each year. The majority (73%) graduate the Master's programme at the expected time, while 21% graduate the Master's programme within 1 year after the expected study time.

The FMV cannot decide to limit the large number of students who have been admitted to Master's programme for almost twenty years.

Before 2003-2004, no system was in place to limit the number of students admitted to the Bachelor's course. To face an even larger number of students, an entrance exam limiting the number of admissions in the first year of the Bachelor's was introduced in 2003-2004.

The number of non-resident candidates was, however, much larger than the number of the resident ones. The entrance exam was then cancelled and a system limiting the number of admitted non-resident students was introduced. In 2006-2007, the number of admitted non-resident students was set to 30% of the number of resident students registered for the first time in the first year of Bachelor's the previous year. In 2016-2017, the limit was then decreased to 20%.

To limit the continuously increasing number of students who registered, a competitive examination was introduced in 2016-2017 after the first year of the Bachelor's programme besides the non-resident student's decree. The aim was to have a maximum of annually graduating students of 250. This selection system will stay in place until 2019-2020 when its efficiency will be assessed. Since the start of the competitive examination in 2016-2017, the university has put in place measures to better train the many students registered in the curriculum while waiting for a reduction of their numbers.

In addition to the selection systems described above, the FMV also increased its capacity:

1. Larger surface: new clinic, new rooms for practical works, intensive use of the FEPEX, skills lab
2. Increase of staff by an allocation of exceptional budget
3. Increase of the number of internal and external animals and the creation of a skills lab

ULiège and the three other institutions organizing Bachelor's, have repetitively asked the government to issue decrees to control the excess of students admitted. These decrees were successively appealed against and cancelled by EU courts.

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

The rules governing the grades delivered by the FMV are the following: when the student has a mean score lower than 10/20, he/she fails, 10 or 11/20, he/she has "succeeded", 12 or 13/20, "satisfactory"; 14 or 15/20, "distinction"; 16 and 17, "high distinction" and 18 or more: "highest distinction" unless the jury decides otherwise.

A competitive examination was introduced in 2016-2017 after the first year of the Bachelor's programme. The aim was to have a maximum of graduating students of 250. This selection system will stay in place until 2019-2020 when its efficiency will be assessed by the Government.

Students graduate when they have acquired all ECTS of a cycle (180 for each cycle in FMV). Students that do not acquire enough ECTS in their annual programme during a period of several years may no longer register in veterinary medicine because they are no longer fundable by the FWB.

ULiège set up a unit (QVE) to assist students with particular status: pregnant students, disabled students, crippling illnesses, psychic troubles, learning difficulties. It is possible for them to have a reasonable arrangement to allow them to carry on their studies: personalised coaching (institutional support, faculty relays), educational and logistical arrangements.

ULiège provides students with a number of services and activities: how to adapt their working method and their time management, how to prepare for exams, etc.

First year Bachelor's students in difficulty may be offered remediation and/or relief. In other cases, relief is possible by special decision of the jury.

Students have access to a medical service supported by ULiège, if needed.

A specific email address is available to students who wish to find out about their fundability.

Students have the opportunity to view their results on a secure personal website.

The FMV has designed teachers and administrative staff to be support people to help students in difficulty.

At the clinics level, a support person is designated in each centre to receive and advise students in difficulty.

A voluntary mindfulness course is offered to the students.

The educational unit may receive students to advise them in their study orientations; if psychological problems are detected, students are sent back to the Students' Quality of Life service.

Besides the Year 1 test, the individual student's progression is monitored through looking at courses passes/fails and if a student appears to be outlying compared to the other students, then the student is contacted.

Attrition rate in the Bachelor's programme is 20% for the first year, 14% the second year and then drops to 1-4%. Total attrition rate is 42%. For the Master's programme the total attrition rate is approximately 4% and indicating that there is no significant difference between students from the four different "feeder" universities. This finding is further corroborated by recent survey statistics made by University of Bruxelles and University of Namur.

Main causes of attrition are failures and/or because students are no longer fundable by the government.

### **7.2. Comments**

The efforts to keep the competitive examination limiting the number of students in the Master's programme after 2019-2020 are commended.

### **7.3. Suggestions for improvement**

Establishment of a tutoring and student mentoring system at ULiège is encouraged.

#### **7.4. Decision**

The Establishment is compliant with Standard 7.

### **8. Student assessment**

#### **8.1. Findings**

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

The curriculum is divided in three blocks of the Bachelors cycle (B1, B2, B3) and three blocks of the Masters cycle (M1, M2, M3). Each block includes a number of UE. The curriculum has 80 UE organized yearly, with two exam periods each, leading to 160 evaluations/exams each year. For each UE the assessment criteria are published on the FMV website in open access.

Each student follows an annual individual programme of at least 60 and at the maximum 75 ECTS. The way students are assessed is specific to each UE and is described in the teaching commitments of each course. The majority of UE evaluate students on the basis of written exams, including in most cases a mix of multiple choice and open-ended questions. At least one UE per block and per session assesses students via oral examinations. Some UE are subjected to continue evaluation throughout the year.

The student accumulates the ECTS over the years and when all credits are obtained, the student is deliberated to obtain the diploma and a grade according to the mean of the results.

##### **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**

Each exam can be written, oral or both, or the UE is assessed by continuous evaluation throughout the year. The Master's thesis is assessed by a written and oral exam.

The table at section 8.1.3. of the SER shows the number of UE in which each Day One Competence is taught, evaluated and which position it has in the curriculum. Each day one competence is at least assessed in one UE.

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

The answers to the exam questions and the feedback to the students are generally published on e-Campus. Whether or not this is done, is dependent on the teacher. Multiple choice questions can be communicated to the student by personal feedback via the SMART unit of ULiège. After each exam, the coordinator of the UE is obliged to organise at least an exam consultation for the students. Students then meet the teachers, see and possibly obtain a copy of their written examination and receive personal advice.

##### **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**

At the start of each year, the teacher(s) decide annually how the students will be assessed, which is (partly) based on the feedback (via CE/EVALENS) received and changes implemented in the last year. The rules for the jury of each cycle are updated annually and are available online on the FMV website (accessible for students and staff).

#### **8.2. Comments**

- The assessment practices are outdated and no longer representative of best practice in clinical professional education.

- Direct assessment of clinical skills and Day One Competences (some of which may be on simulated patients), must form a significant component of the overall process of assessment. It must also include the quality control of the student's 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.

### **8.3. Suggestions for improvement**

- There is a clear need for a programme level assessment strategy to monitor assessment and promote staff training and the delivery of modern, robust and repeatable assessments.
- Implement practical exams to assess students in for example clinical examinations, or the use of Objective Structured Clinical Examinations (OSCEs) to assess specific clinical skills. This can be done with the use of the clinical skills lab once developed.
- The quality assurance of oral examinations cannot be ensured. There is a large body of evidence that they tend not to be fair and repeatable. The Establishment is urged to phase out such examinations as a priority, as part of a wider updating of assessment policy. The only exception to this would be the active assessment of clinical communication skills, for example using observed mock consultations.
- The assessment policy should also address standard setting, it is no longer appropriate to simply say the pass mark is 10/20 or 50%.
- Clinical log books should be used to assess clinical skills in the clinic situation in the VTH and other clinics.

### **8.4. Decision**

The Establishment is compliant with Standard 8, except for Substandards 8.5, 8.6, 8.8 and 8.9:

- The Establishment is partially compliant with Substandards 8.6, 8.8 and 8.9 due to an inadequate level of programme learning outcomes covering professional knowledge, skills, competences and attributes, including allowing the school to certify the students' achievements of the learning objectives.
- The Establishment is not compliant with Substandard 8.5 due to an insufficiency with the strategy for the development and review of assessment methods, and the inability to change such assessment methods when required.

## **9. Academic and support staff**

### **9.1. Findings**

#### **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**

The Establishment has mapped all the competences prescribed by the EAEVE and all the subjects listed in the Directive to ensure that they are included in the veterinary curriculum. This is reviewed by the reform of the programme committee and the CEs ensure continued coverage and relevance of all the skills and competences, supported by the results of alumni surveys. This information is used to consider whether staff teaching skills need to be maintained or even reinforced, when an academic in charge of an area retires.

Regarding the qualifications of academic staff, more than 75% have a permanent position and

around 90% of them are veterinarians. In terms of clinical expertise, 42% of the permanent staff members are EBVS Diplomates (54 out of 128 in 2017-2018), and a large number of them are members of different national as well as international expert agencies. Academic staff also participate in research activities. When new appointments are made, in addition to the legal requirement of a doctoral thesis (PhD), applicants are required to hold the title of European or American specialist, if a College exists for that specialty. In addition, a long period of work abroad is required by the University of ULiège prior to a permanent appointment.

As regards good teaching practice, all staff members involved in teaching must complete teacher training modules. Staff also have the option of going further with the specialised Master's in the Pedagogy of Higher Education.

Staff members must be familiar with biosecurity rules. They are also invited to attend the annual biosecurity day that is organised in the Faculty. Checks of all biosecurity systems are carried out on a regular basis.

Continuing discipline-related education (via Colleges, congresses, seminars, etc.) is strongly encouraged and facilitated when possible. Completion of continuing education for academic veterinarians involved in clinical practice is confirmed by the National Veterinary Council, as for any other practitioner. Academic and teaching staff also have access to various training opportunities and self-development programmes organised by the university.

Fitness for work is managed by the staff welfare committee assisted by the External Service for Prevention and Protection at Work (SPMT-ARISTA).

### **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**

The Establishment makes a number of references to the challenges of coping with large cohorts of students that it does not control. In addition, until 2021, the Board of Directors of the ULiège has decided that only two out of three of the retiring Professors and members of support staff are supposed to be replaced. However, the Establishment wishes to obtain a dispensation from the Rector to keep its academic and support staff numbers at the levels of 2015-2016. Specifically, for the Associate Teachers in the clinics, a slight increase is expected in the coming years. However, the size of this increase will depend on the financial resources released by the Veterinary Teaching Hospital.

### **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**

Tenured teachers are civil servants. Vacant positions are widely advertised through relevant media. Selection is through a competitive process overseen by a selection committee, appointed by the Faculty Council, made up of external members who are experts in the discipline. The CA of the university makes the final decision by approving the recommendations of the CF and recommending ratification of the nomination by the Ministry. The first career step is the rank of Chargé de cours. Except in special cases, the appointment is provisional (four to five years), with the possibility of confirmation after an evaluation procedure.

Additional categories of academic staff include Associate Professors, former Assistant Professors promoted to a permanent position within the scientific staff (these permanent positions are limited to very few fields which have been identified in the Strategic Plan of the Faculty), and Assistant

Professors, normally appointed for a maximum of six years based on a good academic record.

The Establishment also appoints Associate Teachers, who are practitioners hired under annually renewable part-time contracts to supervise students during specific teaching activities. They have been recruited because of the excess of student numbers, under exceptional credits allocated on an annual basis by the university. There are currently discussions to make some of these positions permanent. In addition, the Establishment appoints Clinical Associate Teachers, funded by the income from the Veterinary Teaching Hospital. Some are permanent while others have temporary positions.

Finally, the Establishment recruits Interns and Specialised Interns. They are recruited annually with a salary corresponding to 20% or 40% of a full-time Assistant Professor for Interns and Specialised Interns, respectively. They are co-financed by the CVU revenues.

The Support Staff is composed of civil servants and other agents, to whom specific laws apply. For a permanent position, a formal recruitment process is required in any case. Regular panels are held to meet the needs of the Establishment in terms of its support functions (e.g. accountants, administrative assistants, etc.). Targeted recruitment with panels involving appropriate experts are also organised when needed (e.g. recruitment of grooms).

Each year, a wide range of training courses are offered to support staff. Anyone involved in animal experimentation must undertake specific training according to their level of involvement: “ouvrier animalier” (catégorie A FELASA), “technicien animalier” (catégorie B FELASA), “maître d’expérience” (catégorie C FELASA).

There is no continuous evaluation process of the academic staff, yet their teaching is evaluated each year by students through the EVALENS survey. Scientific publications are gathered in the central information system Orbi; standardised curriculum vitae will soon be managed in the information system, currently under development, Urbi. These tools are gradually being made mandatory for evaluations.

EVALENS is an anonymous survey that students are asked to answer in February and June. The individual results are communicated to each teacher, as well as to the Dean and VDE. They are part of the documents taken into account in the evaluation for permanent appointment and promotions. When problems are identified, the VDE has an interview with the teacher concerned to find possible solutions. The VDE monitors the progress of remedial action the following year.

Most Associate Teachers and Clinical Associate Teacher have voluntarily followed pedagogical training and training oriented towards their taught subject. From 2019 on, a minimum training requirement dedicated to teaching and student assessment will be organised annually by IFRES, for all associated teachers.

Continuous evaluation of Support Staff is organised every other year by the line manager. Positions for promotion are also opened every two years by the CA. The number of positions is limited and granted by competition.

## **9.2. Comments**

- The Establishment has a high percentage of veterinarians overall, and large number of EBVS Specialists across a range of disciplines involved in clinical teaching. All staff are well-qualified for their roles.

- However, the University has recognised the Establishment’s challenges in relation to student numbers, through ensuring the overall total number of staff will be maintained. Although the level of staff has been stabilized at the figure for 2015-2016, and is currently within the strategic plan of the FMV, this number has not been guaranteed by the authorities of the ULiège.
- Another factor is that the number of support staff is insufficient in relation to the indicators of ESEVT/EAEVE and will remain so after the number of graduate students per year is reduced to 250.
- The University and the Establishment are commended for their focus on the development of teaching staff as educators, including the opportunity to progress to a Masters level qualification. While 90% of participants who have been employed for 4-6 years have fulfilled the basic requirement of 10 half day sessions, completion rates are lower for those who have been employed for 4 years or less. Some staff focussed on clinical teaching did not feel that there were any specific units tailored to their pedagogical challenges in the clinics. Those who have completed the Masters recognise the skills they have gained for undertaking educational research, but do not feel that this will be valued if they embark on these types of projects.
- Discussions with academic staff at all levels revealed a recognition of the value of an annual formative appraisal that looked at overall workload, and targets for future tasks and career development.
- Some members of both academic and support staff identified a lack of transparency in the application of promotion criteria, and there was also a perception among academic staff that despite policies that supported the recognition of teaching, clinical and administrative responsibilities, alongside research, research still played a dominant role.

### **9.3. Suggestions for improvement**

- It is suggested that the Establishment sets targets for completion of the compulsory teacher training programme, and monitors and reports on the achievement of these.
- It is suggested that the Establishment works with the University to develop specific optional units relevant to clinical educators. One theme might include “patient-side teaching”. Some material of this type may already exist for medical educators and could act as a model for veterinary units.
- The visiting team saw examples of computer-aided learning packages that were well-designed and pedagogically informed. It is suggested that the Establishment develops a plan for sharing these examples of best practice widely and supporting others in developing their own cutting edge learning resources.
- All the highly ranked veterinary faculties are recognised for their scholarly approach to education as well as the quality of their veterinary research. It is suggested that the Establishment develops a plan for engaging its staff with Masters in Education in discipline focused pedagogical research, and works with the University for recognition of these scholarly contributions in promotion and other rewards criteria.
- During its visit, the ESEVT team discovered that there is a University level project that has trialled a new annual appraisal system in at least one other faculty. It is suggested that the Establishment works with the University to introduce an appropriate developmental appraisal system for all its academic staff.
- It is suggested that the Establishment reviews its promotion criteria and the clarity of the information available to staff. This could be linked to discussions at annual appraisals, if these are developed, so that clear targets for promotion can be set and staff

expectations managed.

- The number of support staff is should be monitored in relation to the Indicators of ESEVT/EAEVE.

#### **9.4. Decision**

The Establishment is compliant with Standard 9, except for Substandard 9.2:

The Establishment is not compliant with Substandard 9.2 due to the current high volume of clinical students and an insufficient number of both clinical cases and staff linked to this number of students. This lack of compliance is also linked to Sub-standard 5.1

## **10. Research programmes, continuing and postgraduate education**

### **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**

Research in the Establishment is led by a Vice Dean for Research and co-ordinated through a Centre focused on “Fundamental and Applied Research for Animals and Health (FARAH)”. By law all permanent faculty must have PhDs, and all are involved in research programmes. Academic staff are also involved in interdisciplinary research through the “Interdisciplinary Research Group in the Biomedical Sciences (GIGA), which includes more than 600 scientists involved in the development of health solutions for the benefit of patients.

This gives the FMV a rich research base, although this activity does not directly contribute to research-based undergraduate education. The GIGA strategy has a number of cross-cutting themes, including education, but there is no mention of any plans to inspire undergraduates or encourage them to think about research careers. The standard response on the visit, to questions about student involvement in research, was that this was down to individual members of staff and “veterinary students are not really interested in research”.

#### **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 FMV has a number of internship (around 25 per annum) and residency (around 20 per annum) programmes. In 2017-2018, 24 residencies were being developed in 10 EBVS Specialties. The responsibilities of the Residents, Interns and undergraduate students are well-defined to avoid conflicts. The undergraduate students are involved in the first-line approach: history, general examination, proposals for appropriate diagnostic tests, as well as conducting the basic tests, and therapeutic (medical or surgical) procedures under a veterinary supervision. They are also responsible for preparing the written report for the referring veterinarian. In contrast, interns and residents are veterinarians: they are responsible for checking and supervising the student tasks, final decisions on the work-up, and performing the more advanced diagnostic tests and therapeutic (medical or surgical) procedures under direct supervision of a EBVS specialist. They are also responsible for the final communication with the owner and the referring veterinarian. Interns complete this part of the job for first-line cases, and help residents in performing their job for specialised cases. Residents and interns continuously teach the students, throughout their case management, in addition to more senior staff.

The Establishment also offers PhD programmes, with around 140 PhD students registered at any one time.

**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**

The assumption is made that “the involvement of the teaching staff in research makes the concept of evidence-based medicine a leitmotiv throughout the entire curriculum”. While this is not substantiated, the students in the Bachelor programmes are taught about sourcing and analysing scientific information, and in one Bachelor’s programme the team saw evidence that students were involved in faculty research programmes and contributed to publications. This is further developed in the Master’s programme, with the students completing a Master’s thesis which can be a literature review, a case series or a research report.

The Establishment reports that they deliver several continuing education courses, most notably in laboratory animal science. In addition, FMV staff is heavily involved in continuing training through external bodies, including FORMAVET (see SER point 10.1.4 page 95).

**10.2. Comments**

The Establishment is increasingly organising its research into two centres: the more veterinary focused FARAH and the interdisciplinary GIGA. There is a clear logic to this alignment, but the visiting team recognised some tension and anxiety about how this is developing in terms of knock-on consequences for work-load allocation and the effect on undergraduate student contact with researchers.

As indicated in the SER, the student Masters thesis can take a number of forms. Exploration of how the Establishment reassures itself that common research-focussed learning outcomes are achieved revealed that this has not been attempted, nor is there any moderation between separate juries (examination boards) to ensure that pass standards are similar across all theses.

**10.3. Suggestions for improvement**

- Although the full potential the Establishment’s involvement in GIGA still has to be realised, and the relationship of this research with that supported by the Establishment’s own FARAH centre fully worked out, it will be important to ensure that greater research engagement is not at the expense of teaching and success of Faculty staff in GIGA does not have a detrimental effect on the research opportunities for others. It is suggested that as this evolves the Vice Dean for Research and the Dean develop a clear plan for workload allocation and resource distribution that assures the sufficiency of teaching staff.
- Given the interest of all young people in complex global problems that will require interdisciplinary investigation and solutions, the lack of a GIGA strategy for introducing undergraduate students to the research being undertaken in Liège seems like a missed opportunity. It is suggested that leaders in the University, the Establishment and the GIGA Centre work together to explore creative ways for inspiring young clinical students to consider research careers. This could include special open days and research forums, as well as short-term (6-8 week) paid studentships with research teams.
- Without common research focussed learning outcomes, it is not possible to determine that the aim for student research skills development through the master thesis is being realised for all students. It is suggested that high level research focussed learning outcomes are developed for the theses, and that assessment criteria relevant to each of the master thesis options are aligned as far as possible with these outcomes.

Additionally, it is suggested that master thesis are sampled across different juries to provide assurance that similar standards are being applied in all areas.

#### **10.4. Decision**

The Establishment is compliant with Standard 10.

### **11. Outcome Assessment and Quality Assurance**

#### **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.

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

**Objectives and Organisation:** The Rector is the head of the ULiège and chairs the Board of Directors (CA). Representatives of internal and external stakeholders are members of the Board, including the representatives of the academic body, the staff and the students.

The Rector and the Rectoral College (CR) define and implement the institutional strategy and the action plan, and manage the University's budget.

The Faculty of Veterinary Medicine (FMV) oversees the academic and administrative management of the various degrees, including the programming of academic activities, the revision of the study programmes, the issuing of academic certificates and the management of the budget. The Dean and the Dean's team head the FMV and they are elected for a period of four years by Faculty Council (CF).

The Faculty Council (CF) is the decision-making body of the faculty, and scientific staff, teaching staff, support staff and students are all represented in the Faculty Council. In case of equal voting in the CF, the Dean who is a veterinarian has the decisive vote.

The persons responsible for professional, ethical and academic affairs of the Veterinary Teaching Hospitals are all veterinarians.

**Finances:** The credits attributed to ULiège by the government and the level of registration fees are governed by law. A moratorium on the financing of higher education is in force until 2021. These amounts are paid to ULiège, which allocates budgets to its eleven faculties according to predefined rules.

The Rector and the Rectoral College (CR) define and implement the institutional strategy and the action plan, and manage the University's budget.

ULiège's financial management is handled in a centralised SAP software that allows accurate monitoring and close control. High-performance interfaces allow all users to manage their own professional data. All structures are called upon to establish annual budgets which are validated by the Budget Review Commission (CEB), before being approved by the ULiège.

The staffing framework at the FMV is negotiated with ULiège each year based on an established set of criteria.

**Curriculum:** The decision making process for programmes changes is visually depicted in Annex 11.3. The curricular programme was deeply revised in 2015-2016. Decisions on curricular changes are made by the Faculty Council (CF) and ultimately decided on by the Board of Directors (CA). Minor modifications are performed annually.

Curricular problems such as overlap, redundancies, omissions, are identified by processes performed at least annually and includes inputs from students, teachers and stakeholders. This has resulted in many improvements, e.g. new courses in communication and practice management.

Information is communicated to students by displaying the programmes online, by the educational commitments, and by the two boards of studies (CE).

**Facilities:** One member of the technical staff is entirely devoted to the continuous control of the FMV facilities. When problems are detected, it is submitted to the University's Real Property Administration (ARI) who asks an external company to solve the identified problems and who also pays for it. The university is fully responsible for real estate costs related to teaching and partially for those related to research. Building needs are stated by the users (staff and students) or by the Decanal office and can only go further if approved by the University. After approval, the actual plans are validated (or not) by the Faculty Council (CF). All staff members and students are informed via a specific point on the agenda of each CF meeting.

The University has a centralised budget for teaching equipment (classroom equipment, computing, eLearning) and decentralised budgets to finance specific needs of faculties (e.g. Personal protective Equipment). Equipment necessary for teaching at the FMV is partly paid by ULiège and partly paid by the clinical activity. Every year teaching grants are allotted to the departments to buy some teaching material; the members of the departments freely decide what to buy.

The University Veterinary Clinic can re-invest part of its benefit in new equipment. For expensive investments, the university can pre-finance the purchase (MRI, CT scan).

**Animal resources and teaching material of animal origin:** The environment of experimental and educational animals is subject to a quarterly control performed by the well-being manager of the FMV in accordance with the legislation in force.

Animals for teaching purposes (horses, dogs, pigs, and cattle herds from the farm) are regularly monitored, both for teaching activities for which they are used and for their living conditions. Any experimental protocol must be submitted and approved by the university ethics commission, and experiments are only carried out only by recognised experimentalists and technicians holding the proper FELASA qualifications.

The number of animals for preclinical activities is communicated by the responsible of the teaching unit (UE) to the Deans Office who decides on funding.

**Learning Resources:** The Library is administered by a steering committee which includes an academic representative of the FMV. The Steering committee meets on average twice a year. One of the missions of these steering committee is to make proposals about the library acquisitions and the scientific activities of the Library.

At all four universities, students and staff can ask for the Library to obtain specific textbooks.

**Student admission, progression and welfare:** The FMV has no influence on the number of students admitted. The Government (FWB) decides on the admission procedures, the admission criteria, and the number of admitted students.

Students may visit the FMV's website to find necessary information.

Written documentation (ABC) about the FMV is updated every year by the FMV.

A competitive examination was introduced in 2016-2017 after the first year of the Bachelor's programme besides the non-resident students decree. The aim was to have a maximum of graduating students of 250. This selection system will stay in place until 2019-2020 when the Government will assess its efficiency will be measured against certain criteria. The Steering Committee has as its prime objective to inform the process of evaluating this assessment.

Students feel that they can approach teachers to discuss personal problems, and teachers are proactive in informing students about how to contact them. Last year, a student had a fatal accident in the city of Liège and the FMV quickly established helplines and support services for the students.

The students see the EVALENS system as a big improvement and it also gives them an opportunity to submit suggestions and complaints anonymously. Students know about the EAEVE, they know the ESEVT accreditation status of the Establishment, and they know about the Day One competences.

**Student assessment:** The rules for student assessment are determined at three different levels:

- the « Décret Paysage » at the level of the Government
- the examination rules of the University of Liège
- the Jury rules of the FMV.

Rules governing the assessments of each teaching unit (UE) are described and available online. Answers to exam questions and the feedback to the students are generally published on e-Campus. Depending on the teacher's agreement, answers to multiple-choice questions can be communicated to the student by a personal feedback via the SMART unit of ULiège.

After each exam session, each teaching unit coordinator is required by the ULiège to organise at least one exam copies consultation for the students.

Rules governing appeal procedures are taken up in the jury regulations and in the general regulations of studies and examinations of ULiège. If a student believes that there has been an irregularity during his/her studies or examinations, he/she is first encouraged to meet the professor or the president of the jury. If he/she has not obtained satisfaction, he/she lodges an appeal with the Dean. If not yet obtained satisfaction, he/she may lodge his/her appeal with the Rector.

For each teaching unit, teachers decide annually how the students will be assessed, taking into account the previous year student's results and received feed backs from the two boards of studies and the student's assessment (EVALENS), and/or on implemented changes in the teaching methods. The assessment criteria must be available on the FMV website in open access before the beginning of the academic year for each teaching unit (UE).

The rules for the Jury of each cycle are updated annually and are available on line on the FMV intranet.

**Academic and support staff:**

Minimum requirements for appointment in the permanent staff: on top of the legal requirement of a doctoral thesis (PhD), applicants are required to hold the title of European or American

specialist if a College exists for that specialty. In addition, ULiège requires a long-term stay abroad prior to a permanent appointment.

All staff members involved in teaching must complete training modules or can be accompanied in their projects by the Institut de Formation et de Recherche en Enseignement Supérieur.

Staff must be familiar with biosecurity rules that have been published in a reference issue and can be accessed via the website.

There is no continuous evaluation process of the academic staff. However, students through the EVALENS survey (anonymous survey that students are asked to answer online) evaluate their teaching each year. The individual results are communicated to each teacher, as well as to the Dean and Vice-Dean for Education (VDE). They are part of the documents taken into account in the evaluation for permanent appointment and promotions. When problems are identified, the VDE has an interview with the teacher concerned to find possible solutions. The VDE monitors progress the following year.

Support Staff is composed of civil servants and hired agents. Both are ruled by specific laws. For a permanent position, a recruitment examination is required in any case. These procedures of selection are led by commissions appointed by the Board of Directors (CA). Experts of the FMV are included every time when it is needed. Every second year, a self-evaluation programme is held to match the needs of the FMV in the more general functions (e.g. accountants, administrative assistants, etc.).

The staff welfare committee manages welfare at work.

Work-related injuries are reported and investigated both at the faculty and the university level to avoid repetition of similar injuries.

The FMV has a strategic plan, approved by the University (the Research and Education University Council and The Board of Directors). The framework and budgets for the staff at the University are defined once a year for the following calendar year, by the Board of directors (CA). In the FMV, the Dean, the Decanal Office, the department presidents and the research units cooperate to define an implementation compatible with the FMV strategic plan, the teaching workload and the productivity in research. The suggestions are then discussed in the Joint Committee of the Permanent Faculty Commission for Education (CPFE) and the Permanent Faculty Commission for Research (CPFR) to prepare the version that will be approved by a vote in the Faculty Council (CF). FMV suggestions are submitted to the Board of Directors (CA) for a decision.

At all four universities there are mandatory courses on didactics and pedagogy offered routinely to both permanent and temporary academic staff, and these courses are also routinely subjected to internal evaluation.

Promotion criteria and minimum requirements for entering the academic staff are increasingly made more explicit, and in some instances, e.g. in reproduction, advanced to the form of tenure track with clear objectives for future promotion. Only scientists with a PhD can enter the permanent staff. Regular involvement in research programmes and publications in international peer-reviewed journals is mandatory to get a promotion. Depending on the area, diplomate status can also be required, especially within the clinical area. For support staff, promotion is possible, but the criteria are not always clear as promotion often relies on competition for a specific position. Possibilities for lifelong learning is developed to some extent for support staff, especially within administration.

The four universities assure themselves of the competence of their teachers, e.g. by providing mandatory courses in didactics and pedagogy. Formal appraisal procedures are not clearly established and rely more on informal mentoring procedures.

**Research programmes, continuing and postgraduate education:**

Only scientists with a PhD can enter the permanent staff and regular involvement in research programmes and publications in international peer-reviewed journals is mandatory to get a promotion.

The FMV has appointed a Vice-Dean for Research (VDR) responsible for all research-related matters.

The FMV offers numerous EBVS residency and internships programmes. Residents and interns are involved in clinical education and supervision of the undergraduate students at the VTH.

Each academic freely manages his/her research according to the principle of « academic freedom ». The only constraints are to respect animal welfare, in accordance with the advice of the ethics committee, and to obtain the necessary funding.

Post-graduate education (internships and residencies): the number of available positions is decided by the Faculty Council (CF), although the CVU may independently decide to employ additional interns and residents from its own funds. The selection of the candidates is performed by a group of professors and associated teachers in each of the clinics.

FMV has significant and broad research activities of staff that integrate with and strengthen the veterinary degree programme through research-based teaching.

All students are trained in scientific method and research techniques relevant to evidence-based veterinary medicine and they have opportunities to participate in research programmes.

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

**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 Rector is the head of the ULiège and chairs the Board of Directors (CA). Representatives of internal and external stakeholders are members of the Board, including the representatives of the academic body, the staff and the students. The Board of Directors (CA) is the decision-making body of the University of Liège.

The University's Quality Management and Accompaniment Department (SMAQ) is in charge of the quality management at the university level: general procedures, quality culture, support in the accreditation and certification processes, etc.

The mission of SMAQ is to promote, coordinate, and disseminate a quality culture within the University of Liège. It implements and accompanies evaluations organised internally and those, which the University made on the part of evaluators, certifying agencies or accreditors.

SMAQ is overseen by the Rector and composed of an executive unit of three administrative agents. It collaborates with the training, research and administrative bodies of the institution subject to evaluations, or wanting to develop their own quality system. It works specifically with the Data Collection and Analysis and Strategically Useful Information (RADIUS) unit regarding the development of useful indicators for internal or external evaluation approaches.

In 2016, the Rector presented the University of Liège Charter: Academic Career, Research

Path, Life Course. The Charter sets out that the University of Liège through a quality education organised around the principles of academic freedom and the freedom of scientific research, the University aims to train autonomous, responsible and committed students and researchers throughout their respective life paths.

The objective of the veterinary education at FMV is to provide the student with the knowledge, skills and competences in the field of health and animal welfare, without forgetting the animal productions and the veterinary public health.

The FMV has a strategic plan and a related operational plan.

These documents are made public partly on the open website.

The Quality Management and Accompaniment Department (SMAQ) has a general mission to promote, coordinate, and disseminate a quality culture based on critical reflection and strategic planning within the University of Liège. The mission also includes a policy: quality management is based on values that have been defined by the SMAQ from its inception, i.e. critical thinking, active participation, dialogue, transparency and planning of changes.

In 2017, the development of a quality culture is recalled as one of the priorities in the Strategic Plan of ULiège. The challenge of the ULiège's quality management is to develop a culture of quality, and that it defines by two key phrases: "fitness for purpose" (critical assessment of the adequacy between the objectives and the means) and "capacity for change" (the ability to adjust).

ULiège is a member of European University Association.

ULiège has three labels of the European Commission: ECTS, Diploma Supplement, and HR Strategy for Researchers.

ULiège was the first European university in 2014 to receive the GMP (Good Manufacturing Practices) certification for the quality control of medication, ULiège has been the first university in the world pre-qualified by the World Health Organization (since 2016).

## **11.2. Comments**

- The FMV periodically (i.e. annually) review the programme and the curriculum by different methods, that also include input from the students (e.g. course evaluations) and external stakeholders (e.g. through the Advisory Board). An example is radio-anatomy that was found to be taught both at the bachelor's and master's level, a finding that led to a curriculum revision at the ULiège. Changes are communicated to all those concerned, e.g. by descriptions in the course descriptions.
- Biosecurity is a high priority of the FMV and several measures are put in place to secure that staff and students are aware of the regulations, e.g. mandatory quizzes for students.

## **11.3. Suggestions for improvement**

- The Team strongly suggest the formulation of a faculty quality policy that is made public, to further support the university's quality policy.
- Some oral examinations, though being public in principle, may consist of only the examiner and the student. To avoid concerns on fairness in examination, the use of additional examiners or external examiners is encouraged (see Sub-standard 8.5 under Standard 8 above).
- The team encourage the ULiège to set-up a Tutor System to further secure that individual students can be identified and helped.

#### **11.4. Decision**

The Establishment is compliant with Standard 11.

#### **12. ESEVT Indicators**

Some of the indicators are below the minimal requirements indicated in the SOP, and this is to a large degree linked to the large number of students admitted to the Master's programme. As actions have been taken at Bachelors' level (B1 competitive exam) to limit the number of students, this situation will improve over the next few years. However, it is of crucial importance that the B1 competitive exam is maintained as a permanent measure, and that the faculty will keep enough resources (staff, teaching materials and other learning resources, patient loads, facilities, etc), even though the number of students decrease. If not, the Establishment will not be able to adequately meet the requirements outlined in the SOP, and consequently, the accreditation status will be put at risk.

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	Calculated Indicators from raw data	Establishment	Median	Minimal	Balance3
I1	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0.116	0.16	0.13	-0.010
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	0.537	0.87	0.59	-0.053
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	0.502	0.94	0.57	-0.064
I4	n° of hours of practical (non-clinical) training	606.500	905.67	595.00	11.500
I5	n° of hours of clinical training	609.000*	932.92	670.00	-61.000
I6	n° of hours of FSQ & VPH training	157.000	287.00	174.40	-17.400
I7	n° of hours of extra-mural practical training in FSQ & VPH	31.000	68.00	28.80	2.200
I8	n° of companion animal patients seen intra-murally / n° of students graduating annually	33.508	70.48	42.01	-8.501
I9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	2.243	2.69	0.46	1.779
I10	n° of equine patients seen intra-murally / n° of students graduating annually	5.451	5.05	1.30	4.153
I11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	4.581	3.35	1.55	3.035
I12	n° of companion animal patients seen extra-murally / n° of students graduating annually	10.843	6.80	0.22	10.619
I13	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating annually	26.148	15.95	6.29	19.853
I14	n° of equine patients seen extra-murally / n° of students graduating annually	1.216	2.11	0.60	0.621
I15	n° of visits to ruminant and pig herds / n° of students graduating annually	0.489	1.33	0.55	-0.058
I16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0.000	0.12	0.04	-0.045
I17	n° of companion animal necropsies / n° of students graduating annually	1.710	2.07	1.40	0.310
I18	n° of ruminant and pig necropsies / n° of students graduating annually	4.352	2.32	0.97	3.382
I19	n° of equine necropsies / n° of students graduating annually	0.849	0.30	0.09	0.756
I20	n° of rabbit, rodent, bird and exotic animal necropsies / n° of students graduating annually	0.686	2.05	0.69	-0.006
I21	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0.195	0.20	0.06	0.132
I22	n° of PhD graduating annually / n° of students graduating annually	0.065	0.15	0.09	-0.023

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

<b>Standard 1: Objectives and Organisation</b>	<b>C</b>	<b>PC</b>	<b>NC</b>
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.	X		
1.2. The Establishment must develop and follow its mission statement which must embrace all the ESEVT standards.	X		
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.	X		
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.	X		
1.5. The organisational structure must allow input not only from staff and students but also from external stakeholders.		X	
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.	X		
<b>Standard 2: Finances</b>			
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.	X		
2.2. The finance report must include both expenditures and revenues and must separate personnel costs, operating costs, maintenance costs and equipment.	X		
2.3. Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.	X		
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 possible.		X	
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.	X		
<b>Standard 3: Curriculum</b>			
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.	X		
3.2. The learning outcomes for the programme must be explicitly articulated to form a cohesive framework.	X		
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.		X	
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.	X		
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.	X		
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).		X	
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.		X	
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.	X		
3.9. There must be a member of the academic staff responsible for the overall supervision of the EPT, including liaison with EPT providers.	X		
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.		X	
<b>Standard 4: Facilities and equipment</b>			
4.1. All aspects of the physical facilities must provide an environment conducive to learning.	X		

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4.2. The veterinary Establishment must have a clear strategy and programme for maintaining and upgrading its buildings and equipment.	X		
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.	X		
4.4. Students must have ready access to adequate and sufficient study, self-learning, recreation, locker, sanitary and food services facilities.	X		
4.5. Offices, teaching preparation and research laboratories must be sufficient for the needs of the academic and support staff.	X		
4.6. Facilities must comply with all relevant legislation including health, safety, biosecurity and EU animal welfare and care standards.	X		
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.	X		
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.	X		
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.	X		
4.10. All core teaching sites must provide dedicated learning spaces including adequate internet access.	X		
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.	X		
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.	X		
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.	X		
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.	X		
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.	X		
<b>Standard 5: Animal resources and teaching material of animal origin</b>			
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.			X
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.	X		
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.	X		
5.4. The VTH must provide nursing care skills and instruction in nursing procedures.	X		
5.5. Under all situations students must be active participants in the workup of patients, including physical diagnosis and diagnostic problem oriented decision making.	X		
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.	X		
<b>Standard 6: Learning resources</b>			
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.	X		
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.		X	
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.		X	
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).	X		
<b>Standard 7: Student admission, progression and welfare</b>			

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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.	X		
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.	X		
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.	X		
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.	X		
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).	X		
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.	X		
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.	X		
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.	X		
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.	X		
7.10. Mechanisms for the exclusion of students from the programme for any reason must be explicit.	X		
7.11. Establishment policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available.	X		
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.	X		
7.13. There must be effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment).	X		
7.14. Mechanisms must be in place by which students can convey their needs and wants to the Establishment.	X		
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.	X		
<b>Standard 8: Student assessment</b>			
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.	X		
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.	X		
8.3. Requirements to pass must be explicit.	X		
8.4. Mechanisms for students to appeal against assessment outcomes must be explicit.	X		
8.5. The Establishment must have a process in place to review assessment outcomes and to change assessment strategies when required.			X
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.		X	
8.7. Students must receive timely feedback on their assessments.	X		
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.		X	
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.		X	
<b>Standard 9: Academic and support staff</b>			
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.	X		
9.2. The total number, qualifications and skills of all staff involved with the programme, including teaching staff, 'adjunct' staff, technical, administrative and support staff, must be sufficient and appropriate to deliver the educational programme and fulfil the Establishment's mission.			X
9.3. 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.	X		

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9.4. 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.	X		
9.5. 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.	X		
9.6. 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.	X		
<b>Standard 10: Research programmes, continuing and postgraduate education</b>			
10.1. The Establishment must demonstrate significant and broad research activities of staff that integrate with and strengthen the veterinary degree programme through research-based teaching.	X		
10.2. All students must be trained in scientific method and research techniques relevant to evidence-based veterinary medicine.	X		
10.3. All students must have opportunities to participate in research programmes.	X		
10.4. 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 relevant to the needs of the profession and society.	X		
<b>Standard 11: Outcome Assessment and Quality Assurance</b>			
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.	X		
11.2. 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.	X		
11.3. 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.	X		
11.4. 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.	X		
11.5. 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.	X		
11.6. 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.	X		
11.7. The Establishment must ensure that they collect, analyse and use relevant information for the effective management of their programmes and other activities.	X		
11.8. The Establishment must publish information about their activities, including programmes, which is clear, accurate, objective, up-to date and readily accessible.	X		
11.9. 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.	X		
11.10. The Establishment must undergo external quality assurance in line with the ESG on a cyclical basis.	X		
<i>C: (total or substantial) compliance; PC: partial compliance (Minor Deficiency); NC: non-compliance (Major Deficiency)</i>			

## **Executive Summary**

### **Brief history of the Establishment and its previous EAEVE Visitations**

The Faculty of Veterinary Medicine (FMV) is over 180 years old having been established in Brussels in 1836. After being integrated during 1969 into the University of Liège, the Establishment moved to its present location in 1993.

The responsibility for Higher Education in this French speaking part of Belgium falls to the Wallonia-Brussels Federation (FWB). FWB promotes synergy between higher education Establishments in Wallonia. As a result, the 6 year veterinary medicine is organised by a Bachelor's degree programme delivered by four universities (ULiège, UNamur, UCLouvain and ULB), followed by a Master's in clinical veterinary delivered solely by the FMV in Liège.

Another major factor is the ruling that within Belgium there is free access to higher education, which has led to a large number of French students coming to study veterinary medicine. As a result of successfully completing their Bachelor's degree, an unsustainable number (for the Masters course) of students wish to complete their Master's veterinary programme at Liège. This number of students has seriously threatened the quality of clinical training, due firstly to lack of staff and facilities to manage the vast cohort of students as well as the finite number of clinical cases. Although the ULiège, supported by the 3 other Establishments organising the Bachelor degree, had repetitively and unsuccessfully pressured the FWB government to issue decrees to control this surge/excess of students, a recent decree has been made to limit the number of non-resident students to 20%. In addition, since 2016, competitive exams have been put in place at the end of the first year of Bachelor studies to limit to 276 the number of students admitted each year to the Bachelor's second year.

The FMV was last visited by ESEVT in 2009 and as a result two major deficiencies and four minor deficiencies were identified by ECOVE (listed above):

### **Brief comment on the SER**

As this visitation covered three "feeder Establishments" as well as Liège itself, there were four separate SER's in addition to the annexes. Although all the SER's were well written, the team identified several gaps in the data provided. As a result, there was an unusually large number of questions sent to the Establishments prior to the visitation. Despite this very large number of questions the requested data was provided before the visit. Additional information was provided on site.

### **Brief comment on the Visitation**

The Visitation was well prepared, well organised and carried out in a cordial and professional atmosphere. Both the liaison officers were easily and efficiently available when requested. The programme of the Visitation was easily adapted when requested by the Visitation Team who had full access to the information, facilities and individuals they asked for.

### **Areas worthy of praise (i.e. Commendations), e.g.:**

- Strong commitment of staff to the education of veterinary students within all four universities
- Smooth integration of students into M1

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- Enthusiastic students with a real commitment to learning
- The vital and excellent role of the Steering committee
- Acknowledgement of the efforts made to balance the number of students with available resources
- State-of-the-art small animal hospital
  - Facilities
  - Equipment
- Number of European diplomates
- Isolation facilities for both companion and large animals
- The provision of fresh carcasses for necropsy
- Pedagogical development of early career teachers

### **Areas of concern (i.e. Minor Deficiencies):**

1. Partial compliance with Substandard 1.5 because of insufficient formal involvement with external stakeholders at the faculty-level; need to establish timetable of twice-yearly meetings with the minutes available to staff and students
2. Partial compliance with Sub-standard 2.4 because of the need to clarify the allocation of funds raised through clinical income, including a greater distribution of funds to those areas responsible for raising such additional income
3. Partial compliance with Basic Sciences at the four Establishments delivering the Bachelor course due to the continuing need to ensure quality education in the Master programme by a continuation of the scheme limiting the number of students within the Bachelor programmes.
4. Partial compliance with Substandard 3.3 because of a requirement that programme learning outcomes must be clearly visible and all units of study should be aligned to these programme outcomes. Achievement of the programme learning outcomes must be supported by evidence.
5. Partial compliance with Substandard 3.4 because of the complex set of committee structures involved in evaluation, identification of content overlap, and revision of the curriculum should be streamlined (especially in ULiège).
6. Partial compliance with Substandards 3.6 and 3.7 because of a need to formalise the clinical skills obtained during EPT in comparison to clinical skills obtained during the core intramural training.
7. Partial compliance with Substandard 3.10 because of the need to introduce a mandatory EPT logbook (either paper or online). Fulfilment of the logbook must also be checked after EPT.
8. Partial compliance with Substandards 6.2 and 6.3 due to the need to upgrade the library based at the FMV (the BSV) to provide a greater number of text books, longer opening hours and an increase in study places.
9. Partial compliance with Substandards 8.6, 8.8 and 8.9 due to an inadequate level of programme learning outcomes covering professional knowledge, skills, competences and attributes, including allowing the school to certify the students' achievements of the learning objectives.

**Items of non-compliance with the ESEVT Standards (i.e. Major Deficiencies):**

1. The Establishment is not compliant with Substandards 5.1 and 9.2 because of the insufficient number of clinical cases and staff linked to the number of students, and absence of certainty that the number of students will be maintained at a level compatible with the caseload and staff.
2. The Establishment is not compliant with Substandard 8.5 due to an insufficiency with the strategy for the development and review of assessment methods, and the inability to change such assessment methods when required.

## **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 the following Major Deficiencies had been identified:

1. Non-compliance with Substandards 5.1 and 9.2 because of the insufficient number of clinical cases and staff linked to the number of students, and absence of certainty that the number of students will be maintained at a level compatible with the caseload and staff.
2. Non-compliance with Substandard 8.5 due to an insufficiency with the strategy for the development and review of assessment methods, and the inability to change such assessment methods when required.

The Faculty of Veterinary Medicine, University of Liège is therefore classified as holding the status of: **NON-ACCREDITATION**.