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European Association of Establishments for Veterinary Education

VISITATION REPORT

To the Faculty of Veterinary Medicine of the Freie Universität Berlin, Germany

On 13-17 November 2017

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Contents of the Visitation Report

Introduction

The Berlin Veterinary Medicinal School was founded in 1790. It was incorporated in 1934 into the Agricultural and Veterinary Faculty of the former Friedrich-Wilhelms-Universität (now Humboldt Universität). Following the division of Berlin after the Second World War, this University was located in the Soviet sector and a second veterinary faculty was established in the newly founded Freie Universität in West Berlin. After the German reunification, the two veterinary faculties were first administratively merged and eventually fully embedded into the Freie Universität (1997). Since then, the Faculty of Veterinary Medicine (called the Establishment in this report) is one of the 12 scientific departments of the Freie Universität Berlin.

The Establishment has been positively evaluated by EAEVE in 1998 and in 2007.

The Establishment is located in the German Capital with a population of 3.5 Million inhabitants. It welcomes every year around 175 new students, mainly females (90%).
In addition to its focus on excellence for education, research and services, the University to which the Establishment belongs has a culture of Quality Assurance and was the first Berlin higher education institution to be awarded the quality seal of the Accreditation Council by the accreditation agency AQAS (2016).

Since the last Visitation (2007), the main developments were:
-) relocation of some institutions to Düppel (e.g. several institutes now housed in the Robert von Ostertag building, the Institute of Meat Hygiene) and establishment of the Virtual Centers of Infection Medicine and , of Veterinary Public Health;
-) amendment of the curriculum (e.g. reduction of the number of hours in the preclinical section, enhanced links between the preclinical and clinical parts, enhanced awareness on Animal Welfare, content harmonisation, availability of learning objective and examination topics catalogues for all subjects, new clinical rotations, elective tracking system, E-Learning and blended learning modules, Veterinary Skills Net (VSN), self-monitoring of the student's individual learning progression through the curriculum (Progress Test), and support mentoring programme);
-) optimisation of some learning infrastructures (e.g. library, facilities for students' welfare);
-) acquisition of new facilities (e.g. new laboratories, clinical buildings, diagnostic imaging equipments).

The major problems encountered by the Establishment in recent years were:
-) difficulty in recruitment of junior staff devoted to food-producing animals;
-) rigid legal framework conditions, e.g. for staff recruitment, curriculum design and facilities' acquisition;
-) insufficient appreciation for staff of teaching and service activities, when compared to research activities.

The current ESEVT Visitation is performed in agreement with the Uppsala SOP (2016).

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

1.1. Findings

1.1.1. Brief description of the Strategic Plan

The 2017-2024 Strategic Plan of the Establishment has been approved by the Faculty Council. It is available as an appendix of the Self Evaluation Report (SER). For each section, it is subdivided into 3 chapters, i.e. 'we are', 'we would like', and 'we will'. It is available for staff, students, stakeholders and the public.

The main mission of the Establishment is to strive for excellence in teaching, research and services.
The main vision is to be one of the leading veterinary medical competence centres in Europe.
The main objectives focus on research, teaching, postgraduate qualifications, patient care, social relevance, public relations, financing, internationality, structures and processes, and workplace environment.
A SWOT analysis is also provided in the SER.

1.1.2. Brief description of the Operating Plan
The Operational plan is described in the SER. It is planned to regularly assess the implementation and accuracy of the Strategic/Operational Plan, and to amend it if necessary.

1.1.3. Brief description of the organisation of the Establishment
The organisational chart of the Establishment is provided in the SER.
The Establishment is one of the 12 academic departments of the Freie Universität Berlin.
This University is managed by an Academic Senate and an Executive Board, under the heading of a President, four Vice-Presidents and a Chancellor.
The Establishment is managed by the Faculty Council (7 professors, 2 academic employees, 2 non-academic employees and 2 students) and the Dean's Office (i.e. the Dean, Vice-Dean for Education, Vice-Dean for Research and Head of Administration). Its composition is fixed by the State of Berlin Higher Education and related University regulations.

Representatives in the Faculty Council are elected for 2-year terms by all members of their respective groups (Academic staff, Support Staff and Students) and the Dean and Vice-Deans are elected for 2-year terms by the Faculty Council.

The Establishment regroups 20 departments (called institutes or clinics), i. e. Anatomy, Physiology, Biochemistry, Animal Nutrition, Veterinary Pathology, Pharmacology and Toxicology, Virology, Animal Hygiene and Environmental Health, Immunology, Microbiology and Epizootics, Parasitology and Tropical Veterinary Medicine, Food Safety and Hygiene, Animal Welfare, Animal Behaviour and Laboratory Animal Science, Veterinary Epidemiology and Biostatistics, Poultry Diseases, Equine Clinic, General Surgery and Radiology, Bad Saarow Equine Centre for Reproduction, Ruminant and Swine Clinic, Animal Reproduction Clinic, and Small Animal Clinic.
Institutes are lead by a managing director. Institutes and clinics with several professors are managed by a board composed of all professors as well as representatives from the academic staff, support staff and students. This board elects the managing director.

The Establishment has committees responsible for specific areas, i.e. Academic Advising, Student Academic Advising, Liaison teacher for students, Education Commission, Coordinator for international relations and partnerships (Erasmus, Sokrates) and visiting students, BAföG (Educational Loans) Coordinator, Faculty Doctoral Committee, Faculty representative in the Standing Commission of the Dahlem Research School (DRS), Coordinator for Habilitation Candidates, Hygiene Coordinator & Commission, Continued Education Commission, Liaison officers for safeguarding good scientific practice, Library Coordinator, Animal Welfare Official, Faculty representative at the Berlin & Federal Veterinarian Chambers, State Examining Boards, Equality commission, and Faculty coordinator for training modules in didactics and teaching.
The respective composition, duties and way of working of these committees are described in the appendicies of the SER.

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 Strategic Plan is developed by the Faculty Council which assesses it every 2 years, sends its conclusions and suggestions of amendment to the University Executive Board and eventually adjusts it in order to close the PDCA cycle. The timeframe and indicators of achievement are provided in the appendices of the SER for each objective of the Strategic Plan and are available for staff, students and stakeholders.

1.2. Comments
The mission statement and the objectives of the Establishment are in agreement with the EU directives, ESG 2015 and ESEVT SOP.

Staff and students are involved in the organisational structure of the Establishment and its cyclical revision. The number of students in the committees is relatively low but it may not be increased because of the State of Berlin Higher Education and related University regulations. The implication of external stakeholders has recently started but could be enhanced.

The current Strategic Plan (2017-2024) has been written in collaboration with staff and students. It includes a SWOT analysis, objectives, an operational plan, milestones and indicators of achievement.

The Establishment is structured into many departments/institutes/clinics, with a subsequent risk of a negative impact on the coherence of the study programme, the interdisciplinary teaching process and an optimal use of the resources. Some 'virtual' centres regrouping several departments have been initiated but these merges could be further developed.

The composition, duties and way of working of the different committees are well described and their functioning is positively appreciated by staff and students.

1.3. Suggestions for improvement
It is suggested to continue to reduce the number of departments in order to ensure the coherence of the study programme, the interdisciplinary teaching processes and the mutualisation of resources.

1.4. Decision
The Establishment is compliant with Standard 1.

2. Finances (see Standards 2.1 to 2.5)
2.1. Findings
2.1.1. Brief description of the global financial process of the Establishment and its autonomy on it:
University funds are determined at two year intervals with the Senate of the State of Berlin, depending on educational objectives (new students, numbers of students in the standard study period, university degrees awarded), research (external funding expenditure, acquisition of external funding) and equality issues (proportion of women in appointments, diversity, etc.). Currently, the Establishment receives approximately 6.5% of the funds allocated to the University.

The budget is agreed between university management and the Dean's Office. Funds are distributed according to the agreed budget and upon agreement to the individual institutes and clinics by the Dean's Office, taking into consideration the long-term development and strategy planning. Major changes in the budget plan and distribution of funds are decided in the Faculty Council. One steering

element for budgetary changes are the negotiations with newly appointed university professors that result in target agreements.

Revenues from clinical and scientific services remain fully in the Establishment with no overhead deduction. The Dean's Office reserves the right, in consultation with the clinics, to adapt the allocation of these funds to meet strategic and operational goals.
The overhead for research projects ranges from 20-30%.

Freie Universität Berlin does not charge tuition fees for students attending the Veterinary Medicine course. However, undergraduate and graduate (doctoral) students have to pay some administrative costs, students association fees and public transportation which amount to € 311,59 per semester.

The Establishment is highly autonomous in the managing the funds allocated to it, although expenditure for core funded personnel, administration, disposeables, keeping animals and education have to be met at all times as they are fully covered by the Establishment.

Since 2013, expenditures for property management and building maintenance are directly covered by the Engineering and Utilities division of Freie Universität Berlin. The latest figures (from 2012) amounted to approx. €3,130,995.00; 66% of which was property management.

2.1.2. Brief description of the budget (expenditures, revenues, balance) of the last 3 years
The global budget (expenditures, revenues, balance) of the last 3 years can be summarised as follows:

	2016	2015	2014	Mean
Expenditures	€25,743,428.39	€25,544,091.64	€25,095,333.19	€25,460,951.07
Revenues	€26,837,310.06	€26,195,471.31	€25,906,433.39	€26,313,071.59
Balance	€1,093,881.67	€651,379.67	€811,070.20	€852,120.52

The funds coming from research represent just above one fifth of the global budget and can be summarised as follows:

	2016	2015	2014	Mean
Research projects	€5,533,075.22	€4,650,475.72	€5,169,629.07	€5,117,726.67
Contract research	€872,056.39	€1,084,544.88	€1,059,031.45	€1,005,210.91

2.1.3. Brief description of the projected budget of the next 3 years:
The Establishment expects only minor changes in revenues or expenditures in the next three years. Currently, the allocation from the university is approximately €21 million/year. Detailed budget planning for 2018-2019 will be conducted in summer of 2017. An increase of 3.5% in the coming 3 years is expected, partly due to raising personnel costs.
The Establishment has made significant efforts in recent years to provide employees in the clinics with improved work contracts and training conditions. This has led to considerable additional costs, which limits the financial flexibility in the coming years.

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

Major investments are being planned for developing, improving and/or refurbishing facilities with funding coming from the Federal Government, the State of Berlin and from the Freie University itself (€55,700,000). Major investments are also planned for larger equipment with a total estimated cost of €2,435,338.20.

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 PDCA cycle involves mainly the University Management and the Dean's Office as far as development and implementation are concerned.
It can be summarised as follows:
Plan
Revenue
University Management upon target agreements
Expenditure
Budget Plan negotiated every two years with the Division II of the University and the Dean's Office
Do
Dean Office communicates the budget to the University Teachers Assembly
Check
Possible daily review of finances in SAP
Act
The Establishment communicates significant results to the Governing Board and the University Management, including negotiations if applicable.

Staff and students may indirectly influence the relevant PDCA cycles through their representation in the respective committees. Feedback by stakeholders is collected regularly and will be considered by the Dean's Office and the Faculty Council.

Through the University-provided SAP application that all departments/faculties have to use, all institutions can check their financial status (core funds and third-party project funds) online on a daily basis. The respective University administrative staff can also review the budget situation of all institutions through SAP.

2.2. Comments
Revenues exceed the expenditure, allowing the existence of funds to meet unexpected expenses.

For large investments, such as the construction of new buildings, the Establishment applies for the support of the University and the State of Berlin.

In spite of having reduced financial problems, considerable additional costs are expected due to new staff contracts, which will limit the financial flexibility in the coming years.

Expenditure for core funded personnel, for administration, disposeables, keeping animals and education are fully covered by the percentage of funds due to the Establishment allocated by the University.

The Establishment has a global budget which gives the Dean's Office some flexibility in the setting of priorities; however, this budget currently barely covers the expenses for core-funded personnel.

Revenue from clinical services (mainly small animal and equine clinic) remain in the Establishment, which is financially dependent on them. The Dean's Office reserves the right, in consultation with the clinics, to adapt the allocation of these funds to meet strategic and operational goals.

The financial status of all institutions can be checked online on a daily basis, providing transparent and updated information to the revenue generators.

2.3. Suggestions for improvement
None.

2.4. Decision
The Establishment is compliant with Standard 2.

3. Curriculum (see Standards 3.1 to 3.10)

3.1. General curriculum

3.1.1. Findings

3.1.1.1. *Brief description of the educational aims and strategy in order to propose a cohesive framework and to achieve the learning outcome:*
The educational aims of the veterinary curriculum contents of university studies in veterinary medicine in Germany are described in the German Veterinary Medical Licensure Law (TAppV) and the Federal Veterinary Regulation (BTÄO) which in turn refer to the minimum requirements laid down in regulation 2005/36/EG for the training of veterinarians in Europe.

The TappV defines the organisational and content framework of the implemented curriculum in order to meet the educational objectives.

The TAppV as a Federal Law (from 2006, last amended in 2016) defines the educational goal, the significant teaching content, the subject-specific hours allocated to intramural and extramural training, the total duration of university studies, as well as the timing of formal examinations. Cornerstones of the TAppV are:

- Total hours of training: 5,020 hours in 5.5 years (11 semesters, including final exam period)
- Intramural scientific-theoretical training; 3,850 hours (not to be exceeded) in first 4.5 years
- Mandatory extramural practical training: 1,170 hours (for subjects see Table 3.1.4)
- 29 official exam subjects, with fixed curricular hours assigned to each subject area

The course is divided into the basic study period ("pre-clinic", 2 years) and the clinical study period ("Clinic", 3.5 years). Minimum time to degree is 5.5 years, including the final examination period.

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):*
The curriculum includes the subjects listed in Annex V of EU Directive 2005/36/EC (Table 3.1.2), distributed into the following groups: Basic Sciences, Clinical Sciences, Animal Production, Food Safety and Quality, and Professional Knowledge.

The total hours including clinical rotations and the minimum number of electives is 3850 hours. Animal Production represents 2% of the total teaching time; Food Hygiene and Food Technology represent 7.4% and Professional Knowledge 1.4%.
The hours devoted for Clinical Animal Work in the Establishment are 168.9 and in the External Practical Training (EPT) 850 – Table 3.1.1.

Basic Natural Sciences are not taught at the establishment, but outsourced to other Faculties in Berlin.

Rotations - All 5th year students rotate in small groups through all clinics including small animal clinic, equine clinic, animal reproduction, ruminants, pigs and poultry, pathology and meat hygiene. During rotation, students participate in regular clinical duties. Rotations in clinical services include a low number of hours in emergency duties (see 3.3.1.3).

EPT takes place in the first year (genetics, breeding, husbandry, milking techniques) for 70 hours; after the second year and in the 5th year in clinical training including private practice on companion animals or production animals (850 hours); in the 5th year in Veterinary Public Health (75 hours), Food Hygiene (75 hours) and in abattoirs (100 hours). The balance of species in the choice of students of EPT places is not assured. EPT may also be undertaken in duties other than Clinical Animal Work (e.g. Pathology).

For about 50% of the students EPT clinical training takes place before clinical rotations. Supervision of the quality of the training obtained during EPT is not structured. Students are provided with a large volume of information that they are asked to fill in during their EPT (Extramurale Praktika im Studiengang Veterinarmedizin – Vorbereitung/Durchfuhrung/Evaluation), for their own control of the activities performed. The related EPT evaluation forms should be returned to the Dean's office for assessement, again on a voluntary basis.

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:*
Subject, organ module and extramural practical coordinators are responsible for the development and coordination of learning objective and exam subject catalogues; they coordinate the process between the relevant subject lecturers and are the first point of contact for the Dean's office, lecturers and students. The comprehensive subject-specific learning objective catalogue is available to all students and lecturers on the Establishment website. It is updated annually, reviewed by the educational commission and presented at a Faculty Council meeting. Curricular deficiencies are identified by the following processes: (i) Regular surveys on student satisfaction (every 2 years), (ii) teaching and learning objective evaluations (cyclical, every 4 years); (iii) University survey of exmatriculated and recently graduated students (every 2 years), (iv) regular stakeholder reviews (every 3-5 years). Compiled information is fed back through the Dean's Office to the Education Commission, the Faculty Council and the afore mentioned coordinators. Changes are implemented in accordance with the QA processes on curricular development.

3.1.1.4. *Description of the selection procedures of the Electives by the students and the degree of freedom in their choice:*
Students must attend at least 6 elective courses (1 course = 1 SWS = 14 hours during one semester) in the preclinical part and 16 courses in the clinical part of the course. Enrolment onto the selected classes is, therefore, an automated process within the Student Life-cycle Management System (SLCMS). In cases of overbooking in space-limited electives, the priority classification as well as specific requirements "tags" are considered. At the beginning of the clinical part of the course students select a main track (Animal Production, horses, pets and small animals, veterinary Public Health or research) in which they have to complete at least 7 courses out of the sixteen. The remaining courses must be selected from other tracks.

The Establishment offers a wide range of approximately 200 elective courses per year (approximately 100 per semester) with sufficient number of places available. Internal and external lecturers cover

topics outside the regular curriculum, as well as intersections on ongoing research projects. Registration is managed via the SLCMS. Distribution takes place in two allocation rounds from 2 weeks before until 2 weeks after the start of classes. The primary track, the preference, place restrictions on individual events as well as special needs (family care, disabilities etc.) are considered. Hardship is taken into account and a subsequent registration for events in SLCMS through the Study Office is possible. If the number of bookings for a course exceeds the number of places available, the admission is based on the afore mentioned criteria.

3.1.1.5. *Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the curriculum:*
As the curriculum of the veterinary medicine courses is regulated by the German Veterinary Medical Licensure Law (TAppV), the possibility of development of curriculum revision is very limited.
The need to adapt study and examination regulations results from changes to the TAppV, feedback from student and alumni surveys and input from the Education Commission, teachers and external experts. The Education Commission includes professors (4), academic staff members (2) and students (8).
The process of changing the study regulations is regulated across the university and documented in "Advancement of degree programs".
The Dean's Office revises the inputs in dialogue with the Education Commission, the chairs of the examination boards, involved teachers, the study office and the programme manager for study and teaching.
Revised study and examination regulations undergo a multi-stage procedure with a formal and conceptual evaluation, a capacity test and a legal examination.
Once approved by the University they have to be accepted by the Faculty Council and published in the University News to become official. Final regulations are communicated back to all status groups and published on the Establishment website.

3.1.2. Comments
The subjects taught cover the EU listed subjects in all areas.

The curriculum is highly regulated by Federal Law, the German Veterinary Medical Licensure Law (TAppV). Therefore, curricular design options for the establishments are limited. One of the intentions of the TAppV besides defining the legal framework for the veterinary education is the inter-university exchange option for undergraduate students in German veterinary establishments. There is some flexibility for reducing teaching time for certain subjects by a maximum of 20% of the hours foreseen. The hours made available have to be allocated to other subjects.

Teaching hours in the basic natural sciences is currently outsourced to other faculties in Berlin, teaching being more focussed on veterinary contents than before (previous evaluation in 2007).

Some degree of tracking may be achieved in the choice of electives. Substantial tracking within the undergraduate veterinary curriculum is not possible given the German legal legislation on veterinary education.

There is a strong disequilibrium between the hours available for Clinical Animal Work in the Establishment (168,9) and in EPT (850).

The selection of extra-mural training (EPT) sites is within the responsibility of the students; the faculty and association of veterinary practitioners provide assistance in finding appropriate places.. The quality of the EPT is inadequately monitored; there is no obligation to provide the Dean's office

with the evaluations that students are asked to complete (Extramurale Praktika im Studiengang Veterinarmedizin – Vorbereitung/Durchfuhrung/Evaluation).

3.1.3. Suggestions of improvement

Opportunities should be created to increase the hours of intramural clinical animal work, so as to decrease the disequilibrium with the hours spent on EPT.

The Establishment should develop the necessary mechanisms to control the quality of EPT.
A Logbook should be produced to assure that Day One Competences are met by all students.

3.2. Basic sciences

3.2.1. Findings

3.2.1.1. *Brief description of the theoretical and practical education in basic sciences:*
The topics belonging to Basic subjects and Basic Sciences are taught within the framework of the core curriculum of the Establishment and are according to the EU-listed subjects in Directive 2013/55/EU.

Basic subjects cover a total of 301 hours and Basic Sciences amount to a total of 1382 hours, as mentioned in the SER (Table 3.1.2). The sum of the two accounts for 43% of the total number of teaching hours. In Basic Sciences the ratio between theoretical hours and practical education is estimated in 0.58.

Basic Sciences are taught in two different buildings – Duppel Campus (most of the Establishment is located here) and Dahlem Campus (Basic Subjects, Anatomy, Pharmacology & Toxicology and Animal Nutrition).
The Establishment has a large number of lecture halls, seminar rooms and laboratories. Lecture halls and seminar rooms are fitted out with up-to-date media technology. The number of rooms used for practical undergraduate training, e.g. course rooms, labs, necropsy and dissection halls, demonstration halls, examination halls, surgery rooms amount for a total of 54.
The equipment available in the teaching rooms matches very adequately the requirements of each subject.
For some Basic Sciences, the practical teaching is based in small groups (minimum Anatomy with six students, followed by Biochemistry (7 students) and by Clinical Propaedeutics in the 5th semester, Parasitological Exercises and Pathology – Exercises on organ course blocks (8 students). The largest number of students in a group is 40 in Special Animal Breeding, followed by Milk Testing and Galenics practicum (30 students).

Practical Anatomy training is based on a large number of cadavers and material of animal origin (Table 5.1.1). Practical teaching takes place in a large dissection hall, well equipped, with good support by the teaching staff, preparators and "prepcoaches" (experienced students that help in practicals as a part of an elective course), using cadavers that are donated or organs collected from the slaughterhouse. Large animals are more difficult to procure, therefore extensively used by means of preservation. A good anatomy museum provides preserved specimens (whole skeletons, parts of skeletons, waxed and plastinated specimen, models, etc.) that are intensively used by the students.

Pathology practical teaching is partly based on training in post-mortem examination (necropsy hall) and partly on observation of histological slides for the evaluation of microscopic lesions, in a lecture hall. Plastinated specimens are prepared mostly for teaching pregnant students or students undergoing health problems that may prescribe no contact with cadavers.

3.2.2. Comments

Basic Subjects and Sciences represent a large part of compulsory training, in spite of the adjustment that has already made in the past to reduce the number of hours in the preclinical section.

Basic subjects such as Chemistry, Physics, Botany and Zoology seem to have an important role in harmonising the differences in the previous learning of students, as they are admitted into the course coming from various high school backgrounds.

In Basic Sciences the ratio between theoretical hours and practical education is estimated in 0,58, representing a minor overload of theoretical teaching.

The facilities used for Basic Sciences teaching are of excellent quality, and the specimens available for study are in general very adequate. The teaching staff is dedicated and using very up to date devices, procedures and materials. Students have access to high quality material (slide sets, parasitological specimens, reagents and devices for various experiments, etc.).

The fact that the course takes place on two different sites imposes a good organisation of the time schedule: a large proportion of all lectures during the first and second year of the curriculum takes place in facilities on the Dahlem site (with instructors from Düppel going there), and some of the lectures in animal feeding/nutrition (5th semester) are given in Düppel (while the Institute is located in Dahlem).

As far as ruminants and pigs are concerned the number of cadavers necropsied indicated as ESEVT is below minimum (0.63 for the indicator I18 for which the minimal value is 0.97). The other values are above minimum, in particular in horses which is above average.

3.2.3. Suggestions of improvement

Solutions to increase the number of necropsies in pigs and ruminants should be explored and implemented.

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:*

The curriculum hours taken by all students is presented in the SER in table 3.1.1. (p. 21). This overview shows a high number of lectures (2073.5 hours) and a low number of clinical animal work in the 3th, 4th and 5th year, altogether 168.9 hours. On the other hand, external practical training amounts to 1170 hours. Curriculum hours for clinical animal work are listed also in Table 3.1.2. (SER p. 23), Table 3.1.3. electives (SER p.23 Electives) and table 3.1.4.(SER p 24: external practical training (EPT)). These tables do not differentiate between different species and there is no information regarding the minimal requirements for the choice of the students regarding different species during EPT. The appendix B offers detailed descriptions of all courses during the whole curriculum. The appendix to table 3.1.2.b offers explanations for the equivalence of the various course with EU subjects and the Establishment implementation.

Between the 6th and 8th semester lectures are organised in organ-centered teaching modules (overview appendix B: p.14 - p.18).

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

Clinical education before the clinical rotations include a 4 week EPT in veterinary practices and subjects in the 3rd and 4th year including propaedeutics, internal medicine, and laboratory diagnostics,

surgery and anaesthesia, radiology, ophthalmology, clinical demonstrations and interdisciplinary teaching.

3.3.1.3. *Description of the core clinical rotations and emergency services in companion animals and the direct involvement of undergraduate students in it:*
Clinical rotations are scheduled in 5th year with a total time of 11 weeks, however this includes pathology and food hygiene. Table 3.1.5 shows 2 weeks each for small animals and equine. A schedule in Appendix 5.1.8.c presents the workload in the equine or small animal clinic with about 8 hours work each day. On the other hand appendix B lists the courses of the study with clinical rotations in the small animal clinic with 5.5 ECTS (1 ETCS =25 hours) and 5.9 ECTS for the equine rotations. These would equate to higher contact hours.

Students are involved in in-patient and ambulatory work, attend seminars and exercises on practice relevant topics and compile case reports. The clinics provide an emergency service, 2 students (equine clinic) during the week and 1 student at weekends are scheduled for evening or weekend day duties. Each student has to serve one weekend day (small animal) or one evening duty (equine clinic). During animal reproduction and ruminant rotations two students are on call for one night each.

There are forms for the evaluation of students and for EPT providers, however, no logbook is given by the Establishment to record student experience.

3.3.2. Comments
There is an insufficient number of hours of hands-on clinical training under the supervision of academic staff in order to achieve "Day One Competences" for each individual student. The time for clinical rotations for each student (a total of 10 weeks, with 2 weeks each for small animals, equine, farm animals, animal reproduction and clinical pathology), especially for small animals, equine and farm animals is too low.

The exposure to emergency duties for students is too low.

There is no substantial tracking (only 7 elective courses of 14 hours each) within the undergraduate curriculum, due to the German legal legislation in veterinary education. An introduction of increased tracking was discussed and could be implemented as add-on to the increased core clinical rotations.

There is a relatively high number of EPT compared to intramural clinical rotations. The indicator 5 (1019 hours) includes at least 700 hours EPT (see SER comments p. 70), or even 850 hours (Table 3.1.1.). That means only about 17 % intramural clinical practical training compared to 83% EPT.
There is a high workload especially in the 5 -8 semesters exceeding 30 ECTS, especially 5th term with 37 ECTS (see Appendix B p.15-17).

3.3.3. Suggestions of improvement
It is strongly suggested that the duration of the clinical rotations in small animal and equine are increased substantially.

It is strongly suggested that compulsory emergency (overnight and weekend) duties in small animal and equine clinics should be implemented.

It is strongly suggested that there should be an equilibrium between intra- and extra-mural clinical training.

It is strongly suggested that a suitable logbook for EPT should be introduced

It is suggested that a minimum amount of clinical training (clinical rotation) should be undertaken by students before the major EPT to help them gain most from the EPT.

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

3.4.1. Findings

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

The education in food-producing animals is spread throughout the duration of the course. Agricultural training is organised in cooperation with Humboldt University, along with training in agricultural economics, animal breeding, animal assessment and animal keeping. Mandatory agricultural EPT for 2 weeks at one of four officially recognised agricultural training facilities (Eichhof, Almesbach, Gross Kreutz and Haus Riswick) or alternatively for 4 weeks at a farm selected by the student and approved by Humboldt University where at least two species are kept.

Theoretical teaching is divided between Institutes. A new contract is in place with clear allocation of responsibility and coverage of all key aspects. The responsibility for the programme rests with the Establishment, so they need to ensure that the QA procedures for the delegated areas is robust. Adequate numbers of animals of farmed species are seen, other than ruminant and swine necropsies. Intramural clinical rotations are only 2 weeks plus a week of food animal orientated reproduction.

The bulk of clinical experience is achieved by mandatory ETP, but there is no requirement for this to include food-producing animals. Also, students are free to select which species are studied during an elective track with 7 out of the required 16 elective classes. The Quality assurance information for individual EPT providers cannot be made public for data protection reasons.

Swine and poultry are covered, and the topics are addressed in the final State examinations. Minor species such as bees are included in the curriculum but not assessed.

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

A sequence of lectures, exercises and clinical demonstrations on animal disease, ruminants & pigs, reproduction, poultry in semester 6, 7 and 8 prepare the students for clinical rotations. Learning objectives are clear and the organisation is both by species and organ centred. The organ centred modules are the responsibility of specified species clinics but cover all species.

3.4.1.3. *Description of the core clinical rotations, emergency services, herd health visits in food-producing animals and the direct involvement of undergraduate students in it:*

There are two weeks of production animal clinical rotations including 2 days of poultry. Approximately half of the two weeks of reproduction rotations includes production animals. The timetable suggests specific single trips to a cattle and swine farm and reproduction farm visit and work on ambulatory clinic and in hospitalised patients. Anamnesis, clinical examination and assistance with surgery are indicated but specific student responsibility for cases is not given. Assessment of clinical rotations are by medical report and assessment of clinical examination.

3.4.1.4. *Brief description of the theoretical and practical education in Animal Production:*

This is the responsibility of Humboldt University. Two 28 hour lecture courses are mandatory in the second semester, with the final one assessed by written examination. Examination results are sent to

the State Examination Office with no audit from the Establishment. Mandatory EPT in agriculture is required by law for 2 weeks at an official agricultural training and research station or four weeks if done on a farm that is registered / certified to educate agricultural trainees.

3.4.2. Comments

Agricultural training is provided by Humboldt University that used to possess its own Veterinary School until 1997. Quality Assurance of this provision by the Establishment is not clear. Official student feedback on EPT providers was not available and students reported that handing in EPT document (Extramurale Praktika im Studiengang Veterinarmedizin) was not compulsory. This document does not meet the requirements of an EPT logbook.

Clinical rotations timetables for food animal species and reproduction suggest these are a mixture of clinically orientated tutorials and clinical case assessment and treatment. With a short clinical rotation of 2+1 weeks an increased focus on obtaining clinical material for direct experience by students should be encouraged. As food producing species coverage is not compulsory, EPT may not substitute for this deficiency.

3.4.3. Suggestions of improvement

It is suggested that a named member of Establishment staff observes the assessments of courses undertaken at Humboldt University so that the QA for these courses is assured by the Establishment.

It is strongly suggested that the duration of the clinical rotations is increased substantially in Food-Producing animals.

It is strongly suggested to reach an equilibrium between intra- and extra-mural clinical training.

It is strongly suggested that a suitable logbook for EPT should be introduced and the species covered by EPT monitored.

It is suggested that a minimum amount of clinical training (clinical rotation) should be undertaken by students before the major EPT to help them gain most from the EPT.

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:*

The topics belonging to Food Safety and Quality are taught within the framework of the core curriculum of the Establishment, according to the EU-listed subjects in Directive 2013/55/EU. The FSQ is integrated into the curriculum from 6th to 10th semester. FSQ covers 285 hours out of a total number of 5020 hours of teaching (including ETP) as mentioned in the SER (Table 3.1.2).

The theoretical and practical education in FSQ is located in the Institute of Food Safety and Food Hygiene. In 2016, the merging of the Institutes of Food Hygiene and Meat Hygiene was carried out. In 2017, most of the former Institute of Meat Hygiene was moved from Campus Mitte into temporary facilities on the Düppel Campus. The centre now encompasses the Institutes for Food Safety and Hygiene; Animal Welfare, Animal Behaviour and Laboratory Animal Science and Veterinary Epidemiology and Biostatistics. When facilities within the current Institute are inadequate for the number of students, lectures and practicals are carried out in other larger facilities within the Establishment.

In near future, the establishment is expecting to build VPH institute facilities on the Düppel campus. Until then, practical training of meat inspection will continue to be held within the current facility on Campus Mitte.

3.5.1.2. *Description of the teaching in slaughterhouses and in premises for the production, processing, distribution/sale or consumption of food of animal origin:*
FSQ is included into the curriculum from the 6th semester and the main workload of FSQ is during the 7th and 8th semester, and during clinical rotations throughout the 9th and 10th semester (Table 3.1.4.). Lectures on meat, milk and slaughter hygiene as well as practical courses in food and milk science are given intramurally. The teachers of FQS are involved in interdisciplinary courses (anatomy, pathology, inspection of game meat). During the clinical rotation, students are divided into small groups (5-6 students) and complete practical training in the meat inspection room (Campus Mitte) consisting of carcass inspection, bacteriological sampling and further testing of pig and cattle carcasses (over the course of one week).

Further practical training (250 hours) on meat and food hygiene, as well as veterinary public services, is carried out within the framework of several EPT placements in the 5th year of the course (Table 3.4.1.). A list of suitable institutions that provide practical training for students is available. It is the responsibility of the students to organise this placement individually. EPT training includes: ante and post mortem meat inspection (100 hours by meat inspection of cattle, pigs and poultry); hygiene control and food examination. Students also visit veterinary inspection offices during this time to learn more about all issues of Veterinary Public Health and the duties of the official veterinarian.

3.5.2. Comments
Theoretical and practical education in FSQ is given at several locations

The content and extent of teaching in FSQ is sufficient and the integration in the curriculum is logical.

There is very good integration between the subjects of microbiology, pathology and parasitology.

Additional interdisciplinary courses are incorporated into curriculum and are available for the students to attend.

In some cases, the EPT placements proceed before intramural training.

A list of suitable slaughterhouses and institutions who provide placements for practical training is available and the students must organise their EPT individually.

For each EPT subject area the faculty has designated an in-house subject coordinator, however, EPT is not directly supervised by the academic staff from the University and this represents inadequate monitoring.

3.5.3. Suggestions of improvement
The intramural training should be provided before EPT.

It is suggested to implement a robust procedure for evaluation of extramural FSQ training at slaughterhouses.

3.6. Professional knowledge
3.6.1. Findings

3.6.1.1. *Brief description of the theoretical and practical education in professional knowledge:*
Core teaching of subjects of professional organisation, ethics and professional skills are part of the lecture series of the first, second and third semesters, lasting for one hour duration per subject. In the sixth, seventh and eighth semesters, teaching in the above subjects is extended to four hours per subject, delivered through interdisciplinary lectures. Animal protection teaching takes place during a two-hour seminar and includes exercises based on real life situations that students are likely to encounter. It is taught by Institute of Animal Welfare, Animal Behaviour and Laboratory Animal Science. Agricultural economics is taught for 2 hours. Animal Ethics: deontological and utilitarian ethics of animals is provided by Humboldt Universität, Faculty of Life Sciences.

The Clinic for Ruminants and Swine is responsible for the teaching of professional knowledge. The written objective of the course is "knowledge on the responsibilities and working areas of veterinarians". To expand on this title, these lectures are an introduction to the duties and responsibilities of the veterinary profession in a variety of fields. Interdisciplinary lectures are mostly focused on communication.

Various organisations are involved in delivering the interdisciplinary courses, such as the Veterinary Chamber and Federal Veterinary Association. Coordination of the different actors involved is by the dean of education.

According to the SER, the total number of hours dedicated to the teaching of professional knowledge is approximately 20 hours.

The final exam ensures that the students can demonstrate knowledge on legislation, liability, running a practice, organisation of the profession and due diligence.

3.6.1.2. *Brief description of the organisation, selection procedures and supervision of the EPT:*
1170 hours are dedicated to EPT. These hours must take place during the lecture breaks.

For Food Hygiene, Students are required to spend 75hrs (2 weeks) in an Administration linked with food hygiene and an additional 100hrs in abattoirs.

Placements in Veterinary Practice (extramural clinical training) are divided into two parts: 150hr after the 2nd year of studies and 700hrs after the 4th year of studies. Veterinary practice is taught either in a private clinic or hospital or in a University-associated teaching hospital (by choice of the student). A reliable vet must have been the manager of the training site for a minimum of two years. Part of the large EPT can be completed in other fields in which veterinarians' work, this with a minimum of 75hrs and a maximum of 350 hrs. Overall, students spend between 500 hrs (minimum) and 850 hrs (maximum) in clinical EPT. There are no contractual agreements between the veterinary faculties and the training providers. Only a formal recording of the schedule of the EPT and a learning objective catalogue exists which is submitted to the German Veterinary Regulatory body to ensure that students have met the requirements.

3.6.1.3. *Description of the procedures used to ascertain the achievement of each core practical/clinical activity and professional knowledge by each student:*
The Federal Veterinary Association is involved in the organisation of these internships.

3.6.2. Comments
The Certificates are given at the end of internship periods and Practitioners and other Institutions that receive students for extramural training do not receive any financial support in agreement with the

relevant local legislation (TAppV).

3.6.3. Suggestions of improvement

An efficient monitoring system for EPT must be established in close cooperation with the Federal Veterinary Association. Monitoring of students' clinical learning must be implemented and a consistent logbook that is compulsory to complete would be a good tool in reaching this objective. It is suggested that EPT is completed in placements that provide a balance of clinical training between different species.

3.7. Decision

The Establishment is not compliant with Standard 3 because of insufficient number of hours of hands-on clinical training under the supervision of academic staff in order to achieve Day One Competences for each individual student.

The Establishment is partially compliant with Standard 3 because of:
- insufficient training on emergency cases for all students, especially in companion animals
- inadequate monitoring and evaluation of EPT.

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

4.1. Findings

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

The establishment is distributed over 4 sites with Düppel Campus being the main site. Some pre-clinical parts are taught at Dahlem Campus, and food hygiene demonstration in Mitte Campus. Furthermore, a special unit, the equine centre at Bad Saarow for horse reproduction is available 70 km southeast of Berlin. A need for more lecture halls in order to concentrate the studies in Düppel is reported. The Establishment does not have its own agricultural teaching and research facility. Agricultural training is carried out in cooperation with the respective Faculty at Humboldt Universität.

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

-) lecturing, group work and practical work:
A large number of lecture halls, seminar rooms and other facilities are present. Maps and detailed descriptions are provided in appendices C and 4.1.2. A need for further lecture halls at Düppel campus is stated to increase flexibility.

There is no dedicated skills Lab, but a disseminated 'VetskillsNet' structure allowing access to clinical skills models at several campus locations.

-) housing healthy, hospitalised and isolated animals:
Appendix 4.1.3. lists all existing premises for animals in Düppel and Bad Saarow for horses. Isolation units are available for dogs, cats, horses, cows, pigs, and two chickens.
Several legal requirements, like hygiene concept, animal protection law, biomaterial ordinances, genetic engineering law and infection protection law have to be fulfilled.

-) clinical activities, diagnostic services and necropsy:
There is a high number of facilities for clinical activities in Düppel and Bad Saarow. The newly refurbished Equine Hospital has excellent facilities. The equipment includes all up to date technologies, for example, several endoscopies, sonography, radiology, CTscan and MRI (planned).

Several laboratories provide general diagnostics.

Necropsy facilities are very good with strong biosecurity rules for all users. Access to deliver cadavers at weekends and after working hours is facilitated; large as suitable refrigeration rooms are available. Disposal of carcasses is by means of an external contractor. Numbers of necropsies are good other than for production animals. The Establishment runs an ambulatory clinic for equine, production animals and reproduction. The region has a low density of production animals and the Establishment is exploring options to formalise collaborations with one or more large-scale production animal farms to underpin caseload.

-) FSQ & VPH: There are 4 premises for FSQ in Düppel and Berlin-Mitte Campus.

-) study and self-learning, catering, locker rooms, accommodation for on call students and leisure:
800 student workplaces are provided across the four campuses. PC workplaces are provided by the library (18 places) and the Establishment (40 and 20 places). Most campuses provide a catering. 800 Locker rooms and rooms for students on call at every clinic are available across the sites of the Establishment, listed in Appendix 4.1.5. A need for more student's hygiene facilities is mentioned.

4.1.3. Description of the adequacy for the veterinary training of the vehicles used for student transportation, ambulatory clinic, live animals and cadavers transportation:
A total of 31 vehicles are available for student transportation, ambulatory clinics, and animal or cadaver transportation. Appendix 4.1.6. lists these vehicles.

4.1.4. Description of the adequacy for the veterinary training of the equipment used for teaching purposes and clinical services:
Various library services as well as e-learning devices are available. VetSkills Net provides models for practical teaching at different disseminated sites, coordinated by a Skills Net committee. (see appendix 7.1.6., p 255).

4.1.5. Description of the adequacy of the biosecurity rules in the Establishment
Biosecurity protocols are in place on all sites. Some improvements in signage to differentiate areas are warranted at some locations.

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
The process for the development of new buildings is organised around the dean office and involves the institutions, the faculty council, the Rectorate and the State of Berlin (>4 millions €).

4.2. Comments
The spreading of the establishment over 4 campuses is mentioned in the SER as a problem to be solved in the future, although it seems to be handled well and causes few problems for the students.

A brief description of the facilities utilised at agricultural Faculty of Humboldt University and in four officially recognised agricultural training facilities (Eichhof, Almesbach, Gross Kreutz and Haus Riswick) would be a useful addition to allow determination of the adequacy of this arrangement.

Signage to alert visitors, students and staff with regard to the isolation units is not sufficient. More space for changing rooms before isolation units is necessary in particular for small animals and farm animals.

4.3 Suggestions for improvement

It is suggested that isolating facilities in small animals and farm animals are improved.

It is suggested that signage for biosecurity is reviewed to ensure it is clear in all locations what risks are present at any location and which type of personnel are allowed to enter.

4.4. Decision

The Establishment is partially compliant with Standard 4 because of:
- insufficient signage for biosecurity and restricted areas;
- sub-optimal isolation facilities, particularly in small animals.

5. Animal resources and teaching material of animal origin (see Standards 5.1 to 5.6)

5.1. Findings

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

The Establishment has a multifaceted approach to providing animal-based teaching material. This are: multiple use of clinic-based animals in demonstrations and hands-on teaching, the use of privately-owned animals, the development of a cadaver donation programme for small and large animals and material derived from abattoirs. Access to live animals is supplemented by models in the Veterinary Skills Net. Access to agriculture training is via a partnership with the Agriculture Faculty at Humboldt Universität. Further external partnerships with large farms are being explored to ensure continued access to caseload in this area of low livestock density.

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:
A broad range of material is provided for teaching purposes. The ESVET indicator values for material of animal origin and clinical case exposure are above minimal values for all indicators except the number of ruminant and pig necropsies per student. The Establishment has identified some underlying issues; lack of a Professor in the Swine Clinic, a position that has not been filled for some years, low value of animal or their products, necropsies being performed by the state veterinarians or by the veterinarians of the farms themselves.

-) the number and diversity of healthy live animals used for pre-clinical training:
A range of healthy animals is available. These are spread over several Institutes and thus locations.

-) the number of visits in herds/flocks/units of food-producing animals:
The visit ESEVT indicators are above median. The Establishment is aware of potential challenges for future access to visits and are entering into agreements with a large dairy unit. This will need to take place to ensure adequate numbers.

-) the number and diversity of patients examined/treated by each student:
The ESEVT indicators are above median but the exposure of ALL students to cases is not consistent. Many animals are seen with no involvement of students or involvement on a voluntary basis. The legal framework of the extramural study ensures expose to cases. The quality of the practice observed is not monitored effectively.

-) 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 intra-mural caseload, particularly for the ambulatory clinics, is weighted towards companion animals. Coverage of poultry and pigs is included. The number of clinical rotation weeks is low but evenly distributed across species. The species spread of the EPT weeks is not controlled so the balance of species training is not assured.

5.1.3. Description of the organisation and management of the VTH and ambulatory clinics:
Clinics providing 7/24 emergency care are provided for small animal, equine and ruminants and swine. They appear to be staffed and organised in an appropriate manner. Student are only involved for a short time and not overnight in the companion animal clinics.

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:
The group sizes for clinical rotations are 8 students for each clinic. These groups are subdivided during daily clinical work on many occasions.
The percentage of cases handled by students is estimated to be about 75% of the cases of the clinics.

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:
A common electronic patient records system is used in all clinics. This is very useful as students will not need to learn a new system for each clinic. Students at the small animal and equine clinic can read the patient file system, but are not allowed to write reports of history, examination or therapies without supervision.

5.1.6. Description of the procedures developed to ensure the welfare of animals used for educational and research activities:
A robust legal and organisational framework is in place to ensure animal welfare. A focus on alternatives to meet the same learning outcomes including use of 'VetSkillsNet' has been adopted.

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:
Cases are recorded, but need to be further monitored.

5.2. Comments
The ESVET indicator values for the number of ruminant and pig necropsies per student are below minimal. The Establishment has presented a plan which, if fully implemented, should address this issue.

Healthy animals are housed in several Institutes and locations. The total number of animals may be able to be reduced by centralising some of this provision and increasing the number of animals available per session / group of students.

The number of cases actually seen by students in the hospitals, rather than the overall caseload is not recorded. Students report that the clinics allow them to participate on a voluntary basis from very early in the course. However, the compulsory exposure of all students to clinical cases is low, due to the short period of core clinical rotations.

5.3. Suggestions for improvement

It is suggested that students have viewing access to all clinical records and be allowed to input data, which may then be approved by clinical staff.

It is strongly suggested that the plan to increase necropsy numbers is implemented in full.

It is strongly suggested that a higher percentage of clinical cases are actively used for undergraduate clinical teaching. Every case should be viewed as a student learning opportunity.

5.4. Decision

The Establishment is partially compliant with Standard 5 because of:
- sub-optimal number of necropsies in ruminants and pigs;
- sub-optimal use of the VTH companion animal patients for clinical training of undergraduate students.

6. Learning resources (see Standards 6.1 to 6.4)

6.1 Finding

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

The veterinary library is a part of the wider library system of the FUB. It is located on the Düppel campus. 7.85 FTE are working in it. A large amount of all kinds of literature (165000) is available on the campus. Subsidiary libraries exist in the institutes and clinics. Additional literature can be ordered on request, free of charge. VetSkillsNet is a Freie Universität Berlin initiative providing propaedeutic learning resources divided into three categories: clinical skills; soft skills and scientific skills. Hands-on resources of the VetSkillsNet include but are not limited to models, surgical instruments and SOP (standard operating procedures) presented through a variety of stations. Input and ideas from students regarding the improvement of the VetSkillsNet initiative are frequently sought and incorporated into refining and creating new learning materials.

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

A wide range of IT services are provided to all students and staff. Blended learning resources combining more traditional methods of teaching (lectures, workshops) with e-learning modules in a variety of topics are under development, having been successfully incorporated into the main course. Examples of this format include QuerVet and Vetipedia that aim bolster core teaching material delivered in lectures through problem based learning whilst increasing student interest in Veterinary Public Health.

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

Multiple ways of accessing Establishment resources are provided, inside the campus, either at home. Online learning resources are supported by ZEDAT and CeDis.

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

The Study Office provides training on using IT resources during the introduction week. Study guides are also handed out to all students.

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
A professor of the Establishment is elected by the Faculty council as the library representative. This staff member also reports to the Dean's office. In cooperation with the head of the library, they run a survey to assess the needs to students and formulate decisions based on the results of this feedback. Most of the requests are fulfilled.

Information is provided electronically to all users.

6.2. Comments

Commendations should be made regarding the excellent e-learning resources that have been developed and made available to students. The QuerVet platform and glossary provides an attractive and engaging platform for learning, with case based problems allowing students to experience real life veterinary scenarios developing Day One Competencies.

Vetipedia and the associated glossary provides an outstanding, easy to use veterinary catalogue that can augment student learning when required, resolving a demand that would otherwise be fulfilled by potentially inaccurate and unreliable online resources found via search engine.

IT services provided are state of the art, with fast functioning Wifi (EduRoam) on campus and private VPN available off site. Students are very satisfied with the level of intranet resources, e-learning and IT support provided.

VetSkillsNet represents a burgeoning resource that has combined the best innovation from academic members with the ideas and enthusiasm from students to produce high quality self-education resources that are of great benefit in honing clinical skills. Access from multiple rooms around the campus is a great strength as this both allows and encourages students to participate as much as possible.

6.3. Suggestions for improvement

Library opening hours are currently from 08:00-18:00 with no weekend access. Although students do have access to other libraries within the university, these institutions do not contain veterinary specific hard copies of books and other materials and therefore access to learning resources is impeded. In addition, students who are completing rotations on the Duppel campus may find it difficult to access other library institution whilst on clinical rotations due to restrictions of time and the distance between Duppel and other campuses.

One suggestion would be to either increase the number of hours that the library is open and staffed, or to provide a way of students independently accessing library resources and learning spaces out of hours through a card or code based system.

VetSkillsNet currently provides many learning resources as part of the Clinical Skills Net, but neglects to provide the same number of materials for Soft Skills Net or Scientific Skills Net. A greater emphasis should be focused on increasing resources for learning communication, business and professionalism in addition to other soft skills, such as role play scenarios or videos. Similarly, resources for the scientific skills lab should be developed to replicate the high level of self-education opportunities provided for clinical skills. Suggestions as to learning resources could be ethical dilemmas pertaining to the 3 Rs, lab animal welfare topics and picture matching of laboratory equipment.

6.4. Decision

The Establishment is compliant with Standard 6.

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

7.1. Finding

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

The selection criteria for student admission adopted by "Hochschulstart" are regulated centrally and every year the Establishment enrols 180 students (175-185 units).
The minority of available positions (40%) are filled by applicants with final high-school grades (20%) or through special admission regulations (20%)
The majority of available positions (60%) are reserved to the students with final grade < 2.5 (1 best mark / 6 worst mark). These students take an on-site PC-based MC test and the student's ranking is prepared on final high school grade and test results. The selection process meets DIN 33430 standard. DIN 33430 standard describes the requirements for occupational aptitude profile and it is a very useful tool for supporting QA selection process.
The test underwent a quality check in 2015 by IKOBE. The IKOBE Quality Certification Institute evaluated the test satisfactory with minor adjustments. Adjustments are carried out every 3 years.
Students who are not admitted can lodge an appeal to the Administrative Court of Berlin.
Students affected by chronic illness or by disabilities can enjoy protection both for admission and for reduction of disadvantage. Special Services for Students take care of them.
German Public University does not expect students to pay tuition fees.
The procedures and requirements related to transparency are available in German and English languages on the website of the "Hochschulstart" and are user-friendly.

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:

As aforementioned the number of students per year is fixed at 180 units (min175; max 185).
The number is recalculated by University administration on the basis of Berlin Regulation Capacity (KapVO). The number is fixed considering: teaching capacity (FTE of core-funded teaching staff), teacher/student ratio and curricular requirements (mainly hours and type of instruction such as full class lectures, large and small group work) .

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

The monitoring of student progression and expulsion is regulated by TAppV (www.gesetze-im-internet.de/tappv/). The progression is also regulated by the regulations of the Establishment. SLCM, records every educational activity attended by students. Students, at any time, can view their attendance of training activities stored in SLCM.

Examination progress is monitored by the State Examination Office (LAGeSo). LAGeSo can invite, for a counselling session, the student not sufficiently progressing.
Yearly, a quality report on academic progress of the enrolled student cohorts is produced. This report is discussed with the University management.

Notice of exclusion of further veterinary studies in Germany: chair of the examination board will address a written notice of exclusion to the student who does not pass the second repeat (third time) in an individual subject.

7.1.4. Brief description of the services available for students:
The University and the Establishment offer many services to the student: administrative, teaching, tutoring, listening, counselling, health care, childcare, disability.
Hospitality and subsidies are offered to foreign students.
Commendably, counselling or preferential registration for educational activities are offered to pregnant students or students with children.

7.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the admission procedures, the admission criteria, the number of admitted students and the services to students:
Regular meetings with University management are held on themes regarding student admission and student progression for improving QA system. Decisions taken at different levels of the governance are communicated back to the Faculty Council and to stakeholders. The decisions are also available on the website of the Establishment.

7.2. Comments
Freie Universität Berlin prides itself on being an institution that is family friendly and makes every attempt to accommodate those individuals with additional needs. The facilities that are available for students with young children in addition to accommodating teaching and providing alternatives specifically for those students and staff members who are pregnant is truly impressive and worthy of commendation.

Student welfare is well provided for via central university services in addition to the mentoring system between staff and students on the Duppel Campus. Staff are noted to be approachable and friendly, always willing to listen and help if an issue arises. A strong community spirit was reported by students who feel well supported within their peer group.

A minority of available positions (40%) is filled by applicants with top high-school grades (20%) or through special admission regulations (20%).

The special admission regulations (SER 7.1.2.) refers to a process by which 20% of the places for veterinary students are filled according to so called waiting times; i.e. the time (in semesters) that applicants have already waited to be admitted for veterinary studies. The criteria are set by the German central admission institution, are published on their website (https://zv.hochschulstart.de/index.php?id=2043), and vary from year to year depending on the overall number of number of applicants.

The IKOBE Quality Certification Institute is affiliate to ENQA.

Applicants who are not successful in their application to study veterinary medicine have to follow official protocols for an appeal.

Applicants have the legal right to appeal against the rejection to the administrative court of Berlin. There are two possible reasons for appeal:

1) Applicants may appeal that they were not treated fairly in the process and their exclusion is not justified for "quality" reasons.

2) Applicants may appeal that the Establishment has a higher capacity to admit students and that there are unfilled slots remaining after the admission procedure. In this case, the applicants may claim that the Establishment did not fulfil their quantitative obligation to fill all available placements. The number of slots that the Establishment has to fill is strictly regulated by the Capacity Regulation (7.1.4. of the SER).

The Establishment highlights that the number of students to be enroled is based largely on curricular and teaching staff endowment. Based on the local rules, recruiting more teaching staff (provided that funds were made available) would directly increase the number of students that would have to be admitted, while a reduction in teaching staff would lead to lower admission numbers.

7.3. Suggestions for improvement

The Establishment must protect and support international student mobility (e.g. Erasmus project) by facilitating the recognition of ECTS when they return. The core curriculum of veterinary medicine degree in Berlin offers 200 elective courses. The wide range of elective courses provided by the Establishment can augment those found in the core curriculum of the Establishment partners in the Erasmus project to complete the learning of the student to ensure that they do not have to repeat a year of study.

Student welfare services could be extended to the Duppel campus as access for clinical students who are working at the VTH throughout the day may be difficult due to time restraints and not being able to travel the main campus during opening hours. Consulting students on which services would be useful to include as part of the Duppel campus may be a first step to identify if such a need exists and which services would be most useful to students.

7.4. Decision

The Establishment is compliant with Standard 7.

8. Student assessment (see Standards 8.1 to 8.9)

8.1. Findings

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

As explained in Chapter 7, paragraph 7.1.2, TAppV and Establishment supplementary examination regulation, coordinated by State Examination Office (LaGeSo) and implemented by the Establishment, regulate student assessment.

The examination aims to assess the theoretical knowledge and pre-clinical or clinical skills acquired by the student.

The curriculum progression is organised into two didactic periods: pre-clinical (first 4 semesters) and clinical (from 5th semester to 11th semester). The curriculum progression from pre-clinical to clinical is related to successful completion of all pre-clinical subjects.

Examination boards are composed by post-graduate qualified members with specific professionalism in preclinical and clinical subjects.

Pregnant students must inform the examination board about their pregnancy, for which they have a period of suspension of the examinations (6 weeks before expected delivery and 8 weeks after childbirth).

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:
TAppV regulates student assessment and indicates four different forms of examination: written MC, oral, practical or oral-practical combined.
The Establishment supplementary examination regulation defines the form, the members of board and the time (not during the running semester when classes are in session).

In case of failed exam, the student can repeat once three weeks later and a second time one year later. After two unsuccessful repeats, students are excluded from further veterinary studies in Germany (see 7.1.5).
Theoretical knowledge as well as pre-clinical practical skills and clinical practical skills are assessed in keeping with Article 38 (Guidelines 2005/36/EG) and aim to satisfy Day One competences.

8.1.3. Description of the processes for providing to students a feedback post-assessment and a guidance for requested improvement:
The examination system is user-friendly on the Establishment website: forms of examination and periods when the examinations take place.
The examination evaluation system is based on the assignment of a mark on a five point scale with 1-4 pass marks and 5 a fail mark. (positive 1 to 4, negative 5).
The examiner logs the result, informs the student immediately after the exam and justifies it in a short feedback report.
An appealing system is provided.
A QA system is based on overview of subject-and student cohort-specific examination results at least once a year. The overview is analysed by the Dean's Office and the respective examination board.
In case of inconsistency or visible trends, reasons and measures are discussed and implemented by the members of the examination board (or by a single member).

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:
A double loop PDCA cycles describes and summarises QA system adopted.

8.2. Comments
The Establishment has a clear responsibility for the outcomes assessment, grading criteria and feedback; all of which are identified and made available to students via the online platform Blackboard.

Opportunities for repeating failed exams are clearly detailed and communicated to students.

A QA system is based on overview of subject and student cohort-specific examination results at least once a year.

Oral examinations are a common form of assessment of the subject material throughout the

progression of the course. Students and staff profess varying opinion regarding preferences of forms of assessment.

Examinations in the final semester include a practical exam that assesses clinical skills in relation to either equine, bovine or domestic species. Students are informed four days before the examination as to which species they will be assessed upon.

8.3. Suggestions for improvement

Written examinations should be used rather than oral examinations as a form of assessment wherever possible. Freie Universität Berlin has a reputation for excellence regarding the assessment of student knowledge, and this can continue to be developed through objective and robust examination structures. Recommendations would include switching to a mainly written based examination format and maximising the use of the e-assessment platform. This resource represents a democratic and independent assessment approach that protects the student, the examiner and the reputation of the Establishment equally in turn.

Ensure that each student is provided with a logbook that is used to record both clearly and objectively, the documentation of cases and procedures that the student performs throughout supervised internships intramurally. Completing this logbook should be a compulsory part of the rotation, and feedback given to the student on their performance during the week based on the documentation completed. Logbooks should also form part of the quality assurance assessment of the clinical rotation.

To ensure the clinical skills of students are sufficient to fulfil the Day One Competencies, students should be assessed in all the three major species categories during the final practical exam in end semester, rather than simply one.

The logbook can also be included in the Diploma supplement.

The Diploma Supplement is an official EU document, written in English, that should be given to each student who is graduating. This document should be free of charge and should accompany a higher education diploma that provides a standardised description of the nature, level, context, content and status of the studies completed by its holder. It can be used to improve opportunities for entry into the job market.

8.4. Decision

The Establishment is compliant with Standard 8.

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

9.1. Findings

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:

Employees are selected through a structured selection process according to the objective of recruiting the best candidates who are highly qualified in their area of expertise. The University protocols for the application process are clearly defined regarding procedure and criteria, constituting an important part of the quality assurance of recruitment and hiring new staff members (Chapter 9.1.2.). All

applicants must complete the same demanding application procedure to ensure both procedural neutrality and to select for a high standard of applicant. All scientific employees of the Establishment must have completed their university studies or have an equivalent qualification. All members of the examination boards must have at least three years of teaching experience and a doctorate or an equivalent degree.

All employees assisting in scientific research of the Establishment are qualified in their area of expertise. There are several mandatory levels of training for all staff at the Establishment. "Basic course in teaching" is offered to all academic at the beginning of every semester. Another training programme is "Day of Teaching" which offers specific lectures and workshops. The University also the teaching qualification programme "SUPPORT" for teaching staff. The Establishment also offers special courses including biosecurity, fire safety, hygiene and animal welfare specifically for Support Staff. Employees must sign an agreement after completion of the training confirming attendance. Each employee must attend at least one training course every year.

The Establishment has two levels of evaluation based on established QA processes (Chapter 9.1.6.). Both levels of evaluation are implemented in 3-year cycles in accordance with the evaluation plan decreed by Faculty Council. For newly-appointed teaching staff, lecturer evaluation is mandatory in the first year of teaching. The analysis of the evaluation is carried out by the teaching and study advisor and then communicated to the respective lecturers and subsequently reported to the Dean's Office. The results of the evaluation are screened in the Dean's Office and forwarded to the responsible lecturers with an offer to discuss the findings.

In most instances animal keepers, caretakers, administrative staff, receptionists and technical staff have at least an apprenticeship certificate with three years of training.

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 number of staff positions (all levels) assigned to the respective institutes and clinics is regularly assessed by the Dean´s Office. Vacant permanent positions are evaluated and potentially reallocated based on the strategic plan of the Establishment. All new positions must first have the permission of the establishment and, for professorial positions, the University Administration before being announced widely for recruitment. The total number of FTE academic staff involved in veterinary training just above the minimal requirements.

9.1.3. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the strategy for allocating, recruiting, promoting, supporting and assessing academic and support staff:
The Establishment functions according to the Establishment Operating Plan which includes the system of annual appraisal meetings where career options and qualifications needs are identified. Changes in allocating and recruiting academic and support staff noted after these meetings are circulated on Establishment and university level. Student representation is present on committees and commissions of the establishment.

9.2. Comments
All teaching and support staff must participate in mandatory training programmes and training is repeated annually.

There is a comparably low number of FTE academic staff involved in veterinary training.

The qualifications required to be recognised as a senior member of teaching staff (for 'habilitation' or appointment of professors) is only a basic qualification of two days training. There is no official requirement for senior teaching staff to complete the recognised didactic certificate of the university ("SUPPORT" program).

Insufficient specialised academic staff in some key clinical disciplines (standard 9.2.).

Insufficient job security for some junior academic staff.

9.3. Suggestions for improvement

It is suggested:
-) to recruit and employ specialised academic staff for specific clinical disciplines (standard 9.2);
-) to convince the Federal authorities to increase the ratio FTE academic staff involved in veterinary training versus admitted students;
-) to convince the Federal authorities to improve the job security for junior academic staff.

9.4. Decision

The Establishment is partially compliant with Standard 9 because of insufficient specialised academic staff in some key clinical disciplines.

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

10.1. Findings

10.1.1. Brief description of how the research activities of the Establishment and the implication of most academic staff in it contribute to research-based undergraduate veterinary education:
Research oriented teaching is one of the key principles of the Establishment. Some mandatory courses and seminars (seminars of literature research, handling of literature search tools, intellectual property, plagiarism or correct citation formats) are part of the curriculum. Approximately 50 elective courses offered by intramural institutions and regional research centres related to research are part of the 5th to 9th semester. The Establishment offers several student research assistant positions to undergraduate students every year and encourages undergraduate student exchange programmes with other universities.

10.1.2. Description of how the postgraduate clinical trainings of the Establishment contributes positively to undergraduate veterinary education and how potential conflicts in relation to case management between post- and undergraduate students are avoided:
Core-funded junior academic staff, some of them at the same time doctoral students and postgraduate clinical trainees, are involved in undergraduate student teaching as teaching assistants. They have formal teaching responsibilities of 2 (half-time) or 4 (full-time) credit hours per week. Conflicts in case management are not perceived to be an issue due to sufficient number of cases available for the teaching of both undergraduate and postgraduate students.

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 University has several types of postgraduates programmes. The "Biomedical Sciences" Programme is structured and organised in a similar way to most Ph.D. programmes (Chapter 10.1.2.). Approximately 15-20% of all veterinary graduates join the formal Ph.D. programme "Biomedical

Sciences" after graduation.

Approximately 60% of all State certified veterinarians who are hoping to create a career as future practitioners enrolled in the "Dr. med. vet." programme. This programme is less structured in terms of duration, scientific output, mentoring and curriculum in comparison the Biomedical Sciences course. It offers much more flexibility for those involved such as the option of a combination of teaching with part time work in the clinics or a private veterinary practice.

The Establishment has a consistent number of 60 PhD students (20 incoming / leaving per year), 400 Dr. med. vet. Students (120 new / leaving per year).

The Establishment also offers a Master Degree Programme in Small Animal Sciences and a MSc in Equine Medicine as clinically oriented graduate education programmes.

Other postgraduate trainings are organised under the umbrella of the EBVS or National Certificates of Veterinary Specialisation.

All programmes with relevance to research training, continuing and postgraduate education are subject to approval by the Faculty Council. Decisions by the Faculty Council are supported by advisory committees on each specific subject.

10.2. Comments
The undergraduate students are keen to incorporate research into their studies.

Research training and postgraduate training are complex but well structured. There are several types of postgraduate education. There is a substantial number of specialisation and continued education opportunities provided by the Establishment.

Based on requirements of the German State Veterinary Chambers, all veterinarians have to attend at least 20 hrs/year of accredited continued education courses.

10.3. Suggestions for improvement
None.

10.4. Decision
The Establishment is compliant with Standard 10.

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

11.1. Findings

11.1.1. Description of the global strategy of the Establishment for outcome assessment and Quality Assurance (QA):
The University of Berlin began the QA process in 2012 and received the accreditation in 2016 by AQAS agency. The University takes both external and internal standards and guidelines into account in the implementation of quality targets.

The Establishment is fully integrated into QA system. PDCA cycles is present and relevant documents on QA (only in German language) are published on the University website (the Faculty website redirects to the University website).

The processes are detailed and internal and external stakeholders are involved for planning and defining QA requirements and processes.

The QA system is compliant with ESG 2015, national standards and ESEVT "Uppsala" SOP 2016.

11.1.2. Brief description of the specific QA processes for each ESEVT Standards:
For each ESEVT standard (Chapter 1-11) a QA PDCA cycle is shown or a QA specific system is cited.

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:
QA planning and processes for all ESEVT Standards are managed by Staff, students and internal and external stakeholders.

11.2. Comments
The involvement of Internal and External Stakeholders as well as students in the process of QA is a strength of the Establishment.

QA procedures are well defined and PDCA's cycles guarantee the implementation of changes in existing processes, supporting continuous improvement, day by day, of the ESEVT Standards.

11.3. Suggestions for improvement
It is suggested to improve the QA information dissemination inside the Establishment, to increase the recruitment of Support Staff in QA working groups and to increase the number of ISO internal auditors within the Establishment.

11.4. Decision
The Establishment is compliant with Standard 11.

12. ESEVT Indicators

Calculated Indicators from raw data		Establishment values	Median values[1]	Minimal values[2]	Balance[3]
I1	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0.12	0.16	0.13	-0.01
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	0.61	0.87	0.59	0.02
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	1.41	0.94	0.57	0.84
I4	n° of hours of practical (non-clinical) training	940.00	905.67	595.00	345.00
I5	n° of hours of clinical training	736,4	932.92	670.00	66,40
I6	n° of hours of FSQ & VPH training	285.50	287.00	174.40	111.10
I7	n° of hours of extra-mural practical training in FSQ & VPH	250.00	68.00	28.80	221.20
I8	n° of companion animal patients seen intra-murally / n° of students graduating annually	62.52	70.48	42.01	20.51
I9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	4.48	2.69	0.46	4.01
I10	n° of equine patients seen intra-murally / n° of students graduating annually	16.11	5.05	1.30	14.81
I11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	24.41	3.35	1.55	22.87
I12	n° of companion animal patients seen extra-murally / n° of students graduating annually	–	–	0.22	–
I13	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating annually	41.42	15.95	6.29	35.12
I14	n° of equine patients seen extra-murally / n° of students graduating annually	–	–	0.60	–
I15	n° of visits to ruminant and pig herds / n° of students graduating annually	2.16	1.33	0.55	1.61
I16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0.06	0.12	0.04	0.01
I17	n° of companion animal necropsies / n° of students graduating annually	1.96	2.07	1.40	0.56
I18	n° of ruminant and pig necropsies / n° of students graduating annually	0.63	2.32	0.97	-0.34
I19	n° of equine necropsies / n° of students graduating annually	0.40	0.30	0.09	0.31
I20	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	5.42	2.05	0.69	4.73

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

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

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

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))

Standard 1: Objectives and Organisation	**C**	**PC**	**NC**
1.1. The Establishment must have as its main objective to provide, in agreement with the EU Directives and ESG recommendations, adequate, ethical, research-based, evidence-based veterinary training that enables the new graduate to perform as a veterinarian capable of entering all commonly recognised branches of the veterinary profession and to be aware of the importance of lifelong learning.	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		
Standard 2: Finances			
2.1. Finances must be demonstrably adequate to sustain the requirements for the Establishment to meet its mission and to achieve its objectives for education, research and services.	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		
Standard 3: Curriculum			
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	

Standard 4: Facilities and equipment			
4.1. All aspects of the physical facilities must provide an environment conducive to learning.	x		
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		
Standard 5: Animal resources and teaching material of animal origin			
5.1. The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical training (in the area of Basic Sciences, Clinical Sciences, Pathology, Animal Production, Food Safety and Quality) and adapted to the number of students enrolled.		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		
Standard 6: Learning resources			
6.1. State-of-the-art learning resources must be available to support veterinary education, research, services and continuing education. Timely access to learning resources, whether through print, electronic media or other means, must be available to students and staff and, when appropriate, to stakeholders. State-of-the-art procedures for bibliographical search and for access to databases and learning resources must be taught to undergraduate students.	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		
Standard 7: Student admission, progression and welfare			
7.1. The selection criteria for admission to the programme must be consistent with the mission of the Establishment. The number of students admitted must be consistent with the resources available at the Establishment for staff, buildings, equipment, healthy and diseased animals, and materials of animal origin.	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. Ò	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		
Standard 8: Student assessment			
8.1. The Establishment must ensure that there is a clearly identified structure within the Establishment showing lines of responsibility for the assessment strategy to ensure coherence of the overall assessment regime and to allow the demonstration of progressive development across the programme towards entry level competence.	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		
Standard 9: Academic and support staff			
9.1. The Establishment must ensure that all staff are appropriately qualified and prepared for their roles, in agreement with the national and EU regulations. A formal training (including good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures) must be in place for all staff involved with teaching. Most FTE academic staff involved in veterinary training must be veterinarians. It is expected that greater than 2/3 of the instruction that the students receive, as determined by student teaching hours, is delivered by qualified veterinarians.	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		
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		
Standard 10: Research programmes, continuing and postgraduate education			
10.1. The Establishment must demonstrate significant and broad research activities of staff that integrate with and strengthen the veterinary degree programme through research-based teaching.	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		
Standard 11: Outcome Assessment and Quality Assurance			
11.1. The Establishment must have a policy for quality assurance that is made public and forms part of their strategic management. Internal stakeholders must develop and implement this policy through appropriate structures and processes, while involving external stakeholders.	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		
C: (total or substantial) compliance; PC: partial compliance (Minor Deficiency); NC: non-compliance (Major Deficiency)			

Executive Summary

The Faculty of Veterinary Medicine of the Freie Universität Berlin is one of the 12 scientific departments of this University. It results from the merge in 1997 (i.e. after the German reunification) of two separate veterinary Establishments (one part of the Humbold Universität and one part of the Freie Universität Berlin).

The Establishment has been positively evaluated by EAEVE in 1998 and in 2007.

The SER was provided on time and written in agreement with the Uppsala SOP (2016). Replies to the pre-Visitation questions from the experts were provided before the start of the Visitation.

The Visitation was very well organised and the Liaison Officer did a great job to adapt the schedule of the Visitation, to search for the requested information and to organise the relevant meetings.

Areas worthy of praise (i.e. Commendations), e.g.:
- excellent buildings and equipment devoted to both teaching and research
- clear plan for equipment and infrastructure investment
- excellent clinical skills teaching network ('VetskillsNet') available across campus
- excellent library and IT support
- excellent e-learning and e-assessment platform
- evident care for the welfare of students
- well-structured training of academic staff to teach and to assess
- excellent research activities in many areas
- excellent QA policy which is implemented in daily life of the Establishment.

Areas of concern (i.e. Minor Deficiencies):
- insufficient training on emergency cases for all students, especially in companion animals
- inadequate monitoring and evaluation of EPT
- insufficient signage for biosecurity and restricted areas
- sub-optimal isolation facilities in small animals
- sub-optimal number of necropsies in ruminants and pigs
- sub-optimal use of the VTH companion animal patients for clinical training of undergraduate students
- insufficient specialised academic staff in some key clinical disciplines.

Additional suggestions of improvement are listed in the Visitation Report

Items not compliant with the ESEVT Standards (i.e. Major Deficiency):
- The Establishment is not compliant with Standard 3 because of insufficient number of hours of hands-on clinical training under the supervision of academic staff in order to achieve Day One Competences for each individual student.

Glossary

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 Deficiency had been identified:

- The Establishment is not compliant with Standard 3 because of insufficient number of hours of hands-on clinical training under the supervision of academic staff in order to achieve Day One Competences for each individual student.

The ‘Faculty of Veterinary Medicine, Freie Universität Berlin‘ is therefore classified as holding the status of: **CONDITIONAL ACCREDITATION**.