Expert group joint opinion

Evaluation Procedure: Assessment of Study Field

Higher Education Institution: Latvia University of Life Sciences and Technologies

Study field: Veterinary Medicine

Experts:

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Summary Assessment of the Study Field

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The expert panel had a good opportunity to meet remotely the enthusiastic and caring teachers (professors, associate professors and lecturers) working in the study programme, motivated undergraduate and PhD students and various graduates of faculty, demonstrating impressive career achievements. There is definitely a good working relationship between the management of the study field, study programme and social partners. Beside that, the materials of Self-Evaluation Report (SER) prepared by the staff of the Faculty of Veterinary Medicine (VMF) have been used for assessment of study field „Veterinary Medicine“ and two study programmes “Veterinary Medicine 49640” and “Veterinary Medicine 51640”

The aims of the study field Agriculture, Forest Management, Fishing, Veterinary Medicine and Food Hygiene and the study programmes of the study field Veterinary Medicine correspond to the directions of the strategic development of Latvia University of Life Sciences and Technologies (LLU) in the field of biosciences, as well as the needs and development trends of the society and the national economy, but it would be desirable to specify the aim of the study field Veterinary Medicine.

The expert panel was more than satisfied with the quality of the learning facilities and resources in LLU, and the staff motivational and development opportunities. All resources are available for all involved parties to achieve successful goals set by individual study programmes. Systemic problems in the Latvian higher education regarding funding are affecting the attraction of highly skilled professionals. Veterinary faculty expenses on infrastructure are high but can be covered from available funds (state funds, tuition fees, income from clinic etc.).

The scientific work is performed in accordance with the approved LLU Strategy 2015-2022 with the main objectives for research: excellence in research, high-quality studies and effective university governance. Based on that, the main areas of research and development have been identified and targeted. Purposeful management activities have shaped the teachers' comprehensive understanding of the importance of research. Students are involved in scientific projects providing assistance to researchers in the development of projects, which forms an understanding of the scientific process and the basic principles of research development. The faculty regularly admits scientists, students from other countries to promote the development of international cooperation. The established simulator laboratory provides the conditions for good, responsible veterinary practice and ethical norms in relation to the animal. The veterinary clinic adheres to high standards and offers good opportunities for scientific research. The targeted development of infrastructure, which is ongoing, is important to ensure further developments.

LLU and VMF are doing their best to cooperate both with Latvian and foreign partners. The cooperation contributes to the achievement of the aims and learning outcomes, especially in offering the internship places for students, giving them possibilities to take part in scientific research projects. The limiting factor is low financing, which does not allow to invite foreign professors for lecturing or demonstrating practical skills. But LLU and VMF management are aware of this need and are planning to solve this problem as soon as possible.

The expert panel established and described both strengths and weaknesses of the study field „Veterinary Medicine“. It is important to stress that all in all, the strengths far outweigh the weaknesses.

The strengths are as follows:

1. LLU study work is organized and managed in accordance with standards and guidelines for quality assurance in the European Higher Education Area.
2. “Investor of Excellence” Certificate and ECOVE (European Committee of Veterinary Education) - certificate of approval shows constant improvement regarding the quality.
3. The study programmes in Veterinary Medicine implemented at LLU have been recognized by

EAEVE since 2019, which confirms their compliance with the requirements of Directive 2005/36 / EC.
4. Modern and up-to-date infrastructure is a strength enabling the promotion of contemporary veterinary medicine as well as doctoral studies.
5. Teaching staff members are aware of the importance of scientific work in their academic careers.

The weaknesses are as follows:
1. The maintenance of the infrastructure requires most of the available funds, which potentially hinders scientific development and prevents the attraction of professionals.
2. The number of doctoral theses defended is not enough to ensure the sustainability of veterinary medicine studies and research.
3. The number of articles in high-impact journals is not sufficient to ensure the international visibility of Latvian veterinary medicine.

1. Management of the Study Field

Analysis

1. The aims of the study field are clearly defined and attainable. The study field and the relevant study programmes comply with the main directions of the strategic development of the higher education institution/college and meet the needs and the development trends of the society and national economy.

Since 2018 (Regulations Regarding Opening and Accreditation of Study Fields (Cabinet regulation Nr 7 9 3)
https://likumi.lv/ta/en/en/id/303956-regulations-regarding-opening-and-accreditation-of-study-fields), the field of study Agriculture, Forestry, Fisheries, Veterinary Medicine and Food Hygiene has been divided into 2 study fields: Agriculture, Forestry, Fisheries and Food Hygiene and Veterinary Medicine; therefore the study field Veterinary Medicine was submitted separately, rather than together with the study field Agriculture, Forest Management, Fishing, Veterinary Medicine and Food Hygiene. In the Self-Evaluation Report (SER) (SER, Part II, paragraph 1.2.) the common goal of the study field Agriculture, Forest Management, Fishing, Veterinary Medicine and Food Hygiene is defined, but the specific aim of the study field Veterinary Medicine is not stated. Within the study field of Veterinary Medicine, two study programmes are being implemented: the professional study programme Veterinary Medicine (the aim – to provide sufficient, ethical and science-based veterinary education that prepares specialists who can examine and treat sick animals, promote animal husbandry by ensuring their health and welfare, protect people from zoonoses and to ensure the entry of high-quality food of animal origin into human consumption (SER, p. 80) and the doctoral study programme Veterinary Medicine (the aim – to provide the highest level of theoretical knowledge in various sub-sectors of the science of Veterinary Medicine; in accordance with the international standards in Veterinary Medicine, to prepare a new generation of scientists, who would be able to deal with research problems of Veterinary Medicine and make the renewal of the scientific and academic staff (SER, p.98)). The aims of both above-mentioned study programmes are clearly defined and achievable. The aims of the study programmes of the study field Veterinary Medicine correspond to the mission of VMF (SER, Part II, paragraph 1.2.) and the directions of the strategic development of LLU in the field of biosciences (control and prevention of infectious and invasive diseases; morphofunctional studies of animal digestion system from the aspects of ontogenesis and pathogenesis of diseases; research on new diagnostics, treatment methods, medications, feed and nutritional supplements), as well as the needs and development trends of the society and the national economy, but it would be desirable to specify the aim of the study field Veterinary Medicine.

2. The structure of the management (administration) of the study field and the relevant study programmes is oriented towards the development of the study field. Decision-taking is efficient. The support provided by the administrative and technical staff contributes to meeting all needs regarding the relevant study programmes of the study field.

LLU study work is organized and managed in accordance with the standards and guidelines for quality assurance in the European Higher Education Area (SER, Part II, paragraph 2.5.).
The efficiency of the study programme management at LLU is promoted by the unified procedures in the study organization in all study fields and programmes, the unified model documents and the availability of information on ongoing processes and current events, regular meetings that bring together the management, the deans, and the supporting administrative units. The decision-making system at the LLU ensures a quality study process and is efficient. The main institutions involved in the decision-making process at the LLU are the Council and the Senate (SER Part I, paragraph 1.2.). The Council functions in accordance with the Regulations (https://www.llu.lv/lv/konvents), the Senate functions in compliance with the Regulations (https://llu.lv/lv/senats). Orders, decisions, and procedures related to the main activities of the LLU are taken and passed within their respective powers by Rector, Vice-Rectors for Studies/Sciences, Chancellor, the LLU Director and Deans of the faculties. The LLU has developed a detailed joint scheme of study processes, which includes 90 main processes of the study block, displaying their sequence and correlation. The detailed joint scheme of study processes provides a unified approach to study processes in all structural units.
The administrative staff who ensure the operation of the study field includes the Dean, Vice-Deans, programme directors, institute directors, Director of the veterinary clinic. As support staff in the implementation of the study programmes of the study field, the VMF specialists in record management are employed; they supervise student affairs, organize and manage faculty records, inform students, perform internal and external document circulation and accounting.
The study field is part of the general structure of LLU, the institution responsible for the implementation of the study field and its programmes are the Faculty of Veterinary Medicine. Programme directors are responsible for the implementation of the study programmes. The programme directors and the responsible departments and/ or institutes are involved in the work of the methodological commission, thus establishing cooperation in the interconnection of the programmes and their practical implementation.

3. The higher education institution/ college has established a system and developed/implemented procedures for the admission of students, the recognition of the study period, professional experience, and the previously acquired formal and non-formal education, as well as for the evaluation of the achievements and learning outcomes of the students, and these procedures are logical and efficient.

The procedure and requirements for the admission of students at LLU have been determined in compliance with the Law on Higher Education Institutions, 10.10.2006 Cabinet Regulation No. 846 “Regulations on Requirements, Criteria and Procedures for Admission to Study Programmes, the Constitution of Latvia University of Life Sciences and Technologies, the Senate decision on the regulations for admission in the respective study year, the order of the Vice-Rector for Studies “On the Procedure of Admission at Latvia University of Life Sciences and Technologies”. The admission of foreign students has specified in the LLU Senate decision “Admission requirements for studies in English”, the admission being organized in accordance with Article 83 of the Law on Higher Education Institutions. Information on admission for international students is available at: https://www.llu.lv/en/how-to-apply .
Prospective students in the study programmes of the study field may also start their studies in later stages, provided that they have acquired knowledge, skills and competencies in prior formal or non-

formal education. LLU has approved the regulations and procedures for starting studies in later stages of studies and for the recognition of knowledge, skills and competences acquired outside formal education or acquired in professional experience.
The recognition of the study results acquired in prior education or professional experience is implemented in compliance with the Law on Higher Education Institution, 14.08.2018 Cabinet Regulation No. 505 “Rules for the recognition of competencies acquired outside formal education or of professional experience and of learning outcomes achieved in prior education” and the LLU “Regulations on recognition of the study results acquired in prior education or professional experience”.

4. The higher education institution/ college has set certain academic integrity principles and mechanisms and uses appropriate plagiarism detection tools which are effective and contribute to the development of the internal culture of the higher education institution/college, and the stakeholders are aware of such tools and mechanisms.

The LLU has developed and follows certain procedures aimed at ensuring the observance of the principles of academic integrity and provides that the involved stakeholders are informed about the performance of academic work by observing the highest standards of professionalism and accuracy, objectivity and truthfulness, moral and ethical principles, and integrity. The LLU students and academic, general, scientific and administrative staff are equally responsible for both the observance of the principles of academic integrity and the consequences of their violation. The LLU has developed and follows certain procedures for the examination of plagiarism in graduation theses and the measures to be taken in case of detection of the signs of plagiarism: there are two Rector's orders "Procedures for Submitting Electronic Copies of Final Theses and Their Verification in the Plagiarism Control System"; “Violations of Academic Integrity in Final Theses / Doctoral Theses”), and LLU has signed an agreement on the use of the unified computerized inter-university plagiarism control system and the examination of final theses on plagiarism in undergraduate, master's and doctoral studies. During the COVID-19 pandemic, LLU introduced a robust plagiarism detection tool that clearly identifies the percentage of plagiarism in all material submitted by students for assessment, including research theses and research projects. Considering the fact that in the study process, the representatives of employers (specialists in veterinary medicine) also act as lecturers (in the status of visiting lecturers), participate in delivering study courses or parts thereof and are members of the Final Examination Commission, experts can conclude that employers are also made aware of the observance of the principles of academic integrity in the study process.

5. The information published on the website of the higher education institution/ college regarding the relevant study programmes of the study field complies with the information available in the official registers. It provides important information for the candidates and the students, and it is published in all languages in which the study programmes are implemented.

The information about the professional study programme “Veterinary Medicine” and doctoral study programme “Veterinary Medicine” published on the LLU website corresponds to the information available in the official registers and provides the necessary information to applicants and students.

Conclusions. Strengths and weaknesses

The aims of the study field Agriculture, Forest Management, Fishing, Veterinary Medicine and Food Hygiene and the study programmes of the study field Veterinary Medicine correspond to the directions of the strategic development of LLU in the field of biosciences, as well as the needs and development trends of the society and the national economy, but it would be desirable to specify

the aim of the study field Veterinary Medicine.
The efficiency of the study programme management at LLU is promoted by the unified procedures in the study organization in all study fields and programmes; the study field Veterinary Medicine is part of the general structure of LLU, the institution responsible for the implementation of the study field and its programmes is the Faculty of Veterinary Medicine.
The procedure and requirements for the admission of students at LLU have been determined in compliance with the Law on Higher Education Institutions. LLU has approved the regulations and procedures for starting studies in later stages of studies and for the recognition of knowledge, skills and competences acquired outside formal education or acquired in professional experience.
The LLU has developed and follows certain procedures aimed at ensuring the observance of the principles of academic integrity and provides that the involved stakeholders are informed about the performance of academic work. The LLU has developed and follows certain procedures for the examination of plagiarism in graduation theses and the measures to be taken in case of detection of the signs of plagiarism.

Strengths
1. The efficiency of the study programme management at LLU is promoted by the unified procedures in the study organization in all study fields and programmes.
2. The procedure and requirements for the admission of students at LLU have been determined in compliance with the Law on Higher Education Institutions.
3. LLU has developed and follows certain procedures aimed at ensuring the observance of the principles of academic integrity and ensures certain procedures for checking plagiarism in the final work.

Weaknesses
1. The aim of the study field Veterinary Medicine is not defined.

2. Efficiency of the Internal Quality Assurance System

Analysis

1. The higher education institution/college has established a quality policy which is publicly available. LLU has developed and maintains a quality assurance system, which contributes to the achievement of the aims and learning outcomes of the study field and the relevant study programmes. The system ensures continuous improvement, development, and efficient performance of the study field and the relevant study programmes.

LLU in compliance with its goal and objectives presented in the Constitution of Latvia University of Life Sciences and Technologies implements its own internal system of quality assurance.
LLU has developed its own policies and strategies based on national legislation, as well the principles of excellence that are the foundation of the "Investors in Excellence" standard that the university has successfully implemented. There is a programme of quality-focused policies, specifying the means of implementation. Policies and strategies are appropriate for each department and stimulate the participation of the entire academic and research staff, as well as students. The strategy, as well as the policies for ensuring the quality of education in LLU, are correlated with the actions promoted at the international level and aim at achieving specific objectives in the short, medium, and long term, specifying the ways of fulfilment and responsibilities.
The activity of maintaining the quality assurance system implemented and certified is coordinated at the university level by the Administrative Center of LLU, which is subordinate to the Rector, ensuring the implementation of the processes at the level of the Faculty of Veterinary Medicine being ensured

at the faculty level by the management functions at this level (dean, programme directors, institute directors).
According to the Quality Management System description and insurance plan https: // www.llu.lv/sites/default/files/2020-08/Quality%20Assurance%20System.pdf, the implemented quality management system defines 3 major categories (management processes, basic activity processes and support processes) in which 19 major processes are presented. These are closely monitored by evaluating the operational efficiency of key processes, and data collection and analysis is performed on a regular basis. The hierarchy of Quality Management System documents is structured on 5 levels: LLU management documents, strategic and planning documents, regulatory documents of the organization's basic activity, regulatory documents of the organization's support functions and support elements. All documents are published on the internal system with limited access based on security access code, on different levels of access, related to the tasks and responsibilities.
A risk management system has been implemented in the LLU, thus recognizing at the institutional level that risk management in the field of quality is a valuable component of an efficient quality system.
At the university level a mechanism has been developed for creating an internal approval of study programs and annually the existing study programs are evaluated, and their performance is supervised. Every year, annual reports are drawn up for all study programs; the reports are approved by the Senate and published on the LLU website https://www.llu.lv/lv/studiju-virzienu-parskati-un-pasnovertejumazinojumi.
The continuous monitoring of the quality of the study programs is ensured at the level of the faculties by the Methodological Commission of studies according to " Regulations of the Methodological Commission", LLU Senate Decision No. 6 - 107, April 9, 2008. The composition of the Methodological Commission is approved by the faculty council. At the university level, in the University Study Council, the Veterinary Medicine Faculty is represented by the director of the study programme which is fully responsible for all aspects involving aspects of study process quality assurance. Efficient mechanisms for monitoring the quality of study programs are being developed with the involvement of the dean of the faculty and the heads/ directors of the departments/ institutes/ centres, teaching staff, and students in the activities of elaborating the proposals for improving the study programme.
The activity of the Methodological Commission involves the continuous updating of study programme plans according to national legislation framework and internal regulatory documents of the university, review and evaluation of new study courses and plans, evaluation of study programme licensing, accreditation and self-evaluation reports; review and coordination of study plans; examination and evaluation of study course programs, their content, in accordance with the guidelines of the study program/ specialization directions to be acquired.
As indicated in section SER paragraph 2.1., the management and quality assurance activities of faculty, departments, teaching staff and administrative services are oriented at the continuous improvement of the quality of education, scientific research and economic-administrative services.
One of the important principles on which the quality management policy in LLU is based is the involvement of all academic community members as well as the final beneficiaries of the educational process, the stakeholders, in improving processes, education and research services. In this sense, at the strategic level, the issue of continuous improvement is addressed, the management improvement programme being one of the four chapters of the Strategic Plan of the university.
An important achievement in the assessment and promotion of the qualification of academic staff is the motivation system for teaching staff based on Rector's Order No. 4.3-8/10 "On implementation of the motivation system for academic staff" completed by 02.12.2020. Rector's Order No. 4.3-8/87 "On compilation of academic staff motivation system data for 2020". The established evaluation mechanism is efficient and is based on 16 evaluation criteria divided into 4 categories (student

assessment; preparation of teaching aids; study process; organizational work; professional development; scientific work). In order to support the continuous development and improvement of the quality management system, it is necessary to involve more members of the academic staff in the specific activities of the quality domain and to assure sustainability of the process, this specific activity can be rewarded by scoring it in the motivation system.
The effectiveness of the implemented quality assurance at the study programme of the Faculty of Veterinary Medicine according to the European System of Evaluation of Veterinary Training is its recognition of EAEVE (European Association of Establishments for Veterinary Education) since 2019, which confirms compliance with the requirements of Directive 2005/36 / EC. The Faculty of Veterinary Medicine is a full member of EAEVE and based on trends in the sector both in the region and globally, participates in decision-making and development of guidelines at different levels.

2. The procedures for the development and review of the relevant study programmes of the study field and the feedback mechanisms (including feedback to students, employers, and graduates) have been defined and they are logical, efficient, and available for all stakeholders.

Within the LLU, the development of new study programs goes through a complex process regulated in the "Regulation on the elaboration, approval and modification of study programs at the LLU" No. 10-5 as of 13 March 2019 (https://www.llu.lv/sites/default/files/2019-03/Studiju_programmu_izstradasanas_noteikumi_2019.pdf), the regulation stipulates that before the study programme is developed at the faculty level, discussed and analyzed in the Methodological Commission of the faculty, approved by the Faculty Council, discussed in the LLU Study Council, recommended for approval by the Senate, which will approve with the new programme of studies and its director. Relevant documents shall be submitted to the Academic Information Center for being licensed, following that new students shall be admitted to LLU and enrolled in the programme after the license has been granted.
Annually the existing study programs are revised and an annual report of the study programme is elaborated, following which an annual report of the field of study is created. The reports are available on the LLU website: https://www.llu.lv/lv/studiju-virzienu-parskati-un-pasnovertejuma-zinojumi
In particular, in the veterinary medicine study programme, the content of all study courses is regularly reviewed in the light of EAEVE recommendations and SOPs (https://www.eaeve.org/fileadmin/downloads/SOP/ESEVT_SOP_2019_adopted_by_the_32nd_GA_in_Zagreb_on_30_May_2019_As_amended_in_December_2020.pdf), which is the leading body in the field of veterinary medicine education in Europe and worldwide, as well as trends in science and practice in each specific field.
The structure responsible for monitoring the quality of the study programme and reviewing them, this Study Methodological Commission is established (rules of procedure are adopted by the University Senate on April 9, 2008) which analyze the curriculum and coordinate teaching between different departments and institutes, provides the recommendations regarding changes in the content and structure of the study programme and study plan (syllabus) and evaluate the initiative of changes in the curriculum submitted by the responsible functions in carrying out the didactic activities (leading lecturer/ institute).
The study programme director is responsible for organizing surveys of graduates, employers and students, to analyze the results of the surveys and to propose the elimination of the revealed shortcomings; to follow the evaluation of the teaching staff involved in the study programme at LLU IS and to evaluate the results.
In the process of improving the curriculum students have an important role, their proposals being promoted in cooperation with the VMF department of the Student Union of the LLU, students having the opportunity to make their proposals through anonymous questionnaires that they fill out

voluntarily and anonymously. in the LLU information system at the end of each session.
The quality assessment system of the teaching process is well organized. Students have the opportunity to evaluate the performance of each teacher at the end of each semester regarding the teaching methods, the availability of the teacher to offer consultations, and also have the opportunity, on this occasion, to submit proposals to improve the teaching process. However, students do not have the opportunity, use this questionnaire to evaluate the examination process and award the final grade. In order to make the grading process more transparent, it is necessary for the Course description to have a clearer presentation of the calculation method of the final grade, for some courses.
If the assessment results are less than 3 in the five-log system, according to the data of these surveys, corrective actions in study courses or discussions with the teaching staff are carried out. The average assessment of teaching staff in 2019 was 4.2. Based on the recommendations of the advisory board and the comments of graduates, corrective actions are taken to improve the study process.
An important role in the professional training of students is occupied by the internship period. And this is an activity that students can evaluate with the help of a questionnaire that includes questions about communication with the practising veterinarian, like transportation and housing options, direct questions like: “Would you come back to this place of practice, and would you recommend this place of practice to other students?”, students also have the opportunity to write comments, and state their opinions. The evaluation of internship places by students is a useful tool to assess whether the particular veterinarian is able, for example, to provide the student with the clinical cases necessary for the practice.
According to the results of the survey of graduates (SER, p.91) as well as it has been presented in the meeting with graduates during the evaluation visit, it has to be concluded that in order for specialists to better meet the needs of the labour market, it is necessary to develop specialization and introduce in curricula subject like veterinary practice management, communications skills and financial knowledge related to a veterinarian activity.
The main important way to receive feedback from employers is from the professional non-governmental veterinary organization in Latvia (Latvian Association of Veterinarians) or to a lesser extent, other representatives from the Advisory Board of the Faculty of Veterinary Medicine, a structure which is actively involved in the development of veterinary medicine sector in Latvia. According to SER p. 32, increased attention should be paid to this type of evaluation, in the sense of applying evaluation questionnaires to other stakeholders as well.
An important role in the process of improving the study program was played by the evaluation carried out within the project "Improvement of the Management of the Latvia University of Agriculture" which took place between 2018-2021 (according SER paragraph 2.2.,pg.28). Within the evaluation teams, in addition to foreign experts, representatives of the employers were also co-opted, who thus had the opportunity to submit recommendations specific to their field of activity.
Information about the study programme and students` and graduates' feedback that has been collected are public and are available in electronic informative materials.
Study booklet: https://www.llu.lv/sites/default/files/2019-02/LLU-pamatstudiju-buklets-2019-WEB.pdf
Master's study booklet: https://www.llu.lv/sites/default/files/2019-03/LLU-Magistra-studijas-2019-web_0.pdf.

3. The higher education institution/college collects and analyses the information (statistics) on the relevant study programmes of the study field on a regular basis and efficiently uses it to improve the study field.

LLU management centrally collects statistical data in different sections and with different regularity, to ensure a documented basis for all decision-making actions it takes. According to SER, p.67, the

data referring to the frequency of collection, the functions responsible for the interpretation of the data as well as their use are:
LLU MANAGEMENT and DEANS:
-monthly: number of students by study programs (following the dynamics of the number of students at LLU);
-once in a year: number of graduates by study programs, study directions and faculties, types of financing (data are used for the preparation of various reports); admission results (plan admission limits and forecasts for each subsequent year);
-annually: execution of state-funded study places by year (LLU, MoA and MES contract execution reports); summary of the performance indicators of the educational programs (annual reports on the implementation of the Development Strategy cascading of the performance indicators for the next year);
LLU MANAGEMENT and DEANS of faculties, VICE-DEANS of faculties as needed:
- monthly: execution of state-funded study places (forecast the number of new state-funded students and the number of places for student rotation in each semester - competition for state-funded study places);
DEANS of faculties and STUDY PROGRAMS DIRECTORS
- annually: summary of statistics by fields of study (annual reports of study fields for evaluation);
MINISTRY OF EDUCATION AND SCIENCE, university website, LLU management
- once in a year: LLU Statistical Data Collection University-1 for the Central Statistical Bureau (CSB) Data collection (preparation of various reports);
Some of the data are made public in reports published on the university's website (annual reports of study fields for evaluation (available at https://www.llu.lv/lv/studiju-un-reglamentejosie-dokumenti), or are published on the Ministry of Education and Science website and are made public to interested parties (https://izm.gov.lv/lv/publikacijas-un-statistika/statistika-par-izglitibu/statistika-par-augstako-izglitib).
The differentiated collection of data both in terms of content and frequency with which it is enhanced, as well as their statistical processing so that it can be used on different decision-making levels, makes this process a very valuable and effective tool in improving educational processes. research and last but not least administrative ones.
The data is effectively used in monitoring study programs while keeping track of all process performance indicators. The importance of this information is evident in the continuous improvement of the study programs, representing the input data in the periodic management analyzes.
This ensures a careful analysis and a pertinent evaluation of the aspects that need improvement, the whole process benefiting from the transparency that ensures access to information to all the parties involved.

4. The higher education institution/college has identified the standards set forth in Part 1 of the ESG, which require special attention. To improve the performance of the relevant study programmes of the study field, LLU has determined aims and measures, which are integrated in a joint quality assurance system.

A complete evaluation of ESG 1.1.-1.10 standards, covering the vital areas for the successful quality provision and learning environments in higher education, is given in SER paragraph 2.5. The institution has identified which standards are challenging and which require special attention in implementation. Thus, the implementation of the ESG 1.3 standard is considered to be a challenge, given that students show a strong tendency to ensure independence in their approach to learning methods, which leads to the need to provide them with increasingly modern ways of teaching

knowledge doubled by technological support to ensure a high quality of the teaching-learning process, especially in the difficult conditions of the current pandemic.
According to ESG 1.5. standard, the university has primary responsibility for the quality of their staff and for providing them with a supportive environment that allows them to carry out their work effectively. In implementing this standard, the institution must face the challenge posed by the recruitment of foreign teachers or highly qualified specialists from the country, in the conditions of limited funding. Also, a major challenge is to ensure the continuity of teaching under the conditions given by the fluctuation of the personnel involved in this process.
In its self-assessment process, the university has identified issues that will require high attention and the implementation of an improvement process. There is a tendency to overburden teachers by involving them in an increasing number of activities, this can be avoided either by a careful assessment of the occupancy of each position followed by a redistribution of tasks, either by an additional number of teachers and support staff, which is very difficult to achieve in terms of insufficient funding.
Regarding the ability to ensure that the university collects, analyzes, and uses relevant information for the effective management of their programs and other activities (ESG 1.7.) the institution has identified the need to pay special attention to collecting feedback from students as well from graduates, this information is considered of great importance in the process of improving and developing study programs.

Conclusions. Strengths and weaknesses

LLU successfully covers all ESG standards requirements by implementing a high-performance quality management system at all levels, which is continuously monitored, evaluated and improved. There is complex software for collecting and interpreting data, which also ensures efficient communication in the processes carried out in the university. Relevant information publicly provided by the LLU is comparable to that provided by universities in the European Higher Education Area.

Strengths
1. LLU study work is organized and managed in accordance with standards and guidelines for quality assurance in the European Higher Education Area;
2. “Investor of Excellence” Certificate and ECOVE (European Committee of Veterinary Education)-certificate of approval shows constant improvement regarding the quality.

Weaknesses
1. Structures involved in activities regarding the implementation of the quality management system at the level of organizational subdivisions (e.g. faculties, institutes, etc.) are having a poor representation, both in teaching and research activities and in the administrative ones.
2. Feedback from students, graduates and employers surveys is not emphasized enough, in order to raise their trust in the process of improvement of the study programme.

3. Resources and Provision of the Study Field

Analysis

1. The higher education institution/ college has developed a system to determine the financial resources required for the implementation of the study field and the relevant study programmes. There is a system for financing the scientific research and/or artistic activities in place, and this system is efficient.

The system to determine resources required for study programs is developed and is working. As

indicated in SAR section 3.1. LLU financial resources are managed by the financial planning centre. LLU has calculated the base expenses of one student in undergraduate level 6072 EUR and 18216 EUR per doctoral student. Based on these base costs LLU receives state-funded budget places from the Ministry of Agriculture. Calculated base costs on one student do not cover actual costs due to expensive infrastructure maintenance in the faculty. The difference between base expanse and real expanse is subsidized by income from the veterinary clinic, a statement confirmed in a meeting with the administration of faculty. Regarding financial flow, the LLU Senate has developed a procedure for the distribution of finances. For example, 80% of state funding is allocated for covering academic staff member salaries and 20% is allocated for all other costs. Of income that is made by study fees, 60% are allocated for reimbursement costs and the rest 40% for other expenses. Regarding the system for financing the scientific research funds coming from certain scientific research projects. Another finance source for research activities comes from base funding of science, 50% of funds are distributed at the direct disposal of faculty, the other 50% of funds are centralized and used to cover scientific activity costs. Overall funds that are provided from the state, mainly are used to only cover basic expenses of the veterinary faculty. Additional funds should be attracted to increase scientific capacity (assisting staff members, full-time PhD students working as researchers etc.)

2. The higher education institution/ college has identified the infrastructure resources and the material and technical provision required for the implementation of the study field, and they are available for the higher education institution/ college. The students and the teaching staff have access to the necessary resources. There is a common system and procedures for the improvement and purchase of the material, technical, methodological, and informative provision, etc. in place.

LLU has identified material-technical provisions that are needed for the implementation of the study process in veterinary medicine. Most of the study process is held on premises of Veterinary faculty, but infrastructure from other LLU faculties is utilized as well for the implementation of the study process. Laboratories and auditoriums are located on several blocks of buildings. During the site visit, some of the premises were undergoing restoration, overall the premises looked clean and appropriate for implementation of the study process. For example, the Veterinary clinic was well equipped with different machines for taking computed tomography and x-rays, sterile surgery rooms were shown, rooms for animal examination and accommodation are also on site. The clinic can provide training and medical help for small and large animals (cats, dogs, cows, horses etc.). Students are participating in manipulations held at the clinic. Auditoriums on the premises are equipped with audio and video equipment. During the study process students have access to the Osteology museum, students are also available to use a noninvasive simulation laboratory where they have different simulated animal models for training practical skills. Other laboratories are equipped with the necessary technical support for the implementation of the study process. There is also a pathology laboratory, which is working with tissue staining and histological analysis. Faculty have arranged internships on training farms, where students can acquire real experience from the field, for example in farm “Kalenieki” or “Līgotne”. Methodological and informative provision of study field is considered, it aims to provide students and academic staff members with modern literature resources. Students have access to Fundamental Library, the library is tailored to the needs of students, for example, users can access it on spot from 8:30 until 19:00, during examination library is working until midnight. Regarding methodological training, academic staff of LLU after getting elected or re-elected in academic positions have to pass an internal didactic skill course to be able to give lectures. The library catalogue and databases are available at any time and can be accessed through the internal LLU system; each student has their own unique login and password. During the COVID-19 pandemic, online library requests have increased (SAR 3.3.) students can access databases like Web of Science, Scopus, CAB Abstracts, EBSCO etc. In the library students have access to computers, reading rooms, and document copying, printing etc. Literature and databases

are updated based on recommendations of academic staff members. Material-technical base and additional equipment are updated through different projects. During the site visit, the faculty administration mentioned that they are planning on establishing corporation bonds with other HEI in Latvia, for example, Riga Stradins University, to use the infrastructure for student skill development. Academic staff members are responsible for revising and updating the literature and other necessary materials for the study process. Library receives requests for new literature, evaluates the proposal and buys the requested literature if the request is reasonable. Students and teaching staff have access to all resources mentioned above. Additional provision of resources is planned and included in the annual budget or obtained from projects that faculty are involved with.

3. The higher education institution/ college has developed and it implements and complies with the procedures for attracting highly skilled teaching staff (for the study field and the relevant study programmes). The academic and research workload of the teaching staff is balanced. The needs of the teaching staff for professional and didactic improvement are identified in a target-oriented manner. Appropriate improvement measures are undertaken, and the outcome and efficiency of the implemented measures are assessed. The teaching staff members take part both in outgoing and incoming mobility, which brings added value to the implementation of the study process and the study quality.

LLU has created a system for attracting teaching staff, but due to insufficient funds highly skilled professionals are keen to stay in the industry because of higher pay grades than in university. First of all, LLU has developed statutes for academic job positions. The number of positions is approved by LLU Senate and is based on available funds that can be allocated for employing academic staff. Secondly, the requirements of applicants for academic positions are regulated by state legislation and optimized to fit LLU needs in the document, the procedure is open and available for everyone: https://www.llu.lv/sites/default/files/2021-06/Akad_amati_2021.pdf. Academic and research activities are balanced, professors are less involved in the study process and more in research and lower positions as lecturers are more involved in teaching than researching. Pay Grade is in accordance with state legislation and approved through the rector's decree. Another approach for attracting new academic members is from students. Starting undergraduate level LLU is encouraging the best students to acquire PhD and continue academic development. The needs of the teaching staff for professional and didactic improvement are identified to meet the staff needs. For example, every 6 years after election and re-election staff has to undergo didactic skill improvement courses in LLU. LLU also provides different courses for the English language, IT skills that staff members can attend. There is also a programme for academic staff where they can go in exchange for 200 hours to improve practical skills in the industry. And also, a motivation system for lecturers is implemented, better salary can be obtained through creating publications that are included Q1 or Q2 level, by showing certificates of self-development etc. This motivation system seems to be working and academic staff members confirmed that it is motivational. The mobility of incoming lecturers can be improved, it is quite low, from 2013-2020 only 17 lecturers have been in incoming mobility. Students also confirmed that foreign lecturers are interesting to hear and could help more often to give international insight regarding novelties in veterinary medicine. Outgoing mobility is better than incoming, 44 times there have been outgoing and experience exchange activities during the same period. These activities have provided useful input for improving the study programmes in this field.

4. The higher education institution/ college has identified the support necessary for the students and established a well-functioning support system, based on the needs of the students.

Students have different financial support options, for example, scholarships both, private and state-funded. Information about them can be found on the LLU website. https://www.llu.lv/stipendijas

There is a possible tuition fee reduction from 50 to 100% and it is regulated by rector's order No. 4.3.-8/12. LLU is also supporting foreign students to get all documentation for enrollment in study programmes. Students can contact and communicate with curators that organize meetings with students. Curators, administration and academic staff members are also working as partial psychological help for students, but permanent positions for psychological support should be created. Also, career support for students is available, during the end of undergraduate studies potential employers ask students to be part of the enterprises. During the study process, there is also available technical support for students regarding IT problems.

Conclusions. Strengths and weaknesses

The overall material-technical base for the implementation of the study field is acknowledged. All resources are available for all involved parties to achieve successful goals set by individual study programmes. Systemic problems in the Latvian higher education space regarding funding are affecting the attraction of highly skilled professionals. Veterinary faculty expenses on infrastructure are high but can be covered from available funds (state funds, tuition fees, income from clinic etc.).

Strengths
1. Veterinary Clinic has a well-established infrastructure, keeps high standards and provides hands-on practice for students. Development of infrastructure is still ongoing.
2. Premises are undergoing renovation, new lecture halls and laboratories are being updated.

Weaknesses
1. The maintenance of the infrastructure requires most of the available funds, which potentially hinders scientific development and prevents the attraction of professionals.

4. Scientific Research and Artistic Creation

Analysis

1. The directions of scientific research and/or artistic creation in the study field comply with the development aims of the higher education institution/ college and they are relevant to the study field and the relevant industry (provide a separate analysis of the role of the doctoral study programmes, if applicable).

The scientific work in LLU is performed in accordance with the approved LLU Strategy 2015-2022. The approved strategy sets out three main long-term objectives for scientific research: excellence in research, high-quality studies and effective university governance, which ensures targeted and efficient use of resources.
The main areas of research are as follows: 1. Morphological and functional research of the digestive apparatus of animals in terms of development and pathogenesis of diseases; 2. Research of new diagnostics, treatment methods, medicines, feed and feed additives; 3. Control and prevention of infectious and infestation diseases.
The academic staff has been active in scientific research and dissemination of the results. Altogether they have published 126 scientific papers indexed in Scopus (Elsevier) or Web of Science (Clarivate) databases (Annex 2.4.4.1). There are four patents listed (Annex 5.4.5.1.). Besides the publications and patents, the research funds are attracted through various projects both internationally and locally (Annex 5.4.4.1).
The doctoral study programme in veterinary medicine is being implemented within the field. The doctoral study programme is important for the development of the scientific potential of the study field, including the new generation of the academic staff and the capacity building of the study field.

Prioritization of research activities and training of young scientists is done in accordance with the LLU Development Strategy for years 2015-2022, and the topics of PhD dissertations cover issues of importance for the general society, economy and environment - food safety; animal and environmental health and welfare; development and implementation of new technologies; development and improvement of treatment and diagnostic methods. Altogether, 13 PhD theses have commenced since 2013. The number of dissertations could be larger, but taking into account the existing financial difficulties as well as uncertainties in the Latvian PhD system, one could state that it is a good starting point for the application of doctoral reforms.
Doctoral students and young scientists gain experience by active participation in international and local conferences with reports based on their research achievements. Doctoral students with their supervisors publish scientific findings in the internationally peer-reviewed journals indexed in Scopus and Web of Science databases. In total, 76% of doctoral students are lecturers of the study programme in veterinary medicine, who will continue their academic careers after doctoral studies.

2. The relation between scientific research and/or artistic creation in the study field and the study process has been defined and ensured, and it is efficient. Scientific research and/or artistic creation and the outcomes thereof are integrated in the study process in the study process in the study programmes of all levels.

As mentioned above, the teaching staff (Annex 5.4.1.1) carries out active research work, integrating academic and scientific activities in the study process, which is a prerequisite for strengthening the quality of the study and research, ensuring the development of the academic staff and the sustainability of the academic career (Education Development Guidelines, 2021-2027). During the reporting period, lecturers participated in the development of several scientific projects, the findings of which were gathered in scientific publications and study materials, promoting the integration of the latest findings based on scientific projects in the study process (Annex 5.4.4.1). The motivation system developed by the LLU provides financial support in accordance with the work carried out during the academic year.
It is worthy to note that teaching staff has been involved in the implementation of two major national research programs (Multidisciplinary approach to monitor, mitigate and contain COVID 19 and other future epidemics in Latvia in 2020-2021; Agricultural Resources for sustainable production of quality and healthy food in Latvia in 2014-2018). Teaching staff actively participates in practical projects of the Ministry of Agriculture promoting innovation and development of new products (the preservation of genetic resources of cows in Latvia, monitoring of the parameters of the low-price rumen bolus and early diagnosis of subacute rumen acidosis in cows). These activities definitely expand the list of necessary cooperation partners for the implementation of new study directions, as well as updating the available research and study environment.
Students are involved in scientific projects providing assistance to researchers in the development of research, which forms an understanding of the scientific process and the basic principles of research development. As the positive outcome of these activities, students participate in the presentation of research results and preparation of scientific publications. The LLU has also developed an internal grant competition, where the involvement of students in scientific work is one of the prerequisites for receiving a scientific grant, which promotes the involvement of students in the research activities.

3. International cooperation in the field of scientific research and/or artistic creation within the study field and the relevant study programmes is ensured and improved in a target-oriented manner.

Undoubtedly international cooperation offers a wide range of possibilities for the development of veterinary research directions. International cooperation has been particularly active in the fields of

pharmacology and toxicology, infectious diseases and food hygiene. These areas of research are relevant for the protection of public health, the control of infectious animal diseases and the development of new treatment methods and clinical medicine to improve the state of animal health. Until now, successful cooperation has been carried out through various international projects focusing on academic or scientific excellence (Annex 5.4.4.1). This includes European Commission Tempus, Erasmus+, FP7, Horizon 2020 and COST activities promoting knowledge transfer, promoting international cooperation and pooling of experience with different countries. Besides that, the international grants from European Union organizations, such as the European Food Safety Authority and the European Society for Clinical Microbiology and Infectious Diseases are instrumental. The list of agreements for scientific collaboration involves seven European universities (Annex 2.5.1.1).
The faculty regularly admits scientists, students from other countries to promote the development of international cooperation. Academic staff are involved on the boards of international organizations (EFSA, ESVO), participate as experts in the evaluation of various organizations, educational institutions, and improvement of study programs. Academic staff also work on editorial boards of international journals (MDPI Pathogens, De Gruyter Rural Sustainability Research, etc.). The number of publications with a high impact factor in cooperation with foreign colleagues is steadily increasing, helping to expand the cooperation network. The faculty of veterinary medicine displays a clear vision about the future strategy of scientific work. This strategy includes expanding and strengthening international cooperation in order to promote the relevant study programs in a target-oriented manner.

4. The higher education institution/ college has developed mechanisms for the involvement of the teaching staff in scientific research and/or artistic creation. They are well-functioning and efficient.

The faculty of veterinary medicine of LLU has developed mechanisms for the involvement of teaching staff in scientific research. The teaching staff has been involved in the implementation of various scientific research projects. First of all, one has to underline the international research projects focused mainly on food safety, animal health, antimicrobial resistance and food security, such as Disseminating Innovative Solutions for Antibiotic Resistance Management (2019-2022). Participation in international project tenders of various organizations promoted international research and cooperation, the exchange of ideas, the creation and implementation of new scientific knowledge in practice. For example, a novel cross-sectoral platform of EFSA for the integration of genomics in the surveillance of foodborne pathogens, aimed at solving and implementing problems relevant to society and science - characterization of food infectious agents and detection of outbreaks of food infections, monitoring of antimicrobials.
At the national level, the teaching staff is involved in state research programs (NRP), national project competitions (Latvian Council of Science), as well as engaged in research commissioned by different ministries to solve problems relevant to the national economy. In 2020-2021, active research took place in the NRP “Multidisciplinary approach to monitor, mitigate and contain COVID 19 and other future epidemics in Latvia" within the framework of the project. The results of individual projects have been used for the development of science-based recommendations. Participation in fundamental and applied projects funded by the Latvian Council of Science contributed to solving internationally important scientific problems, which focused mainly on public health, its protection against infectious diseases and zoonoses, and the promotion of animal health. For significant achievements in Latvian science for the implementation of the Latvian Council of Science project, the group of the teaching staff was awarded the Award of the Latvian Academy of Science for the project "Research and technological solutions for sustainable cultivation and full use of sea buckthorn". In cooperation with animal breeders, producers, organizations, other scientific institutions (Riga Technical University, Rīga Stradiņš University), lecturers from the field of research

engaged in the implementation of projects of importance for the economy, such as the conservation of genetic resources of cows in Latvia through embryo transfer and related biotechnology. The experience of teaching staff in scientific work is one of the factors in project competitions, of the attraction of doctoral students, therefore, each member of the teaching staff is aware of the importance of scientific work in the academic career. The results of the teaching staff's work are evaluated by maintaining employment relations with the lecturers. The evaluation of scientific work criteria is laid down in the university's regulatory framework. The involvement of teaching staff in scientific work is one of the quality indicators of the teaching staff's work, which is evaluated and allows lecturers to receive a supplement according to the work done. The collection of information and evaluation of the quality of the scientist's work is carried out centrally at the Science and Project Development Centre of the LLU.

5. The higher education institution/college has developed mechanisms to promote the involvement of the students in scientific research and/or artistic creation. They are well functioning and efficient.

The faculty of veterinary medicine has taken several steps to promote the involvement of the students in scientific research. In order to expand contacts between students and teaching staff, to promote international scientific cooperation, the LLU student conferences have become international since 2009. The work of the veterinary section of the conference is led by one of the students who has an interest in science and a good knowledge of English. From 2013 to 2020, 53 papers were prepared. The largest number of papers was in 2016 – 11 works. The scientific papers of veterinary medicine students are usually managed by teachers of the faculty. Students themselves are free to choose what to study or the chosen supervisor recommends the topics. The methodology of scientific work carried out by students varies greatly.
The faculty of veterinary medicine does not provide funding for the performance of students' scientific work, therefore many studies are carried out by students participating in the implementation of local, various international scientific project experiments or contract work, in cooperation with their scientific supervisor. Students can use laboratory and diagnostic equipment for veterinary studies free of charge for scientific examinations. Student research varies in complexity and quality. In order to promote the quality of the development and presentation at each conference students receive valuable prizes given for the best research reports.

6. Innovative solutions in the study process.

The faculty of veterinary medicine in the year 2016 introduced practical work in small groups with 5-7 students in one group in order to ensure a high-quality individual training process. In this way, students are provided with innovative, high-quality individual, practical and controlled, safe and ethical training with animals, which is especially important in the training of clinical and other practical study courses. Faculty students and lecturers also actively use the Moodle environment available at the university - E - studies. This platform is used to store lecture and practical work materials so that students have free access to them.
Since 2016, the simulator laboratory has been providing the conditions for good, responsible veterinary practice and ethical norms in relation to the animal, within which the use of an animal for a large number of students is not allowed for a certain procedure. The simulator laboratory provides quality training for faculty Latvian and English speaking students in order to create understanding and promote not only the growth of practical skills but also to strengthen personal responsibility for the work to be done and to educate students on ethical and professional attitudes.
In the simulation laboratory, it is possible to learn, for example, the skills of taking blood samples from dogs, cats and horses, and inserting an intravenous catheter. It is important to learn these skills by repeating them on the simulator several times, until the first attempts on a live patient. It is

important to acquire the skills of operative and small animal surgery in the simulator laboratory. The simulation laboratory is also equipped to work with dead animal tissues, to learn specific surgical methods. The simulation laboratory is available to students starting from the 3rd year, within the study subjects in which the laboratory is integrated for practical works, as well as it is possible to visit the laboratory on working days in the afternoon.

Conclusions. Strengths and weaknesses

The scientific work is performed in accordance with the approved LLU Strategy 2015-2022 with the main objectives for research: excellence in research, high-quality studies and effective university governance. Based on that, the main areas of research and development have been identified and targeted. Purposeful management activities have shaped the teachers' comprehensive understanding of the importance of research. Students are involved in scientific projects providing assistance to researchers in the development of projects, which forms an understanding of the scientific process and the basic principles of research development. The faculty regularly admits scientists, students from other countries to promote the development of international cooperation. The established simulator laboratory provides the conditions for good, responsible veterinary practice and ethical norms in relation to the animal. The veterinary clinic adheres to high standards and offers good opportunities for scientific research. The targeted development of infrastructure, which is ongoing, is important to ensure further developments.

Strengths
1. Teaching staff members are aware of the importance of scientific work in their academic careers.
2. Successful international cooperation has been carried out through various projects focusing on academic or scientific excellence.
3. The teaching staff has been involved in the implementation of various scientific research projects, focused on food safety, animal health, antimicrobial resistance and food security.
4. The faculty of veterinary medicine has taken steps to promote the involvement of the students in scientific research.
5. The faculty of veterinary medicine introduced practical work in small groups with 5-7 students in one group in order to ensure a high-quality individual training process.
6. Modern and up-to-date infrastructure is a strength enabling the promotion of contemporary veterinary medicine as well as doctoral studies.

Weaknesses
1. The number of doctoral theses defended is not enough to ensure the sustainability of veterinary medicine studies and research.
2. The practice of selection and preparation of the best students for the PhD study programme is unclear.
3. The number of articles in high-impact journals is not sufficient to ensure the international visibility of Latvian veterinary medicine.

5. Cooperation and Internationalisation

Analysis

1. The higher education institution/ college cooperates with the institutions from Latvia and abroad (higher education institutions/ colleges, employers, employer‘s organisations, municipalities, non-governmental organisations, scientific institutes, etc.) within the study field, and such cooperation contributes to the achievement of the aims and learning outcomes of the study field and the

relevant study programmes. The cooperation partners are selected in view of the specific features of the study field and the relevant study programmes.

LLU and VMF have developed cooperation with both national and institutions of other countries. According to the information received from the LLU (https://www.llu.lv/lv/starptautiska-sadarbiba), the intensity of information exchange increases every year as a result of global processes, international communication is becoming increasingly important for the growth of the university in the field of knowledge, technology and innovation. Every year, as the foreign cooperation of the Latvia University of Life Sciences and Technology becomes more and more extensive, its organization and development become more constructive and purposeful, paying attention to the most topical issues in education. The international organisations LLU has close contacts are the International Association of Universities; the European Association of Universities; the Lifelong learning programme Erasmus; BOVA UN (The Baltic Forestry, Veterinary and Agricultural University Network); NordPlus (the Nordic Forestry, Veterinary and Agricultural University Network); ICA (Association for European Life Science Universities); EAEVE (European Association of Establishments for Veterinary Education); AgNIC (the Network of Agricultural Libraries); The Baltic University Program: Baltic Sea Region University Network; FAO (the Food and Agricultural Organization); The European Network in Learning and Teaching in Agriculture and Rural Development; NJF Nordic Association of Agricultural Scientists); IELA (The International E-Learning Association) and others. Several scientists of VMF have been working together with colleagues from other countries (SER, Annex No. 2.4.1.). Teachers are participating in different scientific conferences and congresses with or without presentations. Regularly there are ERASMUS incoming students in the Veterinary Clinic of the LLU.
Besides LLU and VMF has worked on different projects in East Europe and Asia, e.g. in Kazakhstan, Azerbaijan and others informing about the European model of education. A big part of international cooperation relates to the ERASMUS programme mobility (both teachers and students, both incoming and outgoing).
What concerns national cooperation inside Latvia, the closest partners are Latvian Food and veterinary Service; Latvian Association of Veterinarians; individual veterinarians, farms, scientific institutions (e.g. Bior), Ministry of Agriculture, Ministry of Education etc.
All types of cooperation can give benefits to the educational process. Relations with individual veterinarians give the possibility to find the best traineeship places, to exchange the experience and observations; Food and Veterinary Service gives students the possibilities to get acquainted with the state supervision and control in the area of veterinary matters, food safety, feed safety, distribution and use of the veterinary medicines etc. Without doubts, experts can confirm that each of the mentioned types of cooperation in one or another way contributes to the achievement of the aims and learning outcomes of the study field and the relevant study programs. The cooperation partners partly are by definition the stakeholders of the LLU and VMF (e.g. Food and Veterinary Service, Latvian Association of Veterinarians, ministries), but others are obtained by means of networking (scientific research partners, during conferences etc.)

2. The higher education institution/ college has developed a system and procedures for the attraction of the teaching staff and students from abroad within the study field. They are efficient and contribute to the improvement of the study process.

According to information from the VMF management, there were several attempts to invite foreign teachers, e.g. for the teaching of dermatology (USA), anesthesiology (Belgium) etc. At the moment there is a visiting professor Andreas Valdmann from Estonia, teaching Farm Animal Reproduction. The main problem to increase the number of foreign professors is not enough finances for that purpose. Another thing is that the salary level at the LLU is very low and foreign professors often are

not willing to work for such a small amount of money. Despite those problems, according to the management of the LLU and VMF, they are planning to solve this problem and increase the number of foreign lecturers.
There is an increasing number of foreign students in the “Veterinary medicine programme 49640” - starting from 6 in the study year 2015/2016 to 79 in the year 2020/2021. During discussions with students, English group representatives were very enthusiastic about studies in VMF, mostly for the reason that in small groups they get much attention from teachers during practical works.

3. A common system for the provision of traineeships and the organisation thereof (if applicable) has been developed within the study field.

There is a Traineeship regulation of the LLU, in which there is stated that the aim of the traineeship is to provide a student with an opportunity to strengthen his/her theoretical knowledge, acquire the competence and practical skills relevant to the programme that is necessary for the specialists of a respective field, as well as to provide a student with an opportunity to obtain information necessary for the elaboration of the course work/project, study project or final thesis, and to carry out research activities. Students may choose the training place from the list or propose another place if it is corresponding to the requirements. In case there is bad feedback from the training place, it is excluded from the list. There were some problems with ensuring training places during COVID19 pandemia, but VMF has managed to provide enough places for a traineeship.
In the Regulation mentioned above, it is stated that for each traineeship there is a programme. The list of places of traineeships for the last years is provided in the annexes of the self-evaluation report. Besides, many students use the possibilities of the ERASMUS programme. During the period of 2014 to 2020 ERASMUS programme, outgoing mobility for practice was used by 153 students.

4. The justification of the development of the joint study programmes and the selection of the partnering higher education institutions complies with the aims and the specific features of the study field and the strategy of the higher education institution/ college. The procedures for the development and implementation of the joint study programmes are defined and efficient (if applicable).

The LLU Veterinary Medicine Faculty is the only one delivering education for veterinarians. So there are not many possibilities for the development of joint programmes. There is some cooperation with Medical University named after Stradiņš, but it is more in the field of scientific activities and training for medical doctors.

Conclusions. Strengths and weaknesses

LLU and VMF are doing their best to cooperate both with Latvian and foreign partners. The cooperation contributes to the achievement of the aims and learning outcomes, especially in offering the practice places for students, giving them possibilities to take part in scientific research projects. The limiting factor is low financing, which does not allow to invite foreign professors for lecturing or demonstrating practical skills. But LLU and VMF management are aware of this need and are planning to solve this problem as soon as possible.

Strengths
1. Good use of the possibilities of the ERASMUS programme both for students and teachers and incoming and outgoing mobility.
2. Awareness of the management about the importance of stimulating both local and international collaboration.

Weaknesses
1. The number of foreign lecturers is limited to ensure the international visibility of the study programme.

6. Implementation of the Recommendations Received During the Previous Assessment Procedures

Analysis

1. The recommendations provided during the previous procedures for the assessment of the study field (accreditation, licensing of the study programmes, evaluation of the changes in the relevant study programmes of the study field, the inclusion of the study programmes in the accreditation form of the study field (if applicable) have been fully or partially implemented. The higher education institution/ college has contributed to the analysis of the recommendations and their implementation in view of the specific features of the study field and the relevant study programmes.

The previous procedure for the assessment of the study field Agriculture, Forest Management, Fishing, Veterinary Medicine and Food Hygiene (15 study programmes) took place in 2012. The experts' recommendations related to the closure or consolidation of some study programmes are not relevant to the study field of Veterinary Medicine. The experts' recommendations regarding the development of the staff, professional development and improvement of foreign language skills were taken into account when developing and implementing certain action plans and SAM project 8.2.3. "Improvement of LLU governance".
Regarding the study field Veterinary Medicine, the experts' recommendations were related to the necessity for the recognition of the study programme Veterinary Medicine at EAEVE. The programme was evaluated by EAEVE experts in 2016. As a result of the visit, the experts identified a number of shortcomings that had to be addressed by autumn 2019. The re-evaluation in 2019 found that the shortcomings had been remedied and the study programme Veterinary Medicine was granted an EAEVE Certificate of Approval attesting to the compliance of the Faculty of Veterinary Medicine and the Veterinary Medicine programmes with the requirements of Directive 2005/36 / EC and Directive 2013/55 / EU.

Conclusions. Strengths and weaknesses

Regarding the study field, the recommendations of Veterinary Medicine experts (accreditation in 2012) were related to the need for the recognition of the study programme Veterinary Medicine by EAEVE (European Association of Establishments for Veterinary Education). LLU organized EAEVE experts' visits twice (in 2016 and 2019) and, since 2019, the study programmes in Veterinary Medicine implemented at LLU have been recognized by EAEVE, which confirms their compliance with the requirements of Directive 2005/36 / EC.

Strengths
1. The study programmes in Veterinary Medicine implemented at LLU have been recognized by EAEVE since 2019, which confirms their compliance with the requirements of Directive 2005/36 / EC.
2. The experts' recommendations considering the staff's development, professional development and improvement of foreign language skills were taken into account when attracting the EU structural funds, implementing the SAM project 8.2.3. "Improvement of LLU governance".

Weaknesses
1. None indicated.

7. Assessment of the Requirements for the Study Field

1 R1 - Pursuant to Section 5, Paragraph 21 of the Law on Institutions of Higher Education, the higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study direction whilst implementing their internal quality assurance systems:

Assessment of compliance: Partially compliant

LLU implements an internal quality assurance system, within which the quality of higher education is ensured; a mechanism has been developed for the development of study programmes and supervision of their performance; the criteria for the evaluation of students' results have been developed, which enable the reassurance of the achievement of the envisaged learning outcomes; the internal procedures and mechanisms for assuring the qualification of the academic staff and quality of their work have been established; the infrastructure has been developed in accordance with the level of scientific development of the study programs; but the standard of professional programs (Cabinet Regulation No. 512) is not observed for the study program “Veterinary Medicine 49640”, because sufficient volume of CP has not been assigned to the final work and the final work is not indicated in the diploma supplement.

2 1.1. The higher education institution/ college has established a policy and procedures for assuring the quality of higher education.

Assessment of compliance: Fully compliant

The efficiency of the study programmes management at LLU is promoted by the unified procedures in the study organization in all study fields and study programs, the unified model documents and the availability of information on ongoing processes and current events, regular meetings that bring together the management, the deans, and the supporting administrative units.

3 1.2. A mechanism for the development and internal approval of the study programmes of the higher education institution/ college, as well as the supervision of their performance and periodic inspection thereof has been developed.

Assessment of compliance: Fully compliant

LLU has developed a mechanism for the development of study programs and monitoring of their implementation and supervision of their performance.

4 1.3. The criteria, conditions, and procedures for the evaluation of students’ results, which enable reassurance of the achievement of the intended learning outcomes, have been developed and made public.

Assessment of compliance: Fully compliant

The criteria for the evaluation of students' results have been developed, which enable the reassurance of the achievement of the envisaged learning outcomes.

5 1.4. Internal procedures and mechanisms for assuring the qualifications of the academic staff and the work quality have been developed.

Assessment of compliance: Fully compliant

The internal procedures and mechanisms for assuring the qualification of the academic staff and

quality of their work have been established.

6 1.5. The higher education institution/ college ensures the collection and analysis of the information on the study achievements of the students, employment of the graduates, satisfaction of the students with the study programme, efficiency of the work of the academic staff, the study funds available and the disbursements thereof, as well as the key performance indicators of the higher education institution/ college.

Assessment of compliance: Fully compliant

LLU has managed to establish a well - functioning internal quality assurance system that works for students, academic staff and other involved parties as graduates and employers in order to develop and maintain good quality of studies and study environment.

7 1.6. The higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study direction whilst implementing their quality assurance systems.

Assessment of compliance: Fully compliant

LLU study work is organized and managed in accordance with standards and guidelines for quality assurance in the European Higher Education Area.
"Investor of Excellence" Certificate and ECOVE (European Committee of Veterinary Education) - certificate of approval shows constant improvement regarding the quality.

8 R2 - The cooperation with different organisations from Latvia and abroad implemented within the study direction ensures the achievement of the aims of the study direction.

Assessment of compliance: Fully compliant

There is notable cooperation with both national and institutions of other countries, including the possibilities which are given by the ERASMUS program

9 R3 - Compliance of scientific research and artistic creation with the development level thereof (if applicable).

Assessment of compliance: Fully compliant

The scientific work is performed in accordance with the approved LLU Strategy 2015-2022 with the main objectives for research: excellence in research, high-quality studies and effective university governance. Based on that, the main areas of research and development have been identified and targeted.

10 R4 - Elimination of the shortcomings and deficiencies identified during the previous assessment of the study direction, if it has been conducted, or the implementation of the provided recommendations.

Assessment of compliance: Fully compliant

Regarding the study field, the recommendations of Veterinary Medicine experts (accreditation in 2012) were related to the need for the recognition of the study programme Veterinary Medicine by EAEVE (European Association of Establishments for Veterinary Education). LLU organized EAEVE experts' visits twice (in 2016 and 2019) and, since 2019, the study programmes in Veterinary Medicine implemented at LLU have been recognized by EAEVE, which confirms their compliance with the requirements of Directive 2005/36 / EC.

8. Recommendations for the Study Field

Short-term recommendations

1. It would be necessary to formulate a specific aim for the study field Veterinary medicine.

Long-term recommendations

1. In order to support the continuous development and improvement of the quality management system, it is necessary to involve more members of the academic staff in the specific activities of the quality domain and to assure sustainability of the process, this specific activity can be rewarded by scoring it in the motivation system.
2. Regular training should be done by QM department representatives in order to increase the involvement of the entire LLU community (teachers, students, administrative staff) in the process of continuous process improvement.
3. It is necessary to introduce in students survey questionnaires specific questions related to the correctness of the evaluation and the transparency of the grading process.
4. In order to make the grading process more transparent, it is necessary for the Course description to have a clearer presentation of the calculation method of the final grade, for some courses.
5. Increased attention should be paid to employer surveys, in the sense of applying evaluation questionnaires to other stakeholders than the Latvian Association of Veterinarians.
6. The attention of the responsible ministries must be focused on the underfunding of veterinary medicine studies, which may have fatal consequences for the sustainability of an important profession in Latvia.
7. Funding for doctoral studies should be significantly increased. The duration of doctoral studies should be extended from three to four years. The motivation of veterinary students to enter doctoral studies needs to be increased. Experienced doctoral practitioners in veterinary medicine should be also encouraged to enter PhD training.
8. The specific system must be established through the learning module. This system helps to select the best veterinary students and to provide a solid basis of knowledge and skills for their doctoral studies. This system could be used to create a solid foundation for the DrVetMed / PhD curriculum.
9. Increase international collaboration with the respective scientific centres in neighbouring countries. Scientific collaboration in the field of biomedicine should be encouraged with the respective centres in Latvia.
10. Increase the finances available for teaching staff, including foreign lecturers in order to involve in the study process with high-quality teachers and foreign lecturers.

II. "Veterinary Medicine" ASSESSMENT

II. "Veterinary Medicine" ASSESSMENT

1. Indicators Describing the Study Programme

Analysis

1.1. The name of the study programme, the degree, the professional qualification or the degree and the professional qualification to be acquired, the aims, objectives, learning outcomes, and admission

requirements are interrelated.

The 2nd level professional higher education study programme Veterinary Medicine is a full-time study programme with an implementation duration of 6 years and a volume of 240 Latvian CP. The languages of instruction – Latvian and English. The code of the study programme according to the Latvian education classification – 49640. The qualification to be obtained – veterinarian.
The study programme name, aims, objectives and qualification to be obtained comply with the requirements of EAEVE, Directive 2005/36/EC and Directive 2013/55/EU, and the Cabinet of Ministers Regulations No. 512 "Regulations on the State Standard of the Second Level Professional Higher Education" and the Veterinary Medicine Law. The name of the study programme, qualification to be obtained, the aims, objectives, learning outcomes, and admission requirements are interrelated; but the standard of professional programs (Cabinet Regulation No. 512) is not fully observed for the study program "Veterinary Medicine 49640", because not sufficient number of CP (3 CP instead of 12 CP) has been assigned to the final work and the final work is not indicated in the diploma supplement (see Joint Report II, 2.2.).
In SER (SER Part III, paragraph 1.2.) it is written that in future it is envisaged that the admission requirements could be tightened by introducing entrance examinations, thus allowing for the selection of the best applicants and reduction of the ex-matriculation of students in the first semesters.
The study results of the professional study programme Veterinary Medicine correspond to the 7th level of the Latvian Qualifications Framework (LQF), which is described in the Cabinet of Ministers Regulations No. 322 "Regulations on the Classification of Education in Latvia" (June 13, 2017), but, taking into account the above-mentioned regulations of the Cabinet of Ministers, the study results could be combined into larger blocks by stating 5-9 expected study results. Recommendation: to review the study results and formulate them in 5-9 study results.

Conclusions by specifying the strengths and weaknesses

The study programme name, aims, objectives and qualification to be obtained comply with the requirements of EAEVE, Directive 2005/36/EC and Directive 2013/55/EU, and the Cabinet of Ministers Regulations No. 512 "Regulations on the State Standard of the Second Level Professional Higher Education" and the Veterinary Medicine Law. The name of the study programme, qualification to be obtained, the aims, objectives, learning outcomes, and admission requirements are interrelated; but the standard of professional programs (Cabinet Regulation No. 512) is not fully observed for the study program "Veterinary Medicine 49640", because not sufficient number of CP has been assigned to the final work and the final work is not indicated in the diploma supplement.

Strengths
1. The name of the study programme, qualification to be obtained, the aims, objectives, learning outcomes, and admission requirements are interrelated and comply with the requirements of EAEVE, Directive 2005/36/EC and Directive 2013/55/EU.

Weaknesses
1. The standard of professional programs (Cabinet Regulation No. 512) is not fully observed for the study program "Veterinary Medicine 49640", because not sufficient number of CP has not been assigned to the final work and the final work is not indicated in the diploma supplement.

2. The Content of Studies and Implementation Thereof

Analysis

1. The descriptions of the study courses/ modules, the traineeship, and the final thesis are of high quality and comply with the provision set forth in the regulatory enactments. The content is relevant and complementary, and it complies with the aims of the study programme, ensures the achievement of the learning outcomes, and meets the needs of the relevant industry and the scientific trends.

The veterinary profession is a regulated profession in the meaning of the DIRECTIVE 2005/36/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 7 September 2005 on the recognition of professional qualifications (further in the text "Directive"; OJ L 255, 30.9.2005, p. 22). Point (a) of the Article 3 "Definitions" of the Directive states " (a) 'regulated profession': a professional activity or group of professional activities, access to which, the pursuit of which, or one of the modes of the pursuit of which is subject, directly or indirectly, by virtue of legislative, regulatory or administrative provisions to the possession of specific professional qualifications; in particular, the use of a professional title limited by legislative, regulatory or administrative provisions to holders of a given professional qualification shall constitute a mode of pursuit." Further in Section 5 "Veterinary surgeons" Article 38 gives the minimum training conditions for the training of veterinarians (according to the UK terminology - veterinary surgeons). They are as follows: "1. The training of veterinary surgeons shall comprise a total of at least five years of full-time theoretical and practical study, which may, in addition, be expressed with the equivalent ECTS credits, at a university or at a higher institute providing training recognised as being of an equivalent level, or under the supervision of a university, covering at least the study programme referred to in point 5.4.1 of Annex V. 2. Admission to veterinary training shall be contingent upon possession of a diploma or certificate entitling the holder to enter, for the studies in question, university establishments or institutes of higher education recognised by a Member State to be of an equivalent level for the purpose of the relevant study. 3. Training as a veterinary surgeon shall provide an assurance that the professional in question has acquired the following knowledge and skills: (a) adequate knowledge of the sciences on which the activities of a veterinary surgeon are based and of the Union law relating to those activities; (b) adequate knowledge of the structure, functions, behavior and physiological needs of animals, as well as the skills and competences needed for their husbandry, feeding, welfare, reproduction and hygiene in general; (c) the clinical, epidemiological and analytical skills and competences required for the prevention, diagnosis and treatment of the diseases of animals, including anesthesia, aseptic surgery and painless death, whether considered individually or in groups, including specific knowledge of the diseases which may be transmitted to humans; (d) adequate knowledge, skills and competences for preventive medicine, including competencies relating to inquiries and certification; (e) adequate knowledge of the hygiene and technology involved in the production, manufacture and putting into circulation of animal feedstuffs or foodstuffs of animal origin intended for human consumption, including the skills and competences required to understand and explain good practice in this regard; (f) the knowledge, skills and competences required for the responsible and sensible use of veterinary medicinal products, in order to treat the animals and to ensure the safety of the food chain and the protection of the environment."
Besides the requirements stated in article 38 of the Directive, there is a list (5.4.1 of Annex V of the Directive) of subjects that have to be covered during studies. Annex V 4 of the Directive "VETERINARY SURGEON" states the following: "5.4.1. Study programme for veterinary surgeons. The programme of studies leading to the evidence of formal qualifications in veterinary medicine shall include at least the subjects listed below. Instruction in one or more of these subjects may be given as part of, or in association with, other courses. A. Basic subjects - Physics; Chemistry; Animal biology; Plant biology; Biomathematics; B. Specific subjects a. Basic sciences: Anatomy (including histology and embryology); Physiology; Biochemistry; Genetics; Pharmacology; Pharmacy; Toxicology; Microbiology; Immunology; Epidemiology; Professional ethics; b. Clinical sciences:

Obstetrics; Pathology (including pathological anatomy); Parasitology; Clinical medicine and surgery (including anesthetics); Clinical lectures on the various domestic animals, poultry and other animal species; Preventive medicine; Radiology; Reproduction and reproductive disorders; Veterinary state medicine and public health; Veterinary legislation and forensic medicine; Therapeutics; Propaedeutics; c. Animal production: Animal production; Animal nutrition; Agronomy; Rural economics; Animal husbandry; Veterinary hygiene; Animal ethology and protection; d.Food hygiene: Inspection and control of animal foodstuffs or foodstuffs of animal origin; Food hygiene and technology; Practical work (including practical work in places where slaughtering and processing of foodstuffs take place).

Practical training may be in the form of a training period, provided that such training is full-time and under the direct control of the competent authority, and does not exceed six months within the aggregate training period of five years of study. The distribution of the theoretical and practical training among the various groups of subjects shall be balanced and coordinated in such a way that the knowledge and experience may be acquired in a manner which will enable veterinary surgeons to perform all their duties."

The requirements mentioned in the Directive are transposed in Latvian law by two legislative acts: "The Law on Regulated Professions and Recognition of Professional Qualifications" and The Regulation of the Council of Ministers of Latvia Nr. 489 of the Year 2005 and its amendments "Regulations on the Minimum Requirements for the Acquisition of the Professional Qualification of a Veterinarian in Educational Programs and on Institutions Under the Direct Control of Which Practical Education in the Veterinary Profession may be Acquired".

According to the Self-Evaluation Report (SER) of the VMF of the LLU, the Study programme "Veterinary Medicine 49640" includes all necessary study subjects and corresponds to all other requirements stated in the Directive and Latvian laws. Even more, the programme includes some additional important subjects such as Latin, Food Infections, Food toxicology etc. There are 9 compulsory traineeships during the studies - one in animal physiology, welfare and ethology; 7 in different clinical studies, including the Rotation practice; one in food hygiene and inspection, including meat inspection in slaughterhouses. There is a requirement to have a final study thesis after Rotation practice and three final exams at the end of studies. According to the information received during discussions, VMF is going to change the sequence of the final evaluation of students' knowledge and skills - to have final exams after the main study process and final thesis after the Rotation practice.

In accordance with the European system of evaluation of veterinary training (ESEVT) and based on the educational requirements of the Directive 2005/36 EC, in December 2019 the Faculty of Veterinary Medicine of Latvia University of Life Sciences and Technologies got approval by the ECOVE (European Committee on Veterinary Education). This is a very important recognition of the quality of studies and gives more possibilities for the VMF to involve students from abroad as well as for the graduates to be well-accepted for work in other European countries.

ESEVT was gradually started in 1985 to compare the level of education (knowledge, skills, competencies) in different European veterinary schools. In 2000 the Joint Education Committee (JEC) of EAEVE (European Association of Establishments of Veterinary Education) and FVE (Federation of Veterinarians of Europe) was formed. In 2007-08 it was renamed the European Committee on Veterinary Education (ECOVE). In 2016 the SOP (the document on important minimum standards of quality and evaluation) was further developed according to the Standards and Guidelines for quality assurance in the European Higher Education Area (ESG 2015). April 2018 EAEVE achieved ENQA membership.

According to the Regulations of the Cabinet of Ministers No.512 of 2014 "Regulations on the State Standard for Second-Level Professional Higher Education," there are some additional requirements. A professional programme has to have at least 160 CP (1CP=40h) and at least 40% of study time as contact hours. The Study Programme "Veterinary Medicine 49640" has 240 CP (6 years), which is

more than necessary for a second level higher professional education programme and 50% contact hours (corresponds). There is a requirement for inclusion in the programme some obligatory study subjects, accordingly - humanitarian, social and management skills with a total volume 12CP (corresponds); business and economy - 6CP; Environment protection - 2CP (corresponds). Study subject “Economy” includes 2CP, but economical aspects are included also in the study subject “Organization of Veterinary Services” (5,5 CP). There should be at least 3 student study works, but in fact, in VMF there are different types of study works in 24 study subjects. At least 12CP should be devoted to the final thesis. In the self-evaluation report, it is mentioned – 3CP for three final state exams, but the final thesis of Rotation practice is included in the praxis volume – 26CP.
The study plan of the professional study programme Veterinary Medicine does not fully comply with the diploma supplement of the professional study programme Veterinary Medicine and the text in the SER (SER Part III, paragraph 2.5., p. 90). In the study plan the final examination is 3 CP (Annex. STUDY PLAN_ENG.xls), but in the diploma supplement – 15 CP (Annex. Diploma and supplement.pdf).
In the SER (SER Part III, paragraph 2.5., p. 90) it is indicated that: “The development and defence of the final works of the sixth year is included in the study course "Clinical Rotation" ... The final work supervisor, reviewer, as well as the commission for defending the final works, are involved in the evaluation of the final works. The Defence Commission consists of representatives of institutes of the Faculty of Veterinary Medicine. The supervisor and the reviewer, having become acquainted with the final work, evaluate it with a mark from one to ten, while the main task of the commission is to evaluate the public defence of the final work and the answers to the questions asked by the reviewer and the commission. The final evaluation of the final work is calculated by the arithmetic mean of the supervisor, reviewer and members of the commission”. The amount of credit points for the final work is not indicated in the text of the SER.
The description of the study course Clinical Rotation II (3 CP) indicates that: “During practice, students must start to write a final work (Clinical rotation practice thesis) ... Study course tests and final work are evaluated in accordance with the criteria indicated in the LLU Study Regulations. To pass Clinical rotation practice II, a student must pass all tests and practical tasks in each block” (Annex. Course description_ENG.pdf). The description of the study course Clinical Rotation III (17 CP) indicates that: “Requirements for awarding credit points Pass all requirements in all clinical rotation practice blocks and defended final work ... To get a final grade of Clinical rotation practice student must pass all tests and final work (Clinical rotation practice thesis). Final grade consists of the average mark of all practice rotation blocks and final work mark (50% of final grade)” (Annex. Course description_ENG.pdf). The amount of credit points for the final work is not indicated in the description of the study courses Clinical Rotation II, III.
The final work is not indicated in the diploma supplement, but it is a compulsory part of the final examinations for professional study programmes.
Taking into account that the regulations of the Cabinet of Ministers (No. 512) define that the Practice, at least 20 CP, and the State Examination, the component of which is the elaboration and defence of a diploma thesis (diploma project), at least 12 CP, it would be necessary to remove 12 CP from the professional practice "Clinical Rotation" and transfer them to the Final work with a mark in the diploma supplement (the total amount of professional practice in the program is 38 CP).
What concerns traineeship there is general satisfaction. When the practice is complete, the students are asked to give their opinions on the communication with the practicing veterinarian (e.g. did the veterinarian hear you out, were there any disagreements, was the study process teamwork, in which the student was seen as an equal, was the students’ opinion taken into account); on the matters like transportation and housing options etc. Furthermore, it is ascertained whether the student's practical skills were improved during the practice with the practicing veterinarian. When answering the questions, students have the opportunity to write comments and state their opinions. If there are negative comments on one or another practicing place, it is excluded from the list.

During discussions with students, graduates, and employers there were not many critics on the content of the study programme. The only proposal was to increase the hours for psychology studies with the inclusion of methods on how to communicate with angry clients. The faculty itself is planning to divide into parts the “Internal disease“ course to separate the “Herd health management” course and to pay more attention to it. This is an important decision as in modern husbandry there is a bigger role for prevention as for the treatment of diseases. This leads also to the need to modify related study subjects such as “Animal husbandry”, “Feed production” to make bigger added value and a more holistic approach, emphasizing the interrelation between husbandry methods and animal welfare, as well the farmers’ responsibilities. The faculty also plans to increase the number of elective courses as well and pay more attention to the “One Health” approach (a concept that animal and human health, and the status of the environment is closely interrelated).
Both analysis of the self-evaluation report and responses from students, graduates and employers showed that the content is relevant and complimentary, and it complies with the aims of the study programme “Veterinary Medicine 49640”, ensures the achievement of the learning outcomes, and meets the needs of the relevant industry (veterinary practice, governmental work etc.) and scientific trends.

2. The study implementation methods, including the evaluation methods, contribute to the achievement of the aims and learning outcomes of the study courses and the study programme. Student-centred learning and teaching principles are taken into account.

Studies in the Veterinary Medicine programme include theoretical lectures, practical works (including laboratory works), seminars as well as practice in clinics, farms, slaughterhouses, Food and veterinary Service, laboratory etc. Above 50% of studies are in the form of contact hours, which is very necessary for medical studies. It is also very important in veterinary medical education to have enough practical training, “hands-on” experience. During the discussion, it was repeatedly emphasized by the students that they feel individual attention by the teacher during practical works, which is possible because of comparably small student groups. It was mentioned by the English group students and they said it is one of the reasons they chose to study at LLU.
Many students take part in the student scientific work which conclusions are presented in an annual Conference of Student Scientific Works in the spring semester. This gives experience to students how to plan experiments (setting goals and objectives, proposing hypotheses), how to monitor and collect the results, how to describe the results in the most effective way, to get answers on the raised targets and objectives - to learn systematic and critical thinking; summarizing, description and presentation of the results.
Evaluation is done for each student for each study subject - during it in a form of colloquiums, at the end as “past” or “past with a mark”, or exam. During many study courses, the seminars are organized for discussions; clinical subjects have “case studies” often in the form of written study work or/and presentation. The obligatory study subjects have to be passed successfully in a sequence (in case it is stated in the program). Teachers practise different types of evaluation - verbally, on paper, on a computer (Moodle system), including multiple-choice tests or perform a set of skills in a predetermined area that requires a test taker to demonstrate it (e.g. “Day First Competencies”). Even though it takes some more time for teachers, it was agreed that on some occasions it is important to keep the possibility of having verbal exams, as it shows the way of thinking and general understanding by a student of the topic in question.
The EU system does not provide veterinary specialization on the level of undergraduate studies. Some Veterinary schools practise so-called “tracing”, which gives the possibility for students to have some more narrow and deep education in some specific areas of the profession, but this is additional to the minimum requirements described in the Directive. VMF practices some “elective courses”, which in fact gives additional possibilities for students for pre-specialisation.

During discussions with students and teaching staff, it came out that in general study and evaluation methods are clear and contribute to the achievement of the aims and learning outcomes of the study courses and the study programme as a whole.
What concerns student-centered learning and teaching principles can mean different things to different people - such as flexible learning, experiential learning, self-directed learning. It is described in literature also as the shift away from teaching to an emphasis on learning; moving the power from the teacher to the student. In literature the teacher-focused/transmission of information formats, such as lecturing, are increasingly criticized, driven by a need for a change in the traditional environment where often students become passive, apathetic and bored.
Taking this into account, experts noticed that first, about 50% of the study time is intended for self-learning. The staff of the VMF is working on the development of more aimed tasks for self-learning and the discussion of the results of it. Medicine as well veterinary medicine education is strictly structured in the sense that to get holistic knowledge of the ways how to prevent and treat diseases it is important to go through study subjects in some sequence way - first anatomy and physiology and then the use of medicines etc. This requires some introductory lecturing consequence. VMF has an intention to move from lecturing to more practical works in the frame of contact hours. There should be a balance in this. A vivid example of the movement in the right direction is the increase of the use of “case studies” in clinical subjects, but also in some others. Students can choose the “case”, propose the treatment plan, handle the simple procedures under the supervision of a teacher and at the end describe the results and possible mistakes, discuss other alternatives etc. Besides, students are involved in all decision making structures of the VMF and LLU and have their say. During discussions with experts, students confirmed that they have the possibilities to express their proposals and requirements to improve the study process etc. On many occasions, it is taken into account.

3. The outcomes of the surveys conducted among the students, employers, and graduates are used to improve the quality of studies.

According to a self-evaluation report of the VMF and discussions with students, graduates, and employers, there are surveys conducted. Most regularly it is done with students. They have the possibility to evaluate each teacher and study course each semester. But according to students they are not very active as it takes time. Students prefer to give direct proposals or claims to the management of the Faculty or proposals during the meetings of decision making bodies. Other survey concerns practising places (see above part 2.1. about traineeship). What concerns the improvement of the study process itself is the most involved decision-making body is the Study and Methodological Committee. According to students their views are always considered and as much as possible taken into account. Graduates and employers are approached less often - approximately once in 5 years. There is an Advisory Board consisting of the representatives of graduates and employers, which gives recommendations for the improvement of the study process in relation to market requirements. Besides this, VMF gets informal feedback from veterinarians and governmental institutions more often during different meetings and projects. One important way of getting information is the conclusions on the needed improvements made by the members of the State Examination Commission (consists of both internal staff and external experts - employers, graduates). Those proposals are considered by the Study and Methodological Committee and Faculty Board.

4. The students avail themselves of the incoming and outgoing mobility opportunities, and the learning outcomes achieved during such mobility are recognised.

Student mobility is rather popular in VMF. During the period of 2014 to 2020 ERASMUS programme,

outgoing mobility for practice was used by 153 students, visiting practice places in 15 countries; 6 students used mobility for studies (3 countries). According to the discussions with students and graduates, many students use this possibility and mostly are very satisfied, recognizing that learning outcomes are achieved during such mobility.

Conclusions by specifying the strengths and weaknesses

In general the content of the study programme “Veterinary Medicine 49640” is corresponding both to the EU and Latvian legislative requirements, as well to the market situation, which is confirmed in self-evaluation reports and during the discussions with students, graduates and employers; but the standard of professional programs (Cabinet Regulation No. 512) is not fully observed for the study program “Veterinary Medicine 49640”, because not enough CP has been assigned to the final work and the final work is not indicated in the diploma supplement. Most of the needed improvements are already identified by VMF itself and introduction is considered. Implementation of the study programme is well established even during COVID 19 pandemic. VMF is going to pay more attention to practical works and “hands-on '' activities, which is extremely important for veterinary medicine studies to receive knowledgeable, skilled professionals with high-level competencies.

Strengths
1. The content of the study programme corresponds to the EU legislation.
2. The certificate of ECOVE approval is obtained.
3. The small student groups for practical works.
4. Introduced “case studies” for clinical and epidemiological studies.

Weaknesses
1. Not a sufficient number of CPs are allocated for the final thesis. The final work is not sufficiently indicated in the diploma supplement, while it is a compulsory part of the final examinations for professional study programmes.

3. Resources and Provision of the Study Programme

Analysis

3.1. The study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision comply with the specific features and the conditions for the implementation of the study programme, create the prerequisites for the achievement of the learning outcomes, and indicate the possibility to ensure a high-quality study process also in the future.

The study programme mostly is held at the premises of the Veterinary faculty. Premises consist of several blocks, including a veterinary clinic. Lecture halls, laboratories with all necessary equipment are located on-premises, some of them are recently renovated or under renovation currently (at the time of experts visit). Laboratories are well equipped and can help to achieve learning outcomes of practical study courses. The clinic has several operation rooms, equipment for sophisticated examinations and students are involved in manipulations to acquire hands-on experience relevant to the labour market. Informative provision is also taken into account, students have access to several databases (Scopus, EBSCO, SciVal, Web of Science etc.), magazines, books, etc. at the fundamental library. These resources mostly are in English, since almost none of the literature in veterinary

medicine is in English. Regarding other IT support of studies, Moodle system was shown during the site visit. Students can use the BigBlueButton option for online lectures, they also can participate in tests, upload assignments and do other work in this system. On-premises students have access to free WiFi. Students also can try to get financial aid in the form of scholarships or study fee reductions. Cost per one student has been calculated for 6072 EUR, which helps to cover all expenses of the faculty. (SAR 3.1. section). Outside of premises students also can attend research farm "Vecauce", training farm "Kalnenieki" for internships. During the studies, the process to optimize resources veterinary students can use other faculty infrastructure as well. All these provisions help to gain professional experience that is relevant for the study programme and helps to achieve study programme goals. Taking into account the development of infrastructure in recent years and that LLU is still working on the renovation of premises, a high-quality study process can be ensured. Steadily growing student statistics (290 students in 2015 to 371 students in 2020) also confirmed that the study programme veterinary medicine is gaining higher trust and acknowledgement in society, probably due to high investments in laboratories and the veterinary clinic. Also, international student interest in the study programme is steadily growing.

2. The study provision and the scientific support, including the resources provided within the cooperation with other scientific institutions and institutions of higher education, comply with the requirements for the implementation of the doctoral study programme, create the prerequisites for the achievement of learning and research outcomes, and indicate the possibility to ensure a high-quality study process also in the future (if applicable).

Not applicable

Conclusions by specifying the strengths and weaknesses

The study programme is focusing on providing possibilities for students to gain real-life experience already during the study process on-premises and during internships. Infrastructure, information and financial supervision have been acknowledged and help students to achieve goals set by the study programme.

Strengths
1. Infrastructure, especially, a veterinary clinic is attracting not only local but also international students to the study programme.
2. Enterprises are involved in providing internships for students to acquire all labor market needs during the study process.
3. Most students, approximately two thirds of them, can study in state-funded places.

Weaknesses
1. None indicated.

4. Teaching Staff

Analysis

1. The higher education institution/ college undertakes measures in a target-oriented manner to avoid negative effects on the quality of the implementation of the study programme and the compliance of the study programme with the requirements set forth in the regulatory enactments, as a result of the changes in the composition of the teaching staff.

In the implementation of the study programme, a steady increase in the number of teaching staff

posts can be observed during the reporting period. The increase in the number of teaching staff is mainly realized by increasing the number of lecturers (as of 1.09.2013 it was 11.74, but as of 1.09.2019 already 26.7 lecturer posts). Both elected and un-elected academic staff are involved in the implementation of the study programme. More than 25% of the lecturers involved in the implementation of the study field have a doctoral degree, which provides students with a vision based on scientific knowledge. Scientific assistants and leading researchers are involved in the study process in the teaching of certain specific topics. For the academic staff of this level, the LLU provided for the national minimum wage, which is an inadequate payment for the higher veterinary education, responsible and difficult work necessary for the performance of these duties.
The increased number of staff positions is reflected with high-quality changes in the study process. Which, respectively, ensures that a higher number of teaching staff are taking part in teaching courses more often. Involving more teaching staff to one study course contributes to the increase of the study course quality because it encourages a transfer of knowledge and solving more in-depth issues, based on the knowledge of the specialist of the respective field. However, it has become increasingly difficult to attract new teaching staff in recent years, as the average pay for young veterinarians in the field (even without in-depth specialization) is higher in comparison with the full-time salary of academic staff in the LLU.

2. The qualification of the teaching staff members involved in the implementation of the study programme complies with the requirements for the implementation of the study programme and the requirements set forth in the regulatory enactments, and it enables the achievement of the aims and learning outcomes of the study programme and the relevant study courses.
There is clear evidence (https://www.eaeve.org/esevt/indicators.html) for the qualifications of teaching staff in veterinary programmes. Teaching staff are attracted to ensure the study process with appropriate academic qualifications, competence and experience in the field. The teaching staff, conducting the specialized study courses, usually also works in the field, which is considered to be a positive practice. The teaching of narrow but no less important specialized study courses in medicine does not provide full academic workload but requires continuous upskilling and improvement of experience. Working at the LLU veterinary clinics and being part-time lecturers at the same time, these specialists can transfer their experience to students. Colleagues and scientists from partner universities have made a significant contribution to the training of veterinary students through the incoming mobility programme. During the reference period, 17 foreign lecturers, scientists and veterinary practitioners gave lectures in various study courses.
One has to appreciate that the director of the study programme displays a strong motivation and clear vision with the aim to improve the existing situation. It is important to underline that his efforts are supported by a highly motivated team of teachers, both young and experienced.
For improving qualifications in both pedagogical and research fields the teaching staff has the opportunity to participate in scientific work through the scientific laboratories, to participate in industry organisations, ministerial working groups, to take advantage of the opportunities offered by various mobility programmes, as well as in the university didactics course organized by LLU, which the academic staff must attend at least once every six years. The number, qualifications and skills of the teaching staff involved in the second level professional programme in veterinary medicine comply with the requirements of the study programme and Directive 2005/36/EC of the European Parliament and of the Council on the basis of the EAEVE expert visit report.

3. The scientific publications of the academic staff involved in the implementation of the doctoral study programmes and the involvement of the academic staff in research-related projects contribute to the implementation of a high-quality doctoral study programme (if applicable).
Not applicable

4. The academic staff is involved in scientific research and/or artistic creation (in the fields related to the content of the study programme) both at national and international level. The obtained information is used in the study process.
During the evaluation period, 126 scientific publications can be found in the databases of Scopus and Web of Science, the authors or co-authors of which are academic staff involved in the implementation of the study programme. It is important to underline that a significant part of them have been published in relevant international peer-review scientific journals. In general, the involvement of teaching staff in scientific projects and publicity promotes the quality of the study programme and the acquisition of evidence-based veterinary medicine, as well as includes materials from self-published publications and research in the lectures. This system is used in practically all professional study courses.

5. There is a mechanism for mutual collaboration between the teaching staff members in place, which contributes to the improvement of the study courses/ modules and their correlation.
In order to promote the acquisition of study courses and interlinking in several study courses, mandatory prior knowledge courses have been identified, for example, it is not possible to understand the topics to be taught in the clinical courses, if knowledge of pre-clinical courses has not been acquired. Besides that, taking into account the relatively specific programme of the faculty of veterinary medicine and the qualification of the necessary teaching staff, several aspects of cooperation are discussed both at the meetings of the teaching methodological commission and at the meetings of the faculty council, but most often at the meetings of each institute. The ratio between students and teaching staff, involved in the programme of veterinary medicine 2020/21, is 2.47.
The overall value of cooperation of teaching staff can be considered as good since veterinary study courses are very related and subordinate. The entire study programme is designed in such a way that students develop a broad, subordinate and fundamental vision and a common understanding of the processes in veterinary medicine through sequential courses.
It is also important to stress that veterinary medicine covers a very wide area since it includes medical issues for several species of animals. There is regular cooperation between teaching staff who teach general study courses and teaching staff specializing in veterinary medicine for certain animal species. It provides high-quality and mutually developed information for students.

Conclusions by specifying the strengths and weaknesses

In the implementation of the study programme, a steady increase in the number of teaching staff posts can be observed during the reporting period. The increased number of staff positions is reflected with high-quality changes in the study process. Teaching staff are attracted to ensure the study process with appropriate academic qualifications, competence and experience in the field. The teaching staff, conducting the specialized study courses, usually also works in the field, which is considered to be a positive practice. In general, the involvement of teaching staff in scientific projects and publicity promotes the quality of the study programme and the acquisition of evidence-based veterinary medicine. The entire study programme is designed in such a way that students develop a broad, subordinate and fundamental vision and a common understanding of the processes in veterinary medicine through sequential courses.

Strengths
1. The director of the study programme displays a strong motivation and clear vision on how to change the existing situation. His efforts are strongly supported by a highly motivated team of teachers, both young and experienced.
2. More than 25% of the lecturers involved in the implementation of the study field have a doctoral

degree, which provides students with a vision based on scientific knowledge.
3. The number, qualifications and skills of the teaching staff involved in the second level professional programme in veterinary medicine comply with the requirements of the study programme and Directive 2005/36/EC of the European Parliament and of the Council on the basis of the EAEVE expert visit report.
4. The number of articles (126) in the Scopus and Web of Science databases reflects the necessary level of teaching staff to provide contemporary knowledge to the students in the field of veterinary medicine.
5. The overall value of cooperation of teaching staff can be considered as good, since veterinary study courses are very related and subordinate.
6. The entire study programme is designed in such a way that students develop a broad, subordinate and fundamental vision and a common understanding of the processes in veterinary medicine through sequential courses.

Weaknesses
1. The insufficient funds do not allow the necessary promotion of the study process: the salaries of academic staff are inadequate for responsible and difficult work, it has been difficult to attract new teaching staff as well as foreign lecturers in recent years.

5. Assessment of the Compliance of the Study Programme "Veterinary Medicine"

Requirements

1 1. The sample of the diploma to be issued for the acquisition of the study programme complies with the procedure by which state-recognised documents of higher education are issued.

Assessment of compliance: Partially compliant

The qualification of Veterinarian that corresponds to the 5th level of professional qualification (Annex. Diploma and supplement) is issued to a person who has acquired an accredited second-level higher professional education programme and fulfilled all the requirements specified in the relevant state education standard (according to the Republic of Latvia Cabinet Regulation No. 512). A diploma supplement in Latvian and a diploma supplement in the English language is attached to the diploma. The diploma is awarded on the basis of the Decision of the State Examinations Commission of LLU. The names of the study courses in English and the volume of their credit points are not reflected in the accreditation documents (Annex. Diploma and supplement).

2 2. Documents confirming that the higher education institution/ college will provide the students with the options to continue the acquisition of education in another study programme or at another higher education institution/ college (a contract with another accredited higher education institution/ college), in case the implementation of the study programme is discontinued.

Assessment of compliance: Fully compliant

LLU has a document confirming that it will provide the students with the options to continue the acquisition of education in another study programme in case the implementation of the study programme is discontinued (Annex. LLU_apliecinajums_Veterinarmedicina_EN.docx).

3 3. Document confirming that the higher education institution/ college guarantees to the students a compensation for losses if the study programme is not accredited or the licence of the study programme is revoked due to the actions of the higher education institution/ college (actions or failure to act) and the student does not wish to continue the studies in another study programme.

Assessment of compliance: Fully compliant

LLU has a document confirming that it will guarantee to the students the compensation for losses if the study programme is not accredited or the licence of the study programme is revoked due to the actions of the higher education institution(actions or failure to act) and the student does not wish to continue the studies in another study programme (Annex. LLU_apliecinajums_Veterinarmedicina_EN.docx).

4 4. The teaching staff members involved in the implementation of the study programme are proficient in the official language in accordance with the regulations on the level of the official language knowledge and the procedures for testing official language proficiency for performing professional duties and office duties.

Assessment of compliance: Fully compliant

LLU has a document confirming that the teaching staff members involved in the implementation of the study programme are proficient in the official language in accordance with the regulations on the level of the official language knowledge and the procedures for testing official language proficiency for performing professional duties and office duties (Annex. LLU_apliecinajums_Veterinarmedicina_EN.docx).

5 5. The teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language, if the study programme or any part thereof is to be implemented in a foreign language.

Assessment of compliance: Fully compliant

LLU has a document confirming that the teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language, if the study programme or any part thereof is to be implemented in a foreign language (Annex. LLU_apliecinajums_Veterinarmedicina_EN.docx).

6 6. At least five teaching staff members with a doctoral degree are among the academic staff of an academic doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field of science. At least five teaching staff members with a doctoral degree are among the academic staff of a professional doctoral study programme in arts.

Assessment of compliance: Not relevant

7 7. The academic staff of the academic study programme complies with the requirements set forth in Section 55, Paragraph one, Clause 3 of the Law on Institutions of Higher Education.

Assessment of compliance: Not relevant

8 8. The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

Assessment of compliance: Fully compliant

According to Republic of Latvia Cabinet of Minister Regulation No. 70, the following provisions of behalf of the student should be provided: the name, surname, personal identification code and address of the declared place of residence, the student‘s obligations to comply with the internal regulatory enactments that regulate the activities of the higher education institution or college. On behalf of Higher Education Institution: name of the higher education institution or college, legal address, registration number in the register of educational institutions, accreditation data (registration date and the number of the accreditation sheet), bank details, name, surname, position and authorization of the rector of the higher education institution, the title, duration,

amount in credit points of the study programme, the degree to be obtained or professional qualification, type of studies, certain main responsibilities of the higher education institution (to provide the student with access to internal regulatory enactments that regulate the activities of the higher education institution or college, tuition fee, etc.), agreement of the parties on the processing of the student‘s personal data; the conditions for terminating the contract, etc.

9 9. The descriptions of the study courses and the study materials have been prepared in all languages in which the study programme is implemented, and they comply with the requirements set forth in Section 56.1, Paragraph two and Section 56.2, Paragraph two of the Law on Institutions of Higher Education.

Assessment of compliance: Fully compliant

The study programme is implemented in Latvian and English and therefore the descriptions of the study courses and the study materials have been prepared in Latvian and English and they comply with the requirements set forth in Section 561, Paragraph two and Section 562, Paragraph two of the Law on Institutions of Higher Education.

10 10. The study programme complies with the valid professional standard or the requirements for the professional qualification (if there is no professional standard required for the relevant occupation) provided that the completion of the study programme leads to a professional qualification.

Assessment of compliance: Fully compliant

The study programme complies with the requirements for the professional qualification (Pielikums 3.2.1.3.).

11 11. Academic study programmes provided for less than 250 full-time students may be implemented and less than five professors and associated professors of the higher education institution may be involved in the implementation of the mandatory and limited elective part of these study programmes provided that the relevant opinion of the Council for Higher Education has been received in accordance with Section 55, Paragraph two of the Law on Institutions of Higher Education.

Assessment of compliance: Not relevant

12 12. The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard.

Assessment of compliance: Partially compliant

The standard of professional programs (Cabinet Regulation No. 512) is not observed for the study program, because CP has not been assigned to the final work and the final work is not indicated in the diploma supplement.

13 13. The joint study programmes comply with the requirements prescribed in Section 551, Paragraphs one, two, and seven of the Law on Institutions of Higher Education (if applicable).

Assessment of compliance: Not relevant

14 14. Each member of the academic staff has either publications published in reviewed editions within the last six years, including international editions (if they have worked for a shorter period of time, the number of publications shall be in proportion to the work period), or artistic creation achievements (for instance, exhibitions, films, theatre performances, and concert activity), or a five-year practical work experience (except for the experience in the implementation of the study programme) in accordance with the Law on Institutions of Higher Education.

Assessment of compliance: Fully compliant

Each member of the academic staff has publications published in reviewed editions within the last six years, including international editions (Annex. Teaching staff CV)

15 R5 - Overall rating

Assessment of compliance: Partially compliant

The standard of professional programs (Cabinet Regulation No. 512) is not fully observed for the study program, because not enough CP has been assigned to the final work and the final work is not sufficiently indicated in the diploma supplement.

Requirements (R6-R8)

1 R6 - The compliance of the study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of the learning outcomes.

Assessment of compliance: Fully compliant

Informative, material-technical and financial provision is ensuring that students can achieve learning outcomes set by the programme. Students have access to most of the infrastructure and it is oriented on student professional skill development.

2 R7 - The compliance of the qualification of the academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments.

Assessment of compliance: Fully compliant

The qualification of the academic staff and visiting professors complies with the conditions for the implementation of the study program and the conditions specified in the relevant regulatory enactments.

3 R8 - The study programme leading to the master or doctoral degree is based on the advances and findings in the relevant field of science or artistic creation.

Assessment of compliance: Not relevant

Conclusions by specifying the strengths and weaknesses

The study programme name, aims, objectives and qualification to be obtained comply with the requirements of EAEVE, Directive 2005/36/EC and Directive 2013/55/EU, and mostly comply with the Cabinet of Ministers Regulations No. 512 “Regulations on the State Standard of the Second Level Professional Higher Education” and the Veterinary Medicine Law. The name of the study programme, qualification to be obtained, the aims, objectives, learning outcomes, and admission requirements are interrelated.
In general the content of the study programme “Veterinary Medicine 49640” is corresponding both to the EU and Latvian legislative requirements, as well to the market situation, which is confirmed in self-evaluation reports and during the discussions with students, graduates and employers; but the standard of professional programs (Cabinet Regulation No. 512) is not fully observed for the study program “Veterinary Medicine 49640”, because not sufficient number of CP has been assigned to the final work and the final work is not sufficiently indicated in the diploma supplement. Most of the

needed improvements are already identified by VMF itself and introduction is considered. Implementation of the study programme is well established even during COVID 19 pandemic. VMF is going to pay more attention to practical works and “hands-on '' activities, which is extremely important for veterinary medicine studies to receive knowledgeable, skilled professionals with high-level competencies.
The study programme is focusing on providing possibilities for students to gain real-life experience already during the study process on-premises and during internships. Infrastructure, information and financial supervision have been acknowledged and help students to achieve goals set by the study programme.
In the implementation of the study programme, a steady increase in the number of teaching staff posts can be observed during the reporting period. The increased number of staff positions is reflected with high-quality changes in the study process. Teaching staff are attracted to ensure the study process with appropriate academic qualifications, competence and experience in the field. The teaching staff, conducting the specialized study courses, usually also works in the field, which is considered to be a positive practice. In general, the involvement of teaching staff in scientific projects and publicity promotes the quality of the study programme and the acquisition of evidence-based veterinary medicine. The entire study programme is designed in such a way that students develop a broad, subordinate and fundamental vision and a common understanding of the processes in veterinary medicine through sequential courses.

Strengths
1. The name of the study programme, qualification to be obtained, the aims, objectives, learning outcomes, and admission requirements are interrelated and comply with the requirements of EAEVE, Directive 2005/36/EC and Directive 2013/55/EU.
2. The content of the study programme corresponds to the EU legislation.
3. The certificate of ECOVE approval is obtained.
4. The small student groups for practical works.
5. Introduced “case studies” for clinical and epidemiological studies.
6. Infrastructure, especially, a veterinary clinic is attracting not only local but also international students to the study programme.
7. Enterprises are involved in providing internships for students to acquire all labour market needs during the study process.
8. Most students, approximately almost two thirds of them, can study in state-funded places.
9. The director of the study programme displays a strong motivation and clear vision on how to change the existing situation. His efforts are strongly supported by a highly motivated team of teachers, both young and experienced.
10. More than 25% of the lecturers involved in the implementation of the study field have a doctoral degree, which provides students with a vision based on scientific knowledge.
11. The number, qualifications and skills of the teaching staff involved in the second level professional programme in veterinary medicine comply with the requirements of the study programme and Directive 2005/36/EC of the European Parliament and of the Council on the basis of the EAEVE expert visit report.
12, The number of articles (126) in the Scopus and Web of Science databases reflects the necessary level of teaching staff to provide contemporary knowledge to the students in the field of veterinary medicine.
13. The overall value of cooperation of teaching staff can be considered as good since veterinary study courses are very related and subordinate.
14. The entire study programme is designed in such a way that students develop a broad, subordinate and fundamental vision and a common understanding of the processes in veterinary medicine through sequential courses.

Weaknesses
1. Not identifying the sufficient amount of CP for the final thesis. The final work is not indicated in the diploma supplement, but it is a compulsory part of the final examinations for professional study programmes.
2. The insufficient funds do not allow the necessary promotion of the study process: the salaries of academic staff are inadequate for responsible and difficult work, and it has been difficult to attract new teaching staff as well as foreign lecturers in recent years.

Evaluation of the study programme "Veterinary Medicine"

Evaluation of the study programme:

Good

6. Recommendations for the Study Programme "Veterinary Medicine"

Short-term recommendations

1. The study results could be combined into larger blocks, stating 5-9 expected study results.
2. Clarify the number of CP for the final thesis to become in correspondence with legislative requirements in this meaning.

Long-term recommendations

1. To promote LLU internationally and boost incoming mobility, create communication routes for advertising veterinary the study programme for foreigners.
2. It is necessary to develop the curricula and introduce subjects like veterinary practice management, communications skills and financial knowledge related to a veterinarian activity.
3. The attention of the responsible ministries must be focused on the underfunding of veterinary medicine studies, which may have fatal consequences for the sustainability of an important profession in Latvia.

II. "Veterinary Medicine" ASSESSMENT

II. "Veterinary Medicine" ASSESSMENT

1. Indicators Describing the Study Programme

Analysis

1. The name of the study programme, the degree, the professional qualification or the degree and the professional qualification to be acquired, the aims, objectives, learning outcomes, and admission requirements are interrelated.

The doctoral study programme Veterinary Medicine is a full-time study programme with an implementation duration of 3 years and a volume of 120 Latvian CP. The language of the programme implementation – Latvian. The code of the study programme according to the Latvian education classification – 51640. The degree to be obtained – doctoral degree: Doctor of Science (Ph.D.) in Veterinary Sciences.
The study programme name, aims, objectives and degree to be obtained comply with the

requirements of EAEVE. The name of the study programme, qualification to be obtained, the aims, objectives, learning outcomes, and admission requirements are interrelated.

Conclusions by specifying the strengths and weaknesses

The study programme name, aims, objectives and degree to be obtained comply with the requirements of EAEVE. The name of the study programme, qualification to be obtained, the aims, objectives, learning outcomes, and admission requirements are interrelated.

Strengths
1. The name of the study programme, qualification to be obtained, the aims, objectives, learning outcomes, and admission requirements are interrelated and comply with the requirements of EAEVE.

Weaknesses
1. None indicated.

2. The Content of Studies and Implementation Thereof

Analysis

1. The descriptions of the study courses/ modules, the traineeship, and the final thesis are of high quality and comply with the provision set forth in the regulatory enactments. The content is relevant and complementary, and it complies with the aims of the study programme, ensures the achievement of the learning outcomes, and meets the needs of the relevant industry and the scientific trends.

The total amount of the doctoral study programme is 120 CP. The volume of theoretical studies (sub-branch special course, research direction special course, foreign language special course, research methodology course) - 20 - 30 CP, the volume of scientific work (research, presentation of research results at scientific conferences, publication of research results) - 90 - 100 CP. https://www.llu.lv/lv/doktora-studijas
According to the Regulations of the Cabinet of Ministers No. 49 from 2018 “Regulations on Latvian science branches and sub-branches” point 4.3. the fields of Veterinary Medicine sciences are Morphology; Physiology; Pathology; Veterinary pharmacology and toxicology; Internal diseases; Parasitology; Infectious diseases and microbiology; Surgery; Obstetrics and gynaecology; Food hygiene; Other subsectors of veterinary science.
The study programme for Doctoral studies has different aims as in undergraduate studies, it has to be more specialized, related to the topic of scientific research. According to the Self-evaluation report and discussions with doctoral students, the students are attending the courses related to general items (Foreign language special course - English; Research methodology etc.) and choose one of 10 special courses of the field of science according to his or her specialization more suitable for their research topic. There are 3 stages of development of the doctoral thesis (elaboration of doctoral thesis, development of theoretical and experimental part of the doctoral thesis; completion of the doctoral thesis) performed independently by the doctoral student, consulting with the supervisor of the doctoral thesis. Publicity activities of the research were carried out by the doctor independently in consultation with the supervisor of the doctoral thesis.
Besides, doctoral students often take additional courses in other Universities and internet-based webinars. The main complaint is about the length of the studies - 3 years, both students and teachers are considering the possibility to prolong the study time to 4 years. The study programme and final thesis comply with the provisions set in the regulations. Study courses comply with the aims of the study programme.

2. The study implementation methods, including the evaluation methods, contribute to the achievement of the aims and learning outcomes of the study courses and the study programme. Student-centred learning and teaching principles are taken into account.

The procedure and criteria for awarding doctoral degrees are determined by the Regulations of the Cabinet of Ministers of the Republic of Latvia Regulations No. 1001 of the Cabinet of Ministers. Delegation of the right to award a doctoral degree (promotion) to higher education institutions is determined by the Regulations of the Cabinet of Ministers No. 1000
According to the information received (https://www.llu.lv/lv/doktora-studijas) within two months after matriculation, the doctoral student develops and submits an individual work plan for doctoral studies for the first year of study; submit an interim report and a report of the department/ institute on the progress of the study plan during each semester; attestation for further studies takes place at the end of each doctoral study year, evaluating the submitted study year report and the work plan of the next study year; approved plans and reports shall be submitted to the Study Center. During the doctoral studies, the doctoral student passes doctoral examinations in a sub-branch of science or a sub-branch, in the chosen research direction and in a foreign language. Two weeks before taking the doctoral examination, the doctoral student submits an application for taking the examination to the Study Center. For a doctoral student, high-quality doctoral studies end with passing all the examinations and tests provided for in the doctoral study plan, submitting the doctoral thesis for the defense of the doctoral degree to the Doctoral Council, public defense of the doctoral thesis and obtaining the doctoral degree.
During the studies, the doctoral student may request a study break (academic leave) with a total period of up to two years. If the doctoral student does not return to study within two weeks after the end of the academic leave, he/ she will be expelled by the order of the Rector.
What concerns student-centred learning - during doctoral studies a lot is in hands of the student itself - planning and organizing of everyday activities in the frame of the agreed study plan and annual plan. To compensate low general financing of the studies full-time doctoral students at the expense of the state budget, may receive the minimum scholarship specified in the regulatory enactments of the Republic of Latvia, as well as by concluding an additional agreement with the LLU, a scholarship equivalent to a loan for obtaining a scientific degree. Students can also apply for a one-time scholarship once a semester. Applications for the minimum monthly scholarship for doctoral studies take place twice a year in August and January, applications for a scholarship equivalent to credit for obtaining a scientific degree take place once a year in September, according to competition.

3. The outcomes of the surveys conducted among the students, employers, and graduates are used to improve the quality of studies.

Doctoral students can take part in surveys similarly to undergraduate students. They are not very active in this for similar reasons as undergraduate students but give their suggestions directly to the management of the Faculty. The proposals are discussed in the Study and Methodological Committee and Faculty Board and taken into account as much as possible. The main problem is low financing which does not allow to accept more doctoral students, but for those who are accepted, they have problems conducting some kind of research due to lack of financial resources.

4. The students avail themselves of the incoming and outgoing mobility opportunities, and the learning outcomes achieved during such mobility are recognised.

In doctoral studies, the time frame is very busy and there is not much time left for mobilities. Rather some kind of mobility is used before starting official doctoral studies. Sometimes this is a big

stimulus to start doctoral studies. On several occasions, doctoral students are working together on one project with incoming ERASMUS students in the clinic. A close cooperation partner to doctoral students is the Scientific Institute “BIOR” which has a very good infrastructure for laboratory investigations.

Conclusions by specifying the strengths and weaknesses

There is a system for doctoral studies in the LLU. Students can have theoretical lectures on general items, such as research methodology and specific subjects depending on the area of their research topic. The biggest problem is low financing, which does not allow to take more students and to perform larger scientific research activities.

Strength.
1. High motivation of the management of the LLU and VMF to improve the quality of the programme.
2. Satisfaction of the doctoral students.

Weaknesses.
1. Low financing of the doctoral students and research activities.

3. Resources and Provision of the Study Programme

Analysis

1. The study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision comply with the specific features and the conditions for the implementation of the study programme, create the prerequisites for the achievement of the learning outcomes, and indicate the possibility to ensure a high-quality study process also in the future.

LLU has developed infrastructure which is very well described in SAR 3.2. section. LLU has calculated the base cost per doctoral student which is 18216 EUR. For the implementation of the study programme, university infrastructure is being used. One of the goals of the study programme is that doctoral students can orient themselves among sub-sectors of veterinary medicine. To achieve this goal several laboratories on-premises can be used: pathology centre, microbiology laboratory, veterinary clinic, even for providing experiments on animals. Another infrastructure of HEI or scientific institute is also broadly used for research purposes. Students are in close collaboration for example with BIOR, LIOS, RSU and other organisations where they can develop research skills and work in multidisciplinary research projects. Informative provision is also sufficient to help doctoral students find all necessary literature in databases or books or any other information source. If necessary, the Fundamental library provides options for ordering information materials from other libraries. Funds for providing research activities, participation in conferences, publication fees etc. are covered mostly through projects in which academic staff members are involved. LLU in addition provides internal grants for students to cover some of the expenses. Resources that are at disposal of doctoral students help to achieve learning outcomes and ensure high-quality study processes in the future as well.

2. The study provision and the scientific support, including the resources provided within the cooperation with other scientific institutions and institutions of higher education, comply with the requirements for the implementation of the doctoral study programme, create the prerequisites for the achievement of learning and research outcomes, and indicate the possibility to ensure a high-

quality study process also in the future (if applicable).

Most of the PhD thesis is developed in cooperation with other HEI or scientific institutes for example during the site visit administration provided examples where students have been involved with Latvian Biomedical research and study centre (BMC), Latvian Institute of organic synthesis (OSI), Institute of food and safety, animal health and environment (BIOR). Sometimes PhD students have the possibility to participate in studies sponsored by private companies to collect some samples or approbate new technologies and include results in their thesis. During the study process, some PhD students use international mobility and can use infrastructure from abroad to write their final thesis. Regarding cooperation with other partners, students have this possibility and these collaborations ensure that students will be able to achieve learning outcomes set by the programme and finish the defence of the thesis. Since veterinary medicine is becoming more interdisciplinary all these partners are providing the possibility to ensure high-quality study processes also in the future.

Conclusions by specifying the strengths and weaknesses

The study programme provision, scientific support and material and technical provision provide conditions for the implementation of the study programme and achieving learning outcomes of the doctoral students.

Strengths
1. Access to different laboratories, where research can be conducted - pathology, microbiology etc. laboratories.
2. Veterinary clinic provide advanced infrastructure, which can be used in research projects.

Weaknesses
1. None indicated.

4. Teaching Staff

Analysis

1. The higher education institution/ college undertakes measures in a target-oriented manner to avoid negative effects on the quality of the implementation of the study programme and the compliance of the study programme with the requirements set forth in the regulatory enactments, as a result of the changes in the composition of the teaching staff.
There have been no significant changes in the composition of the academic staff during the assessment period. It should be stressed that a number of special courses are carried out abroad, or by inviting foreign teaching staff to Latvia. Foreign teaching staff are assigned to a specific course or part thereof (seminar format), which is organized at the faculty of veterinary medicine of the LLU or in one of the partner institutions, e.g. state scientific institute "BIOR". The number of teaching staff involved in the PhD studies is 23 (listed in Annex 5.4.1.1). They all have their respective PhD degrees. Most of them (18) have responsibilities both in the professional level as well as PhD level teaching. The teaching staff, providing the courses for English, preparation of scientific manuscripts and statistical analysis, have been involved only in the PhD level.

2. The qualification of the teaching staff members involved in the implementation of the study programme complies with the requirements for the implementation of the study programme and the requirements set forth in the regulatory enactments, and it enables the achievement of the aims and learning outcomes of the study programme and the relevant study courses.
The qualification of teaching staff is ensured using the procedure established by the university:

regular refresher courses, including pedagogy for which certificates of completion are submitted to the university administration. The scientific qualification of the academic staff is confirmed by their scientific publications, involvement in scientific projects, which in turn promotes the involvement of doctoral students in scientific work. Detailed information is included in the CVs of the teaching staff, lists of scientific publications and scientific projects. However, all these CVs need to be presented in a more organized way. The CVs for teaching staff involved in the PhD studies should be separated from the information of teaching staff involved only in the professional study programme. The current presentation makes it difficult to process the submitted data accordingly.

3. The scientific publications of the academic staff involved in the implementation of the doctoral study programmes and the involvement of the academic staff in research-related projects contribute to the implementation of a high-quality doctoral study programme (if applicable).
During the evaluation period from 2013 to 2020, the publications of the academic staff involved in the implementation of the doctoral study programme are listed in the Annex 2.4.4.1. A total of 126 scientific publications can be found in the Scopus and Web of Science databases for this period. It should be stressed that a significant part of them have been published in relevant international peer-review scientific journals. The Latvian rules do not demand this, but the list of publications need to be presented according to their actual ranking. One can use the ranking by quartiles (Q1, Q2, Q3, Q4). The number of publications in high ranking journals is limited. However, a part of the teaching staff displays outstanding or very good citation level: Prof. Thierry Olivry (Scopus: 267 publications, 6565 citations, h-index 42); Prof. Aivars Berzins (Scopus: 41 publications, 772 citations, h-index 15): Prof. Andres Waldmann (Scopus: 39 publications, 516 citations, h-index 16); and Prof. Margarita Terentjeva (Scopus: 56 publications, 406 citations, h-index 12). In addition, there are 5 scientists with more than 100 citations in the Scopus database.

4. The academic staff is involved in scientific research and/or artistic creation (in the fields related to the content of the study programme) both at national and international level. The obtained information is used in the study process.
Academic staff involved in the doctoral study programme "Veterinary Medicine" participate in scientific projects at both international and national levels, which is also the basis for the involvement of young doctoral students in active scientific work and implementation of scientific projects. A large part of the projects is suitable for applied scientific projects, the tasks of which include the needs of the sector and a close component of research and knowledge and technology transfer. Staff participates in projects such as European Regional Development Fund, Latvian Science Fund, Public-Private Partnership and EU COST. The whole process of scientific work involves planning research, preparing scientific studies, their implementation and publishing, and presenting research results in international scientific forums involving both academic staff and doctoral students. The acquired practical and theoretical knowledge is constantly applied in the study process, which is an integral part of studies. At the moment, several research groups have formed in the faculty, for example, the infectious diseases research group, which involves 12 teaching staff and 5 laboratory assistants, as well as about 20 students from different undergraduate courses. The main research objectives of this group are related to pharmacology, visual diagnostics and research, and the implementation of innovative diagnostic and treatment methods.

5. There is a mechanism for mutual collaboration between the teaching staff members in place, which contributes to the improvement of the study courses/ modules and their correlation.
The director of the study programme demonstrates a strong motivation and clear vision on how to improve the quantity and quality of PhD studies. The path to the doctoral programme can be seen as a window of opportunity. It is important that the director is supported by a team of highly motivated scholars, both young and experienced.

The teaching staff cooperate closely with the teaching staff of other faculties in the implementation of the programme, both in the development of the research methodology, in the analysis of data, and in the doctoral thesis process as a whole. Also, several study courses are served outside the faculty. There are practically no specific mechanisms for promoting cooperation within the framework of veterinary medicine. Despite this obstacle, there is an opportunity to cooperate with specialists in various fields or scientists to solve individual issues. The methodology of the research part of the doctoral thesis is also reviewed at the meetings of each responsible institute and also at the meeting of the faculty council, where the faculty teaching staff can provide advice or additions to the improvement of the methodology. Currently, 15 students are studying in the doctoral programme in veterinary medicine, while 35 members of the teaching staff are involved in the process, including doctoral thesis supervisors and consultants. Therefore, the student and teacher ratio is 0.42. The number of PhD students defending dissertations between 2013 and 2021 is 13.

Conclusions by specifying the strengths and weaknesses

There have been no significant changes in the composition of the academic staff during the assessment period. A number of special courses are carried out abroad, or by inviting foreign teaching staff to Latvia. The teaching staff cooperates closely with the teaching staff of other faculties in the implementation of the programme, both in the development of the research methodology, in the analysis of data, and in the doctoral thesis process as a whole. Also, several study courses are served outside the faculty. The scientific qualification of the academic staff is confirmed by their scientific publications, involvement in scientific projects, which in turn promotes the involvement of doctoral students in scientific work. Academic staff involved in the doctoral study programme "Veterinary Medicine" participate in scientific projects at both international and national levels, which is also the basis for the involvement of young doctoral students in active scientific work. A total of 126 scientific publications can be found in the Scopus and Web of Science databases for the evaluation period. It should be stressed that a significant part of them have been published in relevant international peer-review scientific journals. However, the Latvian rules do not demand this, but the list of publications should be presented in a more organized way. The publications need to be separated by their actual ranking.

Strengths
1. The director of the study programme demonstrates a strong motivation and clear vision on how to improve the quantity and quality of PhD studies.
2. A number of special courses are carried out abroad, or by inviting foreign teaching staff to Latvia. Foreign teaching staff are assigned to a specific course or part thereof (seminar format), which is organized at the faculty of veterinary medicine of the LLU or in one of the partner institutions.
3. The qualification of teaching staff is ensured using the procedure established by the university: regular update of the study courses, including pedagogy for which certificates of completion are submitted to the university administration.
4. The scientific qualification of the academic staff is confirmed by their scientific publications, involvement in scientific projects, which in turn promotes the involvement of doctoral students in scientific work.
5. The teaching staff cooperate closely with the teaching staff of other faculties in the implementation of the programme, both in the development of the research methodology, in the analysis of data, and in the doctoral thesis process as a whole.
6. Modern and up-to-date infrastructure is a strength enabling contemporary veterinary medicine as well as doctoral studies. Veterinary clinics keep high standards and provide facilities for scientific research. Development of infrastructure is still ongoing.

Weaknesses
1. Due to insufficient funds LLU cannot attract foreign lecturers, provide supportive staff in scientific research, and the successful graduation of PhD students is low.
2. The number of articles in high-impact journals is not sufficient to ensure the international visibility of Latvian veterinary medicine.

5. Assessment of the Compliance of the Study Programme "Veterinary Medicine"

Requirements

1 1. The sample of the diploma to be issued for the acquisition of the study programme complies with the procedure by which state-recognised documents of higher education are issued.

Assessment of compliance: Fully compliant

The sample doctoral diploma corresponds to the procedure for issuing state-recognized higher education documents. The diploma shall be issued to a person who has obtained a scientific doctoral degree in accordance with the procedures specified in regulatory enactments regarding the procedure and criteria for promotion (Annex. Doktora_diploms_Veterinārmedicīna_EN.pdf).

2 2. Documents confirming that the higher education institution/ college will provide the students with the options to continue the acquisition of education in another study programme or at another higher education institution/ college (a contract with another accredited higher education institution/ college), in case the implementation of the study programme is discontinued.

Assessment of compliance: Fully compliant

LLU has a document confirming that it will provide the students with the options to continue the acquisition of education in another study programme in case the implementation of the study programme is discontinued (Annex. LLU_apliecinajums_Veterinarmedicina_EN.docx)

3 3. Document confirming that the higher education institution/ college guarantees to the students a compensation for losses if the study programme is not accredited or the licence of the study programme is revoked due to the actions of the higher education institution/ college (actions or failure to act) and the student does not wish to continue the studies in another study programme.

Assessment of compliance: Fully compliant

LLU has a document confirming that it will guarantee to the students the compensation for losses if the study programme is not accredited or the licence of the study programme is revoked due to the actions of the higher education institution(actions or failure to act) and the student does not wish to continue the studies in another study programme (Annex. LLU_apliecinajums_Veterinarmedicina_EN.docx).

4 4. The teaching staff members involved in the implementation of the study programme are proficient in the official language in accordance with the regulations on the level of the official language knowledge and the procedures for testing official language proficiency for performing professional duties and office duties.

Assessment of compliance: Fully compliant

The teaching staff members involved in the implementation of the study programme are proficient in the official language in accordance with the regulations on the level of the official language knowledge.

5 5. The teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language, if the study programme or any part thereof is to be implemented in a foreign language.

Assessment of compliance: Fully compliant

The teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language.

6 6. At least five teaching staff members with a doctoral degree are among the academic staff of an academic doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field of science. At least five teaching staff members with a doctoral degree are among the academic staff of a professional doctoral study programme in arts.

Assessment of compliance: Fully compliant

LLU has a document confirming that at least five teaching staff members with a doctoral degree are among the academic staff of an academic doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field of science (Annex. LLU_apliecinajums_Veterinarmedicina_EN.docx).

7 7. The academic staff of the academic study programme complies with the requirements set forth in Section 55, Paragraph one, Clause 3 of the Law on Institutions of Higher Education.

Assessment of compliance: Fully compliant

Not less than five persons with a doctoral degree shall participate in the implementation of the academic doctoral study program, at least three of whom shall be experts in the relevant field approved by the Latvian Council of Science, it complies with the requirements set forth in Section 55, Paragraph one, Clause 3 of the Law on Institutions of Higher Education (the link https://likumi.lv/ta/en/en/id/37967)

8 8. The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

Assessment of compliance: Fully compliant

According to Republic of Latvia Cabinet of Minister Regulation No. 70, the following provisions on behalf of the student should be provided: the name, surname, personal identification code and address of the declared place of residence, the student‘s obligations to comply with the internal regulatory enactments that regulate the activities of the higher education institution or college. On behalf of Higher Education Institution: name of the higher education institution or college, legal address, registration number in the register of educational institutions, accreditation data (registration date and the number of the accreditation sheet), bank details, name, surname, position and authorization of the rector of the higher education institution, the title, duration, amount in credit points of the study programme, degree to be obtained or professional qualification, type of studies, certain main responsibilities of the higher education institution (to provide the student with access to internal regulatory enactments that regulate the activities of the higher education institution or college, tuition fee, etc.), agreement of the parties on the processing of the student‘s personal data; the conditions for terminating the contract, etc.

9 9. The descriptions of the study courses and the study materials have been prepared in all languages in which the study programme is implemented, and they comply with the requirements set forth in Section 56.1, Paragraph two and Section 56.2, Paragraph two of the Law on Institutions of Higher Education.

Assessment of compliance: Fully compliant

The descriptions of the study courses and the study materials have been prepared in Latvian and English and they comply with the requirements set forth in Section 561, Paragraph two and Section 562, Paragraph two of the Law on Institutions of Higher Education.

10 10. The study programme complies with the valid professional standard or the requirements for the professional qualification (if there is no professional standard required for the relevant occupation) provided that the completion of the study programme leads to a professional qualification.

Assessment of compliance: Not relevant

11 11. Academic study programmes provided for less than 250 full-time students may be implemented and less than five professors and associated professors of the higher education institution may be involved in the implementation of the mandatory and limited elective part of these study programmes provided that the relevant opinion of the Council for Higher Education has been received in accordance with Section 55, Paragraph two of the Law on Institutions of Higher Education.

Assessment of compliance: Fully compliant

LLU has a confirming document from the Council for Higher Education (Annex. dok_stud_progr_Veterinārmedicīna_AIP atzinums_EN.docx).

12 12. The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard.

Assessment of compliance: Not relevant

13 13. The joint study programmes comply with the requirements prescribed in Section 551, Paragraphs one, two, and seven of the Law on Institutions of Higher Education (if applicable).

Assessment of compliance: Not relevant

14 14. Each member of the academic staff has either publications published in reviewed editions within the last six years, including international editions (if they have worked for a shorter period of time, the number of publications shall be in proportion to the work period), or artistic creation achievements (for instance, exhibitions, films, theatre performances, and concert activity), or a five-year practical work experience (except for the experience in the implementation of the study programme) in accordance with the Law on Institutions of Higher Education.

Assessment of compliance: Fully compliant

Each member of the academic staff has publications published in reviewed editions within the last six years, including international editions (Annex. Teaching staff CV).

15 R5 - Overall rating

Assessment of compliance: Fully compliant

The doctor‘s study programme complies with the requirements set forth in the Law on Institutions of Higher Education and other regulatory enactments.

Requirements (R6-R8)

1 R6 - The compliance of the study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of the learning outcomes.

Assessment of compliance: Fully compliant

The provision of studies, scientific support, informative provision, material and technical provision and financial provision meet the conditions for the implementation of the study program and ensure the achievement of study results.

2 R7 - The compliance of the qualification of the academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments.

Assessment of compliance: Fully compliant

The qualification of the academic staff complies with the conditions for the implementation of the doctoral study program and the conditions specified in the relevant regulatory enactments.

3 R8 - The study programme leading to the master or doctoral degree is based on the advances and findings in the relevant field of science or artistic creation.

Assessment of compliance: Fully compliant

Innovative solutions are introduced in the implementation of study courses, integrating research findings into studies. In the development of Doctor theses, students have the opportunity to implement innovations in research by learning new, modern equipment for obtaining research results, etc.

Conclusions by specifying the strengths and weaknesses

The study programme name, aims, objectives and degree to be obtained comply with the requirements of EAEVE. The name of the study programme, qualification to be obtained, the aims, objectives, learning outcomes, and admission requirements are interrelated.
There is a system for doctoral studies in the LLU. Students can have theoretical lectures on general items, such as research methodology and specific subjects depending on the area of their research topic. The biggest problem is low financing, which does not allow to take more students and to perform larger scientific research activities.
There have been no significant changes in the composition of the academic staff during the assessment period. A number of special courses are carried out abroad, or by inviting foreign teaching staff to Latvia. The teaching staff cooperate closely with the teaching staff of other faculties in the implementation of the programme, both in the development of the research methodology, in the analysis of data, and in the doctoral thesis process as a whole. Also, several study courses are served outside the faculty. The scientific qualification of the academic staff is confirmed by their scientific publications, involvement in scientific projects, which in turn promotes the involvement of doctoral students in scientific work. Academic staff involved in the doctoral study programme "Veterinary Medicine" participate in scientific projects at both international and national levels, which is also the basis for the involvement of young doctoral students in active scientific work. A total of 126 scientific publications can be found in the Scopus and Web of Science databases for the evaluation period. It should be stressed that a significant part of them have been published in relevant international peer-review scientific journals. However, the Latvian rules do not demand this,

but the list of publications should be presented in a more organized way. The publications need to be separated by their actual ranking.

Strengths
1. The name of the study programme, qualification to be obtained, the aims, objectives, learning outcomes, and admission requirements are interrelated and comply with the requirements of EAEVE.
2. High motivation of the management of the LLU and VMF to improve the quality of the programme.
3. Satisfaction of the doctoral students.
4. The Director of the study programme demonstrates a strong motivation and clear vision on how to improve the quantity and quality of PhD studies.
5. A number of special courses are carried out abroad, or by inviting foreign teaching staff to Latvia. Foreign teaching staff are assigned to a specific course or part thereof (seminar format), which is organized at the faculty of veterinary medicine of the LLU or in one of the partner institutions.
6. The qualification of teaching staff is ensured using the procedure established by the university: regular refresher courses, including pedagogy for which certificates of completion are submitted to the university administration.
7. The scientific qualification of the academic staff is confirmed by their scientific publications, involvement in scientific projects, which in turn promotes the involvement of doctoral students in scientific work.
8. The teaching staff cooperate closely with the teaching staff of other faculties in the implementation of the programme, both in the development of the research methodology, in the analysis of data, and in the doctoral thesis process as a whole.
9. Modern and up-to-date infrastructure is a strength enabling contemporary veterinary medicine as well as doctoral studies. Veterinary clinic keeps high standards and provide facilities for scientific research. Development of infrastructure is still ongoing.

Weaknesses
1. Low financing of the students and research activities.
2. Due to insufficient funds LLU cannot attract foreign lecturers, provide supportive staff in scientific research, and the successful graduation of PhD students is low.
3. The number of articles in high-impact journals is not sufficient to ensure the international visibility of Latvian veterinary medicine.

Evaluation of the study programme "Veterinary Medicine"

Evaluation of the study programme:

Excellent

6. Recommendations for the Study Programme "Veterinary Medicine"

Short-term recommendations

1. Increase the international visibility of the doctoral program, as the program has a high prerequisite for obtaining strong postgraduate students from abroad.

Long-term recommendations

1. Take action to extend the duration of doctoral studies from three to four years, as this is insufficient to produce high-quality doctoral studies.

2. Improve existing practice in the selection and preparation of doctoral students.
3. Increase the funding for doctoral studies, in order to have more doctoral students; to have more possibilities for research activities.
4. Stimulate the motivation of teaching staff and doctoral students to publish articles in high-impact journals in order to increase the quality of doctoral studies and the international visibility of Latvian veterinary science. Increase international collaboration with the respective scientific centres in neighbouring countries. Collaboration in the field of biomedicine should be encouraged with the respective centres in Latvia.
5. Consistently increase the number of doctoral theses defended to ensure the sustainability of Latvian veterinary science. .
6. Increase the finances available for teaching staff, including foreign lecturers in order to involve in the study process with high-quality teachers and foreign lecturers.
7. Increase the international visibility of the doctoral program, as the program has a high prerequisite for obtaining strong postgraduate students from abroad.

III. Assessment of the Requirements for the Study Field and the Relevant Study Programmes

III. Assessment of the Requirements for the Study Field and the Relevant Study Programmes

Assessment of the Requirements for the Study Field

Requirements	Requirement Evaluation		Comment
R1 - Pursuant to Section 5, Paragraph 21 of the Law on Institutions of Higher Education, the higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study direction whilst implementing their internal quality assurance systems:		Partially compliant	LLU implements an internal quality assurance system, within which the quality of higher education is ensured; a mechanism has been developed for the development of study programmes and supervision of their performance; the criteria for the evaluation of students' results have been developed, which enable the reassurance of the achievement of the envisaged learning outcomes; the internal procedures and mechanisms for assuring the qualification of the academic staff and quality of their work have been established; the infrastructure has been developed in accordance with the level of scientific development of the study programs; but the standard of professional programs (Cabinet Regulation No. 512) is not observed for the study program “Veterinary Medicine 49640”, because sufficient volume of CP has not been assigned to the final work and the final work is not indicated in the diploma supplement.
R2 - The cooperation with different organisations from Latvia and abroad implemented within the study direction ensures the achievement of the aims of the study direction.	Fully compliant		There is notable cooperation with both national and institutions of other countries, including the possibilities which are given by the ERASMUS program
R3 - Compliance of scientific research and artistic creation with the development level thereof (if applicable).	Fully compliant		The scientific work is performed in accordance with the approved LLU Strategy 2015-2022 with the main objectives for research: excellence in research, high-quality studies and effective university governance. Based on that, the main areas of research and development have been identified and targeted.

Requirements	Requirement Evaluation			Comment
R4 - Elimination of the shortcomings and deficiencies identified during the previous assessment of the study direction, if it has been conducted, or the implementation of the provided recommendations.	Fully compliant			Regarding the study field, the recommendations of Veterinary Medicine experts (accreditation in 2012) were related to the need for the recognition of the study programme Veterinary Medicine by EAEVE (European Association of Establishments for Veterinary Education). LLU organized EAEVE experts' visits twice (in 2016 and 2019) and, since 2019, the study programmes in Veterinary Medicine implemented at LLU have been recognized by EAEVE, which confirms their compliance with the requirements of Directive 2005/36 / EC.

Assessment of the Requirements for the Relevant Study Programmes of the Study Field

No.	Study programme	R5	R6	R7	R8	Evaluation of the study programme (excellent, good, average, poor)
1	Veterinary Medicine (49640)	Partially compliant	Fully compliant	Fully compliant	Not relevant	Good
2	Veterinary Medicine (51640)	Fully compliant	Fully compliant	Fully compliant	Fully compliant	Excellent

The Dissenting Opinions of the Experts

There are no different expert opinions.