

# Expert group joint opinion

Evaluation Procedure: Assessment of Study Field

Higher Education Institution: Riga Technical University

Study field: Internal Security and Civil Protection

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# Summary of the Assessment of the Study Field and the Relevant Study Programmes

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Riga Technical University (RTU) was founded in 1862 and is the oldest and largest engineering university in the Baltic States. According to the Self-Assessment Report (SAR) and RTU Strategy, RTU has accumulated a wide and varied experience in studies and technical sciences and has become the leading centre of higher education and science in Latvia obtained a positive assessment from international experts and has been accredited by the Supreme Education Council of the Republic of Latvia.

RTU values include sustainable development, quality, openness and cooperation, creativity, academic freedom, and motivation to explore and discover. The essence of the values was also reflected in the SAR as well during the assessment visit, but perhaps the most confirmation of their adherence is the high recommendation index from employers regarding RTU, which has been the highest in Latvia for years ([www.prakse.lv](http://www.prakse.lv)).

The SAR is comprehensive, outlining the institutional strengths and shortcomings, and provides a solid foundation for future development. It could be concluded that no contradictions were found following the assessment visit, and most conclusions largely coincided with those already presented in the SAR. Additionally, it should be noted that as RTU navigates through organisational changes at the same time as the assessment period, it maintains a positive outlook for the future despite some expressed concerns.

It is imperative to acknowledge that the most striking observation was the high motivation of students, FEEM, and alumni, as well as the satisfaction expressed by employers. There is justifiable pride in the highly esteemed and internationally recognized academic programmes, for which the current expert group identified no significant deficiencies. Moreover, the well-regulated studies and quality management system are to be commended, as they were predominantly confirmed to be effective during the assessment visit, and not the contrary.

However, some short-term challenges lie ahead in balancing the academic approach with practical application and in supporting FEEM as they adapt to new supervisory structures. The RTU's high-calibre, internationally recognized programmes could be better leveraged through targeted promotion to attract foreign students and the pursuit of EU research funding. Enrolment and retention present challenges, with programme interest and dropout rates indicating a need for improved career counselling services to align student choices with personal suitability.

Financial restructuring is anticipated, which on a long-term basis expectedly lead to a focus on more equitable state funding allocations across study programmes, and investment into unique, costly areas that distinguish RTU from its competitors. It was strongly desired by teaching staff as well as by the students that some simulation software licences would be purchased as well the laboratories could be equipped at a higher level.

It was heard during the assessment visit that the long-term goal is to be the main training centre at the EU level, which demands boosted international activity through greater mobility opportunities, foreign student recruitment, and proactive international partnerships, with a strategic focus on preferred countries for collaboration. Further, there is a need to align study programmes more closely with EU features and standards, beyond national ones as well as to implement study courses in English which are prepared. This alignment will meet the differing knowledge and skill expectations that employers have for graduates as well as the expectations for the research activity, which have a challenge to deal with the sensitive nature of security-related data about global events which have an impact on national and international level - how to access and collect that information in time, how and where to publish restricted access information and how to integrate it to studies without high risk.

The challenge for teaching staff has likely not changed much over time, wherein the right balance

must be found between practical teaching and research activity. On one side, there are students and on the other, the FEEM, employers expect both activities to be high-level. Furthermore, continual technological advancements present challenges not only in supporting studies through e-platforms and simulations but also in substantive aspects, such as the use of AI in teaching and/or its use in detecting plagiarism, amongst other applications.

Ultimately, RTU must strike a deliberate balance across its various operational aspects to ensure cohesive progress and relevance in the educational landscape. However, considering the high recommendation index from employers, well-regulated activities, and highly motivated students and FEEM, RTU has so far coped well with these expectations and challenges. Ambitious goals have been set for the new period within the strategy, and the SAR is adequately compiled, which creates a good foundation for continuing the same successful course.

## **I - Assessment of the Study Field**

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#### **1.1 Management of the Study Field**

##### **Analysis**

###### **1.1.1.**

The study field “Internal Security and Civil Protection” (study field) was accredited on 5 June 2013 for the full accreditation period of six years (SAR, p.16), until 4 June 2019. Based on the 3 June 2021 law “Amendments to the Law on Higher Education Institutions”, the accreditation of the study field is prolonged until 31 December 2024 (<https://likumi.lv/ta/id/323800-grozijumi-augstskolu-likuma>). Based on SAR, the aim of the study field is to provide a systematic and successive education in the fields of internal security and civil protection. To achieve the aim, it is necessary to prioritise preventive measures and to be able to anticipate the development of the internal security and civil protection system, linking it to all sectors that have a role to play in the protection of society. It is the national interest to ensure the security of the state, the security of society and the security of individuals (SAR, p.16). The aim of the study field is clearly defined and attainable through the offer of the five related study programmes: two professional Bachelor’s study programmes (“Administration of Customs and Taxes” and “Safety Engineering”, one the 1st cycle higher education study programme (“Fire Safety and Civil Protection”) and 2 professional Master’s study programmes (“Administration of Customs and Taxes” and “Occupational Safety”).

The study field and its study programmes are implemented by RTU Faculty of Engineering Economics and Management (FEEM). The study field and its study programmes comply with the main directions of the strategic development of RTU and FEEM, as also the aims of the study field and its programmes are derived from RTU strategic aims (SAR, p.17). Taking into account the initial accreditation period of the study field, it had to comply with RTU Strategy 2021-2025, which is still available on the RTU FEEM website ([https://www.rtu.lv/writable/public\\_files/RTU\\_strategy\\_for\\_2121\\_2025\\_eng.pdf](https://www.rtu.lv/writable/public_files/RTU_strategy_for_2121_2025_eng.pdf)). The current version of the RTU strategy for the period 2023-2027 is available to the public on the RTU website ([https://www.rtu.lv/writable/public\\_files/RTU\\_rtu\\_strategy\\_2027\\_eng.pdf](https://www.rtu.lv/writable/public_files/RTU_rtu_strategy_2027_eng.pdf)). The RTU Strategy 2023-2027 is the continuation of the previous RTU Strategy 2021-2025 and contains the same mission, vision, values, and strategic goals. RTU Strategy 2023-2027 is guided by the proactive linking of the university's activities with the needs of the national economy, and orientation towards high quality and efficiency. The basis of RTU activity is science, a study process based on innovations and cooperation with industry. RTU Strategy 2023-2027 has been developed in line with the objectives and priorities set out in such Latvia's development planning documents, as the Sustainable Development Strategy of Latvia (Latvia 2030), National Development Plan of Latvia

2021-2027 (NDP2027), UN Sustainable Development Goals (Agenda 2030), Education Development Guidelines 2021-2027, Guidelines for Science, Technology Development and Innovation 2021-2027, Smart Specialisation Strategy (RTU Strategy 2023-2027, p.3)

RTU Strategy 2023-2027 was developed based on discussions at different levels of RTU, involving as wide a range of RTU staff representatives as possible, organising strategic management seminars, think-tanks with RTU staff experts in the fields of science, studies and innovation, and staff surveys (RTU strategy 2023-2027, p.3). As the main values, RTU defines sustainable development, quality, openness and cooperation, creativity, academic freedom, and motivation to explore and discover (RTU Strategy 2023-2027, p.9). In the future, RTU sees itself as one of the leading science and technology universities in the Baltic and Nordic regions, based on a studies system built on research, innovation, and cooperation with industry (RTU strategy 2023-2027, p.10). As the main strategic goals, RTU sets research excellence, sustainable innovation, high-quality study process, and institutional excellence (RTU strategy 2023-2027, p.11).

RTU faculties and independent institutes, including FEEM, develop their development strategies based on the goals, objectives and performance indicators included in the RTU Strategy 2023-2027 (RTU Strategy 2023-2027, p.15). The main activities of FEEM until 2025 will be focused on strengthening international cooperation, valorization and obtaining international accreditation on study programme and institutional (faculty) levels. The FEEM mission is to train internationally recognized, highly qualified specialists in various fields of management, administration, economics, security, technology, systems, and sector management - business, human resources, international economic relations, customs and tax administration, logistics, systems, process, technology and quality management, real estate management, marketing, finance and labour and civil protection (SAR p.17). Information about the strategic goals of FEEM is available on the FEEM website (<https://www.rtu.lv/en/feem/ievf-about-us>).

To achieve the first strategic goal in research excellence RTU plans to emphasise high-level, internationally recognised (cited) publications and a tenure-track professorship of the academic staff, orientation towards projects and renewal of scientific infrastructure (RTU strategy 2023-2027, p.11). During the assessment visit, in the meetings with management, the experts received evidence of the tenure-track professorship approach for the academic staff and orientation on the research activities of academic staff and students. During the interviews with the academic staff, the experts have received the evidence that academic staff members are more oriented on the development of up-to-date practical skills, are busy at work in the industry, but are well-informed about the necessity to participate in research activities and publishing of scientific articles, as also are offered studies in PhD programmes.

To achieve the second strategic goal in the high-quality study process RTU plans to attract well-prepared students, differentiate educational offers, optimise the number of study programmes, and offer lifelong learning and digitalisation (RTU strategy 2023-2027, p.12). During the assessment visit, the experts received evidence that the study programme's managers are active in the assessment of students' results and dropout cases to offer qualitative studies to the students. One study programme in the study field - the 1st level study programme "Customs and tax administration" (classification code 41861) is discontinued to optimise the number of study programmes in the study field (SAR p.6). During the assessment visit, in interviews with management and academic staff, the experts heard about the needs and the further plans to invest in the digitalisation of the study programmes. In the interview with FEEM management, the experts were informed about the future of becoming a regional centre of training and education of customs specialists in Eastern Europe.

To achieve the third strategic goal in sustainable innovation RTU plans active reach of industry, broad involvement of students and academic staff in innovation processes, creation of special grant funds for the development of new technologies and products, as well as for the development of business incubators and accelerators, involvement of RTU in the local and international innovation

ecosystem (RTU strategy 2023-2027, p.12). During the assessment visit, the experts received evidence of successful cooperation of the study field management with the industry and close linkage of the academic staff with the industry.

To achieve the fourth goal of institutional excellence RTU plans to work in 6 sub-goals: digitalisation, sustainable development, efficient financial and administrative management, internationalisation, communication and cooperation, and human resources development (RTU strategy 2023-2027, p.13). During the assessment visit, the experts received the evidence that academic staff is interested in digitalisation and investments in full versions of modelling software. In the interviews with the academic staff, the experts also received proof that FEEM members feel full support from the RTU and FEEM in solving their needs. As a special comment, it was mentioned, that before that it was clear who is the supervising officer and whom to ask in case of questions or problems, but since RTU started its transformation and some structures were changed or optimised, some staff members need more clear information about the future of the RTU and FEEM, as also about the changed in the structure and supervision processes.

The study field and its study programmes fully meet the needs and the development trends of the society and national economy. Based on SAR, the study field covers the training of professionals in the fields of public and human security, such as national border security, economic security, and the security of economic entities through customs and tax administration, civil protection, labour protection and fire safety (SAR, p.16). Latvia's national security strategy is aligned with the EU Internal Security Strategy, according to which, it is necessary to proactively address threats that have a direct impact on the life, security, and well-being of citizens, including natural and man-made disasters. In terms of addressing threats to economic stability, the functions of the state include the protection of personal health, life, property, and rights, intellectual property. The activities of the customs authorities of the State Revenue Service (SRS) are of great importance in protecting economic interests, such as consumer rights, the prevention of competition and corruption risks, the free movement of goods and the protection of fair trade, the detection and prevention of counterfeiting, protection of employees' interests. The fight against terrorism, including the threat of dual-use and the import or transit of prohibited goods, is also in the interests of modern society, and the customs authorities have a crucial role to play. Customs cooperation with other border security authorities, such as the State Border Guard, the Sanitary Border Inspection, as well as integrated border security is important. The tax authorities play an important role in preventing threats to the state finances and in ensuring public confidence, including in the fight against money laundering and the financing of terrorism (SAR p.16-17).

As a positive factor and international prestige can be mentioned, the Bachelor's and Master's study programmes "Administration of Customs and Taxes" have been developed following the requirements of the Latvian national professional standards, the WCO PICARD Professional Standards and the European Union Customs Competency Framework and Training curricula. Along with the RTU diploma, graduates also receive a WCO certificate of compliance with international standards for the customs profession and an EC certificate of compliance with the EU Customs Competency Framework requirements ([https://taxation-customs.ec.europa.eu/taxation-1/eu-training/custcompeu-eu-customs-competencyframework\\_en](https://taxation-customs.ec.europa.eu/taxation-1/eu-training/custcompeu-eu-customs-competencyframework_en)) (SAR, p.19).

As it stated in SAR, the demand for graduates of the study programmes "Administration of Customs and Taxes" is very high, and the demand for these specialists by the State Revenue Service is still not fully met. One of the reasons is the insufficient number of state budget-funded seats allocated to the study programme, and there is still no positive change in this question. According to the State Revenue Service, the turnover of SRS staff is 16% per year, on average, around 550 new staff are needed per year in the areas of taxation, customs, and support. There is also a continuing high demand for specialists in firefighting and occupational safety (SAR, p.20). Professional Bachelor's study programme "Safety Engineering", the 1st cycle professional higher education study

programme "Fire Safety and Civil Protection" are a good continuation of studies after the 1st level professional higher education study programme "Fire Safety and Fire-fighting" at Fire Safety and Civil Defense College in Latvia. Then the education can be continued at the professional Master's study programme "Occupational Safety".

In a survey conducted by the Employers' Confederation of Latvia (LDDK), RTU has been recognized as the most recommended and acknowledged higher education institution by employers and has been ranked the 1st in this ranking every year so far (<https://www.prakse.lv>) (SAR, p.20).

Study programmes of the study field have also achieved high international recognition. In 2022, RTU FEEM and Riga Business School (RBS) were ranked high for the seventh time in the 4 Palms League of Eduniversal. The rating acknowledges a particularly high level of academic institution, outstanding quality and strong international influence in business and management education. In 2022, the study programme "Occupational Safety" achieved rank 4 in the category "Cybersecurity, systems security and data protection" and rank 12 in the category "Environmental security" (<https://www.best-masters.com/search.php?query=Riga+technical>). RTU FEEM Master's study programme "Administration of Customs and Taxes" was ranked 29th among the world's top 50 university and business school programmes in tax administration in 2021. In October 2017/2018 ac.y., the FEEM Advisory Board was established and approved at the FEEM Council meeting. The aim of the Board is to promote the development of RTU, FEEM and institutes in line with RTU strategy and the needs of the national economy and to help improve the quality of studies (SAR p.21).

The interconnection of the study programmes included in the study field is clear and logical. Based on SAR, the aims of the study programmes within the study field are subordinated to the aim of the study field, forming a coherent framework while reflecting the specifics of each study programme. There are five study programmes in the study field. Professional Bachelor's and Master's study programmes "Administration of Customs and Taxes" ensure that students acquire comprehensive knowledge of the activities of customs and tax authorities and can apply it in practice, as well as can independently analyse information, make decisions and demonstrate an understanding of professional ethics and perform the duties of the head of an institution, company and its departments. The 1st cycle professional higher education programme "Fire Safety and Civil Protection" corresponds to the interests of Latvia in the field of human safety and educates and trains students for the profession of fire safety and civil protection engineer. The functioning of the national security system is based on civil-military cooperation, which is the planned and coordinated action of public authorities, society, and the National Armed Forces to deal with national threats. The security of the technogenic environment is also understood as one of the most important components of the security of a country. The main mission of the study programmes "Occupational Safety" and "Safety Engineering" is to train highly qualified senior specialists in occupational safety and occupational safety engineers, whose knowledge of occupational safety and civil defence is necessary for the national economy to guarantee safe working conditions for health and life in every workplace, which is also in full compliance with the national interests (SAR, p.17-18).

#### 1.1.2.

Based on SAR, to ensure the quality of the study field, an annual improvement report is drawn up and evaluated by an expert appointed by the Vice-Rector for Academic Affairs. The SWOT analysis is an integral part of this improvement report. It allows for showing the achievements and highlighting the problems in a concise way (SAR, p.21). The SWOT analysis and the development plan for the next 6 years were substantially revised in 2022 with the involvement of all heads of the study programmes, employer representatives, representatives of the FEEM Student Self-government, and members of the FEEM Advisory Board (SAR, p.22).

There are 23 strengths indicated in the study field SWOT analysis. As the main strengths can be mentioned unique and modern study programmes at higher education level; recognition of study

programmes in Administration of Customs and Taxes by WCO and EC and related certification of the graduates; high ranking of the study programmes in Administration of Customs and Taxes by international experts in customs; highly developed infrastructure, physical facilities, modern technical support for classrooms and staff offices, excellent digital infrastructure (ORTUS, Bloomberg, Use Science, publication databases, ARSHI, ALOHA and ArcGis software; EMDAS, EDS, ITMS systems used in the study courses); availability of Laboratories for study needs as the Scientific Laboratory of the Technogenic Environment Safety and the Customs Control Laboratory; special literature developed by RTU academic staff for the needs of the study process; motivated and professionally qualified staff with extensive experience in practical work; democratic relations among the administration, academic staff and students; active FEEM Student Self-government; close contact of academic staff with employers; excellent cooperation with international organisations; a strong RTU Alumni Association; high international reputation and visibility (SAR, p.22-23).

Based on SAR, there are seven weaknesses defined in the SWOT analysis of the study field. The main are the following: low students' initial level of preparation and insufficient prior knowledge in certain subjects; insufficient student mobility within the learning process due to students' employment; the need to use restricted information makes international student exchanges more difficult and limits opportunities for academic staff to publish research results; limited access to industry databases and lack of appropriate simulation software, as well as insufficient funding to purchase such software; the requirement to increase tuition fees annually has led to a decline in the number of tuition fee-paying students at the study programmes; insufficient public funding for state budget seats at programmes compared to the demand for graduates from public institutions and the private sector; declining student success rates due to the combination of study and work (SAR, p.23).

Based on SAR, there are eleven opportunities defined in the SWOT analysis of the study field. The main are the following: to develop wider international cooperation in international training programmes (like EC BOMCA-10, Geneva Centre for the Democratic Control of Armed Forces and OSCE programmes in Central Asia), implementation of the WCO common standards for customs professions, the EC TAXUD framework, study programmes with foreign partners; to develop research capacity; participate in international projects, to offer qualification improvement courses; to increase students' and academic staff international mobility; digitization of study courses (SAR, p.24).

Based on SAR, there are six threats defined in the SWOT analysis of the study field. The main are the following: lack of a sustainable strategy in the Latvian higher education policy, including in the field of security; insufficient public funding for state budget-funded seats; lack of a sustainable strategy in the State Revenue Service staff development and recruitment system, which does not ensure sufficient attraction of graduates; a decrease in the number of potential applicants due to youth emigration and demographics; high tuition fees and low ability to pay; very expensive equipment and laboratory facilities in the field of study (SAR, p.24).

All these results of the SWOT analysis are considered in the study field development plan. During the assessment visit, the experts gained evidence that all these positive and negative factors were mentioned during the various interviews with management, academic staff, employers, students, and graduates.

### 1.1.3.

The management structure of the study field and its study programmes follows regulation, is clearly defined, oriented towards the development of the study field. The decision-making takes place efficiently, and the support provided by the administrative and technical staff is adequate and ensures all the needs of the study field and its study programmes.

Based on SAR, the structure and administration of RTU are established in compliance with the RTU vision, mission and objectives and considering the specifics of the RTU management. The

administrative structure is based on a decentralised decision-making process and obligations arising from the Law on the Higher Education Institutions, the Constitution of RTU, resolutions of the RTU Senate, the orders issued by the Rector, as well as other RTU documents (SAR p.8). Overall, RTU management can be divided into three levels: university level, administration level and faculty level (SAR p.9). Each faculty also has its own student self-government, while RTU Student Parliament coordinates faculty's student self-governments. Students are represented in all RTU decision-making bodies and can therefore participate in the University's strategic decision-making (SAR p.10).

The development of study programmes takes place following the "Procedure for the application, elaboration and amendment of the study programmes" (approved at the Meeting of RTU Senate on 26 April 2021, Minutes No 649). At RTU, the operation of the internal quality assurance mechanism takes place at the level of the Rectorate, faculties, study fields and study programmes (SAR p.12). Internal quality control at the faculty and the level of the study field is ensured by the Vice Dean for Academic Affairs. The quality of the study programme is ensured by the Head of the study programme and the academic staff involved in the implementation of the programme, whereas the whole process is controlled by the administration of the responsible institute or department (SAR, p.25). At the level of the faculty and the study field, internal quality is ensured by the FEEM Council, the Study Field Committee, the head of the study field, heads of the study programmes, the administration of the institutes or departments implementing the study programmes, as well as the FEEM Student Self-government and the FEEM Deputy Dean for Academic Affairs (SAR, p.26). The administration of the FEEM constantly monitors the compliance of the premises and technical equipment with modern quality requirements. The Study Field committee includes directors of all study programmes in the specific study field, leading teaching staff, representatives of employers and a representative of students. The Study Field Committee supervises the activities of the study field, performing an examination of the content and quality of implementation of study programmes at the end of each academic year, and providing suggestions for improvements. RTU has established a robust system for the management and development of study programmes. Proposals to introduce any changes in the curriculum are made by the Study Field Committee based on the recommendations of the academic staff, references from employers, suggestions from student self-government, as well as observing the latest trends in the national economy and the labour market (SAR, p.26).

During the assessment visit, the experts received evidence that academic staff feels full support from the management of the study field and related study programmes and from FEEM administration staff. All the daily technical needs mentioned to the management were met.

#### 1.1.4.

SAR provides a detailed description of the regulations related to the criterion of the students' admission at all levels, recognition of the study period, professional experience, prior formal and non-formal education, and assessment of students' achievements and learning outcomes. All the requirements are well-explained, logical and effective, allowing for the admission of adequate students to the study programmes. All these rules are publicly available to all potential stakeholders. Based on SAR, the admission process and procedure of students' matriculation is stipulated in the RTU Admission Regulations, which are elaborated based on the Law on Higher Education Institutions and Cabinet Regulations No. 846 issued 10 Oct 2006 "Regulations on Requirements, Criteria and Procedures for Enrolment in Study Programmes", as well as the specific requirements of study programmes and the industry. The RTU Admission Regulations are approved by the RTU Senate and published on November 1 each year. The admission system is easily accessible, logically structured, and evolving in line with today's digitalization trends, providing potential students with a convenient and easy-to-use application for university registration tools. Applicants are admitted to full-time and part-time undergraduate programmes based on the results of the Centralised Examinations (CE) in

Mathematics, the Latvian language and the Foreign Language, and the final grades in individual subjects obtained in the Secondary Education, and the entry test results. To participate in the competition for the state budget-funded seats, the rating in Mathematics CE is calculated as the average value of all Mathematics CE rating sections and must be at least 15%. An applicant with a CE in mathematics of less than 15% may apply only for a tuition fee. To determine the candidate's rank in the competition, each CE rating, calculated as an average of all CE evaluation sections, and each entry test (if any applies) is multiplied by the appropriate weighting factor and the resulting multiplications are added together. Some study programme applicants must pass an entry test, the result of which shall be multiplied by an appropriate weighting factor and summed up in the total calculation of rank. In specific cases, the following legal acts are applied: Cabinet Regulations No. 335 "Rules on the content and procedure for centralised examinations" (SAR, p.30); Cabinet Regulations No. 543 adopted on 29 September 2015 "Regulations on Replacement of the Foreign Language Centralised Examination in the General Secondary Education Programme by Foreign Language Examinations Conducted by International Testing Institutions" (SAR, p.31). The applicants who have acquired a bachelor's degree in a field relevant to the study programme are enrolled on the graduate study programmes. The applicants take part in the competition with a weighted average grade from the Bachelor or professional study programme records (SAR, p.31).

Recognition of previously acquired formal and non-formal education at RTU is carried out following the "Regulation on the Recognition of the "Courses Completed at Other Universities and RTU Study Programmes" (Resolution of RTU Vice-Rector for Academic Affairs No 02000-1.1/29 as of 4 April 2016) and the "Procedure for Recognition of Competencies Developed Outside Formal Education or From Professional Experience and Learning Outcomes Achieved in Previous Education at Riga Technical University" (approved at the Meeting of RTU Senate on 23 September 2019, Minutes No 632) (<https://international.rtu.lv/study-regulations/>, Annex 09 of the List of Internal regulations). RTU Admission Regulations are published at: <https://www.rtu.lv/lv/studijas/uznemsana/uznemsanas-noteikumi> in Latvian language for local students and at <http://fsd.rtu.lv/> for foreign and exchange students.

Based on SAR, recognition of the study period, professional experience, and prior formal and informal studies within the study field is a convenient and relatively simple procedure for students. On SAR p.32, there are provided a few examples of recognition. The student should submit an application accompanied by the necessary documents on previous similar studies and/or professional experience to be assessed. For professional experience matching, students are required to submit a description of their professional activity, which is evaluated by a committee and a decision is taken on the relevance of the professional activity to the requirements of the study programme (SAR, p.32).

#### 1.1.5.

The methods, principles, and procedures for assessing the achievements of students have been developed, and are clearly defined and available to all stakeholders.

Based on SAR, assessment of student learning outcomes is carried out following the "Regulation on the Assessment of Learning Outcomes" (approved at the Meeting of RTU Senate on 30 May 2022, Minutes No 633), which is available on Studies Regulations page of RTU web page ([https://www.rtu.lv/writable/public\\_files/RTU\\_5.4.\\_7.4.studiju\\_rezultatu\\_vertesanas\\_nolikums\\_2022.pdf](https://www.rtu.lv/writable/public_files/RTU_5.4._7.4.studiju_rezultatu_vertesanas_nolikums_2022.pdf) in Latvian language (the English translation is provided in SAR in the file of Annex 04 of the List of Internal regulations). A summative assessment system is used in the appraisal of student achievements, it implies that the final grade is composed of numerous components. In the study course descriptions of the study programme there is a set of relevant knowledge, skills and competencies and their evaluation system, defined learning outcomes for the achievement of which credit points are awarded. Pedagogical methods used in the implementation of study courses, as

well as assessment forms and methods are selected by the instructors responsible for the study courses in compliance with the course curriculum and specifics of the programme, as well as student needs (SAR, p.33). A member of the academic staff should inform students about particular assessment criteria at the first lecture/practical class. The main advantage of the summative assessment system is that the final grade is made up of several components. Therefore, the students may contribute to their final grades by working during the semester. Criteria for assessment of the study courses and individual/home tasks are published on the ORTUS e-study system beforehand. During the semester, the assessment for each home task, test, report, presentation, and any other task is assigned a certain weight in the final grade. Exam grade may not exceed 50% of the final grade. The assessment structure for the study course is determined by the academic staff themselves. The evaluation principles, procedures, and practices of students' achievements at RTU are unified, they do not differ within the study field and its programmes. The differences lie in the choice and use of the methods, as the assessment of students' knowledge, skills and competencies is carried out following the learning outcomes formulated in a particular study course (SAR,p.34). During the assessment visit, the experts got the evidence that the academic staff is satisfied with the new summative approach of the final grading of the study courses, informing that the level of final grades increased, decreased the risk of dropout, and dependence of the student on single exam results is taken off.

Another document related to the evaluation of learning outcomes is "Regulation on Final Examinations at RTU" (approved at the Meeting of RTU Senate on 26 April 2021, Minutes No 649), which regulates the procedure for organisation and conduct of final examinations, general requirements for study graduation papers, final theses (graduation papers), as well as the procedure of development and presentation of study final theses graduation papers. Detailed requirements for study graduation papers final theses, methodological guidelines for the development of study graduation papers final theses and the procedure of presentation, according to the present Regulations, are developed by the unit in charge of the implementation of the relevant study programme and approved by the relevant Faculty Council. These Regulations apply to studies of all types and levels, except for doctoral studies (SAR p.13).

#### 1.1.6.

RTU has established solid principles of academic integrity and mechanisms for their observance, effective anti-plagiarism tools that promote the development of the internal culture of the university. Their principles, regulations and tools are applied, and all stakeholders are involved and informed about them.

Based on SAR, since 2010 all students who graduate from any RTU study programme should upload electronic versions of their graduation papers in the ORTUS portal to improve the quality of graduation papers, create a bibliographic database of the graduation papers and introduce an automated control system for detecting plagiarism. RTU uses two major plagiarism control tools in the study process: since 2015, the joint computerised plagiarism control system (JCPCS), which unites numerous Latvian universities and colleges (SAR, p.34); and since December 2017, Turnitin® (SAR, p.35). Turnitin® tool is integrated with the RTU ORTUS e-study system and provides full service of submitting, correcting, verifying the originality (plagiarism) and return of the submitted papers. Graduation papers are checked in both systems in parallel, thus using the advantages of both systems. Since 2005, the Code of Ethics of RTU Students, Academic Personnel and Staff has been effective at RTU (Annex 19 of the List of Internal Regulations). The Academic Integrity Code was approved at the RTU Senate meeting on 29 February 2016. The Academic Integrity Code aims to strengthen academic culture and integrity in the academic environment of RTU, to explain the concept of academic integrity and related actions, to define the main procedures in the examination of academic fairness violations

([https://www.rtu.lv/writable/public\\_files/RTU\\_rtu\\_studiju\\_reglaments\\_7.1.1.4..pdf](https://www.rtu.lv/writable/public_files/RTU_rtu_studiju_reglaments_7.1.1.4..pdf)) in Latvian language, English translation is in Annex 38 of the List of Internal regulations. There are procedures defined, on how the report on the violation of the student's academic integrity is filled, registered, reviewed, and appealed. Informing and educating students about the aspects of academic integrity takes place both within the study courses and in specially organised seminars. Both students and academic staff have access to the book "Glossary for Academic Integrity" published by RTU publishing house (<http://www.academicintegrity.eu/wp/glossary/>). In addition, RTU participates in different initiatives that bring forward and solve academic integrity-related issues. RTU is a member and one of the founders of the European Network for Academic Integrity (ENAI), where it is involved in active work sharing experience, keeping updated about academic integrity-related issues, and organising conferences. The Dictionary of Academic Integrity Terms and Guidelines is one of the newest aids that has been developed and published by RTU Press. In the framework of Specific Support Objective (SSO) 8.2.3 of the project "Development of Efficient Management of Riga Technical University", RTU, in cooperation with the University of Latvia (UL) and Rīga Stradiņš University, develops educational aids, as well as participates in the establishment of the Latvian national academic integrity organisation and development of plagiarism control tools (SAR, p.35). Struggle with plagiarism issues is described in SAR p.36-37. Using both RTU systems for plagiarism detection, there were several cases where a student's graduation paper had up to 96% textual matching, with the average being between 4 and 56%. In the study programme "Safety Engineering", 39 graduation papers of students were checked for plagiarism from 2017 to 2021, the average percentage of text match in the graduation papers was 9-14%, and the highest percentage was 96%. In the study programme "Fire Safety and Civil Protection", 108 graduation papers of students were checked for plagiarism from 2017 to 2021, the average percentage of text matching in the graduation papers was 12-18%, and the highest percentage was 38%. In the study programme "Occupational Safety", 90 graduation papers of students were checked for plagiarism between 2017 and 2021. In the spring semester of the academic year 2021/2022, the RTU tool Turnitin® identified 38% of textual matches (SAR, p.36). In the professional Master's study programme "Administration of Customs and Taxes", three cases of suspected breaches of academic integrity have been identified since the use of the Turnitin® software. In all cases of high plagiarism rates, RTU has applied an adequate reaction (SAR, p.37). Overall, it can be concluded that the process of educating the students has been very successful, and a culture of academic integrity is introduced and supported at RTU. At the same time, these tools are not suitable for the detection of AI-generated text in students' works. In SAR, there is no information provided on how academic staff can check students' work for the application of AI-generated text.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

The study field was accredited on 5 June 2013 for the full accreditation period of six years with prolongation until 31 December 2024. The aim of the study field is to provide a systematic and successive education in the fields of internal security and civil protection. The aim of the study field is clearly defined and attainable through the offer of the five related study programmes: two professional Bachelor's study programmes, one the 1st cycle higher education study programme and 2 professional Master's study programmes. The study field and its study programmes comply with the main directions of the strategic development of RTU and FEEM. In RTU Strategy 2023-2027, as the main strategic goals RTU sets research excellence, sustainable innovation, high-quality study process, and institutional excellence.

There is a tenure-track professorship approach for the academic staff and orientation on the research activities of academic staff and students. At the same time, the FEEM members are more oriented on the development of up-to-date practical skills, are busy at work in the industry, but are

well-informed about the necessity to participate in research activities and publish scientific articles. Study programmes' managers are active in the assessment of students' results and dropout cases to offer qualitative studies to the students. One study programme in the study field – the 1st level study programme "Customs and tax administration" (classification code 41861) is discontinued to optimise the number of study programmes in the study field. There are needs and further plans to invest in the digitalisation of the study programmes. In the future, FEEM plans to become a regional centre of training and education of customs specialists in Eastern Europe.

There is a successful cooperation of the study field management with the industry and a close linkage of the academic staff with the industry.

Academic staff is interested in digitalisation and investments in full versions of modelling software. FEEM members feel full support from the university and FEEM in solving their needs. Before the RTU transformation, it was clear to them who is the supervising officer and who to address for help, but since RTU started its transformation and some structures were changed or optimised, some staff members need more clear information about the future of the RTU and FEEM, as also about the changes in the structure and supervision processes.

The study field and its study programmes fully meet the needs and the development trends of the society and national economy. The interconnection of the study programmes included in the study field is clear and logical.

The management structure of the study field and its study programmes is in accordance with regulation, is clearly defined, oriented towards the development of the study field. The decision-making takes place efficiently, and the support provided by the administrative and technical staff is adequate and ensures all the needs of the study field and its study programmes.

RTU has set up a clear and effective system and developed detailed procedures for the admission of students, for recognition of the study period, professional experience, prior formal and non-formal education and for the assessment of students' achievements and learning outcomes.

The methods, principles, and procedures for assessing the achievements of students have been developed, and are clearly defined and available to all stakeholders.

RTU has established solid principles of academic integrity and mechanisms for their observance, effective anti-plagiarism tools that promote the development of the internal culture of the university. The principles, regulations and tools are applied, and all stakeholders are involved and informed about them. RTU uses two major plagiarism control tools in the study process: the joint computerised plagiarism control system (JCPCS) and Turnitin®. The culture of academic integrity is introduced and strongly supported at RTU. At the same time, these methods are not successful in detecting AI-generated text.

#### Strengths:

- 1) Unique and modern study programmes at the higher education level.
- 2) Compliance of the study field with all the related regulations.
- 3) Compliance of the study field with RTU Strategy 2023-2027 and other internal documents.
- 4) Close collaboration with all the stakeholders in the development of the study field.
- 5) Awareness of SWOT factors and their application in study field development plans.
- 6) High demand for graduates from the industry.
- 7) Optimization of the number of study programmes in the study field.
- 8) High international recognition of study programmes in the Administration of Customs and Taxes (WCO, EC, Eduniversal ranking).
- 9) Certification of graduates of study programmes in Administration of Customs and Taxes by WCO and EC.
- 10) High recognition of the study programmes by employers.
- 11) Logical interconnection of the study programmes included in the study field.
- 12) Democratic relations among the administration, academic staff and students.

- 13) Clear and easy admission process and regulations.
- 14) High academic integrity culture and anti-plagiarism activities.
- 15) Summative assessment system for students' achievements.

Weaknesses:

- 1) Limited information about the transformation of RTU is available for employees.
- 2) Inability of existing anti-plagiarism measures to detect AI-generated texts.

## **1.2. Efficiency of the Internal Quality Assurance System**

### **Analysis**

#### 1.2.1.

RTU has established an internal quality management system, which works in line with "Excellence approach" (approved on 30 January 2017 at meeting of the RTU Senate, Minutes No 606, available at RTU website) and "RTU Quality Policy" (approved by the Senate in September 2017, Minutes No 612, available at RTU website), as well as respects and follows international regulations such as Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG, standards of Part 1) and European Association for Quality Assurance in Higher Education (ENQA) standards and guidelines.

According to SAR, the quality policy is focused on the implementation of the RTU mission and the achievement of the strategic goals - scientific research, tertiary education, infrastructure and organisational excellence, and recognizability and RTU maintains an open dialogue to explore the parties' needs and respond appropriately by developing feedback to day-to-day and long-term cooperation. During the assessment visit, it was evident that all parties involved understood their roles within the quality management system and it was emphasised that quality is not a destination, but an ongoing journey. Based on regular feedback from students and graduates, improvements have been made or are planned, for instance, teaching staff actively engage in dialogues with students to gather feedback on their subjects. Additionally, students shared instances where lecturers implemented new or alternative teaching methods based on suggestions from previous students.

Furthermore, regular surveys are conducted to validate that the quality management system is fully integrated into daily activities and forms an integral part of the everyday work processes. In addition, several supplementary activities were organised (as described in SAR section 2.2.1) to ensure the highest quality of the SAR, which is compiled annually. However, during the assessment visit, it was brought to the attention of students and graduates that although they have participated in numerous surveys, they are unaware of the results. It is possible that the results are indeed available, but they might not have actively sought or accessed them and this is an opportunity for the RTU to improve the process - how to present results in a way that students understand their role and influence.

RTU quality management system is a mechanism which operates at the level of the university administration, faculties, study fields and study programmes and contains different aspects of assessment which are stipulated in procedures and agreements, for example, annual agreements on the target study process performance indicators are signed and evaluated with faculties, the development of study programmes takes place following the RTU internal regulations (examples are mentioned in chapter 1.2.2 of this report).

It should be noted that most of the regulations were issued or renewed in 2021 to improve the quality management system, which was evaluated in 2022 and the implementation of the quality management system by the university was recognized with an award - a four-star rating "Recognized by EFQM" (SAR section 1.3).

The conclusion could be made that the quality management system is thoroughly developed and implemented. The RTU recognizes the significance of both formal and informal feedback collected from students, graduates, and stakeholders. The continuous improvement of the study process, study programmes, and teaching methods is acknowledged as an integral part of the RTU's daily activities. However, it remains unclear how the results are effectively disseminated to all parties involved. It is important to ensure a clear understanding of how feedback from various sources and stakeholders is consolidated into one comprehensive system, as it forms a vital component of the RTU commitment to continuous improvement.

### 1.2.2.

Study programme development and revision processes are regulated according to the “Procedure for the application, elaboration and amendment of the study programmes (approved at the Meeting of RTU Senate on 26 April 2021, Minutes No 649) and revision of the study programme curriculum and academic activities is the responsibility of the Study Field Committee. The responsibilities and activities of the committees are regulated by the “Regulation of the Study Field Committee” (approved by the Resolution of the RTU Senate Meeting in April 2021, Minutes No 649) and the process is also described in SAR section 2.2.2: expert assessment of the study programme is performed by the Study Committee, then - by the FEEM Council or the councils of several faculties involved, the expert assessment procedure is finalised by the Study Department and at the end the Study Field Committee evaluates the quality of the draft study programme and the compliance of its curriculum to the planned aims and tasks.

It is described in the SAR section 2.2.2 that study programmes are developed and revised based on the requirements of the relevant occupational standards, which have been updated or replaced with the participation of academic staff. It should be noted that most of the study programmes in the study field “Internal Security and Civil Protection” have been reviewed and important improvements have been made during the last five years, which are described in the study programmes, but it is also mentioned in the study programmes SARs as well as it was mentioned during the assessment visit that courses are reviewed mainly twice a year according to the feedback collected from the students and employers (internship report).

According to SAR section 2.2.2 feedback is collected systematically and regularly from target groups at different levels, for example:

- a student survey is conducted every semester to obtain feedback on the study programmes;
- a graduate survey is conducted before each graduation ceremony;
- surveys of employers and graduates of previous years are carried out regularly;
- employers, as RTU students’ practical placement providers, draw up an online review of the student’s knowledge and skills at the end of the practical placements, thus also assessing the relevance of the knowledge provided by the study programme to industry needs;
- RTU obtains employers’ opinions from the Advisory Board, and sectoral associations, as well as from the portal <https://www.prakse.lv>, where RTU has been the most recommended university by employers for several years in a row.

It is stated in the SAR section 1.4 that student surveys are organised following the regulations on “Student Polling for Assessment of the Study Process” (approved by the resolution of RTU Vice-Rector for Academic Affairs No 02000-1.1-e/89 as of 1 February 2021).

During the assessment visit, it was recognised that students were aware of surveys and had completed them with the understanding that they could influence the study quality for the next groups, but the graduates admitted that they had received the surveys, but mostly had not completed those. However, as a considerable amount of employees in the industry are graduates of RTU, the relevant feedback could be delivered through other channels, for example Advisory Board, online reviews about practical placement students’ approach etc.

Also according to the SAR section 2.2.3 the FEEM administration and the management of the study field, in addition to the existing system at RTU, constantly monitor the study process, always listen to students' suggestions and complaints and make sure that all issues are resolved. Every semester, the group leaders of each programme of the study field, together with representatives of the FEEM Student Self-government, organise a meeting with the head of a respective study programme to discuss improvements in the study process and students' proposals.

A significant level of satisfaction has been observed during the assessment visit among students, graduates, and employers regarding the studies offered in all programmes within the field of "Internal Security and Civil Protection." This high level of satisfaction serves as a confirmation that feedback regarding the study programmes is actively collected and that relevant improvements are regularly implemented based on this feedback.

It was understood during the assessment visit, that most of the teaching staff is highly recognized by students, only a few negative examples were brought forward when asked by the assessment commission. Also, the academic staff left the impression of highly motivated lecturers who enjoy teaching and communicating with students. Several examples were provided to illustrate the daily collection of feedback and subsequent implementation of improvements based on student reflections. The remarkable dedication and effectiveness of the academic staff have also been recognized through the RTU Academic Excellence Awards. Notably, members of the study field's academic staff have repeatedly received recognition as the best lecturers of the year as highlighted in the SAR section 2.2.2.

It could be concluded that the study programmes undergo regular reviews based on feedback from students, employers, and graduates and the necessary improvements or changes are made in alignment with professional standards and the evolving needs of the labour market. The regulatory mechanisms in place ensure a comprehensive evaluation process that considers various aspects. However, as mentioned in the previous section, there remains a lack of clarity regarding how all the surveys and feedback collection efforts are integrated into one cohesive system. Additionally, it is unclear how the results of these surveys are disseminated to all relevant parties. The establishment of a more comprehensive feedback dissemination mechanism would contribute to enhancing the transparency and effectiveness of the feedback process.

### 1.2.3.

According to SAR section 2.2.3 students are provided an opportunity to submit complaints and suggestions in compliance with "Procedure for Submission and Examination of RTU Students' Proposals and Complaints" (published at <https://www.rtu.lv/en/university/proposals-and-complaints>). Also, it is said that the new document was approved in 2019, which gives guidelines for students on how to apply, the opportunity to prepare a summary of statistics and analyse the main issues to improve the quality of studies.

Statistics which are offered in the SAR section 2.2.3 show that the number of complaints (around 100 per year) is relatively low according to the number of students of RTU (around 12500). In the same section, the analytics is provided that most of the complaints are related to administrative issues and suggestions on how to plan the studies more student-centred. From the analyses, it turned out that most of the complaints were issued by foreign students, which raises the question is there any lack of communication with this target group and whether they prefer to ask administrative questions through the complaint form. At the same time, it confirms that students, including foreign students, are aware of the possibilities and are encouraged to use it. Thereby there are only a few cases from the overall statistics directed to FEEM, which confirms the high satisfaction of the students which was noticed during the assessment visit as well as the good relations inside the FEEM.

During the assessment visit it was reflected from the students that they have been in a dialogue with the academic staff if any problem occurs or they have any suggestions and mostly their

problems have been solved at the level of study programme management, only one example was given when the official complaint form was used and the student didn't have any response for that yet.

The description is provided in the SAR section 2.2.3 about the complaints which have been handled during the reporting period and it could be concluded that the implementation of procedures have been done following regulations and good practice. The overall impression remains that students are aware of the possibilities and their rights and they do not hesitate to use it if necessary. It could be concluded that democratic relations are established among administration, academic staff and students.

#### 1.2.4.

According to SAR section 2.2.4 the quality reviews are drawn up once a year, summarising the data performance indicators (which have stated 28) of RTU administration, core activities and support processes, which are analysed by study level, faculty level and study field and indicators of numerous study programmes are compared with the general average RTU level. Beneficiary, it is described that a study programme quality visualisation tool has been created in the Power BI environment, which will be used to reflect Bachelor and Master study programme performance in an academic year with the help of a radar chart.

According to SAR section 2.2.4 detailed data is collected and submitted yearly to the Central Statistical Bureau and the Ministry of Education and Science for the following purposes:

- improvement of the study field. For example, if at some study programme, the annual number of student dropouts is much higher than the number of graduates who obtained a degree/qualification, the causes of such a situation are sought for with scrutiny;
- monitoring the number of students enrolled. If at some study programme, the number of enrolled students decreases annually, the cause should be identified, and potential programme closure should be considered;
- allocation of financing (for state budget-funded seats).

However, when the statistics are collected and analysed, it is not clear how and what kind of activities are considered to improve the areas which have shown problematic trends in statistics, for example, student dropout, insufficient financing, lack of foreign students etc.

To analyse study fields and receive feedback, RTU has developed a polling cycle which is described in the SAR section 2.2.4 as follows:

- when starting students at RTU, a survey of students is conducted about expectations from studies, availability of information, and the admission process; the survey is conducted electronically on the portal ORTUS;
- each semester, the polling of the students at a study programme is conducted to find out student opinions about the instructor's work quality and obtain an evaluation of the study programme both in the middle of the semester and at the end of the semester; polling is conducted electronically in the portal ORTUS, the results are received by each instructor personally and the head of the organisational unit; the summary of results is summarised at department meetings, at the meeting of the Study Field Committee and the meeting of the FEEM Council;
- after each graduation round, polling of the graduates of Bachelor's and Master's programmes is conducted; the results are taken into consideration in the improvement of the study programmes within a study field and discussed at methodological seminars;
- it is also planned to run regular centralised polling of RTU employers; polling of employers presently takes place at the end of the practical placement of each student, as well as within the scope of the development of study programmes.

It could be concluded that the mechanism of collecting statistical data is established well on a regular basis and several target groups are involved, however, it was mentioned during the

assessment visit that most of the graduates have seen the survey in their mailbox, but they haven't completed it. Also, it was mentioned by the students that they have completed the surveys but they do not know about the results of that survey. In that matter, it could be considered to improve the feedback communication possibilities as well as to include the summary of the statistics besides the participation rate in % and also the number of the responses received, which will give a better idea of how many people from the target group have answered.

#### 1.2.5.

The information published on RTU public webpage [www.rtu.lv](http://www.rtu.lv) offers a detailed overview of the study programmes of RTU under the faculties. It is easy to navigate and find the information described in the SAR section 2.2.5 as well as programmes which are in Latvian and programmes which are provided in English are highlighted separately. However, the web link about study programmes implemented in English did not lead directly to the list of programmes, the right website section was easy to find.

The Master's Study Programme "Administration of Customs and Taxes" is declared to be available in English, however, it was not found under the programmes implemented in English. During the assessment visit it was said that the studies haven't been held in English yet, even if it was planned to start at the beginning of the year 2024, it was postponed until September. The fact that the study programme was not found in the section of the implemented programmes in English, leaves some uncertainty about the actual will. It should be published on the website as an intention to open the group in English, especially as the amount of foreign students is relatively low at the time, more focused promotion work could be done.

The published information on the website of the RTU provides applicants and students with the most important information. The website for information about the study programmes is available in Latvian. The website provides information about the study programmes, including study courses the main topics included and terms of admission. Information about the study programmes submitted for accreditation is also available in the public register on [www.viis.gov.lv](http://www.viis.gov.lv) and AIKA e-platform <https://eplatforma.aika.lv/>. RTU website contains information about the same study programmes.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

RTU has developed and implemented a quality management system, which is effective and covers the needs at different levels. Both formal and informal feedback is collected from the students, graduates and stakeholders and improvement of the study process, study programmes and teaching methods are acknowledged as important parts of the daily basis activities in the university. Students have several channels, for example, ORTUS, students' self-government, a webpage form for complaints and suggestions etc, to give feedback on their studies. According to the assessment visit, open communication is between teaching staff and students, as well as between employers and the FEEM. Most of the students' problems or suggestions have been resolved by the administrative level of FEEM. Continuous improvement of the study programmes is done with close cooperation with employers and following the occupational standards, which makes the content of studies relevant and highly valued equally by the students, graduates as well as employers.

The data collected within the surveys and procedures are sufficient for systematic analysis of the study programmes and general satisfaction with the quality and other factors.

The RTU webpage is easy to navigate and provides basic information about study programmes, however, the Master's study programme "Administration of Customs and Taxes" was not found in the list of programmes implemented in English.

Strengths:

- 1) Highly motivated students and teaching staff.
- 2) Well-regulated processes and quality management system which ensures continuous programme development and quality control.
- 3) Democratic relations among the administration, academic staff and students.
- 4) Close contact between academic staff and employers.
- 5) The study programmes provide relevant, high-quality, modern and prestigious education and good career opportunities.

Weaknesses:

- 1) The results of the feedback are not presented in a way that students understand their role and influence.
- 2) Information about the study programmes “Administration of Customs and Taxes” which should be available in English was not found on the RTU webpage.

### **Assessment of the requirement [1]**

- 1 R1 - Pursuant to Section 5, Paragraph 2.1 of the Law on Higher Education Institutions, the higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study field whilst implementing its internal quality assurance system:

**Assessment of compliance:** Fully compliant

RTU has established solid regulations and mechanisms under the Internal Quality Assurance System. The continuous improvement of the study process, study programmes, and teaching methods is acknowledged as an integral part of the RTU daily activities, feedback is collected in several ways (formal, informal, surveys, reports, etc) and examples are given of how it is implemented to the development process.

No significant weaknesses were identified, however, two weaknesses are mentioned only for improvement purposes regarding the availability of the feedback results and information provided about English programmes on the RTU webpage

- 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

RTU Quality Policy has been established and it is available on the RTU public website.

- 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

“Procedure for the application, elaboration, and amendment of the study programmes” has been established and the implementation methods are described in the SAR section 1.4.

- 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 published.

**Assessment of compliance:** Fully compliant

“Regulations on the Assessment of Learning Outcomes” is established and the implementation methods are described in the SAR section 1.4.

- 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 Centre for Academic Excellence (CAE), a teaching and learning center, was set up at the end of 2018 (SAR p. 14). According to SAR section 1.4, several surveys have been conducted as well as professional advancement activities at the unit level.

- 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

Student surveys are organised regularly in accordance with the Regulations on “Student Polling for Assessment of the Study Process”. A description of the implementation of the activities which are concluded from the collected information is provided in the SAR section 1.4.

- 7 1.6 - The higher education institution/ college ensures continuous improvement, development, and efficient performance of the study field whilst implementing its quality assurance systems.

**Assessment of compliance:** Fully compliant

Academic activities are monitored in line with the “Regulation of the Study field Committee”, a description of the implementation of the processes and activities is provided in the SAR section 1.4.

### 1.3. Resources and Provision of the Study Field

#### Analysis

##### 1.3.1.

In the SAR regarding the budget is available data for the period 2013 - 2021 (File “Funding by Positions by the period from 2013-2022”). This shows the total funding for all programmes since 2015 is rather similar for each year. Changes are in proportion between state budget financing and tuition fees for local students. While in 2013 the revenue from student fees accounted for 63,56%, in 2022 it accounted for only 24,98% of the total budget (SAR p.56). Accordingly, increasing state budget financing.

In the file “Funding by Positions by the period from 2013-2022” there are included preferable/optimal costs for one student for every year of every programme. (Note: In the file, the title of the respective column is 'Izmaksas uz 1 studentu € / Costs for per student €', and in the additional information provided to experts by email, RTU explained that this is not the real cost, but rather the preferable/optimal cost, calculated according to the procedure defined in the Legislation). According to this, the preferable/optimal costs per student in the Bachelor's study programme “Administration of Customs and Taxes” in 2021/2022 was 6846,46 euros per year. However, overall funding (including state funding and tuition fees) for the programme was just 2371,24 euros per student. There is a significant gap between preferable and real. In all the rest of the study programmes in the study field, there are also bigger or smaller gaps. Preferable cost is calculated according to Regulations No 994 of the Cabinet of Ministers “Procedures for Financing Institutions of Higher Education and Colleges from the Funds of the State Budget”. In Regulations is described procedure of how costs should be calculated.

The average real available funding for one student in the study field is 3151,56 euros. According to RTU, it covers 62,47% of the preferable/optimal cost which is calculated according to the Legislation. The situation has improved as in 2013/2014 state funding covered just 50,61%.

According to SAR, RTU still manages to carry out these study programmes in an economically reasonable way and in high enough quality (what was confirmed by employers during assessment visit conversations). However, a limited budget might have a negative impact on the study process and need to continue to work to decrease this gap.

In SAR, is not shown funding for science and/or research (“Breakdown of funding between cost items”; “Funding by the Positions”). However, there is the “RTU Research Support Fund” (decision of RTU Senate No. 585 “RTU Regulation of Research Support Fund” as of 15 December 2014) which aims at providing financial support for various research-related activities, such as support for maintenance of research equipment, protection and licensing of intellectual property, covering of expenses related to the Doctoral study process, publishing of scientific journals, participation and organization of scientific conferences, support to researchers in establishing new laboratories in a prospective research field.

It could be concluded that budgeting is one of the main concerns for maintaining and developing the study field. However, during the assessment visit it was described that the entire financing system will be changed in 2024, it will be noted that the change is recommended and the desired outcome is that problems like insufficient state-funded seats and relatively high tuition fees will get better as well as the allocation of the additional funding between study fields.

### 1.3.2.

FEEM is located separately from the RTU Kipsala campus (Campus) where all other faculties, library, laboratories etc. It was planned to relocate the FEEM to the Campus till 2021 but this was not done. Now it is planned to complete the relocation in 2025. During the assessment visit meeting, experts learned that academic staff and students are looking forward to relocation hoping to have new, modern, and well-equipped premises. Although the current building is renovated, students are claiming several problems, like lack of a ventilation system in auditoriums, and issues with windows and curtains.

Students complain about the lack of free parking areas around the FEEM and the missing canteen (currently out of order) because to have lunch students should go to canteens in the nearest area.

The building has a sufficient number of auditoriums, offices for administration, 5 laboratories, and sanitary facilities on every floor. Ensured necessary IT equipment (laptops, monitors, printers, projectors, etc.) including modern LCD boards.

Foreign students, visiting lecturers, and university guests can use the renovated RTU student accommodations (located in Kipsala, near the Campus).

Experts had the opportunity to visit the Fire Safety Laboratory and Customs Laboratory. The Fire Safety Laboratory has a fire alarm installation wall (controlling board, different sensors, alarm switches), fire safety water system (sprinkler) simulation equipment, and a special room for different fire trials and tests. Most of the equipment was installed in recent years.

The Customs Laboratory has a number of different tools that customs officers use to identify illegal products in transport. On the day of the visit, a new valuable tool for the Customs Laboratory was demonstrated to the experts.

Despite the Fire Safety Laboratory and Customs Laboratory having been improved, FEEM administration, academic staff, and students claim sufficient support to equip laboratories with solid equipment. As examples were mentioned equipment for testing fire-resisting properties of different materials for the Fire Safety laboratory. Recommended developing some kind of “Laboratory Development Plan” for the next 3-5 years including a list of necessary equipment and needed improvements.

Experts did not visit, but according to SAR, in the building there are also:

- a Creative Laboratory;
- for the needs of Customs and taxes programme students there is a firearm training simulator;

- Customs Consulting Center;
- The Scientific Laboratory of Technogenic Environment Safety;
- Consultative and Training Centre of Technogenic Safety;
- The Economics Research Centre of Innovation;
- Bloomberg Laboratory (at the time of the visit it was not operational due to the lack of funding for licenses).

There is a detailed funding allocation methodology (approved with RTU Rector Order No. 01000-1.1-e/159 from 29.06.2022.) which also includes funding for Scientific projects, the Science Innovation Centre and the Scientific Library.

According to the annex of the SAR “Breakdown of funding between cost items” depending on the study programme, for purchase of books and magazines is assigned 3-4% of the whole budget, but for purchase and modernization of equipment 0-2%. In the Master's study programme “Occupational Safety” and both Bachelor's and Master's study programmes “Administration of Customs and Taxes” the budget for the purchase and modernization of equipment is 0%. Taking into account that during the meetings in assessment visit with academic staff and students was emphasized the need to improve laboratories, RTU should pay attention to this topic and assign some resources for the purchase and modernization of equipment.

Considering the above mentioned, overall RTU ensures necessary infrastructure resources, material, and technical support for the implementation of the study field. Significant effort has been invested to ensure comfortable conditions for the study process, arranging premises and ensuring necessary equipment. Some recommended improvements are identified and described above.

### 1.3.3.

During the assessment visit, experts had the opportunity to visit the Scientific Library on Campus. Very good and well-organized Scientific Library with materials (books, magazines) for each study programme. Also, access to different databases is available for students. Part of the Library is located in a completely new building and part is in an older building. Both buildings are connected. The premises are very comfortable, with a lot of space for students (including outdoor seats and tables). Available workstations with computers, special rooms for individual work, self-service canteen, printing, and scanning service. The library is available for all students on working days and on Saturdays from 10:00 to 15:00. Outside opening hours, students can use the 24-hour reading room.

The only concern, which was mentioned also by students during meetings in the assessment visit - Library is located on the Kipsala campus which is away from the FEEM current building, however, some educational materials are available in the FEEM building as well.

According to the SAR (section 2.3.3), there is an established Library Council and a formal process on how to supplement library collections. Heads of study programmes and researchers have the right to recommend the necessary staff.

The selection of the library collection is wide and sufficient. There are sections for every programme of the study field. The collection is updated regularly, including books from local and foreign authors in different languages.

### 1.3.4.

Developed centralised portal ORTUS which is used by all involved parties - administration, management, academic staff and students. ORTUS functions as a single digital gateway, combining information from all RTU information system components and providing users with an easy-to-use way of accessing the directory of all IT services in one place. Demonstration of the functionality of ORTUS was provided by the director of the study field.

Administration staff and students are ensured with Microsoft Windows and Microsoft Office software. Bachelor and Master study programmes "Administration of Customs and Taxes" students have access to the test environment of several State Revenue Service programmes (EMDAS, EDS, ITVS). To ensure effective implementation of the study process, the Moodle e-learning system is used, where all relevant information is compiled in an automated way (study courses, users, groups, access rights, etc.). Students valued the courses in Moodle and platform ORTUS during the assessment.

Students appreciate that Academic staff upload information related to every course/lecture to the system and it is available for students.

For online distance learning academic staff has options to use Zoom or Microsoft Teams video conferencing platforms.

In terms of quality assurance, a digital student survey system is used, with the help of which the quality control of study courses and study programmes is implemented each semester. Based on the results of quality control, regular measures are taken to improve study programmes and the study process, in general.

During the assessment meetings, the ORTUS portal was mentioned often by all parties and there were no claims regarding functionality or other issues. All academic staff and students were familiar with the portal and relevant platforms. That confirms ORTUS as a completely functional and useful tool for the study process.

#### 1.3.5.

RTU has procedures for attracting qualified teaching staff. Process defined in national legislation (Law on Higher Education and relevant Cabinet Regulations). As well, RTU has developed and approved internal documents for this process. For example: "On the Procedure of Electing Professors and Associate Professors", "On the Procedure Of Electing Assistant Professors, Lecturers and Assistants" (attachments to SAR, available on [www.rtu.lv](http://www.rtu.lv) )

Additional rules for visiting academic staff (RTU internal regulations "Procedure of Involvement and Employment of Visiting Academic Personnel at RTU").

Admittedly the above-mentioned documents and many other relevant documents, are available for the public on RTU's main web page (<https://www.rtu.lv/en/university/documents> ).

The Personnel Department announces a competition for academic staff positions on the RTU website, the Euraxess vacancy portal and at least in one mass media distributed throughout Latvia (SAR p.71).

For the evaluation process, RTU has submitted a number of CVs of academic staff which confirm their qualifications. Some of the lecturers have practical working experience in organisations which are important for these study programmes, like the State Revenue Service (including Customs direction), the State Fire Safety and Rescue Service, and the State Labour Inspection.

Overall in the study field involved academic staff, 35% have a Master's Degree (20 persons) and 65% have a doctorate degree (36 persons).

#### 1.3.6.

At the end of 2018, the Centre for Academic Excellence (teaching and learning centre) was established at RTU to support RTU academic staff (in the areas of pedagogical, intercultural communication and self-development) (SAR 2.3.6.).

Centre for Academic Excellence ensures a lot of different activities for academic staff, including training, experience exchange, and use of IT systems. As well two conferences are organised annually which are dedicated to the modern content of the study courses and modern teaching and learning methods. All the materials are available on the ORTUS system.

Feedback from academic staff and students is collected regularly via surveys and assessment questionnaires.

Every year a contest is held to recognize the best lecturers in several nominations.

The number of lecturers has received many different awards from state bodies (e.g. Cabinet of Ministers, State Revenue Service, State Border Guard, Constitutional Court, Fire Safety and Rescue Service, Riga Municipality Police, different State Ministries, as well different recognitions and awards from foreign countries like USA, Ukraine, Russia, Uzbekistan). It confirms the quality and knowledge of the involved academic staff.

In the employers' surveys (for 2013-2022) they have mainly positive feedback regarding the quality (knowledge) of students, which also confirms the quality of teaching staff.

#### 1.3.7.

RTU has a methodology to evaluate and plan the remuneration and workload for academic, administrative and research work, including project work, taking into account the planned workload for the current reporting period (semester or academic year) and making adjustments for work done in the previous period.

RTU recognizes that in most cases it is impossible to evaluate and define academic and research workload as sometimes it overlaps. That's why in the RTU is no specific separation of academic and research workload, which is determined proportionally for each member of the academic staff on an individual basis, by planning the staff member's workload at the department, as well as taking into account their position, involvement in project implementation, professional competences and experience. (SAR p.81).

During the assessment visit in the meeting with academic staff, they recognised that there are some issues regarding research work. Some recognize they do research work only if time is left after academic work (and it's not often). Some claim too high requirements for research work. However, in the annex "List of the publications, patents, and artistic creations of the teaching staff over the reporting period" there are listed 805 publications since 2015. Some teachers have more than 30 publications (note - many publications are joint work of several persons).

According to the academic staff CVs, some of the academic staff at the same time have positions and work in private companies or state organisations. Some people even have jobs in several private companies simultaneously.

According to the annex "The study field "Internal Security and Civil Protection" involved teaching staff", some teachers teach several courses, some 8-9 and even 14 study courses.

According to the SAR attachment "List of the publications, patents, and artistic creations of the teaching staff over the reporting period" in the period 2015 - 2022 there are 805 publications in this study field. However, in the list, no information about any patent is included.

During the assessment visit academic staff expressed concerns regarding scientific work (to develop articles and publications etc.) as they spend most of the time on the academic part of the work. This points out the need to review and improve funding for scientific/research work. Experts see the possibility that some solutions could be offered with a new financing system.

#### 1.3.8.

RTU has established a "Career Support and Services Department" which provides students with a wide range of career and psychological support services for prospective and current students.

During the assessment visit, current students were sceptical regarding the possibility of receiving psychological support. However, they have not tried to approach specialists assuming it's too busy. Obviously, some more information and encouragement are needed for students.

Since 2014 Kipsala Campus has been working as a "Students Service Centre" which provides some

practical support for students (consultations, print and copy materials, issuing students cards, registering and administrating proposals and complaints).

RTU Student Parliament also provides students with various types of support and consultations, including the rights and interests of foreign students.

The FEEM building (Kalnciema 6) is adapted for students with reduced mobility (access, elevator, facilities). As well, RTU has developed guidelines with recommendations for effective communication and improvement of the study environment for people with disabilities and special needs.

Regarding students from abroad, there is the RTU "International Cooperation and Foreign Students Department" which has academic consultants to consult foreign students on studies and practical issues. Support includes also regular academic seminars which are mandatory. Monitoring of foreign students' study performance is ongoing and in case of problems, students are invited for individual consultations.

Nevertheless, the number of students in almost all programmes decreasing:

- Custom and Tax Administration: from 629 students in 2014 to 302 students in 2021.
- Custom and Tax Administration Master programme: from 93 students in 2017 to 45 students in 2021.
- Fire Safety and Civil Protection: from 67 students in 2017 to 44 students in 2021.
- Safety Engineering: from 65 students in 2017 to 45 students in 2021.

Employers were concerned about it as well and during assessment visit meetings expressed the need for some marketing activities to attract more students as well, as review possibilities to make programmes more attractive.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

However, the budget shows stagnation rather than growth and development in this study field. Funding has been at a similar level for years, same time, study costs have increased, but tuition fees significantly decreased. Potential students do not want to pay for studies, obviously not seeing further benefit to have such professions. One of the reasons could be the current rather low salaries in the profession. At the same time, employers (who participated in the meeting) are claiming a lack of new professionals (from all programmes, including the most important employers State Revenue Service and Fire Safety and Rescue Service).

Identified negative gaps between State-defined optimal cost per student and the really assigned budget.

For purchase of books and magazines is assigned 3-4% of the whole budget but for the purchase and modernization of equipment 0-2%. In the programme Occupational Safety and both programmes Administration of Customs and Taxes the budget for the purchase and modernization of equipment is 0%.

The number of students has decreased in almost all programmes in recent years. In some cases, it's close to or even below the minimum limit according to the "Minimum number of students to ensure profitability of the study programme". For example, the number of students in the Bachelor's study programme "Safety Engineering" and Master's study programme "Occupational Safety" by the study years.

RTU has a methodology on how to evaluate and plan workload balance between different tasks. At the same time:

- some teachers were saying they did not have enough time for research work;
- according to CVs, some teachers have one or more other jobs outside RTU (private or state organisations);
- some teachers have more than 30 publications (2015-2022);
- some teachers teach many study courses (8-9 and even 14 study courses).

Taking into account the above-mentioned, it can be concluded that the need to review and assess

existing methodology ensures sufficient balance between tasks, sufficient workload (as well, as taking into account workload in jobs outside RTU) and sufficient work/life balance to avoid burnout of the people.

Strengths:

- 1) Comprehensive centralised portal ORTUS for all involved parties, where a lot of information and links to different databases are available.
- 2) RTU provides a lot of support activities for academic staff and students.
- 3) Excellent and comfortable Scientific Library in Kipsala Campus.

Weaknesses:

- 1) The transition period from one financing system to the new one can bring various uncertainties.
- 2) Negative gap between state-defined preferable/optimal cost per student and really assigned budget.
- 3) Currently insufficient (or not existing) funding for the purchase and modernization of equipment (according to the annex "Breakdown of funding between cost items").
- 4) Decreasing number of students in the study field in almost all programmes.

## **1.4. Scientific Research and Artistic Creation**

### **Analysis**

#### **1.4.1.**

Section 2.4.1 of the SAR states that the RTU has three main development objectives: quality study process, excellent research, and sustainable innovations. Specifically, about scientific research, it is stated that the academic staff, in carrying out their research, strive for high performance and the valorization of the results obtained, which are subsequently integrated into the teaching process (where possible and appropriate). On this basis, it can be said that there is a link between the academic work of university lecturers and the learning process and that these two objectives are therefore complementary.

In the same section of the SAR, it is stated that the research area covers the following sub-themes:

- improvement and efficiency of customs and tax administration and organization;
- improvement of import, export, and transit control on dual-use items;
- issues related to tax planning and tax control improvement;
- analysis and development of fire and civil protection systems;
- identification of technogenic environment risks.

These research areas are in line with the profile of the study programmes and, although they do not cover them completely and categorically, they show the desire of the lecturers of the study field to implement the results of their scientific research in the educational process.

The academic staff regularly participates in the development of many projects of a scientific and research nature, the results of which contribute both to the enrichment of practice with good ideas and to science. In these scientific studies, special attention is paid to the opportunity for doctoral students to gain not only invaluable experience but also a material base for successfully developing their dissertation and incorporating the results of their research into their future educational activities.

Given the above, it can be assumed that all three objectives of the RTU are covered since the research tested in practice can be successfully implemented in the educational process and reflect the most modern and effective solutions for building safety and security systems.

The results of the scientific research conducted are also used to organize courses and training for practitioners, which enables the transfer of scientific and research knowledge to the sectors of the

national economy and the acquisition of significant added value for those working in the sector, increasing their competitiveness.

Members of the academic staff are regularly involved as experts in practice, enabling the transfer of their knowledge and the results of their research to sectors of the economy in the form of contract work. This is a good way of confirming the usefulness and quality of their work and creates a direct link between theory and practice. The fact that practice knows and accepts their knowledge and skills is a positive sign of the quality of their scientific work.

According to section 2.4.1 of the SAR, the academic staff is quite active in research at the national level, but it would be good to expand the scope of international cooperation in this direction since the university has many partnership agreements that are not being worked on.

Only one of the scientific research projects mentioned in section 2.4.1 of the SAR states that students are involved ("The Prevalence of Undeclared Employment in Latvia and Opportunities to Combat it"), which contradicts the information in section 2.4.5 of the SAR.

Most of the research ends with the presentation of the results in publications, some of which are referenced in global databases such as Scopus and Web of Science. Considering the quality requirements of the materials proposed for publication in these publications, it can be concluded that the research results are important, of great significance for theory and practice, and, due to their international character, can be considered by researchers and practitioners outside Latvia.

RTU assists some foreign universities in developing programmes for training customs officers and improving the training process according to WCO and EC requirements (mainly in Central Asian countries). It would be good if the accumulated knowledge could be shared with the EU Member States, as well as with the Candidate Countries. The European customs legislation is in line with the WCO directives, but it has its peculiarities, which are a challenge for customs administrations and economic operators in the EU.

#### 1.4.2.

According to 2.4.2 of the SAR, the research component of work with students is provided through participation in projects, contract work and conferences, and the preparation of publications. By preparing scientific articles for publication, the academic staff complements the courses with practical examples and calculations, the latest scientific findings, and theories, thereby contributing to a better understanding of the subject matter by the students. In the same section of the SAR, some examples are given that demonstrate the usefulness of research for future specialists in the respective fields.

A comprehensive list of publications can be found in the appendix "List of the publications, patents, and artistic creations of the teaching staff over the reporting period".

Looking at the data in section 2.4.4 of the SAR and in particular Figure 2.4.1 Number of publications per year by Scopus/WoS and other publications, it is clear that a large proportion of them have a high impact factor, which is undeniable proof of their quality. During the assessment visit to RTU, it was confirmed by both lecturers and former and current students that, wherever possible, the results of scientific research are incorporated into the training courses. Incorporating materials from such research into the learning process ensures that there is a constant transfer of up-to-date knowledge from lecturers to students.

#### 1.4.3.

To ensure continuous development, academic staff use various forms of international scientific activity. These include participation in international projects, publication of their results, organization of and participation in international scientific conferences and seminars, and publication of articles in scientific journals indexed in recognized databases (WoS, Scopus) (2.4.2 of the SAR).

International projects include joint research and publications with partners from other universities. Agreements on cooperation in educational and research activities have been signed with several universities, but active cooperation is developing with only some of them.

One of the most important international projects is the BOMCA-9 project (Border Management Programme in Central Asia), where knowledge and research results are used in the implementation of the curriculum of customs and tax administration. In the period of implementation of the project 2015-2020, in the part led by the Institute, 88 different national, regional, and international events were organized with more than 1400 participants. 40 different normative documents were developed, including recommendations, strategic planning documents, etc.

Good contacts are also maintained with practitioners from other countries, which helps to diversify the educational content with good examples and to improve the teaching methodology of the educational courses. The exchange of foreign experiences is very useful for the students, as they can make comparisons between national and foreign practice and thus model strengths and weaknesses in this respect.

A good example is the development of a joint curriculum with the Azerbaijan Customs Academy. This allows students from the Academy to participate in RTUs online lectures, exchange of professors, guest lectures, distance learning opportunities, cooperation within Erasmus+, Jean Monnet programmes, and other initiatives.

By analyzing the participation of academic staff in scientific research, further activities have been identified to increase their effectiveness:

- to increase the number of scientific publications in scientific journals indexed in Scopus and Web of Science databases;
- to promote the publication of scientific articles in co-authorship with foreign academic staff;
- to increase the activity of the academic staff in the implementation of international projects;
- to actively participate in international scientific conferences;
- to diversify the forms of cooperation with international partners and to attract foreign guest lecturers to the study field.

The identification of these activities can be defined as evidence of the vision of the teaching staff for the future development of their scientific activity, with the subsequent implementation of the results in the educational process.

#### 1.4.4.

According to the Decision of RTU Senate No. 649 "On approval of the RTU Regulations "On the Procedure for Election of a Candidate for the Position of Professor or Associate Professor and the Procedure for Assessing the Qualification of an Existing Professor or Associate Professor" in a new edition" as of 26 April 2021, habilitated lecturers are subject to periodic evaluation, one of the main criteria of which is their publication activity and participation in research projects. A similar requirement also exists regarding the possibility for them to supervise doctoral students (decision of RTU Senate No. 602 "On Amendments to RTU Regulation on Doctorate" as of 26 September 2016). The specified requirements represent a significant motive for engaging the teaching staff of RTU with scientific research. However, if lecturers do not meet these requirements, they are downgraded and the university offers them methodological help to improve the relevant problem areas in their work. According to information from the lecturers, such situations are very rare.

A mechanism has been introduced to finance individual faculties according to the results achieved (2.4.4 of the SAR), which is a prerequisite for internal competition and an additional motive for increased activity of lecturers. This mechanism is realized through the Research Support Fund at the RTU.

In 2013, six research platforms were established in RTU's main strategic research areas as a tool to promote interdisciplinary and inter-faculty collaboration of researchers in areas of importance to

industry and society.

According to the SAR section 2.4.4, the effectiveness of these mechanisms can be illustrated by the growth of SCOPUS-indexed publications over the period 2013-2019. The total number of publications increased from around 440 per year in 2013 to 879 in 2021, and the number of SCOPUS publications per researcher, expressed as full-time equivalents (FTE), increased from around 0.9 in 2013 to around 1.7 publications/FTE per year in 2021. This is evidenced by the document "List of the publications, patents, and artistic creations of the teaching staff over the reporting period", which lists all publications by year.

The number of citations of their works is evidence of the quality of the research activities of the teaching staff. However, it must be considered that there is a decrease in citations, from 793 in 2017 to only 122 in 2022. This process is difficult to manage by the professors themselves, but it may be an indicator of a decline in the interest, usefulness, or relevance of their research.

During the assessment visit to the RTU and the discussions with the lecturers, it became clear that the decreasing number of publications and citations is due to two main problems: the specificity of the field of security and the related confidentiality of data and information, and the lack of specialized scientific journals for which reports or articles can be prepared. The lower number of publications and citations leads to a lower h-index of lecturers, which is one of the main criteria for evaluating their scientific work. On the other hand, lecturers are heavily involved in the teaching process and have little time left for science. To improve this situation, RTU tried to attract lecturers from abroad and worked with 5 such lecturers during the evaluation period.

Based on the reported participation of study field lecturers in research projects, it is possible to conclude their activities and their efforts to achieve results with a high added value for science and practice. A detailed list "Summary of quantitative data on scientific activities corresponding to the study field" is presented, which contains detailed information on the activities of the teaching staff.

The teaching staff is actively involved in the supervision and evaluation of doctoral theses and the delivery of the doctoral programme. The supervision of doctoral students is a good practice that has a positive effect on both sides - doctoral students work on their theses with the help of their supervisors, and lecturers are directly involved in their research activities.

#### 1.4.5.

RTU has mechanisms to attract and fund young and talented researchers, undergraduates, and PhD students to participate in multidisciplinary and inter-faculty research projects in collaboration with industry. There are also post-doctoral projects that allow RTU to attract new researchers from abroad and other Latvian research institutions, and to provide academic career opportunities for PhD students who have graduated from RTU. Section 2.4.5 of the SAR describes all these opportunities in detail and presents quantitative and value indicators of their support.

Some of the scientific research and projects involve students (SAR section 2.4.1), and some criteria give additional credit if they involve students at the Bachelor's, Master's, or Doctoral level (SAR section 2.4.5). This is a good approach that ensures the interest of professors to involve more students and thus guarantees a certain competitive advantage in competitions for the funding of research projects. Section 2.4.2 of the SAR states that the research component of work with students is provided through participation in projects, contract work and conferences, and the production of publications.

RTU regularly organizes student scientific and technical conferences, which also encourage students to publish their views on various current issues. This practice is of great benefit to the students, as they are expected to analyze and summarise information that they have become aware of during the learning process, or to look for additional data that can be used to represent a particular process or activity. In this way, it is possible to track students' success in perceiving the learning material and transforming it into knowledge, skills, and competencies.

#### 1.4.6.

Section 2.4.6 of the SAR states that a change from "teaching" to "learning" has been implemented at RTU, which has implications for teaching methodology, with priority being given to the use of interactive and innovative teaching methods. Knowledge generated by research is used in the learning process, while organizational innovation is based on the digitalization of learning courses. A classroom for distance learning in the field of customs and taxation has been created, which allows the training of a larger number of students from Latvia and abroad, as well as the organization of online lectures with guest lecturers or representatives from practice. Several learning laboratories with special equipment have also been built, allowing students to put their theoretical knowledge into practice. This approach is in line with modern learning trends and ensures significantly better performance for today's students (Generation Z).

Several scientific discoveries made by lecturers are implemented in the curricula and become part of the learning process in various disciplines. This can be seen as a guarantee that future professionals will be prepared for the real world and will be able to use the most modern methods and technologies in their work.

In recent years, RTU has invested in new equipment and technologies that ensure the learning process, which has been used in several joint projects and initiatives by lecturers with other universities or institutions.

Training laboratories for fire safety, occupational safety, and customs control have been built and are constantly updated and used for scientific research and exercises. In this way, students can get as close as possible to a real working environment, without leaving the educational process, and learn from both successes and mistakes made when working with the relevant equipment and technologies. However, during the assessment visit to the RTU, the students expressed their desire for more practical training and more intensive use of the laboratories.

It is also worth mentioning the RTU's own Historical Museum of Customs and Taxes, which traces the history of customs and tax activities in Latvia. With the help of the museum, students will acquire a basic knowledge of the peculiarities of the development and technical means used by these two control systems over the years, as well as the stages of their development from the point of view of the socio-economic and political development of society. All of this is of the utmost importance for their understanding of the role and importance of the customs and tax control system in different socio-economic and political systems.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

It is clear from the SAR that the educational process in the study field covers the main goals of the RTU, as the results of the research tested in practice are successfully implemented in the educational process and reflect the most modern and effective solutions for building security and safety systems. Incorporating materials from such research into the learning process ensures that up-to-date knowledge is passed on to students by their lecturers.

The academic staff actively participates in international projects, publishes their results, organizes and participates in international scientific conferences and seminars, and publishes articles in scientific journals indexed in recognized databases (WoS, Scopus), which proves the high level of development of their research activity.

Mechanisms have been developed at RTU to stimulate both teaching staff and students in the University's research activities, both at the national and international levels. However, these processes need to be strengthened as there are areas of weakness.

The RTU has implemented a change in teaching methodology, prioritizing the use of interactive and innovative teaching methods. Investments have been made in new laboratories, equipment, and technologies, which will further contribute to the improvement of the quality of both the scientific

research activity of the lecturers and the training of the students.

Strengths:

- 1) A vision for the implementation of the results of scientific research into practice in the educational process.
- 2) Well-developed international partnership at the level of joint projects, scientific events, and publications.
- 3) Developed mechanisms to motivate teaching staff and students to participate in research activities.
- 4) Orientation towards interactive and innovative learning methods.

Weaknesses:

- 1) Narrow geographical scope of international cooperation in the field of scientific research.
- 2) Existence of research partnership contracts that are not being implemented.
- 3) A relatively small number of students and graduates are involved in scientific research.
- 4) Limited scope of assistance in the development of training programmes for customs officials and improvement of the training process in accordance with WCO and EC requirements (mainly in Central Asian countries).

## Assessment of the requirement [2]

- 1 R2 - Compliance of scientific research and artistic creation with the level of development of scientific research and artistic creation (if applicable)

**Assessment of compliance:** Fully compliant

Despite the presence of some weaknesses, they do not have a significant negative impact on the level of development of scientific research activity in the study field at RTU. There are a number of examples of success in research activities and a drive for improvement, which is why experts consider the requirements to be fully met.

## 1.5. Cooperation and Internationalisation

### Analysis

#### 1.5.1.

The RTU study field regularly cooperates with Latvian state institutions, companies, industry associations, various organizations, and other higher education institutions. In total, the study field has 16 national agreements for cooperation in the field of teaching, improving educational content, scientific research, improving qualifications, providing internships for students, examining theses, organizing joint events, and many others (of these agreements, only 4 are with universities - Annex: "sadarbības\_līgumu\_saraksts\_cooperation\_agreements\_list.pdf"). RTU intends to form consortia with other universities in Latvia in scientific fields, which may also take the form of separate institutes. This will lead to some standardization of education, but it is seen as a good basis for joint scientific projects and study programmes. It should be considered that lecturers have some concerns about this idea, as they will certainly face new difficulties in its implementation.

The main driving force for promoting cooperation and improving study programmes is the Advisory Board of the FEEM, whose purpose is to promote the development of RTU and the FEEM following the University's strategy and the needs of the national economy.

Regarding the partnership with the practice at the national level, it can be said that it is good. RTU has contracts with the government and in some courses, they only train students on behalf of the government. Due to the small labour market for narrow specialists in the field of civil security and

customs, RTU has developed broader programmes to give its graduates a better chance of realization. Due to the lower remuneration in the public sector, most graduates prefer to work in the private sector, which does not meet the expectations and needs of the state authorities in this direction. However, during the assessment visit, it was noted by the employers that 30% of the employees in the Latvian customs and tax administration are RTU graduates, and in the fire brigade 100% of the management bodies have been trained at the university.

Representatives of the practice regularly participate in the development of new or the updating of existing curricula and programmes, which guarantees their relevance and adequacy to the requirements and needs of the labour market. During the assessment visit at the RTU, employers recommended more activity and flexibility in adapting curricula to the current geopolitical and economic situation. They asked for more digital skills, logical thinking, communication, critical and analytical skills, skills to work with specialized software applications, etc. Section 2.5.1. of the SAR (p. 112) gives some examples of cooperation with institutions in Latvia to ensure a high-quality educational process through the provision of lecturers.

The RTU also organizes regular events and conferences where all stakeholders - employers, academic staff, graduates, and current students - can meet. Surveys of graduates and employers are conducted regularly to evaluate the programmes, their knowledge and skills, and their relevance to the labour market. Students also meet potential employers during the RTU Career Days event, where they can meet representatives from various companies in person or virtually to learn about companies of interest and current job opportunities.

Representatives of the academic staff participate in Expert Councils in the practice of national importance, which also provide a link between practice, research, and the learning process. Their participation as experts in practice also has a certain image effect on the University, which should also be considered.

All study programmes include and provide training practice in Latvian public institutions or companies, including the State Revenue Service, the State Fire and Rescue Service (SFRS), industry organizations, and private companies (page 113 of the SAR). During the assessment visit, it was pointed out that most of the practice partners are also budget organizations and cannot help much with material resources, although they try. A good opportunity is the development of joint infrastructure projects, including with European funding. According to the employers, the help is not only measured in technical equipment but also in time, people, and resources allocated to the implementation of learning practices for the students. The opportunity for practical training is extremely beneficial for students, as they can practice the acquired knowledge and skills during the lectures and thus get a better idea of the methods, means, and procedures used to carry out the relevant activities.

A good impression is made by the good organization of the practical training and the rules developed at the RTU in this regard. During the assessment visit meeting with the teaching staff, it was pointed out that there is a problem with the students' practice of English, but although it is difficult, they manage to cope with it through partnerships with international companies in Latvia.

### 1.5.2.

The objectives of the international cooperation of the study field include the promotion and implementation of internationalization activities, including participation in international projects, the presentation of the study field in relevant international professional organizations, as well as the improvement of study programmes following international standards. The total number of concluded international cooperation agreements is 46, of which 24 are exclusively related to Erasmus+ mobility (Annex "sadarbības\_līgumu\_saraksts\_cooperation\_agreements\_list.pdf").

The main areas of international cooperation are identified in section 2.5.2 of the SAR:

1. Improvement of the RTU study process, achievement of the aims and learning outcomes based on the latest international regulations, and examples of good practice in the world.

2. Active participation in the development and improvement of customs education in the world and the European Union, as well as assistance to higher education institutions and customs training centers of other countries, improvement of study programmes and teaching methods to ensure the implementation of occupational and educational standards of the European Union and World Customs Organization and improvement of border security.

3. Cooperation with universities, institutions, and organizations to strengthen cooperation in the field of internal security in the Baltic Sea Region.

In the same section of the SAR (page 118), the main selection criteria and methods for attracting partners for international cooperation are presented. They can be defined as diverse and sufficiently motivated, which is a good prerequisite for high partnership efficiency and sustainability in terms of future joint activities and initiatives.

There is a strong emphasis on international cooperation in the field of Customs activities, which is understandable given their international nature. The University has a partnership with the World Customs Organisation (WCO) within the framework of the PICARD programme, with DG TAXUD of the European Commission, with the International Network of Customs Universities (INCUI), and with other foreign universities. Bachelor's and Master's degree programmes in Customs are certified by the WCO and DG TAXUD, which is proof of the high level of compliance with the requirements of the customs profession at the world and European levels. At the same time, both lecturers and practitioners noted that the accreditation of customs programmes is used primarily for image purposes, especially for recruiting foreign students. Their main aim is to attract a group of foreign students to study in English. Due to the specificity of the issue, it should be considered that the focus of the training should be different since the recognition by the WCO allows them to recruit students from a wider range of countries, whereas the recognition by the European Commission implies the attraction of students from EU Member States. At the same time, due to the small market for customs specialists in Latvia, they want to open to foreign students and become a training center for such specialists in Eastern Europe. Despite this indisputable success for the RTU, its benefits from international cooperation are mainly image-based and are not being used to the full to strengthen the university's international relations.

However, it is clear from the examples presented in SAR that the geographical scope of this cooperation is mainly outside the EU Member States. The available expert, scientific, and educational potential of the RTU in the field of Customs is mainly directed towards the countries of Central Asia, Ukraine, Switzerland, and even Africa (page 124 of the SAR), while real partnership relations with representatives of EU Member States and Candidate Countries are few.

Concerning the other directions of the study field "Internal Security and Civil Protection", an international partnership develops mainly in the form of participation in joint projects and conferences with other universities from countries in the Baltic Sea region. The SAR (p. 123) gives several examples of this, with the focus of these activities being on improving the learning process, increasing knowledge and understanding of different national contexts, exchange of lecturers, etc. The general impression is that areas such as fire safety, civil protection, security, etc. are not sufficiently represented in the international cooperation of the RTUs and related joint activities and initiatives.

### 1.5.3.

RTU uses a multifaceted communication strategy to attract lecturers and students from abroad, including various marketing approaches, suitable partners and even opening its own information and study centers in certain countries. This largely ensures an adequate presence of the university on the international market of educational services and makes its educational products recognizable outside Latvia. However, section 2.5.3 of the SAR provides data showing a trend towards a decreasing number of newly enrolled students in the first year (p. 126) - from 20 newly enrolled

foreign students in the academic year 2014/2015 to only 3 newly enrolled foreign students in the academic year 2021/2022.

The participation of international exchange students in the “FEEM Erasmus+ Module” training courses organized by the RTU makes a good impression, as during the reporting period almost 2120 full-time foreign students participated in various courses of the specialization programmes.

Student exchange opportunities under the Erasmus+ programme are intensively used, despite the difficulties reported in the SAR about the specific requirements of the regulatory framework of the Republic of Latvia regarding the specialization of the study field “Internal Security and Civil Protection” (page 127 of the SAR). However, opportunities for student mobility are sought and found at the University, both through Erasmus+ and during the implementation of various projects. During the meetings with the students at the RTU, one of the main problems regarding the outgoing mobility of the students was pointed out, namely that they do not want to be separated from the educational process for 6 months and prefer shorter mobility if possible (for example, one week). At the same time, this process is further complicated by the fact that, despite a large number of agreements under the Erasmus+ programme, it is difficult to achieve mobility in similar bachelor programmes at partner universities. In addition, civil defense students cannot go on an outgoing Erasmus+ exchange, as they work in the fire brigade and cannot be absent for a long time.

Detailed information on student mobility can be found in the Annex “Statistics on Student Outgoing and Incoming Mobility in the Study Field”. During the reporting period, 33 students participated in outgoing mobility (mostly to EU countries). Only 9 foreign students were reported for incoming mobility, which was released in the fall semester of 2015/2016 exclusively in the Study Course “Taxes and Duties”.

Within the framework of the Erasmus+ programme, students from 5 programmes undertook practical placements in different companies and organizations abroad, which should be seen as a positive aspect as it allows students to access a variety of real working environments during their studies.

During the reporting period, there was intensive outgoing mobility of teaching staff, with a total of almost 100 Erasmus+ events and more than 100 different other events not related to the Erasmus+ programme and funding. The participation of academic staff in this form of international cooperation has a positive impact on their scientific research and the educational process, helping to improve its quality. It also improves the recognition of not only the lecturers but also the University and its educational products abroad. In addition, more than 100 different exchanges under the Erasmus+ programme (training + teaching) by academic staff and employees of the study field were reported (Annex “Incoming Outgoing Staff Mobility”).

During the reporting period, a total of 5 full-time academic staff from abroad were recruited to the FEEM, increasing teaching capacity and opportunities to incorporate foreign experience into the educational process. Nearly 50 academic staff and experts from foreign universities and organizations visited RTU within the Erasmus+ programme, which is an indication of the recognition and appreciation of the University by the international educational community.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

RTU regularly cooperates with state institutions, companies, industry associations, various organizations and other higher education institutions in Latvia and abroad. In total, RTU has 62 national and international cooperation agreements in the field of teaching, improving study content, scientific research, improving qualifications, providing internships for students, examining theses, organising joint events and others. The RTU uses a variety of selection criteria and methods to attract national and foreign partners and students.

There is a strong emphasis on international cooperation in the field of customs activities, which is understandable given its international nature. About the other directions in the study field, the

international partnership develops mainly in the form of participation in joint projects and conferences with other universities from countries in the Baltic Sea region.

Student exchange under the Erasmus+ programme is intensively used, with outgoing mobility being more than three times higher than incoming mobility. In terms of teaching and academic staff, both incoming and outgoing mobility are well organized, which has a positive impact on both research and the learning process at RTU.

Strengths:

- 1) A wide range of national and international partners.
- 2) A clear strategy and vision in terms of selection criteria and methods for attracting foreign partners, students and lecturers.
- 3) A high level of international recognition of training and scientific research in the field of customs activities.
- 4) Use of student and teaching staff exchange opportunities under the Erasmus+ programme, including in the form of internships for students.

Weaknesses:

- 1) Limited geographical scope of international cooperation with a focus on a small number of Central Asian countries.
- 2) Weakly developed international cooperation in areas such as fire protection, civil defence, security, etc.
- 3) A decreasing number of newly admitted foreign students in their first year of study.
- 4) Low interest in incoming student mobility under the Erasmus+ programme.

### **Assessment of the requirement [3]**

- 1 R3 - The cooperation implemented within the study field with various Latvian and foreign organizations ensures the achievement of the aims of the study field.

**Assessment of compliance:** Fully compliant

RTU's efforts to build a network of national and international partners are undeniable, especially in the field of customs and taxation. The study field has many active partners, aligning with RTU's goals. RTU has made efforts to increase activities in foreign cooperation and student mobility. However, the pandemic period and the subsequent war in Ukraine disrupted collaboration with several partners. As these impacts were due to force majeure, the experts consider the proposal to have been taken into account and implemented to the extent possible. Looking to the future, there is still a recommendation to continue increasing mobility and expanding the network of foreign partners.

## **1.6. Implementation of the Recommendations Received During the Previous Assessment Procedures**

### **Analysis**

#### 1.6.1.

The study field "Internal Security and Civil Protection" received accreditation on June 5, 2013, according to decisions by the Study Accreditation Commission. According to the provided documentation, the International Business and Customs Institute of RTU was specifically praised for its excellent performance in international research and leadership in projects related to customs education development in the EU and globally. Graduates from RTU programmes were highly

regarded for their professionalism and preparation for work, with noted high competitiveness in the labour market. The experts highlighted the institute's significant role in educating customs staff, especially during Latvia's EU joining process. Overall, RTU's influence on the development of customs studies in the EU was positively acknowledged in the experts' report. In brief, the study field received quite general recommendations, and RTU has mostly fulfilled these suggestions.

The study field "Internal Security and Civil Protection" experienced changes solely in the professional master's study programme "Customs and Tax Administration" during the reporting period. These changes, approved through decision No.23.A by the Study Accreditation Commission on August 25, 2016, received support and positive evaluation in the expert's conclusion. No additional recommendations were provided.

The progress and evaluation of recommendations for the study field are as follows:

- To continue developing the SP (Study programmes in the Field: Civil and Military Defence) according to the international market tendencies.

The study programmes in the field were updated to align with international market trends, incorporating changes in line with World Customs Organization standards and European Commission requirements. The recommendation can be considered complete, however, to stay compliant, further development plans are needed, for example, clarity on the future regarding English language study mode.

- To focus on the courses that are important for businesses (logistics, transportation, marketing, accounting, tax compliance, IT systems for businesses, safety at work, etc.).

Emphasis was placed on the integration of courses essential for businesses, such as logistics, marketing, accounting, and safety at work. European Commission experts recognized RTU study courses regarding this topic. The recommendation can be considered complete.

- To invite more guest lecturers, especially foreign experts.

Efforts were made to increase the involvement of guest lecturers, particularly foreign experts, resulting in a significant rise in the number of international guest professors. Collaboration with experts in supply chain security and global trade, as well as participation in international projects like NEEDS and BOMCA, enriched the study experience. During the reporting period, 55 international guest lecturers participated in the study process. The recommendation can be considered completed, however recommendation is to continue current and seek ways on how to attract more guest lecturers.

- To continue investing in the development of the qualification of the academic staff as well as encourage them to participate in foreign exchange programmes or international projects.

Investment in the continuous development of academic staff qualifications was prioritized, with all staff members completing 160 hours of in-service training. However, only a select number of staff members actively participate in mobility programmes. The recommendation can be considered only partially fulfilled.

- To encourage students to take part in international exchange programmes.

During the reporting period, 32 students participated in the ERASMUS+ study exchange programme and 5 students in the Erasmus+ Traineeship mobility programme. Students have participated in other international projects. However the number of students who have participated in mobility opportunities is relatively low, therefore the institution should seek ways to increase this number. The recommendation can be considered complete as students apparently have been encouraged to take part in exchange programmes, however further action is expected to continue increasing the number of outbound students.

- To develop more online courses.

During the on-site demonstration, e-learning resources - particularly for Customs and Tax programmes - were in good order, however, there is still room for improvement for select study courses which feature a weak development level of e-learning. The recommendation can be considered only partially fulfilled.

Recommendations for the Professional Master's Study Programme "Administration of Customs and Taxes" are as follows:

- The admissions requirements for the first variant of the Professional Master's Study Programme "Administration of Customs and Taxes" should be formulated as follows: "professional Bachelor's degree in administration of customs and taxes, or an equivalent four-year professional education"  
Necessary changes were made. The recommendation can be considered complete.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

Overall, the study field received general recommendations, most of which were addressed by RTU. While commendable progress was made, areas such as increasing student and staff participation in mobility programmes and further developing e-learning resources require ongoing attention for fuller fulfilment of recommendations. In summary, RTU has made substantial strides in aligning its programmes with international standards and responding positively to accreditation recommendations, with some specific areas warranting continuous enhancement.

Strengths:

- 1) Customs and Tax programmes are well adjusted to market and industry needs.
- 2) Significant number of guest lectures.

Weaknesses:

- 1) There are still instances where E-learning resources are not sufficiently developed.
- 2) Staff and student mobility is at relatively low levels.

### **Assessment of the requirement [4]**

- 1 R4 - Elimination of deficiencies and shortcomings identified in the previous assessment of the study field, if any, or implementation of the recommendations provided.

**Assessment of compliance:** Fully compliant

While there have been some noted shortcomings in implementing recommendations, the study field has shown its capability to address the issues raised during previous evaluation procedures. Continuous efforts are still expected, but overall, the study field is now largely in full compliance with the implementation of previous recommendations.

## **1.7. Recommendations for the Study Field**

### **Short-term recommendations**

- |   |
|---|
| 1) Provide more information to employees regarding transformation processes in RTU.   |
| 2) Embrace Generative AI in the study process and apply measures to detect AI-generated texts.  |
| 3) Review the communication of changes based on feedback to ensure that all parties (students, graduates, employers etc) understand the value of their contribution and impact on the development of RTU.   |
| 4) Promote programmes under the study field to have more students (including foreign students), but at the same time analyze more comprehensively the dropout reasons, including the connection between dropouts and information provided before the studies, between teaching staff, the content of studies, etc, to find out opportunities to increase the number of graduates. |

5) Increase the mobility of incoming students as well as students and teaching staff in all directions under the Erasmus+ programme by at least 50%.

6) Extend the geographical scope of international cooperation in EU Member States and Candidate Countries, as well as strengthen the partnership in scientific research within the framework of the contracts already concluded with foreign partners.

### **Long-term recommendations**

1) Perform a comprehensive financial audit (a few years after the implementation of the new financial system) to evaluate the impact of the new financial system (including the impact of the identified negative gap between State-defined preferable/optimal cost per student and really assigned budget).

2) Identify priority equipment and software needs of the laboratories, craft a clear, strategic proposal for the necessary modernization of equipment, and actively pursue alternative funding sources such as grants, partnerships, and alumni donations specifically for this purpose.

3) Continue to expand and strengthen the scope of international cooperation in the field of scientific research, including the partner universities (based on the certification by the WCO and DG TAXUD) in the field of customs as well as in the field of fire safety, civil protection, security, etc.

4) Increase the interest of students and graduates in participating in scientific research, e.g. by offering bonuses in the assessment of exams, motivation and mentoring, awarding certificates and small material prizes, etc.

5) Increase the number of newly enrolled foreign students at least in a size that allows the formation of a separate group (6-10 students).

6) Further develop e-learning resources and establish a sufficient base-line minimum for all study courses.

## **II - "Administration of Customs and Taxes" ASSESSMENT**

### **II - "Administration of Customs and Taxes" ASSESSMENT**

#### **2.1. Indicators Describing the Study Programme**

##### **Analysis**

###### **2.1.1.**

The professional bachelor study programme "Administration of Customs and Taxes" (42861) (hereinafter PBA SP "Administration of Customs and Taxes") is developed in accordance with the requirements of the study field "Internal Security and Civil Protection" and in compliance with the sector-specific regulatory framework, the relevant education standard and the qualification is provided in Appendix 6 "Annex6\_Compliance with the national education standard\_.pdf" and 7 "Annex 7\_Compliance of the Bachelor programme for professional standart\_.pdf" of the SAR.

###### **2.1.2.**

The PBA SP "Administration of Customs and Taxes" aligns directly with the objectives of providing

multi-level education in public security areas like national border security and economic security. It prepares individuals for roles in customs and tax administration, corresponding to the "Internal Security and Civil Defense" field. The PBA SP "Administration of Customs and Taxes" aims to offer theoretical knowledge and practical skills for professional competence at the level of a professional bachelor's education. Programme is divided into two sub-programmes -

[1] Sub-programme "Administration of Taxes" focuses on analyzing tax flows, forecasting revenue, managing taxpayer accounts, and addressing tax-related matters. Graduates receive a Professional Bachelor's Degree in Administration of Customs and Taxes with professional qualification as a "Tax Economist."

[2] Sub-programme "Administration of Customs" concentrates on customs clearance processes, risk management, and international trade law. Graduates receive a Professional Bachelor's Degree in Administration of Customs and Taxes, with qualifications as a "Functional Manager of Customs Administration"

Tasks within the PBA SP "Administration of Customs and Taxes" are defined to achieve the goal and produce specialists with competencies outlined in professional standards. Students gain theoretical and practical preparation, enabling them to analyze economic patterns, interpret and apply legislation, and perform various tasks related to customs and tax administration.

Both sub-programmes emphasize the importance of internal security, border security, and effective payment administration in customs and taxation. Courses tailored to each specialization, such as "Customs Processes and Procedures" and "Tax Control and Risks," ensure students acquire relevant competencies. Customized practical placement programmes are developed for both sub-programmes.

PBA SP "Administration of Customs and Taxes" application is for both Latvian and English language modes. The PBA SP "Administration of Customs and Taxes" is currently available in Latvian, with plans to open enrollment for the English language option in the future. Although only the Latvian mode is currently implemented, the programme possesses the necessary capacity and competencies to be conducted in English. Also, the implemented part-time mode is fully functional and achieves its intended goals.

The PBA SP "Administration of Customs and Taxes" has a scope of 160 CP (240 ECTS) with a study duration of 4 years for full-time studies and 5 years for part-time extramural studies.

The PBA SP "Administration of Customs and Taxes" corresponds to the education classification code 42861, with the last three numbers (861) standing for Protection of persons and property, it sets 861 09 "Administration of Customs and Taxes" according to the classification of Latvian education (Cabinet 322), which can be accessed here: <https://likumi.lv/ta/id/291524-noteikumi-par-latvijas-izglitibas-klasifikaciju> (only in Latvian).

Enrollment in the PBA SP "Administration of Customs and Taxes" necessitates a background in secondary or professional secondary education. The admission process for full-time undergraduate programs, specifically for state-funded positions, is competitive and determined by performance in centralized examinations (CE). Prospective students applying to the programme are required to take two CEs, covering mathematics, physics, a foreign language (English, German, or French), and the Latvian language.

The title, code, degree, and professional qualification of the PBA SP "Administration of Customs and Taxes", aims, objectives, learning outcomes, and admission requirements are interrelated.

### 2.1.3.

PBA SP "Administration of Customs and Taxes" received approval on December 15, 2003, and international accreditation from the World Customs Organisation in 2010, confirming compliance with international customs standards. National accreditation in 2013 was extended until June 2024. In 2021, the programme earned a Certificate of Recognition from the European Commission,

aligning with the EU Customs Competence Framework, developed collaboratively with experts from EU countries and based on WCO and international recommendations. Regular updates, informed by labour market research, employer consultations, and input from alumni, students, and international organizations, ensure the programme stays relevant. Changes in 2013-2023 included adapting to new standards and updating study plans, curricula, internships, and these regulations. Collaboration with WCO led to changes in the customs officer's occupational standard. A new standard, "Functional Manager of Customs Administration", was developed in 2022. A similar improvement was made in the field of taxation for the "Tax Economist" qualification in 2019.

No fundamental changes to PBA SP "Administration of Customs and Taxes" indicators were made. All other changes and improvements are justified.

#### 2.1.4.

As of now there are in total 302 students in the PBA SP "Administration of Customs and Taxes". 207 are self-funded students, 95 are state-funded. 185 full-time and 117 part-time. (Annex. "5pielikums\_Statistikas dati par studejošiem.pdf")The higher number of students in both full-time and part-time studies is observed in the customs field, which accounts on average for 68% of the total number of students, and in the tax field for 32% of the total number of students.

The number of fee-paying students is gradually decreasing. Tuition fees for full-time studies have increased annually since 2017/2018. Examining 1st-year students in state-budget-funded places, the number fluctuates based on previous graduates and state allocations. The number of fee-paying students has consistently declined, largely due to tuition fee hikes. Part-time extramural studies have shown relative stability, but a recent decrease is linked to economic and geopolitical instability. Over the past three years, both full-time and part-time student enrollments have decreased due to rising tuition fees, creating financial concerns and reluctance to take on credit commitments.

The highest dropout rates are observed in the first two years. As of now, the dropout rate is on average 7.6% of the total number of students. Reasons for dropout include academic difficulties, particularly in maths and sciences. Employment, especially in the 2nd and 3rd years, is another significant reason for dropout, as students struggle to balance work and studies. PBA SP "Administration of Customs and Taxes" given its curriculum, aims and goals are economically justified. Trends of student numbers are at healthy levels, however with a negative trend over the year.

2.1.5. The development and implementation of the joint study programme is justified and ensures a quality study process (if applicable).

N/A

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

The PBA SP "Administration of Customs and Taxes" aligns with the "Internal Security and Civil Protection" field, providing theoretical and practical education in customs and tax administration. Graduates receive a Professional Bachelor's Degree in Administration of Customs and Taxes and professional qualification as a "Functional Manager of Customs Administration" or "Tax Economist." The PBA SP "Administration of Customs and Taxes", currently available in Latvian, plans to offer an English option and has a functional part-time mode. Reasons for dropout include academic challenges and employment conflicts. Despite a negative student number trend, the programme is deemed economically justified based on its curriculum and goals.

Strengths:

- 1) The PBA SP “Administration of Customs and Taxes” complies with all the related regulations.
- 2) Graduates of the PBA SP “Administration of Customs and Taxes” have good employability opportunities.
- 3) The State is funding a definite number of study places in the PBA SP “Administration of Customs and Taxes”.
- 4) Two sub-programmes to meet the needs of students.
- 5) WCO and EC certification.
- 6) Close cooperation with the industry.

Weaknesses:

- 1) an Insufficient number of state budget-funded places in the PBA SP “Administration of Customs and Taxes”.
- 2) Annually growing tuition fee.
- 3) Relatively high dropout rates in the study programme.

## **2.2. The Content of Studies and Implementation Thereof**

### **Analysis**

#### 2.2.1.

The PBA SP “Administration of Customs and Taxes” aligns with its objectives to deliver practical, professional education attuned to market and societal needs, rooted in scientific principles. It encompasses a curriculum that meets the Latvian Framework for Education Classification's 6th Level, offering a comprehensive suite of knowledge, skills, and competencies. To meet the needs of students there are two sub-programmes available: “Administration of Taxes” or “Administration of Customs”, which allows occupying appropriate positions of the functional manager of customs administration authorities or tax economist and provides opportunities for further studies. Key components include academic courses (economics, management, law and humanities, etc. through lectures, practical classes, laboratory work, and independent works), an external internship, and a state examination culminating in the creation and defense of a Bachelor Thesis.

Detailed comparison is provided in the PBA SP “Administration of Customs and Taxes” annexes between:

- "Regulations on the state standard of professional higher education" (Regulations of 21.06.2023 No. 305 requirements) and study programme "Administration of Customs and Taxes" (see annex: “Annex6\_Compliance with the national education standard\_.pdf”);
- Knowledge necessary for performing the basic tasks of professional activity professional knowledge and competence according to the professional standard of the functional manager of customs administration and relevant study courses in the study programme "Administration of Customs and Taxes" (see annex: “Annex 7\_Compliance of the Bachelor programme for professional standart\_.pdf”);
- Sector-specific regulatory framework and study courses of study programmes “Administration of Customs and Taxes” (see annex: “Annex\_Compliance of the Professional Bachelor study programme with the sector-specific regulatory framework\_.pdf”).

The current students, graduates, and employers all confirmed that the PBA SP “Administration of Customs and Taxes” is up-to-date and the content is relevant. They found education to be highly necessary and employers would even like to have more graduates than the university can produce. Students expressed high valuation about teaching staff (including guest lecturers) as well as the study visits and the study content itself. However, some remarks also were made about the desire to have even more practical activities, and some proposals were given to have longer internships

instead of some courses they thought were unnecessary.

During the assessment visit, one focus of the discussion with employers was on identifying areas for improvement in the study field. While the employers expressed their satisfaction with the knowledge and skills of the graduates, they also acknowledged the need for further development concerning current global events and their impact on security and civil protection. This is also highlighted in SAR section 3.2.1 which states that the courses are designed to address the most relevant issues in the sector, considering the role of the customs and tax system in society and the economy, the objectives and functions of the customs and tax administration, and changes in the external environment. Events such as BREXIT, the COVID-19 pandemic, terrorist activities, the international migrant crisis, and wars in different regions of the world necessitate a reassessment of customs priorities, improvement in customs control methods, development of new cooperation methods, IT solutions, and process organization models. Furthermore, changes in sector-related issues require the updating of existing courses and the introduction of new ones. This indicates that there is a similarity in understanding, but the main issue that emerged is the time factor. Employers expressed the need to integrate the necessary (mostly sensitive information regarding security issues) information regarding globally impactful events into education at a faster pace in a manner that strengthens internal security without compromising it. At the same time, it was clearly recognized that the accessibility of relevant, up-to-date information on a short-term basis is not only a university matter, but the state service also has a role to play in ensuring the timely acquisition of necessary information.

Connected to the aforementioned topic, employers also highlighted the need for a greater emphasis on teaching critical thinking, communication, and analytical skills, which are equally relevant to the security situation. This is necessary to better recognize relevant information, draw conclusions from it, and effectively communicate it.

Overall a strong impression remained from several discussions which reflected the high level of satisfaction with the studies from students, graduates as well as employers. All target groups confirmed the topicality of the study programme as well as the learning outcomes that meet the needs of the industry. In addition, the same result is shown in the surveys, which according to the SAR is one of the cornerstones of course content evaluation. For example, the course "Risk Management of Customs" which is described in the SAR as one of the courses which have been improved with several field trips to provide students with more opportunities to acquire practical skills, also was the most named course as one of the favorite courses so far. Feedback about the students they meet during the internship and/or after graduation was the same during the assessment visit as well as it is written in the SAR section 3.2.1 "Employers also praise the attitude of the students, saying they are very thorough, work well in teams, are independent and have a sense of responsibility".

It confirms that the feedback from the students, graduates as well as employers has been analyzed and improvements have been considered. This is a good example of how the quality management system has been implemented in the FEEM and continuous improvements have been made. Nevertheless, while listening to various stakeholders, some untapped opportunities became apparent. On one hand, it was evident that the university aspires to become an EU education center in the Baltic region. However, concerns were raised about the underutilization of paid positions due to the increase in tuition fees, as it was emphasized that the field of study as a whole is not something to "sell," but rather it is important for security and the state. Experts see an opportunity here to capitalize on the university's strengths and recognized curriculum by marketing it not only domestically but also internationally, which would be a good first step towards becoming an EU training center.

## 2.2.2.

N/A

### 2.2.3.

Reflection from the students during the assessment visit confirmed that most of the teaching staff is using different methods and puts an effort to change the teaching more for the learning approach. One indicator for that is described in the SAR section 3.2.3. as the basic principle of the PBA SP "Administration of Customs and Taxes", which is democracy and dialogue with students, and their active involvement in the improvement of the study process. Relations between students, teaching staff, and administration are definitely the strength of the study field, which was also reflected very well during the assessment visit. It was described by the students that if they have any kind of questions, problems, or suggestions they first communicate with the teaching staff and mostly they get the solution, only one exception was where the official complaint form was used.

A detailed overview is given in the SAR section 3.2.3, where several methods are named, such as seminars, discussions, solving situations and practical tasks, individual and group work, including research work, visits to companies and field trips, internships, guest lectures by representatives of employers and also the role plays are used in some courses where it gives the better outcome (as an example the course "Model of Functioning of the Customs and Tax Administration" is described in the SAR). During the assessment visit, the teaching staff showed high motivation and gave several examples from their teaching experiences as well as they felt support and encouragement from their supervisors so far. However, the structure of the FEEM was changed a few weeks before the assessment visit and some uncertainty about the future was expressed as it was understood that the supervision system would be different. However, the teaching staff was open-minded and optimistic, but also slightly worried, which is an adequate and normal reflection of the change processes.

Several very well-implemented study courses were demonstrated in the e-platform Moodle where the H5P was integrated, but it was admitted that a considerable amount of courses are still at the basic level and could be developed. However the students valued the courses in Moodle and platform ORTUS during the assessment visit, they also highlighted the wish to have more practical studies as well as the guest lecturers who could be involved more as they connected the theoretical studies very well with practical examples.

Student participation in short-term mobility programmes indicated high satisfaction, though overall engagement with these opportunities was low. This indicates a need for strategies to boost involvement in mobility programmes, which could significantly enhance the overall educational experience.

As a big generalization of pointing out results of the PBA SP "Administration of Customs and Taxes", the keywords could be: summarise, analyze, interpret, use of information, communication, research, innovation, problem-solving, and social dialogue. The conclusion could be made that according to the examples which have been provided in the SAR as well as during the assessment visit the teaching and learning is not only activity in the classroom, but is an ongoing process during the study period. For example, the way teaching staff communicates with the students and with each other gives a better example of how to communicate with colleagues in the future and solve problems than any theoretical study course can provide.

According to the PBA SP "Administration of Customs and Taxes", the studies are also implemented in English. However, during the assessment visit, it was clarified that there haven't been implementations in English yet, but the goal is to open it in September 2024. Section 3.2.3. in the SAR declares that no different approach is provided for the implementation of the study programme in English, but it should be noted that the programme implemented in English provides a study course for the acquisition of the Latvian language, as well as the implementation of the internship is ensured in English. The preparation of the employers to host an internship in English was asked

during the assessment visit and it turned out that they were not only ready to host, but they were expecting foreign students as a lot of the companies are active in several countries.

In conclusion, the findings from the assessment visit reveal a commitment from FEEM to a student-centered learning approach, a core tenet of the programme that emphasizes active student engagement and democracy. Positive relationships between students, staff, and administration are a noted strength. While digital learning platforms like Moodle show promise, further enhancement of course materials is needed. Students seek more practical learning and the integration of additional guest lecturers. Although short-term mobility programmes yield high satisfaction, participation rates suggest the necessity for increased promotional efforts. Plans to offer the PBA SP “Administration of Customs and Taxes” in English by September 2024 are welcomed, with employers ready to support internships in English for international students.

#### 2.2.4.

The tasks of the practical placement are closely related to the PBA SP “Administration of Customs and Taxes” outcomes and the requirements of the professional standard and the practical placement is a compulsory component of the study programme (its scope is 20 CP/30 ECTS). The importance of the internship emerged also during the assessment visit, as several examples were given by students of how they understood the relevance of several study subjects only when they got the internship experience which gave them an understanding of their future work.

RTU has established a regulation “On the Procedure for Organising Internship at Riga Technical University” (approved at the RTU Senate meeting on 28 January 2019, protocol No 626). The main concept is that the internship procedure is the cooperation between FEEM, students, and employer, who should evaluate the possibility of achievement of the learning outcomes, appoint the supervisor, and sign the tripartite agreement.

There are three main concept points highlighted in the SAR section 3.2.4:

1) Students are provided with Practical Placement both at the State Revenue Service (for both customs and taxation) and in companies.

2) Part-time students are allowed to undertake a Practical Placement at their place of work in cases where the workplace can support the study programme.

3) Where the student has relevant work experience in customs and/or taxation, the possibility is granted to count work in a company or institution as a Practical Placement. In this case, a commission is set up to assess whether the work experience meets the objectives of the internship.

The aim of the practical placement is described in the SAR as well as the examples of the feedback from the employers from the different organisations, which is relatively positive about the knowledge and skills of the students. Feedback is collected at the end of the practical placement when the students are obligated to prepare and defend the practical placement report where one part is also the feedback from the company.

According to the SAR section 3.2.4. the PBA SP “Administration of Customs and Taxes” in English will provide opportunities to organize Practical Placement in workplaces where the language of communication will be English, because, for example, the administration of customs affairs is closely related to international trade, which in turn is unthinkable without communication skills in English, however, there is lack of the international students in this area.

The conclusion could be made that the process of internship is a collaborative effort between FEEM, students, and employers, governed by RTUs regulations. Positive outcomes are evidenced by employer feedback and the programme anticipates further enhancing its international relevance by offering placements in English-speaking environments.

#### 2.2.5.

N/A

#### 2.2.6.

At the end of the PBA SP “Administration of Customs and Taxes”, students are required to produce a Bachelor Thesis on a topical issue in the administration of customs or administration of taxes, and the Bachelor Thesis is publicly defended at the State Examination Commission. Learning outcomes that are evaluated are research skills, working with literature and internet sources as well as the ability to find the relevant topic in the field. The final thesis should follow the instructions which are described in the guidelines produced for the study field. (SAR section 3.2.6)

The final theses were appreciated by the employers during the assessment visit, which confirms the interest of the employers and relevance for the field. It was noted that most of the students were already employed in their final course years, which, on one hand, required balancing studies with professional responsibilities, but on the other, offered the opportunity to investigate aspects significant to their employer's operations or the industry at large. Consequently, most of the theses produced have substantial value to the employers and contribute added value to the field overall.

It should be noted that the support during the studies is well maintained by the RTU, students are involved in several research activities as well as student conferences are organized where students can present their findings. Also, some opportunities are offered to participate in international conferences and workshops.

Some examples of topics of the final thesis are provided in the SAR section 3.2.6 which have the highest rating of 10 (outstanding) and awarded to Bachelor Theses that included in-depth research going beyond the requirements of a Bachelor Thesis. Some of these are: "Analysis of the examination of goods samples and related processes in the Customs laboratory", "Risk analysis of international supply chains in the company "Do it", "Optimisation of the application of customs procedures in the company", "Evaluation of the implementation of the ATA carnet online system" etc.

Based on the assessment, it can be concluded that the final theses topics chosen by students are relevant to the field of study and demonstrate a high level of quality. This confirms that the students have successfully achieved the desired study outcomes and are in alignment with the study programme. The SAR outlines the comprehensive support provided to students throughout their studies, including various study courses and internships that are integrated into the final thesis process.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

In conclusion, it can be said that the curriculum holds significance on both a national and international scale, satisfying the expectations of students, graduates, and employers in its structure and content. The FEEM members are highly esteemed, and the teaching methods effectively support the achievement of learning outcomes. However, there are also some areas for further development to consider. Students express a desire for greater practical orientation in their studies and guest lecturers who can effectively bridge theoretical knowledge with practical applications. Employers expect graduates to possess enhanced analytical, critical thinking, and communication skills to navigate complex global events, extract relevant information, and apply it accordingly. Additionally, to realise its ambition of becoming the primary EU training centre in the Baltic region, the university needs to engage in boulder marketing efforts and exude confidence. Contrary to some opinions heard, experts affirm that security-related topics are currently in focus and have a market appeal. Students themselves also confirmed that when choosing their field of study, they sought uniqueness and reputation in the curriculum.

Strengths:

- 1) Unique study programme with international recognition.
- 2) Well-regulated processes as well as the quality management system which supports the implementation and development of the study programmes.
- 3) Highly motivated students and teaching staff with democratic relations.
- 4) Highly valued graduates by employers, as well as the high suggestion index by employers.
- 5) Good cooperation with employers, which ensures practical placement possibilities, career opportunities, research topics etc.
- 6) Opportunities to participate (students as well as teaching staff) in scientific conferences and seminars (including international).

Weaknesses:

- 1) Students' initial level of preparation and insufficient prior knowledge in subjects such as mathematics, physics, chemistry etc.
- 2) Insufficient student mobility within the learning process.
- 3) Lack of the implementation study programme in English as well as the lack of international students.

### **Assessment of the requirement [5] (applicable only to master's or doctoral study programmes)**

- 1 R5 - The study programme for obtaining a master's or doctoral degree is based on the achievements and findings of the respective field of science or field of artistic creation.

**Assessment of compliance:** Not relevant

## **2.3. Resources and Provision of the Study Programme**

### **Analysis**

#### 2.3.1.

Administration, academic staff, and students have a sufficient number of auditoriums with relevant equipment in the FEEM building at Kalnciema Street 6. In the building is located the Customs and Tax History Museum and Customs Control Laboratory which is important for the students of this PBA SP "Administration of Customs and Taxes".

Two computer classrooms are used for tactical tasks. In computers are available such specific software as EMDAS, EDS, and ITVS are important for customs and taxes students.

Everyone has access to the ORTUS system.

Special room with 12 workstations for teaching and academic staff, besides that all of them are ensured with modern laptops.

Students have access to the Scientific Library located on the Kipsala campus.

"Customs and Tax History Museum" takes part in the study process introducing students to the development of the study field.

A significant role in practical works plays "Customs Control Laboratory". The laboratory is equipped with different equipment and tools which are used by customs officers to inspect vehicles and persons. To train students to find smuggled goods, special hiding places have also been set up in hollow boards, car doors, seats, fuel tanks, and tires. The laboratory thus simulates the hiding places often used in Latvia for the transport of illicit goods. This gives them useful knowledge and skills necessary for their future profession.

The PBA SP "Administration of Customs and Taxes" also included self-defense training. For practical

training available at the gym. During the training students receive relevant equipment (kimonos, helmets, body protectors, gloves, etc.).

In 2018, a shooting simulator was installed, which students use to learn basic skills and safety techniques related to the proper use and handling of firearms, as well as how to react to simple situations that may arise in the line of duty.

RTU has agreements with the State Revenue Service to use in the training process infrastructure and technical resources of the Service and National Customs Board.

Academic staff expressed the need to improve laboratory equipment, however, it was not identified what type of tools or equipment is missing. According to the annex "Breakdown of funding between cost items" funding for purchase and modernization of equipment is 0%. FEEM should evaluate the process of funding to upgrade and develop the "Customs Control Laboratory".

2.3.2.

N/A

2.3.3.

Since 2014 till 2022 the number of students has decreased significantly, from 629 students to 302. State budget-funded places are on the same level, but decrease fees - paying students due to a substantial increase in tuition fees. However, it's still significantly above the minimum number of students (which is 15) to ensure the profitability of the programme (SAR section 3.3.3.). However, a tendency is worrying.

State Revenue Service claims they would like to have more graduates as current amounts do not meet their needs for new professionals. State Revenue Service) admits good quality of graduates, some recent graduates already had made career development within State Revenue Service.

In the file "Funding by Positions by the period from 2013-2022" there are included preferable (or optimal) costs for one student for every year of every programme. According to this, the preferable costs per student in PBA SP "Administration of Customs and Taxes" in 2021/2022 was 6846,46 euros in a year. However, overall funding (including state funding and tuition fees) for the programme was just 2371,24 Euro per student. There is a significant gap between preferable/optimal and real available funding! Preferable cost is calculated according to Regulations No 994 of the Cabinet of Ministers "Procedures for Financing Institutions of Higher Education and Colleges from the Funds of the State Budget". In Regulations is described procedure of how costs should be calculated.

According to the annex "Breakdown of funding between cost items" for purchase of books and magazines is assigned 3% of the whole budget, but for the purchase and modernization of equipment - 0%.

The limited budget might have a negative impact on the study process and set some limitations to developing the content of the programme, study provision, scientific provision, material, technical provision, etc. Accordingly, in the SAR (section 3.3.3.) RTU admits challenges to developing highly qualified specialists. As a solution RTU proposes to allocate additional state budget-funded places to the programme, taking into account the known needs of the sector, to reduce tuition fees, and to waive study loans for graduates who have entered the public sector.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

For the PBA SP "Administration of Customs and Taxes", there is a sufficient number and quality of premises and IT equipment. FEEM has close cooperation (agreement) with the State Revenue Service (which is the main interested organization in graduates) to use their infrastructure and

technical resources.

For students available and ensured different software that is needed in the study process and later in their work.

According to the annex "Breakdown of funding between cost items" funding for purchase and modernization of equipment is 0%. FEEM should evaluate the process of funding to upgrade and develop the "Customs Control Laboratory".

The number of students is significantly decreasing due to the increasing tuition fee. Can't provide a sufficient number of graduates for the State Revenue Service.

A limited budget (the gap between optimal and real) should have a negative impact on the study process and set some limitations to developing content of the programme, study provision, scientific provision, material, technical provision, etc. For example to develop and improve equipment for the Customs Control Laboratory.

Strengths:

- 1) Close cooperation and support from the State Revenue Service as a main interested organization of graduates and potential employers.
- 2) Tax History Museum and Customs Control Laboratory which is important for the students of this PBA SP "Administration of Customs and Taxes".
- 3) Availability to have access and use in practical training-specific programmes for the field like EMDAS, EDS, and ITVS.

Weaknesses:

- 1) Real funding of the PBA SP "Administration of Customs and Taxes" is significantly lower than preferable/optimal, as defined in legislation. This limits development possibilities.
- 2) 0% of the budget is assigned for the purchase and modernization of equipment which can threaten the further development of the "Customs Control Laboratory".
- 3) Decreasing number of fees - paying students.

## Assessment of the requirement [6]

- 1 R6 - Compliance of the study provision, science provision (if applicable), informative provision (including library), material and technical provision and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of learning outcomes

**Assessment of compliance:** Partially compliant

Ensured sufficient level of all kinds of provisions to ensure successful implementation of the program. Identified: a) need to reduce the negative gap between real funding (state budget + tuition fees) and optimal (calculated according to legislation) regarding cost per student; b) increase funding for the purchase and modernization of equipment which currently is 0%.

## 2.4. Teaching Staff

### Analysis

#### 2.4.1.

Elected academic staff and guest lecturers of the RTU, as well as highly qualified leading specialists in the field, participate in implementing the PBA SP "Administration of Customs and Taxes". Section 3.4.1 of the SAR states that 32 elected teaching staff participate in implementing the PBA SP "Administration of Customs and Taxes", of which 23 (72%) teaching staff have a doctoral degree and 9 (28%) teaching staff have a master's degree. Analyzing the data on the academic staff elected

at the RTU, it can be concluded that 15 (48%) representatives of the academic staff have been elected to the position of professor or associate professor, 6 (18%) to the position of assistant professor, 1 or 3% to the position of leading researcher and 1 to the position of researcher (3%). On the other hand, 6 (19%) with a master's degree have been elected to the position of practical assistant professor and 3 (9%) to the position of lecturer. From the quantitative data presented, it is clear that the curriculum is provided with a sufficient number of lecturers, while at the same time, from a qualitative point of view, the majority of them are professors and associate professors.

From the attached CVs of the teaching staff (Annex Academic\_staff\_CV\_EN) they all have extensive teaching, research, and practical experience, which is a good testimony to their qualifications and ability to achieve the objectives and learning outcomes of the PBA SP “Administration of Customs and Taxes” and the relevant study courses. Some of them have extensive international experience, both as university professors and researchers and as practitioners. This ensures the transfer of international knowledge to their students and its successful implementation in the dynamic global world. Lecturers from the programme participate as experts in reviewing the compliance of other universities' customs education curricula with the standards of the WCO and DG TAXUD.

Leading specialists from the industry and representatives of the business environment take part in the educational process: they conduct training courses, give lectures, supervise and examine diploma theses, participate in the work of the State Examinations Committee, provide internships for students, participate in joint research with RTU academic staff, which is also reflected in published scientific articles, participation in conferences and international projects.

#### 2.4.2.

To ensure the educational process and improve the quality of teaching, the PBA SP “Administration of Customs and Taxes” should improve the teaching staff, as well as due to the retirement of experienced lecturers and the appointment of new highly qualified specialists, including one with practical experience. It should be noted that the existing teaching staff regularly develop their professional skills by participating in mobilities, conferences, projects, seminars, and courses both nationally and internationally, which provides students with an improvement of study courses, updating of content, and application of new learning methods following the principles and requirements of education. This also provides an opportunity for mutual exchange and transfer of knowledge and experience. During the assessment visit, it was also presented that the young lecturers are supported by qualified colleagues and the management, which ensures continuity between them and good working conditions.

Section 3.4.2 of the SAR states that there are no significant changes in the total number of academic staff, except for the academic year 2016/2017, due to retirements, parental leave, and changes in the field of activity of specialists. Between the academic years 2013/2014 and 2021/2022, there is a 33% decrease in the number of academic staff, which is largely due to the reaching of retirement age. At the same time, the number of professors and associate professors (with a doctorate) has increased during the period under review, which undoubtedly has a positive impact on the quality of education.

Looking at the age structure of academic staff, the number of lecturers in the 31-40 age group has decreased, but a positive trend can be observed in the 41-50 age group, which represents 40% of the total number of teaching staff.

Changes in the composition of the teaching staff do not affect the quality of education. The educational process increasingly involves the best specialists with a high level of expertise. The next generation of lecturers is attracted and the best students are involved in research, leading them to future academic and research careers.

#### 2.4.3.

N/A

#### 2.4.4.

The annex "List of the publications, patents, and artistic creations of the teaching staff over the reporting period" to Section 2.4 "Scientific Research and Artistic Creation" from the SAR of the study field "Internal Security and Civil Protection" shows that the teaching staff of the PBA SP "Administration of Customs and Taxes" were very active in research during the reporting period. All 32 FEEM members reported publication activity, with some being particularly productive (more than 15 publications for each of the last six years). A review shows that the topics of the publications correspond to the profile of the courses in which the authors are involved as lecturers within the PBA SP "Administration of Customs and Taxes".

Many publications are co-authored by more than one member of the Department, and 385 of them are indexed in internationally recognized databases such as Scopus and Web of Science. After checking the relevant databases, the high performance in peer-reviewed publications of Prof. Andra Blumberga (129 publications in Scopus / WoS, h-index 19), Prof. Nataļja Lāce (80 publications in Scopus / WoS, h-index 11) and Prof. Elīna Gaile-Sarkane (55 publications in Scopus / WoS, h-index 7) was noted. This high score for the PBA SP "Administration of Customs and Taxes" FEEM is due to their well-developed international partnership and intensive involvement in international projects and research, the results of which have a high impact factor and are well-accepted for publication in peer-reviewed journals. However, data on indexed publications are missing for 6 of the lecturers, which should also be considered by the PBA SP "Administration of Customs and Taxes" management and the RTU.

There is a balanced distribution of the geographical scope of the publications, with a slightly larger share of those in national publications (mainly of RTU) compared to foreign ones, but this in no way diminishes their qualities and contributions of a scientific and practical nature.

Some of the lecturers have more than 15 years of practical experience, as shown in their CVs, which is a testament to their professionalism and insight into the field in which they teach.

#### 2.4.5.

The PBA SP "Administration of Customs and Taxes" includes a variety of study blocks covering both general and professional competencies. Each year, each course of study is developed and updated with new teaching methods and economic trends, while meeting higher education quality standards. FEEM members involved in the programme work together within their courses to ensure that the courses are interlinked.

In section 2.4.5 of the SAR, examples of links between the courses "Customs Processes and Procedures" and "Customs Law", "Customs Risk Management" and "Customs Control Technologies and Tools" are given, which allow students to gain a better understanding of the scope of customs activities, customs functions, and legislation. The courses in the curriculum are arranged in such a way that the basic knowledge acquired at the beginning is gradually supplemented with technological knowledge and the students are ready for practice at the end of their studies. The organization of the courses involves a certain number of lecturers, which leads to both cooperation with the students and cooperation in the management of the respective study courses.

In addition to teaching, teaching staff also collaborate in other directions, such as Erasmus+ mobility, participation in joint projects at national and international levels, scientific activity and research, etc. Some examples of cooperation between teaching staff in these directions are given in the SAR.

Several mechanisms have been put in place at the RTU to promote cooperation between teaching staff in the implementation of the curriculum, including during departmental meetings or through

participation in refresher courses organized by the RTU.

The SAR states that the ratio of students to selected academic staff in 2022/2023 will be 1:7. With the participation of leading specialists in the field, there will be five students per academic staff.

### **Conclusions on this set of criteria, by indicating strengths and weaknesses**

Enough lecturers are involved in the implementation of the PBA SP “Administration of Customs and Taxes”, well distributed in terms of positions and educational levels, which allows the expert group to conclude that all the conditions are in place to achieve the objectives and learning outcomes of the PBA SP “Administration of Customs and Taxes”. Guest lecturers from practice are also involved in the educational process, which has an additional positive impact on its quality and the overall training of future specialists in the field of customs and taxation.

Relations between lecturers can be described as good, with evidence of good cooperation and continuity in teaching and research activities. Efforts are being made to attract more active students to research and to motivate them to start a teaching career at the RTU.

The publication activity of the teaching staff is at a very high scientific and professional level, as evidenced by the large number of publications indexed in internationally recognized databases such as Scopus and Web of Science.

The training courses are regularly updated, respecting the principle of interrelation between them and not allowing the duplication of training content.

Strengths:

- 1) The participation of academic staff and guest lecturers from practice is successfully combined in the learning process.
- 2) Lecturers have extensive academic, research, and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the study programme.
- 3) Regular professional development of the teaching staff and support for junior lecturers from senior lecturers and management.
- 4) Very strong publication activity in the area of courses in the study programme, including peer-reviewed publications in Scopus and Web of Science.
- 5) Regular development of new courses and updating of existing courses with new learning methods and economic trends, maintaining the interrelationship between them.

Weaknesses:

- 1) Some of the lecturers do not have publications indexed in Scopus and Web of Science.

### **Assessment of the requirement [7]**

- 1 R7 - Compliance of the qualification of the academic staff and visiting professors, visiting associate professors, visiting docents, visiting lecturers and visiting assistants with the conditions for the implementation of the study programme and the requirements set out in the respective regulatory enactments.

**Assessment of compliance:** Fully compliant

The expert group considers that there is sufficient evidence to support the claim that the qualification of the PBA SP “Administration of Customs and Taxes” teaching staff fully meets the conditions for the implementation of the study programme and the requirements defined in the relevant legal acts.

## **2.5. Assessment of the Compliance**

### **Requirements**

- 1 1 - The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard

**Assessment of compliance:** Fully compliant

Annex 6 (“Annex6\_Compliance with the national education standard\_.pdf”) confirms that the study programme complies with Cabinet Regulation No. 305 “Noteikumi par valsts profesionālās augstākās izglītības standartu”

- 2 2 - The study programme complies with a valid professional standard or the requirements for the professional qualification (if there is no professional standard required for the relevant occupation) provided if the completion of the study programme leads to a professional qualification (if applicable)

**Assessment of compliance:** Fully compliant

Annex 7 (“Annex 7\_Compliance of the Bachelor programme for professional standart\_.pdf”) confirms that the programme is compliant with the professional standard of "Functional Manager of Customs Administration" (approved on 14 December, 2022) and “Tax Economist” (approved on 18 September, 2019)

- 3 3 - 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 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education Institutions.

**Assessment of compliance:** Fully compliant

The attached study course descriptions (“Annex 10\_Study\_Courses\_.pdf”) are prepared in Latvian and English. Descriptions comply with regulations outlined in the Law on Higher Education Institutions.

- 4 4 - The sample of the diploma to be issued for the acquisition of the study programme complies with the procedure according to which state recognised documents of higher education are issued.

**Assessment of compliance:** Fully compliant

The provided Diploma sample (“Diploma\_Diploma\_Supplement\_.pdf”) complies with the procedure by which state-recognized documents of higher education are issued in accordance with Cabinet Regulation No. 202 “Kārtība, kādā izsniedz valsts atzītus augstāko izglītību apliecinājošus dokumentus”.

- 5 5 - 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 Higher Education Institutions.

**Assessment of compliance:** Not relevant

- 6 6 - 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 Higher Education Institutions.

**Assessment of compliance:** Not relevant

- 7 7 - 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 (if applicable).

**Assessment of compliance:** Not relevant

- 8 8 - 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 attached resumes of staff ("Academic\_staff\_CV\_EN.zip") and confirmation ("Confirmation - knowledge of the state language.edoc") verifies that state language proficiency is compliant with Cabinet Regulation No. 733 "Noteikumi par valsts valodas zināšanu apjomu, valsts valodas prasmes pārbaudes kārtību un valsts nodevu par valsts valodas prasmes pārbaudi".

- 9 9 - 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 (if applicable).

**Assessment of compliance:** Fully compliant

The attached resumes of staff ("Academic\_staff\_CV\_EN.zip") and confirmation ("Confirmation - knowledge of the foreign language.edoc") verify that language proficiency in English is at least B2.

- 10 10 - The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

**Assessment of compliance:** Fully compliant

Sample of the attached study agreement ("Study\_agreements.zip") complies with Cabinet Regulation No. 70 "Studiju līgumā obligāti ietveramie noteikumi".

- 11 11 - The higher education institution / college has provided confirmation that students will be provided with opportunities to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

**Assessment of compliance:** Fully compliant

The attached contracts ("Līgums\_Stud.turpināšana\_Agreement\_Transition.zip") confirm that the institution provides the possibility to continue studies within the following options - University of Latvia: Academic Bachelor's Study Programme "Accounting, Analysis and Audit". Rezekne Academy of Technology: Professional Bachelor's Study Programme "Border Protection"; Professional Bachelor's Study Programme "Economics".

- 12 12 - The higher education institution / college has provided confirmation that students are guaranteed compensation for losses if the study programme is not accredited or the study programme's license is revoked due to the actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.

**Assessment of compliance:** Fully compliant

RTU confirmation ("Confirmation - on compensation for losses.edoc") states, that students are

guaranteed 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 college (actions or failure to act) and the student does not wish to continue the studies in another study programme.

- 13 13 - The joint study programmes comply with the requirements prescribed in Section 55.(1), Paragraphs one, two, and seven of the Law on Higher Education Institutions (if applicable)

**Assessment of compliance:** Not relevant

- 14 14 - Compliance with the requirements specified in other regulatory enactments that apply to the study programme being assessed (if applicable)

**Assessment of compliance:** Fully compliant

The study programme complies with a list of specified regulatory enactments (Conventions, European

Union regulatory framework and National regulatory framework including select laws and Cabinet regulations) relevant to the field of taxation and customs. ("Annex\_Compliance of the Professional Bachelor study programme with the sector-specific regulatory framework\_.pdf").

### **Assessment of the requirement [8]**

- 1 R8 - Compliance of the study programme with the requirements set forth in the Law on Higher Education Institutions and other regulatory enactments.

**Assessment of compliance:** Fully compliant

PBA SP "Administration of Customs and Taxes" complies with regulatory requirements.

### **General conclusions about the study programme, indicating the most important strengths and weaknesses of the study programme**

The PBA SP "Administration of Customs and Taxes" aligns with the "Internal Security and Civil Protection" field, providing theoretical and practical education in customs and tax administration. Graduates receive a professional Bachelor's Degree in Administration of Customs and Taxes and professional qualification as "Functional Manager of Customs Administration" or "Tax Economist." The PBA SP "Administration of Customs and Taxes", currently available in Latvian, plans to offer an English option and has a functional part-time mode. Reasons for dropout include academic challenges and employment conflicts. Despite a negative student number trend, the PBA SP "Administration of Customs and Taxes" is deemed economically justified based on its curriculum and goals.

The PBA SP "Administration of Customs and Taxes" holds significance on both a national and international scale, satisfying the expectations of students, graduates, and employers in its structure and content. The FEEM members are highly esteemed, and the teaching methods effectively support the achievement of learning outcomes. However, there are also some areas for further development to consider. Students express a desire for greater practical orientation in their studies and guest lecturers who can effectively bridge theoretical knowledge with practical applications. Employers expect graduates to possess enhanced analytical, critical thinking, and communication skills to navigate complex global events, extract relevant information, and apply it accordingly. Additionally, to realise its ambition of becoming the primary EU training centre in the Baltic region, the university needs to engage in boulder marketing efforts and exude confidence. Contrary to some opinions heard, experts affirm that security-related topics are currently in focus and have a market appeal.

There is a sufficient number and quality of premises and IT equipment. FEEM has close cooperation with the State Revenue Service, which is the main interested organisation in graduates, to use their infrastructure and technical resources. For students available and ensured different software that is

needed in the study process and later in their work.

The number of students is significantly decreasing due to the increasing tuition fee. Can't provide a sufficient number of graduates for the State Revenue Service. Some of the graduates choose to work in the private sector due to the higher salaries. Limited budget - the gap between optimal and real- should have a negative impact on the study process and set some limitations to developing content of the programme, study provision, scientific provision, material and technical provision.

Enough lecturers are involved in the implementation of the PBA SP "Administration of Customs and Taxes", well distributed in terms of positions and educational levels, which allows the expert group to conclude that all the conditions are in place to achieve the objectives and learning outcomes of the PBA SP "Administration of Customs and Taxes". Guest lecturers from practice are also involved in the educational process, which has an additional positive impact on its quality and the overall training of future specialists in the field of customs and taxation. Relations between lecturers can be described as good, with evidence of good cooperation and continuity in teaching and research activities. Efforts are being made to attract more active students to research and to motivate them to start a teaching career at the RTU. The publication activity of the teaching staff is at a very high scientific and professional level, as evidenced by the large number of publications indexed in internationally recognised databases such as Scopus and Web of Science.

In conclusion, the expert group has an opinion that even though there is an evaluation partially compliant under the Resources and Provision of the PBA SP "Administration of Customs and Taxes", because of the negative gap between real funding (state budget + tuition fees) and optimal (calculated according to legislation) regarding cost per student, the overall evaluation of the PBA SP "Administration of Customs and Taxes" could be excellent. It was found that the funding issues are not only influenced by the RTU but are dependent on the state level, however, RTU has been proactive and will start to pilot the new funding system, which could offer better conditions also to the PBA SP "Administration of Customs and Taxes". Also, the weaknesses identified primarily serve as indicators of areas that could be considered for developmental activities, however, fundamentally, these do not impact the substantive quality of the PBA SP "Administration of Customs and Taxes".

Strengths:

- 1) The PBA SP "Administration of Customs and Taxes" is a unique study programme which complies with all the related regulations and has WCO and EC certification.
- 2) Graduates of the PBA SP "Administration of Customs and Taxes" have good employability opportunities.
- 3) The state is funding a definite number of study places in the PBA SP "Administration of Customs and Taxes".
- 4) Two sub-programmes to meet the needs of students.
- 5) Close cooperation with the industry and support from the State Revenue Service.
- 6) Well-regulated processes as well as the quality management system which supports implementation and development of the study programmes.
- 7) Opportunities to participate for students and teaching staff in local and international scientific conferences and seminars.
- 8) Highly motivated students and teaching staff with democratic relations.
- 9) Highly valued graduates by employers, as well as the high recommendation index by employers.
- 10) Tax History Museum and Customs Control Laboratory which is important for the students of this programme.
- 11) Availability to have access and use in practical training-specific programmes for the field like EMDAS, EDS, and ITVS.
- 12) Regular professional development of the teaching staff and support for junior lecturers from senior lecturers and management.

- 13) Regular development of new courses and updating of existing courses with new learning methods and economic trends, maintaining the interrelationship between them.
- 14) The participation of academic staff and guest lecturers from practice is successfully combined in the learning process.
- 15) Lecturers have extensive academic, research and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the study programme.
- 16) Very strong publication activity in the area of courses in the study programme, including peer-reviewed publications in Scopus and Web of Science.

Weaknesses:

- 1) Insufficient number of state-funded places in the PBA SP "Administration of Customs and Taxes".
- 2) Annually growing tuition fees, which have led to the decreasing number of students (including self-paid students).
- 3) Relatively high dropout rates in the PBA SP "Administration of Customs and Taxes".
- 4) Students' initial level of preparation and insufficient prior knowledge in subjects such as mathematics, physics, chemistry etc.
- 5) Insufficient student mobility within the learning process.
- 6) Lack of the implementation of PBA SP "Administration of Customs and Taxes" in English as well as the lack of international students.
- 7) Real funding of the PBA SP "Administration of Customs and Taxes" is significantly lower than preferable/optimal, as defined in legislation. This limits development possibilities.
- 8) 0% of the budget is assigned for the purchase and modernization of equipment.
- 9) Some of the lecturers do not have publications indexed in Scopus and Web of Science.

**Evaluation of the study programme "Administration of Customs and Taxes"**

Evaluation of the study programme:

Excellent

**2.6. Recommendations for the Study Programme "Administration of Customs and Taxes"**

**Short-term recommendations**

- |  |
|--|
| 1) Ensure activities to promote the PBA SP "Administration of Customs and Taxes" and increase the number of students in the programme (including self-paid places) at least by 20% annually.           |
| 2) Ensure assistance activities for students with insufficient prior knowledge in subjects such as mathematics, physics, chemistry.  |
| 3) Extend partnerships with other universities to facilitate exchange programmes and increase student mobility.  |
| 4) Launch an English-Language Programme: To attract a broader demographic, including international students, initiate a version of the PBA SP "Administration of Customs and Taxes" taught in English. |
| 5) It is necessary to increase the number of scientific research of the teaching staff indexed in the world databases Scopus and Web of Science, for which more resources should be allocated by RTU.  |

**Long-term recommendations**

1) Search opportunities to increase the number of state budget-funded places or industry-based sponsorships in the PBA SP "Administration of Customs and Taxes".

2) Develop targeted interventions to lower dropout rates, such as enhanced academic advising, mentoring programmes, and early identification of at-risk students to provide them with additional support.

3) Craft a clear, strategic proposal for the necessary modernization of equipment, and actively pursue alternative funding sources such as grants, partnerships, and alumni donations specifically for this purpose.

## II - "Safety Engineering" ASSESSMENT

### II - "Safety Engineering" ASSESSMENT

#### 2.1. Indicators Describing the Study Programme

##### Analysis

##### 2.1.1.

The Professional Bachelor's study programme "Safety Engineering" 42862 (hereinafter PBA SP "Safety Engineering") fully complies with the study field "Internal security and civil protection". The aim of the PBA SP "Safety Engineering" considers the training of labour protection engineers who can also perform the functions of fire safety and civil protection specialists. Based on SAR Annex 9, the study courses cover such areas as Civil Defence 3 CP, Chemistry for Engineers 2 CP, Environmental Engineering 2 CP, Occupational Health and Basic Principles of Industrial Medicine 3 CP, Legislation on Labour Protection, Fire Safety and Civil Defence 3 CP, Organization of Labour Protection System 2 CP, Ergonomics and Work Psychology 2 CP, Electrical Safety 3 CP, Personal and Collective Means of Protection 3CP, Safety Requirements for Workplaces 3 CP, Safety Equipment 2 CP, Working Environment Risk Prevention Methods 4 CP, Organisation of Fire Security Preventive Works and Fire Investigation 3 CP, Fire Protection and Prevention 2 CP, Disaster Management 2 CP, Work Equipment Safety and Supervision 5 CP, Industrial Waste Management 2CP, Construction Fire Safety 3CP, Safety in the Use of Hazardous Substances 3 CP, Fire Protection Systems 2 CP, Construction Technology and Safety 4 CP, Management of Technogenic Environment Safety 2 CP, Safety and Risk Assessment of Technological Processes 5 CP (SAR, Annex 9).

##### 2.1.2.

Based on SAR p.138-140, the PBA SP "Safety Engineering" is implemented as a full-time, intramural study programme in the Latvian language only, with both public and private funding. The PBA SP "Safety Engineering" has a nominal duration of 4 years and a volume of 160 CP (240 ECTS).

According to the classification of education (Cabinet of Ministers of the Republic of Latvia Regulations No.322, 2017) the code of the PBA SP "Safety Engineering" is 42862, where the last three numbers 862 stand for occupational protection and safety and set 862 00 occupational protection and safety.

The PBA SP "Safety Engineering" has interdisciplinary components. Graduates of the PBA SP "Safety Engineering" obtain a professional Bachelor's degree in safety engineering and the professional qualification "Occupational Safety Engineer", adopted on 8 February 2022.

Based on SAR, the aim of the PBA SP "Safety Engineering" is to train labour protection engineers who can also perform the functions of fire safety and civil protection specialists, to develop students'

understanding of professional ethics and the principles of good practice in labour protection, as well as to form the basis for further studies to acquire a higher level of knowledge and competence. The main objectives of the study programme are to provide a competitive education in security engineering that meets the Bachelor's study level and international standards and to prepare students for practical work following the requirements of the labour market and regulatory enactments for a security engineer. The main learning outcomes of graduates include the ability to create, implement, and provide a comprehensive labour protection management system, to assess and prevent risks of the work environment, to provide proposals for engineering safety solutions by performing appropriate calculations, to participate in the transformation of the work environment, to plan and implement fire safety, civil defense, and disaster management solutions, to constantly improve professional qualifications and knowledge (SAR, p.138-140). Learning outcomes of the PBA SP "Safety Engineering" are achievable and correspond to the job duties, tasks, and competencies of an occupational safety engineer as defined in the professional standard "Occupational Safety Engineer" (SAR, p.143). The mapping of study courses for evaluation of reaching the learning outcomes of the PBA SP "Safety Engineering" is provided in SAR Annex 8.

Students are enrolled in PBA SP "Safety Engineering" based on the results of the centralized secondary school examinations. There are no specific entry requirements for the programme. The study programme is completed by a state examination, which includes the elaboration and public defense of a bachelor thesis at an open meeting of the State Examination Committee. The Bachelor thesis can only be defended if the student's knowledge and skills in the theoretical and specialized areas of the field have been successfully assessed (SAR, p.142).

The title, code, the obtained degree, and professional qualification of the PBA SP "Safety Engineering", as also aims, objectives, learning outcomes and admission requirements are clearly defined and interrelated. The duration, language, and scope of the study programme are reasonable and justified. The PBA SP "Safety Engineering" complies with the national education standard (SAR Annex 6: 6.pielikums\_Annex 6\_atbilstiba\_valsts\_izglitiba\_standartam\_compliance with the national education standard.pdf), related professional standard (SAR Annex 7: 7.pielikums\_7 Annex\_Studiju programmas\_atbilstiba\_profesijas\_standartam\_Study programme compliance with Professional standard.pdf) and sector-specific regulatory frameworks like Civil Protection and Disaster Management Law, Fire Safety and Fire-fighting Law, Law on Chemical Substances, Labour Protection Law, Law On Technical Supervision of Dangerous Equipment, Waste Management Law, Labour Law, Cabinet Regulation No. 372, No. 400, No. 359, No. 660, No. 92, No. 526, No. 195 (SAR Annex Studiju programmas\_atbilstiba\_nozares\_specifikajam\_normativajam\_regulejumam\_Compliance of study programme with the sector-specific regulatory framework .pdf).

### 2.1.3.

Based on SAR, two main changes were made – professional qualification was changed from "Senior Specialist in Occupational Safety" to "Occupational Safety Engineer", and a new Director was assigned to the PBA SP "Safety Engineering" (SAR, p.141).

Following the procedure set out in Article 10 of the Cabinet of Ministers Regulation No.633 "Procedure for Development of Occupational Standard, Professional Qualification Requirements (if no occupational standard is approved for an occupation) and Sectoral Qualification Framework", in 2022 the professional standard was updated and the new professional standard "Occupational Safety Engineer" was agreed at the meeting of the Tripartite Cooperation Sub-Council for Professional Education and Employment held on 8 June 2022. In 2022, changes have been made to the parameters of the PBA SP "Safety Engineering" in terms of the qualifications to be awarded. On 13 December 2022, by the decision of the Council of RTU IEVF (Minutes No 115 (22000-1.1/20)), it was decided to change the professional qualification to be obtained in the PBA SP "Safety Engineering" from "Senior Specialist in Occupational Safety" to "Occupational Safety Engineer". The

requirements for the occupational qualification of occupational safety engineer were agreed at the meeting of the Tripartite Cooperation Sub-Council for Professional Education and Employment on 8 June 2022 (Minutes No 3), corresponding to the sixth level of the Latvian Qualifications Framework (LQF 6). On 16 October 2023, by the decision of the Council of RTU IEVF (Minutes No 9 (22000-1.1/17)), it was decided to approve associate professor Māris Ziemelis as a Director of the professional bachelor study programme (SAR, p.141).

All the corrections done during the assessment period are justified and fully supported.

#### 2.1.4.

The PBA SP "Safety Engineering" provides the degree and professional qualification that are of high demand and necessity in the labour market. There is a legal requirement to ensure labour and fire safety in every company and organization. The Labour Protection Law (in force since 01.01.2002) requires employers to set up an occupational safety system and to take measures to protect workers, such as training, risk assessment, and preventive measures. The employer is responsible for the health and safety of employees at work, according to the provisions of the Labour Protection Law, but to ensure the necessary quality, an occupational health and safety specialist or a competent authority is hired in accordance with Paragraphs 5.1 and 5.2. of the Cabinet of Ministers Regulation No 99 "Regulations on types of commercial activity in which the employer involves a competent authority". Consequently, following the requirements of the laws and regulations of the Republic of Latvia, all companies need an occupational health and safety officer. Graduates of the PBA SP "Safety Engineering" are also awarded a 160-hour certificate in fire safety, so they can perform not only the duties of an occupational safety officer but also be responsible for fire safety in accordance with the "Fire Safety and Fire Fighting Law" (in force from 01.01.2003). So far, only a few similar study programmes have been implemented in Latvia. This PBA SP "Safety Engineering" also covers the safety of the technogenic environment (SAR, p.144-145).

Looking at the students' statistics, there are students who are doing studies on a state budget and students who are paying tuition fees. During the assessment visit, the experts got the evidence in interviews with the FEEM management, heads of the study field, and study programmes, that increasing tuition fees are negatively impacting the number of students, that the ability of students to pay is rather low, and there are not enough state budget funded places for studies. Based on SAR p.147, the number of paying tuition fee students in all four years of studies was 7 in 2013/2014 ac.year, 9 in 2014/2015 ac.year, 9 in 2015/2016 ac.year, 11 in 2016/2017 ac.year, 11 in 2017/2018 ac.year, 10 in 2018/2019 ac.year, 7 in 2019/2020 ac.year, 3 in 2020/2021 and 2021/2022 academic year, and only 2 in 2022/2023 academic year (SAR, p.147). At the same time number of students financed from the state budget is changing from year to year - from 15 students in 2014/2015 ac.year, up to a maximum of 54 students in the 2017/2018 and 2018/2019 academic years, and up to 43 students in 2022/2023 academic year (SAR, p.148).

Based on SAR, 5 students graduated from the PBA SP "Safety Engineering" in 2015/2016 academic year, 1 - in 2016/2017 ac.year, 9 in 2017/2018 ac.year, 10 in 2018/2019 ac.year, 14 in 2019/2020 ac.yer, 8 in 2020/2021 ac.year and 10 in 2021/2022 ac.year (SAR, p.146). The number of graduates is not very high, it can indicate high dropout rates or inability of students to graduate on time. The SAR explains, that the low number of graduates in the 2016/2017 academic year is because admission for this year's graduates took place in the 2013/2014 academic year, but no students were admitted, resulting in only 1 student graduating in the 2016/2017 academic year from the 2012/2013 academic year intake who had taken academic leave and graduated in the 2016/2017 academic year. As the PBA SP "Safety Engineering" was launched in the 2011/2012 academic year as a fee-only programme, the number of students enrolled in the first years is small, but by the 2015/2016 academic year, there were no graduates at all. However, state budget-funded places were allocated in the academic year 2013/2014 and the number of students enrolled in the

programme has increased in subsequent years, which is also reflected in the graduation statistics in the following years. A total of 57 students graduated in the reporting period (SAR, p.146).

Based on SAR, analyzing the reasons for dropout, it can be concluded that during the reporting period, the highest proportion (14.66%) of students in the first year dropped out of academic failure and 5.33% dropped out voluntarily, while 6% dropped out for not having started their studies. The main reasons for academic failure in the 1st year are that students have poor prior knowledge of science subjects such as chemistry, physics, and mathematics. There are various personal reasons for voluntary dropout. In the 2nd year, the highest dropout rate in the reporting period was for poor performance (7,14%) and the second reason for dropout was those who left their studies voluntarily (3.06%). In this case, both the reasons for dropping out and the reasons for dropping out of their own volition are the same as for the first year. In the 3rd year, the highest dropout rate is for failure to complete studies - 5.81%, while 2.32% dropped out of their own volition (SAR, p.149). During the assessment visit the experts got the evidence that many students have difficulties in passing exact science study courses like Mathematics, Physics, and Chemistry, and even do not understand why these study courses are in the PBA SP "Safety Engineering".

2.1.5.

N/A

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

The PBA SP "Safety Engineering" fully complies with the study field "Internal security and civil protection". The aim of the programme considers the training of labour protection engineers who can also perform the functions of fire safety and civil protection specialists.

The title, code, the obtained degree, and professional qualification of the PBA SP "Safety Engineering", as also aims, objectives, learning outcomes and admission requirements are clearly defined and interrelated. The duration, language, and scope of the PBA SP "Safety Engineering" are reasonable and justified as well as it complies with the national education standard (SAR Annex 6), related professional standard (SAR Annex 7), and sector-specific regulatory framework.

Two main changes were made during the assessment period in the PBA SP "Safety Engineering": professional qualification was changed from "Senior Specialist in Occupational Safety" to "Occupational Safety Engineer", and a new Director was assigned to the study programme.

The PBA SP "Safety Engineering" provides the degree and professional qualification that are in high demand and necessity in the labour market, providing graduates with good employability opportunities. Graduates of the PBA SP "Safety Engineering" are also awarded a 160-hour certificate in fire safety, so they can perform not only the duties of an occupational safety officer but also be responsible for fire safety in accordance with the "Fire Safety and Fire Fighting Law". In the academic year 2022/2023, 43 students are studying with state budget funding and 2 students are paying tuition fees. Dynamics of numbers of students, graduates, and dropout cases show that the PBA SP "Safety Engineering" is in good demand but depends on state funding. Students might need more support in passing exact science study courses, which often is a reason for dropout.

Strengths:

- 1) The PBA SP "Safety Engineering" complies with all the related regulations.
- 2) Graduates of the PBA SP "Safety Engineering" have good employability opportunities - degree and professional qualification are in high demand and legal need in the labour market.

- 3) Graduates in addition to a professional Bachelor's degree and professional qualification receive a certificate in fire safety, which broadens their professional qualification.
- 4) The State is funding a definite number of study places in the PBA SP "Safety Engineering".
- 5) Close cooperation with industry.

Weaknesses:

- 1) Decreasing number of students paying tuition fees.
- 2) A low number of graduates in the PBA SP "Safety Engineering".
- 3) High dropout rates in the PBA SP "Safety Engineering".

## 2.2. The Content of Studies and Implementation Thereof

### Analysis

#### 2.2.1.

PBA SP "Safety Engineering" is a unique programme in Latvia. According to SAR students acquire the necessary knowledge, skills, and competencies corresponding to the sixth level of professional qualification (PQL 6) and the sixth level of the Latvian Qualifications Framework (LQF 6), which corresponds to the Occupational Standard for Senior Specialist in Occupational Safety. Graduates are awarded a Professional Bachelor's Degree in Safety Engineering and qualification as Occupational Safety Engineer is awarded.

Detailed comparison is provided in the PBA SP "Safety Engineering" annexes between:

- "Regulations on the state standard of professional higher education" (Regulations of 21.06.2023 No. 305 Part V requirements) and study programme "Safety Engineering" (See annex: 6.pielikums\_Annex 6\_atbilstiba valsts izglitibas standartam\_compliance with the national education standard.pdf);
- Knowledge required for the performance of the main tasks of the professional activity according to the professional standard of occupational safety engineer and relevant study courses in the study programme "Safety Engineering" (see annex: 7.pielikums\_7 Annex\_Studiju programmas atbilstiba profesijas standartam\_Study programme compliance with Professional standard.pdf);
- Sector-specific regulatory framework and study course of the study programme "Safety Engineering" (see annex: Studiju programmas atbilstiba nozares specifiskajam normativajam regulējumam\_Compliance of study programme with the sector-specific regulatory framework .pdf).

Several examples are provided in the SAR section 3.2.1 of how the content of the study is constantly updated and improved in line with the latest trends in the area, as well as the situation in the labour market and its requirements. To ensure the quality of the PBA SP "Safety Engineering", several changes were made to the content and structure of the study programme during the reporting period, which was necessitated by the recommendations gathered in the questionnaire results, as well as by changes in the regulatory enactments and the occupational standard.

During the assessment visit, it was seen that the students were motivated and satisfied with their studies, nevertheless, a particular topic was identified that gave light controversial feedback and remained a challenge for the RTU. In the SAR section 3.2.1 an example is given about the recommendation from the students which was taken into account and the specialization subjects of the PBA SP "Safety Engineering" were supplemented with the study course "Fire Safety of Technological Processes and Explosion Hazard" in the amount of 3 CP, as well as one of the students comments "Design the programme so that from the first year of study, students can understand what career they have chosen", which covered by the 1 CP course "Introduction to Speciality". However, in the assessment visit, it was highlighted that studies are too specialized in the first course and several general subjects are left in the final years, the graduates felt that they would have preferred to have general subjects first and after the first internship when they have an

understanding about the work they are going to do after graduation, it would have been easier to understand those specific subjects. It seems that every party is right and it should be noticed as a positive example of how RTU responds to the feedback, but the challenge is how to find the right balance so that the students get the idea about the career, but do not drop out at the first course because difficulties with specific and/or advance courses and can prepare themselves (maybe some extra courses could be offered during the first year to be able to continue the studies also with the advanced level of chemistry, physics, mathematics, etc) for the in-depth studies. It could be considered that the development of courses is focused on creating a more tailored approach that facilitates a clearer connection between studies and the intended professions. This would enable students to better understand the practical applications of their chosen field of study.

During the assessment visit, one focus of the discussion with employers was on identifying areas for improvement in the study field. While the employers expressed their satisfaction with the knowledge and skills of the graduates, they also acknowledged the need for further development concerning current global events and their impact on security and civil protection. Employers expressed the need to integrate the necessary (mostly sensitive information regarding security issues) information regarding globally impactful events into education at a faster pace in a manner that strengthens internal security without compromising it. At the same time, it was clearly recognized that the accessibility of relevant, up-to-date information on a short-term basis is not only an RTU matter, but the state service also has a role to play in ensuring the timely acquisition of necessary information.

Connected to the aforementioned topic, employers also highlighted the need for a greater emphasis on teaching critical thinking, communication, and analytical skills, which are equally relevant to the security situation. This is necessary to better recognize relevant information, draw conclusions from it, and effectively communicate it.

Overall a strong impression remained from several discussions which reflected the high level of satisfaction with the studies from students, graduates as well as employers. All target groups confirmed the topicality of the study programme as well as the learning outcomes that meet the needs of the industry. However, it was brought to attention that there are a few areas requiring attention and improvement that could be incorporated into the development plan. These include the establishment of well-equipped laboratories and the enhancement of skills in writing project plans to secure grants. It was noted that the study area has not been particularly successful in obtaining grants available at the university.

2.2.2.

N/A

2.2.3.

According to SAR section 3.2.3 the PBA SP "Safety Engineering" provides for studying, in lectures, practical classes, laboratory work, and literature studies, the study courses which ensure the achievement of professional competence. Further methods are named, such as seminars, discussions, solving situations and practical tasks, individual and group work, including research work, visits to companies and field trips, internships, and guest lectures by representatives of employers.

Reflection from the students during the assessment visit confirmed that most of the teaching staff is using different methods and put an effort to change the teaching more for the learning approach. Relations between students, teaching staff, and administration are definitely the strength of the study field, which was also reflected very well during the assessment visit. It was described by the students that if they have any kind of questions, problems, or suggestions they first communicate with the teaching staff (in the classroom or via ORTUS), and mostly they get the solution.

The teaching staff showed high motivation and gave several examples from their teaching experiences as well and they felt support and encouragement from their supervisors so far. However, it is important to note that several weeks before the assessment visit, there were changes in the FEEM structure. As a result, there was some uncertainty about the future, particularly regarding the supervision system. The teaching staff displayed an understandable mix of open-mindedness, optimism, and slight concern in response to these change processes, which can be considered a normal and appropriate reaction.

Several very well-implemented study courses were demonstrated in the e-platform Moodle where the H5P was integrated, but it was admitted that a considerable amount of courses are still at the basic level and could be developed. However the students valued the courses in Moodle during the assessment visit, they also highlighted the wish to have more practical studies as well as the guest lecturers who could be involved more as they connected the theoretical studies very well with practical examples. It was highly appreciated by the students that they had the possibility to have guest lecturers from different countries and organizations.

Student participation in short-term mobility programmes indicated high satisfaction, though overall engagement with these opportunities was low. This indicates a need for strategies to boost involvement in mobility programmes, which could significantly enhance the overall educational experience.

Also, several examples are given in the SAR section 3.2.3 of how the studies are enriched in the framework of the study courses students took part in practical work at the State Fire and Rescue Service (SFRS) Civil Protection Operational Control Centre, study excursions organized to the "Latvian Firefighting Museum", practical classes were organized for students at the State Police Forensic Department, laboratory work and familiarisation classes were organized at the Fire Safety and Civil Protection College of the State Fire and Rescue Service of the Ministry of the Interior, as well as 1st-year students participated in a theoretical disaster management training scenario at NMC (Emergency Medical Centre) and OMG (Operational Management Group) held at Paula Stradiņš University Hospital.

Nevertheless, the effort from the teaching staff is highly valued by students, alongside a keen interest expressed in acquiring licenses for certain simulation programmes. Presently, the availability is limited to versions free of charge that unfortunately lack access to critical functions, thus failing to enrich the educational experience within the PBA SP "Safety Engineering". Moving forward, it would be prudent for the institution to explore potential partnerships and pursue additional funding mechanisms that would facilitate access to a more comprehensive simulation platform.

As a big generalization of pointing out results of the PBA SP "Safety Engineering", the keywords could be creation, implementation, cooperation, communication, research, innovation, problem-solving, planning, etc. The conclusion could be made that according to the examples which have been provided in the SAR as well as during the assessment visit the teaching and learning is not only activity in the classroom, but is an ongoing process during the study period. For example, the way teaching staff communicates with the students and with each other gives a better example of how to communicate with colleagues in the future and solve problems than any theoretical study course can provide.

#### 2.2.4.

The internship outside the educational institution is an integral part of professional bachelor studies. The four-year PBA SP "Safety Engineering" includes a 26 CP internship, which is divided into a specialization practice and practical placement for pre-graduation projects. The importance of the internship emerged also during the assessment visit, as several examples were given by students of how they understood the relevance of several study subjects only when they got the internship

experience which gave them an understanding of their future work.

RTU has established a regulation "On the Procedure for Organising Internship at Riga Technical University" (approved at the RTU Senate meeting on 28 January 2019, protocol No 626). The main concept is that the internship procedure is the cooperation between FEEM, students, and employer, who should evaluate the possibility of achievement of the learning outcomes, appoint the supervisor, and sign the tripartite agreement. It is considered to enable internship in the company in which the student is already employed, but if the student is not employed anywhere, the placement is provided by the department or RTU offers the assistance of a Student Career Support Officer who can find a suitable placement.

It is stated in the SAR section 3.2.4 that the aim and objectives of the internship are closely linked to the duties and tasks specified in the professional standard, which ensure the consolidation and application of theoretical knowledge in practice. The aim of the specialized practice is to acquire practical skills for independent work, to systematize, consolidate, and extend theoretical and practical knowledge, and to develop work skills as future senior occupational safety and health officers. The goal of the Practical Placement for Pre-Graduation Projects is to help students prepare materials for their final work. It could be concluded that the internship supports the study process and helps to achieve the learning outcomes stipulated in the PBA SP "Safety Engineering".

During the assessment visit the practical placement was not brought up in any way, which allows experts to conclude that the process is effective and works well as it is described in the SAR. It was understood that there is also some flexibility for students during the internship period. It could be positively noticed that the internship report which contains also feedback from the employers is not only an evaluation of the students but also substantive feedback is considered in the process of developing a PBA SP "Safety Engineering".

#### 2.2.5.

N/A

#### 2.2.6.

At the end of the PBA SP "Safety Engineering" state examination takes place, where students are required to produce a final thesis on a topical issue and which should be publicly defended at the State Examination Commission. Learning outcomes that are evaluated are research skills, working with literature (including in English) and internet sources as well as the ability to find the relevant topic in the field and the ability to defend a professional personal opinion. The final thesis should follow the instructions which are described in the guidelines produced for the study field.

The final theses were appreciated by the employers during the assessment visit, which confirms the interest of the employers and relevance for the field. It was noted that most of the students were already employed in their final course years, which, on one hand, required balancing studies with professional responsibilities, but on the other, offered the opportunity to investigate aspects significant to their employer's operations or the industry at large. Consequently, most of the theses produced have substantial value to the employers and contribute added value to the field overall.

It should be noted that the support during the studies is well maintained by the RTU, students are involved in several research activities as well as student conferences are organized where students can present their findings. Also, some opportunities are offered to participate in international conferences and workshops.

Some examples of topics of the final thesis are provided in the SAR section 3.2.6 which have the highest rating from the examination commission: "Current challenges and solutions in occupational safety for the arboriculture profession", "Reducing accidents in the electricity supply industry", "Creating a safety culture in a woodworking company", "Improving safety briefings in remote

working", "Improving the safety of the working environment for young people in remote working" etc.

Based on the assessment, it can be concluded that the final theses topics chosen by students are relevant to the field of study and demonstrate a high level of quality with an average grade of 8.3 out of 10. This confirms that the students have successfully achieved the desired study outcomes and are in alignment with the study programme. The SAR outlines the comprehensive support provided to students throughout their studies, including various study courses and internships that are integrated into the final thesis process.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

In conclusion, the PBA SP "Safety Engineering" has been thoughtfully developed based on professional standards, employer requirements, and societal trends. It undergoes continuous monitoring and updates to align with the dynamic needs of the labour market and incorporates valuable feedback from stakeholders.

The study field is characterised by highly motivated students and dedicated teaching staff who maintain a strong collaborative relationship. This synergy has resulted in teaching practices that meet high standards, making it challenging to identify significant areas for improvement during the assessment visit. The observations made primarily focused on organisational matters, as well as the need for well-equipped laboratories and the desire to have a licence for modelling simulation platforms, which could have a significant impact on the studies.

Employers play an integral role in the implementation of the PBA SP "Safety Engineering" by offering internships, study visits, and providing invaluable feedback. These collaborations contribute to ongoing PBA SP "Safety Engineering" development efforts. The overall satisfaction with the RTU's work and the competence of graduates is exemplary, as indicated by the high recommendation index on the national e-platform.

Strengths:

- 1) Unique study programme in Latvia.
- 2) Well-regulated processes as well as the quality management system which supports the implementation and development of the study programmes.
- 3) Highly motivated students and teaching staff with democratic relations.
- 4) Highly valued graduates by employers, as well as the high recommendation index by employers.
- 5) Good cooperation with employers, which ensures practical placement possibilities, career opportunities, research topics etc.
- 6) Opportunities to participate (students as well as teaching staff) in scientific conferences and seminars (including international).

Weaknesses:

- 1) Students' initial level of preparation and insufficient prior knowledge in subjects such as mathematics, physics, chemistry etc.
- 2) Lack of appropriate simulation software, as well as a well-equipped laboratory.
- 3) Insufficient student mobility within the learning process.

### **Assessment of the requirement [5] (applicable only to master's or doctoral study programmes)**

- 1 R5 - The study programme for obtaining a master's or doctoral degree is based on the achievements and findings of the respective field of science or field of artistic creation.

**Assessment of compliance:** Not relevant

### 2.3. Resources and Provision of the Study Programme

#### Analysis

##### 2.3.1.

For students of the PBA SP "Safety Engineering", there is the Scientific Library, located on Kipsala Campus, where there are many books related to the study field. Also, some resources are available in the FEEM building at Kalnciema 6 (e.g. Methodology Room). Academic staff and programme directors have the right to purchase needed new books.

Students have access to two teaching laboratories with relevant equipment (fire safety laboratory and occupational safety laboratory), which are continuously updated and improved. The Fire Safety laboratory has a fire alarm installation wall (controlling board, different sensors, alarm switches), fire extinguishing water system simulation equipment, and a special room for different fire trials and tests. As regards Occupational Safety Lab, there are examples of personal protective equipment, and mobile measurement devices (noise, light, vibrations, gases, electricity, etc.).

Administration, academic staff, and students have a sufficient number of auditoriums with relevant equipment in the FEEM building at Kalnciema Street 6. Teaching and academic staff are ensured with modern laptops. All members of the RTU are granted access to the ORTUS system.

The FEEM has articulated a requirement for the enhancement and expansion of laboratory facilities, as well as the procurement of advanced equipment. Additionally, there is a discernible preference among the student body for an increase in hands-on experiential learning opportunities.

According to the Annex "Breakdown of funding between cost items" of the Self-Assessment Report from the whole budget of the PBA SP "Safety Engineering", for purchase and modernization of equipment is assigned 2% of the budget. For the purchase of books and magazines are assigned 3% of the budget. It's 5% of the budget and in the year 2021/2022 it was about 9 000 euros.

##### 2.3.2.

N/A

##### 2.3.3.

According to RTU, PBA SP "Safety Engineering" is a unique programme, which combines three specialities: occupational safety, fire safety, and civil protection, and is not provided by other Universities.

Despite the uniqueness of the PBA SP "Safety Engineering", from 2017 to 2022 the number of students has decreased from 65 students to 45 accordingly (Annex 5 "Statistical data on students of the study programme "Safety Engineering"). Very low number of fees - paying students (since 2020 just 2-3 students per year). Tuition fees have increased from 1650 euro/year (in 2016) to 2600 Euro/year (in 2022). In 2016 when tuition - fees were relatively low, there were 11 fee-paying students (52 students total). According to the document "Minimum number of students to ensure the profitability of the study programme" point 1.1. for full-time intramural local students the First-level, Bachelor's, and Master's levels (including the second-level professional study programmes) - the minimum should be 19 students in each year of study. According to the SAR (p.171) the number of students reflected in the table fully ensures the cost-effectiveness of the PBA SP "Safety

Engineering". However, in the 3rd year of study, there were only 5 students (year 2022/2023). In the Annex "Funding by Positions by the period from 2013-2022" there are included preferable (or optimal) costs for one student for every year of every programme. According to this, the preferable cost per student in PBA SP "Safety Engineering" in 2021/2022 was 6846,46 Euro in a year. However, overall funding (including state funding and tuition fees) for the PBA SP "Safety Engineering" was 3513,22 Euro per student. There is a gap between preferable/optimal cost and really available funding. Preferable cost is calculated according to Regulations No 994 of the Cabinet of Ministers "Procedures for Financing Institutions of Higher Education and Colleges from the Funds of the State Budget".

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

The PBA SP "Safety Engineering" is unique and none of the other Universities provide similar programmes. Nevertheless, there are several worrying aspects:

- decreasing number of students;
- lack of fees paying students;
- low number of students by study years.

Real funding of the PBA SP "Safety Engineering" is lower than preferable/optimal, as defined in legislation. This limits development possibilities.

Premises and IT staff are ensured for students and academic staff. Students can use the Scientific Library, Fire Safety and Occupational Safety Laboratories. And students would like to have more practical training.

Strengths:

- 1) Unique programme, combining three specialities.
- 2) Well-ensured Scientific Library.

Weaknesses:

- 1) Real funding of the PBA SP "Safety Engineering" is lower than preferable/optimal, defined in Legislation. This limits development possibilities.
- 2) Decreasing number of students.

### **Assessment of the requirement [6]**

- 1 R6 - Compliance of the study provision, science provision (if applicable), informative provision (including library), material and technical provision and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of learning outcomes

**Assessment of compliance:** Partially compliant

Ensured sufficient level of all kinds of provisions to ensure successful implementation of the program. Identified challenges and necessary improvements to stop the decrease in the number of students and reduce the negative gap between real funding (state budget + tuition fees) and optimal (calculated according to legislation) regarding cost per student

## **2.4. Teaching Staff**

### **Analysis**

#### 2.4.1.

32 elected lecturers (59% of whom have a doctorate) are involved in implementing the PBA SP

"Safety Engineering" - 4 professors, 4 associate professors, 5 lead researchers, 2 researchers, 3 practical assistant professors, 5 assistant professors, 5 lecturers, and 4 research assistants. The election of the teaching staff is based on their scientific and pedagogical experience, areas of scientific research, and results achieved, considering the specificities of the PBA SP "Safety Engineering" and study disciplines.

Section 3.4.1 of the SAR provides detailed data on the scientific research activities of the academic staff of the PBA SP "Safety Engineering", including participation in several conferences and seminars, publication of scientific articles, mobilities, thesis reviews, etc. Examples are given from the academic life of eminent representatives of the teaching staff of the PBA SP "Safety Engineering", which show their extensive commitment as lecturers, researchers, and practitioners. The knowledge and practical experience gained through international cooperation and mobility are used to update and improve the courses taught by the teaching staff and to better achieve the objectives of the curriculum. All this enables lecturers not only to regularly improve their professional and academic knowledge but also to successfully transfer it to their students, thus better preparing them for work in a real environment.

The participation of the staff of the PBA SP "Safety Engineering" in various projects and other forms of cooperation at the national and international levels enables the PBA SP "Safety Engineering" to attract foreign guest lecturers as well as to conduct practical international intensive training programmes for students, in which representatives and experts from other countries participate and share their practical experience and knowledge.

The teaching staff of the PBA SP "Safety Engineering" have extensive practical experience and work as experts and competent contractors in various contract works related to the field of safety engineering. They are also often involved in initiatives to update the normative base on which students will have to base their professional activities in the future.

Based on the above, it can be concluded that the qualifications and competencies of the academic staff involved in the PBA SP "Safety Engineering" are fully relevant to the specific nature of the courses. Their competence, knowledge, and practical experience make it possible to achieve the objectives of the PBA SP "Safety Engineering", to successfully carry out the tasks to be performed, and to ensure the achievement of the expected results set out in the programme.

#### 2.4.2.

The PBA SP "Safety Engineering" is delivered by both academic lecturers and highly qualified industry experts, which is highly valued by students. In Section 3.4.2 the SAR presented information on the changes in the composition of the teaching staff of the PBA SP "Safety Engineering" (2013-2023) by position. From the data, it can be seen that during the analyzed period there is a smooth trend of increase in the number of academic staff in individual positions, with the largest increase in the number of experts in the field (from 3 to 10). In the majority of cases, changes in the composition of the teaching staff are related to changes in the content of the PBA SP "Safety Engineering", which indicates a search for an optimal option for its development.

The participation of specialists from the industry and experts in the PBA SP "Safety Engineering" keeps the content of the programme as close as possible to the specifics and current needs of the industry. At the same time, the growth of the academic staff guarantees an increase in the quality of the educational process and the research potential in this direction.

The SAR provides examples of the recruitment of several former students who have completed the PBA SP "Safety Engineering" into the teaching profession, thus ensuring continuity in teaching and a successful generational change. This creates conditions for sustainability in the future development of the study programme and its delivery by well-prepared and professionally oriented lecturers.

#### 2.4.3.

N/A

#### 2.4.4.

The annex "List of the publications, patents, and artistic creations of the teaching staff over the reporting period" to Section 2.4 "Scientific Research and Artistic Creation" from the SAR of the study field "Internal Security and Civil Protection" shows that the teaching staff of the PBA SP "Safety Engineering" (code 42862) had good publication activity during the reporting period. All 32 FEEM members reported publication activity, with some being particularly productive. A review shows that the topics of the publications correspond to the profile of the courses in which the authors are involved as lecturers within the PBA SP "Safety Engineering".

Many publications are co-authored by more than one member of the Department, and 252 of them are indexed in internationally recognized databases such as Scopus and Web of Science. After checking the relevant databases, the high achievements in the publication activity in peer-reviewed journals of Prof. Andra Blumberga (146 publications in Scopus / WoS, h-index 21), Prof. Andrejs Matvejevs (20 publications in Scopus/WoS, h-index 3) deserve attention), Associate Professor Ingūna Jurgelāne-Kaldava (16 publications in Scopus/WoS, h-index 4) and Associate Professor Artūrs Vrubļevskis (14 publications in Scopus/WoS, h-index 7) deserve attention. Despite the difficulties reported during the meeting at RTU with the teaching staff of the study field, related to the small number of specialized journals in the area of internal security and civil protection and the difficult access to information from practice, the lecturers of the PBA SP "Safety Engineering" participate in international projects and research, the results of which have a high impact factor and are well accepted for publication in peer-reviewed journals. However, data on indexed publications are missing for 7 of the lecturers, which should also be considered by the PBA SP "Safety Engineering" management and the RTU.

There is a balanced distribution of the geographical scope of the publications, with a slightly larger share of those in national publications (mainly of RTU) compared to foreign ones, but this in no way diminishes their qualities and contributions of a scientific and practical nature.

Some lecturers have more than 15 years of practical experience, as shown in their CVs, which is a testament to their professionalism and insight into the field in which they teach.

#### 2.4.5.

Collaboration between teaching staff within the PBA SP "Safety Engineering" takes place both during the semester in the teaching of courses and in the planning and development of changes and developments necessary to update the study programme. Course audits are carried out annually to identify possible improvements. Lecturers within the PBA SP "Safety Engineering" communicate with each other both formally (during meetings and other general events) and informally (individual face-to-face meetings, telephone communication, etc.). In Section 3.4.5 of the SAR, some examples of joint initiatives have been given in which representatives of lecturers from different positions in the academic hierarchy participated, which confirms the good cooperation between them.

Regular meetings and methodological sessions of the teaching staff are held to discuss the topics of the courses and the necessary improvements in the content of the courses, to agree on topics, directions, responsibilities, and compliance with regulatory requirements. All members of the teaching staff involved in the training course participate in the process of coordinating them to ensure that the topics included in the training programme do not overlap and are continuously improved and updated in collaboration with the professionals involved in the field. This ensures that issues related to the learning process and its improvement are discussed promptly, that the topics taught in the training courses are aligned with the PBA SP "Safety Engineering" objectives, and that the learning outcomes of the training courses are integrated into the overall learning outcomes of

the programme, e.g. considering different work schedules and workloads.

An analysis of the ratio of students to teaching staff within the PBA SP "Safety Engineering" shows that in the academic year 2022/2023 the ratio of elected teaching staff to students is approximately 1:3, while the ratio of professionals to students is approximately 1:5.

### **Conclusions on this set of criteria, by indicating strengths and weaknesses**

Enough lecturers participate in the implementation of the PBA SP "Safety Engineering", well distributed in terms of positions and educational level, which allows the expert group to state that there are good conditions for achieving the objectives and learning outcomes of the PBA SP "Safety Engineering". Some of the lecturers have many years of practical experience, and at the same time, guest lecturers from practice (including from abroad) are involved in the educational process, which has a positive impact on its quality and the overall training of future specialists in the field of safety engineering.

Relations between lecturers can be described as good, with evidence of good cooperation and continuity in teaching and research activities. Efforts are being made to attract more active students to research and to motivate them to start a teaching career at the RTU.

The publication activity of the teaching staff is at a very high scientific and professional level, as evidenced by the available publications indexed in internationally recognized databases such as Scopus and Web of Science.

The PBA SP "Safety Engineering" is regularly updated, respecting the principle of interrelation between them and not allowing the duplication of training content.

Strengths:

- 1) The participation of academic lecturers and guest lecturers from practice is successfully combined in the learning process.
- 2) Lecturers have extensive academic, research, and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the PBA SP "Safety Engineering".
- 3) Regular professional development of the teaching staff and support for junior lecturers from senior lecturers and management of FEEM.
- 4) Good publication activity in the area of courses in the PBA SP "Safety Engineering", including peer-reviewed publications in Scopus and Web of Science.

Weaknesses:

- 1) Some of the lecturers do not have publications indexed in Scopus and Web of Science.

### **Assessment of the requirement [7]**

- 1 R7 - Compliance of the qualification of the academic staff and visiting professors, visiting associate professors, visiting docents, visiting lecturers and visiting assistants with the conditions for the implementation of the study programme and the requirements set out in the respective regulatory enactments.

**Assessment of compliance:** Fully compliant

The expert group considers that there is sufficient evidence to support the claim that the qualification of the PBA SP "Safety Engineering" teaching staff fully meets the conditions for the implementation of the PBA SP "Safety Engineering" and the requirements defined in the relevant legal acts.

## **2.5. Assessment of the Compliance**

## Requirements

- 1 - The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard

**Assessment of compliance:** Fully compliant

Annex 6 ("6.pielikums\_Annex 6\_atbilstība valsts izglītības standartam\_compliance with the national education standard.pdf") confirms that the study programme complies with Cabinet Regulation No. 305 "Noteikumi par valsts profesionālās augstākās izglītības standartu"

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

**Assessment of compliance:** Fully compliant

Annex 7 ("7.pielikums\_7 Annex\_Studiju programmas atbilstība profesijas standartam\_Study programme compliance with Professional standard.pdf") confirms that the programme is compliant with the professional standard of "Occupational Safety Engineer" (approved on 8 February, 2022).

- 3 - 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 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education Institutions.

**Assessment of compliance:** Fully compliant

The attached study course descriptions ("Annex 10\_Study\_Courses\_.pdf") are prepared in Latvian. Descriptions comply with regulations outlined in the Law on Higher Education Institutions.

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

**Assessment of compliance:** Fully compliant

The provided Diploma sample (" Safety Engineering\_ENG\_diploma and diploma supplement.pdf") complies with the procedure by which state-recognized documents of higher education are issued in accordance with Cabinet Regulation No. 202 "Kārtība, kādā izsniedz valsts atzītus augstāko izglītību apliecinājošus dokumentus".

- 5 - 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 Higher Education Institutions.

**Assessment of compliance:** Not relevant

- 6 - 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 Higher Education Institutions.

**Assessment of compliance:** Not relevant

- 7 7 - 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 (if applicable).

**Assessment of compliance:** Not relevant

- 8 8 - 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 attached resumes of staff ("Academic\_staff\_CV\_EN.zip") and confirmation ("Confirmation - knowledge of the state language.edoc") verifies that state language proficiency is compliant with Cabinet Regulation No. 733 "Noteikumi par valsts valodas zināšanu apjomu, valsts valodas prasmes pārbaudes kārtību un valsts nodevu par valsts valodas prasmes pārbaudi".

- 9 9 - 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 (if applicable).

**Assessment of compliance:** Not relevant

- 10 10 - The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

**Assessment of compliance:** Fully compliant

Sample of the attached study agreement ("Study\_agreements.zip") complies with Cabinet Regulation No. 70 "Studiju līgumā obligāti ietveramie noteikumi".

- 11 11 - The higher education institution / college has provided confirmation that students will be provided with opportunities to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

**Assessment of compliance:** Fully compliant

The attached contracts ("Līgums\_Stud.turpināšana\_Agreement\_Transition.zip") confirm that the institution provides the possibility to continue studies within the following options - University of Latvia:

the Professional Bachelor's Study Programme "Occupational Health and Safety at Work;

- 12 12 - The higher education institution / college has provided confirmation that students are guaranteed compensation for losses if the study programme is not accredited or the study programme's license is revoked due to the actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.

**Assessment of compliance:** Fully compliant

RTU confirmation ("Confirmation - on compensation for losses.edoc") states, that students are guaranteed 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 college (actions or failure to act) and the student does not wish to continue the studies in another study programme.

13 13 - The joint study programmes comply with the requirements prescribed in Section 55.(1), Paragraphs one, two, and seven of the Law on Higher Education Institutions (if applicable)

**Assessment of compliance:** Not relevant

14 14 - Compliance with the requirements specified in other regulatory enactments that apply to the study programme being assessed (if applicable)

**Assessment of compliance:** Fully compliant

The study programme complies with a list of specified regulatory enactments relevant to the field of civil protection, fire safety, labour protection and similar ("Studiju programmas atbilstība nozares specifiskajam normatīvajam regulējumam\_ Compliance of study programme with the sector-specific regulatory framework .pdf").

### **Assessment of the requirement [8]**

1 R8 - Compliance of the study programme with the requirements set forth in the Law on Higher Education Institutions and other regulatory enactments.

**Assessment of compliance:** Fully compliant

PBA SP "Safety Engineering" complies with regulatory requirements.

### **General conclusions about the study programme, indicating the most important strengths and weaknesses of the study programme**

The PBA SP "Safety Engineering" fully complies with the study field "Internal Security and Civil Protection" and all related regulations. The title, code, the obtained degree, and professional qualification of the PBA SP "Safety Engineering", as also aims, objectives, learning outcomes and admission requirements are clearly defined and interrelated. The duration, language, and scope of the PBA SP "Safety Engineering" are reasonable and justified.

The PBA SP "Safety Engineering" provides the degree and professional qualification that are in high demand and necessity in the labour market, providing graduates with good employability opportunities. Graduates of the PBA SP "Safety Engineering" are also awarded a 160-hour certificate in fire safety, so they can perform not only the duties of an occupational safety officer but also be responsible for fire safety in accordance with the "Fire Safety and Fire Fighting Law". In the academic year 2022/2023, 43 students are studying with state budget funding and 2 students are paying tuition fees. Dynamics of numbers of students, graduates, and dropout cases show that the PBA SP "Safety Engineering" is in good demand but depends on state funding. Students might need more support in passing exact science study courses, which often is a reason for dropout.

The PBA SP "Safety Engineering" has been thoughtfully developed based on professional standards, employer requirements, and societal trends. It undergoes continuous monitoring and updates to align with the dynamic needs of the labour market and incorporates valuable feedback from stakeholders. The study direction is characterized by highly motivated students and dedicated teaching staff who maintain a strong collaborative relationship. This synergy has resulted in teaching practices that meet high standards, making it challenging to identify significant areas for improvement during the assessment visit. The observations made primarily focused on organizational matters, as well as the need for well-equipped laboratories and the desire to have a license for modeling simulation platforms, which could have a significant impact on the studies. Employers play an integral role in the implementation of the PBA SP "Safety Engineering" by offering internships, study visits, and providing invaluable feedback. These collaborations contribute to ongoing curriculum development efforts. The overall satisfaction with the RTU work and the competence of graduates is exemplary, as indicated by the high recommendation index on the

national e-platform.

The PBA SP "Safety Engineering" is unique and none of the other Universities provide similar programmes. Nevertheless, there are several worrying aspects like decreasing number of students, lack of fees paying students, and a low number of students by study years.

The real funding of the programme is lower than preferable or optimal, as defined in the normative base. This limits development possibilities.

Premises and IT are ensured for students and academic staff. Students can use the Scientific Library, Fire Safety, and Occupational Safety Laboratories. However, academic staff express the need for better new laboratories and new equipment. Students would like to have more practical training.

Enough lecturers participate in the implementation of the PBA SP "Safety Engineering", well distributed in terms of positions and educational level, which allows the expert group to state that there are good conditions for achieving the objectives and learning outcomes of the PBA SP "Safety Engineering". Some of the lecturers have many years of practical experience, and at the same time, guest lecturers from practice, including from abroad, are involved in the educational process, which has a positive impact on its quality and the overall training of future specialists in the field of safety engineering.

Relations between lecturers can be described as good, with evidence of good cooperation and continuity in teaching and research activities. Efforts are being made to attract more active students to research and to motivate them to start a teaching career at the RTU. The publication activity of the teaching staff is at a very high scientific and professional level, as evidenced by the available publications indexed in internationally recognized databases such as Scopus and Web of Science.

The expert group has an opinion that even if there is an evaluation partially compliant under the Resources and Provision of the PBA SP "Safety Engineering", because of the negative gap between real funding (state budget + tuition fees) and optimal (calculated according to legislation) regarding cost per student, the overall evaluation of the PBA SP "Safety Engineering" could be excellent. It was found that the funding issues are not only influenced by the RTU but are dependent on the state level, however, RTU has been proactive and will start to pilot the new funding system, which could offer better conditions also to the PBA SP "Safety Engineering". Also, the weaknesses identified primarily serve as indicators of areas that could be considered for developmental activities, however, fundamentally, these do not impact the substantive quality of the PBA SP "Safety Engineering".

Strengths:

- 1) Graduates of the PBA SP "Safety Engineering" programme in addition to a professional Bachelor's degree and professional qualification receive a certificate in fire safety, which broadens their professional qualification.
- 2) Graduates of the PBA SP "Safety Engineering" have good employability opportunities - degree and professional qualification are in high demand and legal need in the labour market.
- 3) State is funding a definite number of study places in the study programme.
- 4) Close cooperation with industry.
- 5) Unique programme, combining three specialities, which comply with all the related regulations.
- 6) Highly motivated students and teaching staff with democratic relations.
- 7) Well-regulated processes as well as the quality management system which supports implementation and development of the PBA SP "Safety Engineering".
- 8) Opportunities to participate for students and teaching staff in local and international scientific conferences and seminars.
- 9) Well-ensured Scientific Library and Fire Safety laboratory.
- 10) Regular professional development of the teaching staff and support for junior lecturers from senior lecturers and management.
- 11) The participation of academic lecturers and guest lecturers from practice is successfully

combined in the learning process.

12) Lecturers have extensive academic, research, and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the PBA SP "Safety Engineering".

13) Good publication activity in the area of courses in the PBA SP "Safety Engineering", including peer-reviewed publications in Scopus and Web of Science.

Weaknesses:

1) A low number of graduates in the PBA SP "Safety Engineering".

2) High dropout rates in the PBA SP "Safety Engineering", due to which there is a low number of graduates.

3) Decreasing number of students paying tuition fees.

4) Students' initial level of preparation and insufficient prior knowledge in subjects such as mathematics, physics, chemistry, etc.

5) Insufficient student mobility within the learning process.

6) Decreasing the overall number of students.

7) Real funding of the PBA SP "Safety Engineering" is significantly lower than preferable/optimal, defined in Legislation. This limits development possibilities, for example, there is a lack of appropriate simulation software, as well as a well-equipped laboratory.

8) Availability of lecturers with a small number of publications that are indexed in Scopus and the Web of Science.

## Evaluation of the study programme "Safety Engineering"

Evaluation of the study programme:

Excellent

## 2.6. Recommendations for the Study Programme "Safety Engineering"

### Short-term recommendations

1) Ensure activities to increase the number of graduates in the PBA SP "Safety Engineering" up to 90% of the group.

2) Ensure activities to promote the PBA SP "Safety Engineering" and increase the number of students in the programme, including self-paid places, at least by 20% annually.

3) Ensure assistance activities for students with insufficient prior knowledge in subjects such as mathematics, physics, and chemistry.

4) Extend partnerships with other universities to facilitate exchange programmes and increase student mobility.

5) Ensure investment in a full version of appropriate simulation software.

6) It is necessary to increase the number of scientific research of the teaching staff indexed in the world databases Scopus and Web of Science, for which more resources should be allocated by RTU.

### Long-term recommendations

1) Develop targeted interventions to lower dropout rates, such as enhanced academic advising, mentoring programmes, and early identification of at-risk students to provide them with additional support.

2) Craft a clear, strategic proposal for the necessary modernization of equipment, and actively pursue alternative funding sources such as grants, partnerships, and alumni donations specifically for this purpose.

## II - "Fire Safety and Civil Protection" ASSESSMENT

### II - "Fire Safety and Civil Protection" ASSESSMENT

#### 2.1. Indicators Describing the Study Programme

##### Analysis

###### 2.1.1.

The 1st Cycle professional higher education study programme "Fire Safety and Civil Protection" 44862 (hereinafter PHE SP "Fire Safety and Civil Protection") fully complies with the study field "Internal security and civil protection". The main objective of the PHE SP "Fire Safety and Civil Protection" is to provide students with the knowledge required for the professional qualification of Fire Safety and Civil Protection Engineer. Based on SAR Annex 9 (9.pielikums\_Annex 9\_Studiju kursu plāns\_Course plan\_.pdf), the study courses cover such areas as Fire Security of Construction and Design 4 CP, Safety of Technological Processes 2 CP, Fire Safety Monitoring and Fire Assessment 4 CP, Fire Safety and Civil Protection Legislation 4 CP, Facility Risk Assessment and Disaster Modelling and Management 4 CP, Object Risk Assessment and Disaster Modelling 2 CP, Managing the Safety of Work and the Work Environment 4 CP, Civil Protection System Planning 4 CP (SAR, Annex 9).

###### 2.1.2.

Based on SAR, the PHE SP "Fire Safety and Civil Protection" is implemented in two modes - full-time (1 year and 6 months) and part-time (2 years), in-presence, in Latvian language only, with both public and private funding. The PHE SP "Fire Safety and Civil Protection" has a volume of 60 CP (90 ECTS).

Based on SAR, p.180, and according to the classification of education (Cabinet of Ministers of the Republic of Latvia Regulations No.322, 2017) the code of the PHE SP "Fire Safety and Civil Protection" is 44862, with the last three numbers 862 stands for occupational protection and safety and sets 862 00 occupational protection and safety. At the same time, in SAR p.184, it is written that the PHE SP "Fire Safety and Civil Protection" is in the thematic area of Civil and Military Protection Services, Protection of Persons, and Property - code 861, ISCED-2013 classification: 1032; and subject areas not elsewhere classified - Programme groups not elsewhere classified - code 999, ISCED-2013 classification: 9999 (SAR, p.183-184). The experts consider that it is more correct to link the study programme to the code 861 - protection of persons and property. As can be seen in Chapter 2.1.1 in this report, the main study courses are more related to the protection of people and property and are less linked to occupational protection and safety. If RTU prefers to keep the code 44862, then the PHE SP "Fire Safety and Civil Protection" should be updated with the courses related to labour issues and occupational protection. Extra information received from RTU during the assessment provides evidence that RTU considers code 44861 as more relevant. The professional qualification "Fire Safety and Civil Protection Engineer" and the corresponding profession code 2149 40 to be awarded to graduates of the study programme comply with the Cabinet of Ministers

Regulation No 264 "Regulations on the Classification of Professions, Basic Tasks, and Qualification Requirements Corresponding to the Profession". The PHE SP "Fire Safety and Civil Protection" has interdisciplinary components.

The PHE SP "Fire Safety and Civil Protection" is developed to provide a systematic and coherent education in the fields of internal security and civil protection. The objectives of the PHE SP "Fire Safety and Civil Protection" are subordinate to the objectives of the field of study, forming a coherent framework while reflecting the specificities of the study programme. The aim of the PHE SP "Fire Safety and Civil Protection" is to provide theoretical knowledge and practical skills to prepare specialists with knowledge, skills, and abilities in fire safety and civil protection, drafting and implementing emergency plans, calculating, and assessing various risks, as well as making appropriate decisions within their competence.

Based on SAR Annex 6, the objectives, scope, and assessment of the PHE SP "Fire Safety and Civil Protection" are in line with the requirements set out in the national education standard (SAR Annex 6). Students are enrolled in the PHE SP "Fire Safety and Civil Protection" only after graduating from the College of Fire and Civil Protection and qualifying as a Fire and Civil Protection Technician (SAR, p.183-184).

The admission procedure is regulated by the RTU Admission Rules. The tasks of the PHE SP "Fire Safety and Civil Protection" are to provide operational disaster management and action at the scene; to manage firefighting and rescue operations; to carry out fire safety monitoring and building documentation analysis and expertise; to organize civil protection measures; to investigate and assess fire conditions; to train personnel within the scope of their competence. The PHE SP "Fire Safety and Civil Protection" has defined 5 achievable study outcomes that correspond to the job duties, tasks, and competencies defined in the professional standard "Fire Safety and Civil Protection Engineer" (SAR Annex 7 "7.pielikums\_7 Annex\_Studiju programmas atbilstība profesijas standartam\_Study programme compliance with Professional standard.pdf"), as also with the sector-specific regulatory framework (SAR Annex "Specifiskais normatīvais regulējums\_Specific Regulatory Framework\_.pdf").

Study courses' content is subordinated to the achievement of the PHE SP "Fire Safety and Civil Protection" deliverables (SAR Annex 8 "8.pielikums\_Annex 8\_Kartēšana\_Mapping\_.pdf"). The occupational standard "Fire Safety and Civil Protection Engineer" agreed at the meeting of the Tripartite Cooperation Sub-Council for Professional Education and Employment on 18 February 2009 was updated in 2022 and 11.10.2023. The draft occupational qualification requirements have been coordinated in the Tripartite Cooperation Sub-Council for Professional Education and Employment (minutes of the meeting No.5). The agreed project will be published on the [https://registri.visc.gov.lv/profizglitiba/nks\\_stand\\_saraks\\_mk\\_not\\_626.shtml](https://registri.visc.gov.lv/profizglitiba/nks_stand_saraks_mk_not_626.shtml) website within 3-4 weeks of project reconciliation in the Tripartite Sub-Council for Professional Training and Employment. Consequently, following publication, further changes and additions to the course descriptions will be made at a later stage, if necessary (SAR, p.185).

The title, the professional qualification of the PHE SP "Fire Safety and Civil Protection", as well as aims, objectives, learning outcomes and admission requirements are clearly defined and interrelated, as well as the duration, language and scope are reasonable and justified. The code of the programme is more related to 44861.

### 2.1.3.

The main changes in the PHE SP "Fire Safety and Civil Protection" during the assessment project were in the context of the related professional qualification. Based on SAR, during the reporting period, the PHE SP "Fire Safety and Civil Protection" was implemented following the professional standard "Fire Safety and Civil Protection Engineer" approved at the meeting of the Tripartite Cooperation Sub-Council for Professional Education and Employment on 18 February 2009.

Following the procedure set out in Article 10 of the Cabinet of Ministers Regulation No.633 "Procedure for Development of Occupational Standard, Professional Qualification Requirements (if no occupational standard is approved for an occupation) and Sectoral Qualification Framework", in 2022 the professional standard was updated and at the moment of SAR preparation, the draft of professional qualification requirements has been submitted for consideration to the Tripartite Cooperation Sub-Council for Professional Education and Employment (SAR Annex "Draft Occupational Standard for Fire Safety and Civil Protection Engineer" and "On Harmonisation of the Draft Professional Standard"). The current professional qualification standard accepted on 11 October 2023 by the Tripartite Cooperation Sub-Council for Professional Education and Employment (minutes of the meeting No.5) is available at: <https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/2017/PS-278.pdf>

In February 2023, it was decided to amend the requirements under "Previous education required" to read as follows: short-cycle professional higher education and 5th level professional qualification "Fire and civil protection technician". No other changes were made to the parameters of the PHE SP "Fire Safety and Civil Protection" during the reporting period (SAR, p.183).

The experts consider that the mentioned changes are justified and fully supported.

#### 2.1.4.

The PHE SP "Fire Safety and Civil Protection" provides the professional qualification which is of high importance for the national security system and based on SAR, the civil protection system is a component of the national security system. The training of fire safety and civil protection specialists is a very important part of civil protection, which is based on normative documents such as the "Law on Civil Protection and Disaster Management" (in force from 01.10.2016), the "Law on Fire Safety and Fire Fighting" (in force from 01.01.2003) and the "National Civil Protection Plan" (in force from 26.08.2020).

The implementation of the PHE SP "Fire Safety and Civil Protection" and the training of fire safety and civil protection engineers allows the SFRS with highly qualified personnel, which in turn is an important component of the civil protection system. The economic and social rationale of the PHE SP "Fire Safety and Civil Protection" is therefore closely intertwined with the country's development and national interests. As the PHE SP "Fire Safety and Civil Protection" only admits students who have previously completed a short-cycle professional higher education and the 5th level professional qualification "Fire Safety and Civil Protection Technician", the competencies defined in the professional qualification requirements for "Fire Safety and Civil Protection Engineer" are aligned with the professional qualification requirements for "Fire Safety and Civil Protection Technician", so that professional qualification requirements are mutually reinforcing, complement the knowledge acquired in the previous cycle and form a coherent set of competencies for the first cycle of higher professional education. The specific admission rules of the PHE SP "Fire Safety and Civil Protection" mean that students already have prior knowledge and work experience in the field, as students matriculated in parallel to their studies work in the SFRS (SAR, p.186).

Looking at the graduate statistics, the highest number of graduates was in the 2018/2019 academic year (23 graduates) and the lowest in the 2013/2014 academic year (9 graduates). The low number of graduates in the 2013/2014 academic year is because some of the students had an academic year, because of which only 9 out of all students renewed and completed their studies. In total, 167 students graduated from the PHE SP "Fire Safety and Civil Protection" in the reporting period, and continued their studies mainly in SFRS departments (about 97%) or elsewhere (about 3%) (SAR, p.187).

During the reporting period, the number of part-time extramural applications for the PHE SP "Fire Safety and Civil Protection" was below the minimum number of students set by the RTU to make the part-time extramural option cost-effective (SAR, p.187). The highest number of students on state

funding in the 1st year was in the academic year 2017/2018 - 38 students. This is due to the increase in the number of state budget-funded places. The lowest number of students in the 1st year with state funding is observed in the academic years 2015/2016, 2018/2019, and 2020/2021 - 20 students each. This is because the number of state budget-funded places in the PHE SP "Fire Safety and Civil Protection" was lower in those years due to the level of funding provided by the state. The highest number of students in the 1st year studying at personal expense was in the academic year 2019/2020 - 4 students, while in the academic years 2013/2014, 2016/2017, 2017/2018, and 2022/2023 there were no fee-paying students at all. This is because in those years there were more state budget-funded places, which made it possible for all students to study without having to invest their own money (SAR, p.188).

Analyzing the reasons for dropout of students, in the reporting period the largest share (12.98%) in the 1st year is those who dropped out of academic failure and 2.59% are those who dropped out of their own free will, while 0.43% dropout as not having started their studies. The high number of dropouts in the 2017/2018 academic year is because all students from previous academic years who had previously taken several study breaks and had never renewed to continue their studies were dropped in that year. The main reasons for academic failure in 1st year are students missing classes for personal reasons and failing to complete course requirements on time to obtain a passing grade. The reasons for voluntary dropout are mainly of a personal nature (illness, change in private life, etc.). In the 2nd year, the highest dropout rate in the reporting period was for poor performance (17,64%) and the second reason for dropout was those who left their studies voluntarily (1.35%). In this case, the reasons for dropping out are mainly the same as before, but the reasons for dropping out of their own volition are the same as for the first year (SAR, 189.p.).

2.1.5.

N/A

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

The PHE SP "Fire Safety and Civil Protection" fully complies with the study field "Internal Security and Civil Protection". The main objective of the PHE SP "Fire Safety and Civil Protection" is to provide students with the knowledge required for the professional qualification of Fire Safety and Civil Protection Engineer. The title, the professional qualification of the PHE SP "Fire Safety and Civil Protection", as well as aims, objectives, learning outcomes and admission requirements are clearly defined and interrelated, as well as the duration, language and scope are reasonable and justified. The code of the PHE SP "Fire Safety and Civil Protection" is more related to 44861 (861 - protection of persons and property), not 44862 (862 - occupational protection and safety). But in SAR, both codes are mentioned, 44862 in the description of the study programme (SAR, p.180) and 44861 in the explanation of SAR p.184. The PHE SP "Fire Safety and Civil Protection" complies with the state education standard, related professional qualification requirements, and a specific regulatory framework.

Strengths:

- 1) The PHE SP "Fire Safety and Civil Protection" complies with all the related regulations.
- 2) Graduates of the PHE SP "Fire Safety and Civil Protection" have good employability opportunities in the SFRS.
- 3) The State is funding a definite number of study places in the PHE SP "Fire Safety and Civil Protection".
- 4) Close cooperation with industry.

Weaknesses:

- 1) Insufficient number of students to start a part-time group.
- 2) Low or close to zero number of students paying tuition fees.
- 3) High dropout rates in the PHE SP "Fire Safety and Civil Protection".
- 4) The number of potential students is limited by admission requirements regarding previous education.
- 5) Number of state budget places is limited in the PHE SP "Fire Safety and Civil Protection".
- 6) The code of the PHE SP "Fire Safety and Civil Protection" is not clearly indicated in SAR (p.180, p.184).

## **2.2. The Content of Studies and Implementation Thereof**

### **Analysis**

#### 2.2.1.

PHE SP "Fire Safety and Civil Protection" is unique and the only one in the Baltic region, the graduates of the study programme are in demand from the SFRS following the special cooperation agreement signed between RTU and SFRS. Students of the PHE SP "Fire Safety and Civil Protection" acquire the necessary knowledge, skills, and competencies corresponding to the sixth level of professional qualification (PQL 6) and the sixth level of the Latvian Qualifications Framework (LQF 6), which correspond to the requirements for the professional qualification of Fire Safety and Civil Protection Engineer.

A detailed comparison is provided in the annexes between:

- "Regulations on the state standard of professional higher education" (Regulations of 21.06.2023 No. 305 Part VIII requirements) and PHE SP "Fire Safety and Civil Protection". (See annex: 6.pielikums\_Annex 6\_atbilstiba\_valsts\_izglibas\_standartam\_compliance\_with\_the\_national\_education\_standard.pdf)
- Knowledge required for the performance of the main tasks of the professional activity and relevant study courses in the PHE SP "Fire Safety and Civil Protection". (See annex: 7.pielikums\_7\_Annex\_Studiju\_programmas\_atbilstiba\_profesijas\_standartam\_Study\_programme\_compliance\_with\_Professional\_standard.pdf)
- Specific regulatory framework and study courses of the PHE SP "Fire Safety and Civil Protection". (See annex: Specifiskais\_normativais\_regulējums\_Specific\_Regulatory\_Framework\_.pdf)

The comparison reveals that despite the curriculum being governed by a cooperation agreement, with an annual enrollment of 15-20 students as stipulated by the SFRS, there have been no concessions made in either the content or quality of the educational programme and the PHE SP "Fire Safety and Civil Protection" meets national standards.

Several examples are provided in the SAR section 3.2.1 of how the content of the study is constantly updated and improved in line with the latest trends in fire safety and civil protection, as well as the situation in the labour market and its requirements. To ensure the quality of the PHE SP "Fire Safety and Civil Protection", several changes were made to the content and structure of the programme during the reporting period, which was necessitated by the recommendations gathered in the questionnaire results, as well as by changes in the regulatory enactments and the occupational standard.

It was seen that the students are motivated and satisfied with their studies and it was difficult to get suggestions on development needs, which confirms that the PHE SP "Fire Safety and Civil Protection" is developed continuously and recommendations from the students and graduates, which are mentioned in the SAR are considered and implemented.

However, one focus of the discussion with employers was on identifying areas for improvement in the study field. While the employers expressed their satisfaction with the knowledge and skills of the

graduates, they also acknowledged the need for further development concerning current global events and their impact on security and civil protection. Employers expressed the need to integrate the necessary (mostly sensitive information regarding security issues) information regarding globally impactful events into education at a faster pace in a manner that strengthens internal security without compromising it. At the same time, it was clearly recognized that the accessibility of relevant, up-to-date information on a short-term basis is not only a university matter, but the state service also has a role to play in ensuring the timely acquisition of necessary information.

Connected to the aforementioned topic, employers also highlighted the need for a greater emphasis on teaching critical thinking, communication, and analytical skills, which are equally relevant to the security situation. This is necessary to better recognize relevant information, draw conclusions from it, and effectively communicate it.

Overall a strong impression remained from several discussions which reflected the high level of satisfaction with the studies from students, graduates as well as employers. All target groups confirmed the topicality of the PHE SP “Fire Safety and Civil Protection” as well as the learning outcomes that meet the needs of the industry. However, it was brought to attention that there are a few areas requiring attention and improvement that could be incorporated into the development plan. These include the establishment of well-equipped laboratories and the enhancement of skills in writing project plans to secure grants. It was noted that the study area has not been particularly successful in obtaining grants available at the university.

2.2.2. In the case of a master's or doctoral study programme, the awarding of a degree is based on the achievements and findings of the relevant field of science or artistic creation.

N/A

2.2.3.

The PHE SP “Fire Safety and Civil Protection” provides for studying courses that ensure the achievement of professional competence in lectures, practical classes, laboratory work, and literature studies. Methods are named in the SAR, such as seminars, discussions, solving situations and practical tasks, individual and group work, including research work, visits to companies and field trips, internships, and guest lectures by representatives of employers.

Reflections from the students during the assessment visit confirmed that most of the teaching staff is using different methods and put an effort to change the teaching more for the learning approach. Relations between students, teaching staff, and administration are definitely the strength of the study field, which was also reflected very well during the assessment visit. It was described by the students that if they have any kind of questions, problems, or suggestions they first communicate with the teaching staff (in the classroom or via ORTUS) and mostly they get the solution.

During the assessment visit, the teaching staff showed high motivation and gave several examples from their teaching experiences as well as they felt support and encouragement from their supervisors so far. However, it is important to note that several weeks before the assessment visit, there were changes in the FEEM structure. As a result, there was some uncertainty about the future, particularly regarding the supervision system. The teaching staff displayed an understandable mix of open-mindedness, optimism, and slight concern in response to these change processes, which can be considered a normal and appropriate reaction.

Several very well-implemented study courses were demonstrated in the e-platform Moodle where the H5P was integrated, but it was admitted that a considerable amount of courses are still at the basic level and could be developed. However the students valued the courses in Moodle during the assessment visit, they also highlighted the wish to have more practical studies (including in the laboratory) as well as the guest lecturers who could be involved more as they connected the

theoretical studies very well with practical examples. It was highly appreciated by the students that they had the possibility to have guest lecturers from different countries and organizations.

Also, several examples are given in the SAR section 3.2.3 of how the studies are enriched with study excursions and practical works for example at the SFRS Civil Protection Operational Control Center, the Civil Alarm and Notification Control Center, the 112 Single Line Operation Center, the Firefighting Museum as well as the Forensic Department of the State Police. It should be positively noted that students and teaching staff from the PHE SP “Fire Safety and Civil Protection” have been using the benefit from the Erasmus programme and other opportunities, which they valued highly during the assessment visit, as well as the overview of the used mobility projects is provided in the SAR section 3.2.3.

Nevertheless, the effort from the teaching staff is highly valued by students, alongside a keen interest expressed in acquiring licenses for certain simulation programmes. Presently, the availability is limited to versions free of charge that unfortunately lack access to critical functions, thus failing to enrich the educational experience within the PHE SP “Fire Safety and Civil Protection”. Moving forward, it would be prudent for the institution to explore potential partnerships and pursue additional funding mechanisms that would facilitate access to a more comprehensive simulation platform, as well as a well-equipped laboratory.

As most of the students have work experience, it is a good opportunity for the teaching staff also to use teaching methodologies that are useful for both sides, for example, study projects and analyzing different situations, which relates the studies with the work field and gives the information about the latest trends. It was seen during the assessment visit that the environment was friendly and positive, which encouraged the students to express their views in dialogue and share their professional experiences, thus explaining the issues at stake based on examples and thus understanding the essence of the course, as it is said in the SAR section 3.2.3.

In conclusion, the PHE SP “Fire Safety and Civil Protection” effectively combines a range of educational methods to achieve professional competence through courses, seminars, practical tasks, and internships, as confirmed by student feedback. The responsive and motivated teaching staff have fostered strong relations with students, crucial for the PHE SP “Fire Safety and Civil Protection” positive learning environment. Students have expressed a desire for more advanced simulations and practical sessions in the laboratory, although resource limitations currently restrict access to sophisticated versions of simulation programmes as well as to the equipment of the laboratory. An opportunity presents itself for the institution to seek enhanced resources and partnerships to upgrade practical learning tools and laboratory facilities. Moreover, the existing work experience of many students is a valuable asset that can be leveraged to better link academic learning with industry practice, enhancing the learning experience and reflecting the latest trends in the field. The positive and open environment noted during the assessment visit promotes constructive dialogue and the sharing of professional insights, further enriching the educational process.

#### 2.2.4.

The internship outside the educational institution is an integral part of studies. The PHE SP “Fire Safety and Civil Protection” includes a 20 CP internship. RTU has established a regulation “On the Procedure for Organising Internship at Riga Technical University” (approved at the RTU Senate meeting on 28 January 2019, protocol No 626). The main concept is that the internship procedure is the cooperation between FEEM, students, and employer, who should evaluate the possibility of achievement of the learning outcomes, appoint the supervisor, and sign the tripartite agreement. However, the study course is demanded of the SFRS the internships of this PHE SP “Fire Safety and Civil Protection” are provided in accordance with mutual agreement between RTU and SFRS. Additionally, it is said in SAR section 3.2.4 that in case the student is not a person working in the

SFRS structure, the student is provided with an internship at his/her workplace by concluding an appropriate agreement between RTU, the student, and the company.

It is stated in the SAR section 3.2.4 that the aim and objectives of the internship are closely linked to the duties and tasks specified in the professional standard, which ensure the consolidation and application of theoretical knowledge in practice. Also, the internship supervisor provides feedback (completes a feedback form), in which he/she assesses the trainee's knowledge, theoretical preparation, and communication skills, thus maintaining a continuous close link with the industry, thus creating the opportunity to develop and improve the PHE SP "Fire Safety and Civil Protection" even more qualitatively and in line with the requirements of the labour market. It could be concluded that the internship supports the study process and helps to achieve the learning outcomes stipulated in the PHE SP "Fire Safety and Civil Protection" and it could be positively noted that the internship report which contains also feedback from the employers is not only evaluation of the students but also substantive feedback is considered in a process of developing a PHE SP "Fire Safety and Civil Protection".

During the assessment visit the practical placement was not brought up in any way, which allows experts to conclude that the process is effective and works well and it was understood that there is also some flexibility for students about the internship period and also possibility was available for the recognition of prior learning, professional experience, and formal and informal education, which is according to SAR section 3.2.4 is a convenient and relatively simple procedure for students.

#### 2.2.5.

N/A

#### 2.2.6.

At the end of the PHE SP "Fire Safety and Civil Protection", students are required to produce a thesis project on topical issues in civil protection or fire safety (some of the relevant topics are also offered by the SFRS) and it must contain elements of scientific creativity or innovation in practical application. According to the SAR section 3.2.6, the diploma project is publicly defended at a meeting of the State Examination Commission and it should reflect the novelty of the issues raised, as well as the systematization of theoretical knowledge and experience, the analysis of the current applied problem, the analysis, development, and implementation of practical solutions.

The final theses were appreciated by the employers during the assessment visit, which confirms the interest of the employers and relevance for the field. It was noted that as the students were already employed before the studies, on one hand, it required balancing studies with professional responsibilities, but on the other, offered the opportunity to investigate aspects significant to their employer's (SFRS) operations or the industry at large. Consequently, most of the theses produced have substantial value to the employers and contribute added value to the field overall.

It should be noted that the support during the studies is well maintained by the RTU, students are involved in several research activities as well as student conferences are organized where students can present their findings. Also, some opportunities are offered to participate in international conferences and workshops.

Some examples of topics of the final thesis are provided in the SAR section 3.2.6 which have the highest rating from the examination commission: "Improving the methodology for disaster criteria determination", "Effectiveness of active lightning protection", "Development of recommendations for the content of the civil protection course at higher education institutions", "Establishment of boat launching sites on the Baltic Sea coast in the Republic of Latvia", "Improvement of lifeboat equipment for fire fighting on water", "Technical base for the State Fire and Rescue Service repairs: justification of the need and optimal possible solutions", "Analysis and improvement of equipment,

special equipment and standards for fire-fighting and rescue" etc.

Based on the assessment, it can be concluded that the final theses topics chosen by students are relevant to the field of study and demonstrate a high level of quality with an average grade of 7,5 out of 10. This confirms that the students have successfully achieved the desired study outcomes and are in alignment with the PHE SP "Fire Safety and Civil Protection". The SAR outlines the comprehensive support provided to students throughout their studies, including various study courses and internships that are integrated into the final thesis process.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

In conclusion, the PHE SP "Fire Safety and Civil Protection" is prepared based on professional standards, employer needs, and social trends, but mainly considering the needs and the demands of the SFRS. It is continuously monitored and updated according to the needs of the labour market and collected feedback.

The study direction is characterized by highly motivated students and teaching staff, whose good cooperation has raised the teaching to a level where it was quite difficult to find major areas of improvement during the assessment visit. Most of what was pointed out was more of an organizational nature.

SFRS is a good partner in the implementation of the PHE SP "Fire Safety and Civil Protection" by offering internships, study visits, and valuable feedback, with the help of which the curriculum is also developed. However the PHE SP "Fire Safety and Civil Protection" is implemented by the demand of the SFRS, some flexibility is left and some extensions have been done for the other organizations as well in the area. The general satisfaction with the RTU's work and the level of graduates is high, and this is also confirmed by the high recommendation index on the national e-platform.

Strengths:

- 1) Unique PHE SP "Fire Safety and Civil Protection" with the demand of SFRS.
- 2) Well-regulated processes as well as the quality management system which supports the implementation and development of the study programmes.
- 3) Highly motivated students and teaching staff with democratic relations.
- 4) Highly valued graduates by employers, as well as the high recommendation index by employers.
- 5) Good cooperation with SFRS, which ensures practical placement possibilities, career opportunities, research topics, etc.
- 6) Opportunities to participate (students as well as teaching staff) in scientific conferences and seminars (including international).

Weaknesses:

- 1) Lack of appropriate simulation software as well as a well-equipped laboratory.

### **Assessment of the requirement [5] (applicable only to master's or doctoral study programmes)**

- 1 R5 - The study programme for obtaining a master's or doctoral degree is based on the achievements and findings of the respective field of science or field of artistic creation.

**Assessment of compliance:** Not relevant

## **2.3. Resources and Provision of the Study Programme**

## Analysis

### 2.3.1.

Students of the PHE SP “Fire Safety and Civil Protection” have unfettered access to the Scientific Library situated within the Kipsala Campus, which boasts an extensive collection of literature pertinent to their field of study. The academic staff and study programmes directors are endowed with the authority to authorize the acquisition of new publications as required to support the curriculum and research activities.

For practical work in the FEEM building is the Fire safety laboratory. Since 2017 Laboratory has been regularly updated and improved installing new equipment. The Fire Safety laboratory has a fire alarm installation wall (controlling board, different sensors, alarm switches), fire extinguishing water system simulation equipment, and a special room for different fire trials and tests. During the assessment visit, all involved parties in the study process (academic staff, students, and graduates as well) expressed the need for further development of the Laboratory, e.g. equipment for testing fire-resisting properties of different materials. However, it was not mentioned future plan for the development of the Fire Safety Laboratory. It was not clear how and if the Laboratory would be relocated to the Kipsala Campus.

RTU has an agreement with the State Fire Safety and Rescue Service (SFRS) as most of the graduates (97%) after the studies work for the SFRS. According to the agreement, the SFRS is expecting 15-20 graduates annually. Students have the possibility to do a lot of practical work in SFRS facilities. It is obvious that in graduates the only interested organisation is SFRS. Despite that in the country there are significant companies and a lot of municipalities, that should have such specialists.

Administration, academic staff, and students have a sufficient number of auditoriums with relevant equipment in the FEEM building at Kalnciema Street 6. Teaching and academic staff are ensured with modern laptops. All members of the RTU are granted access to the ORTUS system.

The FEEM has articulated a requirement for the enhancement and expansion of laboratory facilities, as well as the procurement of advanced equipment. Additionally, there is a discernible preference among the student body for an increase in hands-on experiential learning opportunities.

According to the Annex “Breakdown of funding between cost items” of the Self-Assessment Report from the whole budget of the Programme, for purchase and modernization of equipment is assigned 1% of the budget. For the purchase of books and magazines assigned 4 % of the budget. It’s 5% of the budget and in the year 2021/2022 it was about 12 260 euros per year. However, only 1% (= 2450 euro) of the budget for the purchase and modernization of equipment seems too little.

### 2.3.2.

N/A

### 2.3.3.

According to the SAR, the number of students fully ensures the cost-effectiveness of the PHE SP “Fire Safety and Civil Protection”, given that the minimum number of students in the study programme is 15 students (SAR p.207), while the average number of students per academic year during the reporting period is 49.6 students. In the year 2021/2022 there were 44 students in the programme (Annex 5 “Statistical data on students of the study programme “Fire Safety and Civil Protection”).

Several troubling concerns have been identified:

- number of students not increasing, since the year 2018/2019 there is a rather stable number of

students for PHE SP "Fire Safety and Civil Protection" (44 - 50 students per year);

- none or very few fees paying students.

In the file "Funding by Positions by the period from 2013-2022" there are included preferable (or optimal) costs for one student for every year of every programme. According to this, the preferable cost per student in the PHE SP "Fire Safety and Civil Protection" in 2021/2022 was 6846,46 Euro in a year per student. However, overall funding for the PHE SP "Fire Safety and Civil Protection" was 4903,73 Euro per student. There is a gap between preferable/optimal cost and really available funding. Preferable cost is calculated according to Regulations No 994 of the Cabinet of Ministers "Procedures for Financing Institutions of Higher Education and Colleges from the Funds of the State Budget".

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

Close cooperation with SFRS - in the study process, students can have practical work in SFRS facilities. Almost all graduates work in the SFRS after their studies. So, graduates have almost certain career opportunities.

Real funding of the PHE SP "Fire Safety and Civil Protection" is lower than it should be according to the optimal level which is calculated according to legislation (real 4903,73 vs optimal 6846,46 Euro per student in a year).

Only 1% of the budget is assigned to the purchase and modernization of equipment. Nevertheless, since 2017 Fire Safety laboratory has received some investments and was developed. This trend must continue in the future as much as possible. Recommended developing some kind of "Laboratory Development Plan" for the next 3-5 years including necessary equipment and improvements.

The number of students in recent years has been stable, but not increasing. However, it is sufficient to ensure the cost-effectiveness of the PHE SP "Fire Safety and Civil Protection".

Strengths:

- 1) Close cooperation with SFRS regarding the study process (use of facilities and equipment) and later employment of graduates.
- 2) Since 2017 Fire Safety Laboratory has been regularly upgraded installing new equipment. This trend must continue in the future as much as possible.

Weaknesses:

- 1) The number of students is stable, but not increasing in recent years.
- 2) There are no or very few tuition fees paying students.
- 3) Only 1% of the budget is assigned to the purchase and modernization of equipment.
- 4) Real funding of the PHE SP "Fire Safety and Civil Protection" is lower than it should be according to the optimal level which is calculated according to legislation (real 4903,73 vs optimal 6846,46 Euro per student in a year).

### **Assessment of the requirement [6]**

- 1 R6 - Compliance of the study provision, science provision (if applicable), informative provision (including library), material and technical provision and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of learning outcomes

**Assessment of compliance:** Partially compliant

Ensured sufficient level of all kinds of provisions to ensure successful implementation of the program. Identified: a) need to reduce the negative gap between real funding (state budget + tuition fees) and optimal (calculated according to Legislation) regarding cost per student; b)

increase funding for the purchase and modernization of equipment which currently is 1%.

## **2.4. Teaching Staff**

### **Analysis**

#### 2.4.1.

In total there are 12 staff members involved in the implementation of the PHE SP “Fire Safety and Civil Protection” - 3 professors, 3 associate professors, 2 assistant professors, and 4 field experts. Throughout the reporting period, academic staff actively participated in numerous academic conferences and seminars, contributing to approximately 47 scientific conferences and delivering presentations at about 72 international scientific conferences. Their academic output includes 149 articles in international scientific journals and conference proceedings. (SAR section 3.4.2)

Given that the PHE SP “Fire Safety and Civil Protection” is a college-level education. The teaching staff actively improves their professional and academic knowledge through seminars, conferences, and research projects to enhance the PHE SP “Fire Safety and Civil Protection” quality and make graduates competitive in the job market. Their involvement in international cooperation and mobility programmes, like Erasmus+, helps integrate the latest insights into the courses, ensuring continuous improvement. Collaborations with foreign partners allow for attracting foreign lecturers and organizing practical international training for students. The staff's practical experience also makes them sought-after contractors for field-related projects, contributing to scientific articles beneficial for students. Their expertise in legislation and standards development ensures students receive current and high-quality information. Overall, the teaching staff's competence, knowledge, and practical experience are crucial for achieving PHE SP “Fire Safety and Civil Protection” objectives and ensuring successful outcomes.

Qualification of teaching staff members involved in the implementation of PHE SP “Fire Safety and Civil Protection” complies with regulatory enactments and enables the achievement of defined outcomes.

#### 2.4.2.

The PHE SP “Fire Safety and Civil Protection” is delivered by a mix of academics and highly qualified industry experts, a combination appreciated by students based on surveys. The teaching staff composition for the PHE SP “Fire Safety and Civil Protection” changed over the years, with fluctuations in the number of professors, associate professors, docents, lecturers, and experts. Notably, the involvement of former PHE SP “Fire Safety and Civil Protection” graduates as teaching staff members reflects a positive trend. For instance, graduates pursued further studies, obtained a Professional Master's degree, defended a doctoral thesis, and have now joined the FEEM, contributing as an assistant professor and researcher while teaching specific courses. Overall, the qualifications of the teaching staff align with PHE SP “Fire Safety and Civil Protection” implementation conditions and regulatory requirements.

#### 2.4.3.

N/A

#### 2.4.4.

The SAR Annex “List of the publications, patents, and artistic creations of the teaching staff over the reporting period” to Section 2.4 “Scientific Research and Artistic Creation” from the SAR of the study

field "Internal Security and Civil Protection" shows that the teaching staff of the PHE SP "Fire Safety and Civil Protection" had good publication activity during the reporting period. Each member of the academic staff for this PHE SP "Fire Safety and Civil Protection" since 2017 has had some publications (from 2 to 17 publications per member). A review shows that the topics of the publications correspond to the profile of the courses in which the authors are involved as lecturers within the PHE SP "Fire Safety and Civil Protection".

Many publications are co-authored by more than one member of the Department, and 49 of them are indexed in internationally recognized databases such as Scopus and Web of Science. After checking the relevant databases, the high achievements in the publication activity in peer-reviewed journals of Associate Professor Jana Eriņa (19 publications in Scopus / WoS, h-index 1), Associate Professor Māris Ziemelis (8 publications in Scopus / WoS, h-index 4) and Associate Professor Jeļena Pundure (7 publications in Scopus / WoS, h-index 7) deserve attention. Despite the difficulties reported during the meeting at RTU with the teaching staff of the study field, related to the small number of specialized journals in the area of the study programme, the lecturers participate in international projects and research, the results of which have a high impact factor and are well accepted for publication in peer-reviewed journals.

There is a balanced distribution of the geographical scope of the publications, with a slightly larger share of those in national publications (mainly of RTU) compared to foreign ones, but this in no way diminishes their qualities and contributions of a scientific and practical nature.

Some lecturers have more than 15 years of practical experience, as shown in their CVs, which is a testament to their professionalism and insight into the field in which they teach. According to the CVs, some members of the academic staff also have other jobs, including in private companies (as many as 9 positions in addition to employment at RTU - G. Kiselovs).

#### 2.4.5.

Collaboration between teaching staff within the PHE SP "Fire Safety and Civil Protection" takes place both during the semester in the teaching of courses and in the planning and development of changes and developments necessary to update the curriculum. Course audits are carried out annually to identify possible improvements. Teaching staff within the PHE SP "Fire Safety and Civil Protection" communicate with each other both formally (during meetings and other general events) and informally (individual face-to-face meetings, telephone communication, etc.). Section 3.4.5 of the SAR gives some examples of joint initiatives in which representatives of teaching staff from different positions in the academic hierarchy have participated, which confirms the good cooperation between them (e.g. a set of guidelines has been developed for both study projects and internships, etc.).

Regular meetings and methodological sessions of the teaching staff are held to discuss the topics of the PHE SP "Fire Safety and Civil Protection" and the necessary improvements in the study content, to agree on topics, directions, responsibilities, and compliance with regulatory requirements. All members of the teaching staff involved in the training course participate in the process of coordinating the training courses to ensure that the topics included in the PHE SP "Fire Safety and Civil Protection" do not overlap and are continuously improved and updated in collaboration with the professionals involved in the field. This ensures that issues related to the learning process and its improvement are discussed on time, that the topics taught in the training courses are aligned with the PHE SP "Fire Safety and Civil Protection" objectives, and that the learning outcomes of the training courses are integrated into the overall learning outcomes of the programme, e.g. considering different work schedules and workloads.

The analysis of the ratio of students to teaching staff within the curriculum shows that in the academic year 2022/2023 there is one selected lecturer for every 6.25 students and one subject specialist for every 12.5 students.

## Conclusions on this set of criteria, by indicating strengths and weaknesses

Enough lecturers participate in the implementation of the PHE SP “Fire Safety and Civil Protection”, well distributed in terms of positions and educational level, which allows the expert group to state that there are good conditions for achieving the objectives and learning outcomes of the study programme. Some of the lecturers have many years of practical experience, and at the same time, guest lecturers from practice (including from abroad) are involved in the educational process, which has a positive impact on its quality and the overall training of future specialists in the field of safety engineering.

Lecturers' relations can be described as good, with evidence of good cooperation and continuity in teaching and research activities. Efforts are being made to attract more active students to research and to motivate them to start a teaching career at the RTU.

The publication activity of the teaching staff is at a very high scientific and professional level, as evidenced by the available publications indexed in internationally recognized databases such as Scopus and Web of Science.

The training courses are regularly updated, respecting the principle of interrelation between them and not allowing the duplication of training content.

Strengths:

- 1) The participation of academic staff and guest lecturers from practice is successfully combined in the learning process.
- 2) Lecturers have extensive academic, research, and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the study programme.
- 3) Regular professional development of the teaching staff and support for junior lecturers from senior lecturers and management.
- 4) Good publication activity in the area of courses in the study programme, including peer-reviewed publications in Scopus and Web of Science.

Weaknesses:

- 1) Availability of lecturers with a small number of publications that are indexed in Scopus and the Web of Science.

## Assessment of the requirement [7]

- 1 R7 - Compliance of the qualification of the academic staff and visiting professors, visiting associate professors, visiting docents, visiting lecturers and visiting assistants with the conditions for the implementation of the study programme and the requirements set out in the respective regulatory enactments.

**Assessment of compliance:** Fully compliant

The expert group considers sufficient evidence to support the claim that the qualification of the PHE SP “Fire Safety and Civil Protection” teaching staff fully meets the conditions for the implementation of the PHE SP “Fire Safety and Civil Protection” and the requirements defined in the relevant legal acts.

## 2.5. Assessment of the Compliance

### Requirements

- 1 1 - The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard

**Assessment of compliance:** Fully compliant

Annex 6 (“6.pielikums\_Annex 6\_atbilstība valsts izglītības standartam\_compliance with the national education standard.pdf”) confirms that the study programme complies with Cabinet Regulation No. 305 “Noteikumi par valsts profesionālās augstākās izglītības standartu”.

- 2 2 - The study programme complies with a valid professional standard or the requirements for the professional qualification (if there is no professional standard required for the relevant occupation) provided if the completion of the study programme leads to a professional qualification (if applicable)

**Assessment of compliance:** Fully compliant

Annex 7 (“7.pielikums\_7 Annex\_Studiju programmas atbilstība profesijas standartam\_Study programme compliance with Professional standard.pdf”) confirms that the programme is compliant with the professional standard of "Fire safety and civil protection engineer" (approved on 11 October, 2023).

- 3 3 - 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 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education Institutions.

**Assessment of compliance:** Fully compliant

The attached study course descriptions (“Annex 10\_Study courses\_ENG.pdf”) are prepared in Latvian. Descriptions comply with regulations outlined in the Law on Higher Education Institutions.

- 4 4 - The sample of the diploma to be issued for the acquisition of the study programme complies with the procedure according to which state recognised documents of higher education are issued.

**Assessment of compliance:** Fully compliant

The provided Diploma sample (“ Fire safety and civil protection\_diploma and diploma supplement.pdf”) complies with the procedure by which state-recognised documents of higher education are issued in accordance with Cabinet Regulation No. 202 “Kārtība, kādā izsniedz valsts atzītus augstāko izglītību apliecinājošus dokumentus”.

- 5 5 - 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 Higher Education Institutions.

**Assessment of compliance:** Not relevant

- 6 6 - 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 Higher Education Institutions.

**Assessment of compliance:** Not relevant

- 7 7 - 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 (if applicable).

**Assessment of compliance:** Not relevant

- 8 8 - 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 attached resumes of staff ("Academic\_staff\_CV\_EN.zip") and confirmation ("Confirmation - knowledge of the state language.edoc") verifies that state language proficiency is compliant with Cabinet Regulation No. 733 "Noteikumi par valsts valodas zināšanu apjomu, valsts valodas prasmes pārbaudes kārtību un valsts nodevu par valsts valodas prasmes pārbaudi".

- 9 9 - 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 (if applicable).

**Assessment of compliance:** Not relevant

- 10 10 - The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

**Assessment of compliance:** Fully compliant

Sample of the attached study agreement ("Study\_agreements.zip") complies with Cabinet Regulation No. 70 "Studiju līgumā obligāti ietveramie noteikumi".

- 11 11 - The higher education institution / college has provided confirmation that students will be provided with opportunities to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

**Assessment of compliance:** Partially compliant

The attached contracts ("Līgums\_Stud.turpināšana\_Agreement\_Transition.zip") confirm that there are no comparable options regarding curriculum and study level, where students can continue their studies. However, the expert group found that although there is partial compliance de facto by law, from a substantive perspective, the RTU cannot fulfill this condition as it involves a unique curriculum demanded by SFRS and it is not replicated elsewhere, and from a national standpoint, it is not reasonable to duplicate the teaching of a narrow field. Therefore, the experts believe that in this section, partial compliance should not influence the final evaluation since the opportunity for students to change their field of study within the university is already provided.

- 12 12 - The higher education institution / college has provided confirmation that students are guaranteed compensation for losses if the study programme is not accredited or the study programme's license is revoked due to the actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.

**Assessment of compliance:** Fully compliant

RTU confirmation ("Confirmation - on compensation for losses.edoc") states, that students are guaranteed 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 college (actions or failure to act) and the student does not wish to continue the studies in another study programme.

- 13 13 - The joint study programmes comply with the requirements prescribed in Section 55.(1), Paragraphs one, two, and seven of the Law on Higher Education Institutions (if applicable)

**Assessment of compliance:** Not relevant

- 14 14 - Compliance with the requirements specified in other regulatory enactments that apply to the study programme being assessed (if applicable)

**Assessment of compliance:** Fully compliant

The study programme complies with a list of specified regulatory enactments relevant to the field of fire safety and civil protection ("Specifiskais normatīvais regulējums\_Specific Regulatory Framework\_.pdf").

### **Assessment of the requirement [8]**

- 1 R8 - Compliance of the study programme with the requirements set forth in the Law on Higher Education Institutions and other regulatory enactments.

**Assessment of compliance:** Fully compliant

The PHE SP "Fire Safety and Civil Protection" aligns with regulatory requirements. However, if the programme were to be discontinued, there is currently no equivalent study programme available for students to pursue. The expert group determined that while there is partial compliance with the law, the RTU cannot fulfill this condition due to the unique curriculum not being replicated elsewhere, and it's not reasonable to duplicate the teaching of a narrow field from a national standpoint. Therefore, the experts believe that partial compliance should not influence the final evaluation in this section, as the university already provides the opportunity for students to change their field of study.

### **General conclusions about the study programme, indicating the most important strengths and weaknesses of the study programme**

The PHE SP "Fire Safety and Civil Protection" fully complies with the study field "Internal Security and Civil Protection" and all related legal regulations. The main objective of the PHE SP "Fire Safety and Civil Protection" is to provide students with the knowledge required for the professional qualification of Fire Safety and Civil Protection Engineer. The title, code, and professional qualification of the PHE SP "Fire Safety and Civil Protection", as well as aims, objectives, learning outcomes and admission requirements are clearly defined and interrelated as well as the duration, language, and scope are reasonable and justified. The code of the PHE SP "Fire Safety and Civil Protection" is indicated as 44862 on SAR p.180 (862 stands for occupational protection and safety), but in SAR p.184 is mentioned as 44861 (861 - protection of persons and property). It makes sense to change the code of the programme to 44861.

The PHE SP "Fire Safety and Civil Protection" is prepared based on professional standards, employer needs, and social trends, but mainly considering the needs and the demands of the SFRS. It is continuously monitored and updated according to the needs of the labour market and collected feedback. The study direction is characterized by highly motivated students and teaching staff, whose good cooperation has raised the teaching to a level where it was quite difficult to find major areas of improvement during the assessment visit. Most of what was pointed out was more of an organizational nature. SFRS is a good partner in the implementation of the curriculum by offering internships, study visits, and valuable feedback, with the help of which the curriculum is also developed. However the PHE SP "Fire Safety and Civil Protection" is implemented by the demand of the SFRS, some flexibility is left and some extensions have been done for the other organizations as well in the area. The general satisfaction with the RTU work and the level of graduates is high, and this is also confirmed by the high recommendation index on the national e-platform.

Almost all graduates work in the SFRS after their studies. So, graduates have almost certain career

opportunities. Real funding of the PHE SP “Fire Safety and Civil Protection” is lower than it should be according to the optimal level which is calculated according to legislation (real 4903,73 vs optimal 6846,46 Euro per student in a year). Only 1% of the budget is assigned to the purchase and modernization of equipment. Despite that, since 2017 Fire Safety laboratory has received some investments and was developed. This trend must continue in the future as much as possible. Recommended developing some kind of “Laboratory Development Plan” for the next 3-5 years including necessary equipment and improvements. The number of students in recent years has been stable, but not increasing. However, it is sufficient to ensure the cost-effectiveness of the PHE SP “Fire Safety and Civil Protection”.

Enough lecturers participate in the implementation of the PHE SP “Fire Safety and Civil Protection”, well distributed in terms of positions and educational level, which allows the expert group to state that there are good conditions for achieving the objectives and learning outcomes of the PHE SP “Fire Safety and Civil Protection”. Some of the lecturers have many years of practical experience, and at the same time, guest lecturers from practice, including from abroad, are involved in the educational process, which has a positive impact on its quality and the overall training of future specialists in the field of safety engineering.

Lecturers' relations can be described as good, with evidence of good cooperation and continuity in teaching and research activities. Efforts are being made to attract more active students to research and to motivate them to start a teaching career at the RTU. The publication activity of the teaching staff is at a very high scientific and professional level, as evidenced by the available publications indexed in internationally recognized databases such as Scopus and Web of Science.

In conclusion expert group has an opinion that even though there is an evaluation partially compliant under the Resources and Provision of the PHE SP “Fire Safety and Civil Protection”, because of the negative gap between real funding (state budget + tuition fees) and optimal (calculated according Legislation) regarding cost per student, the overall evaluation of the PHE SP “Fire Safety and Civil Protection” could be excellent. It was found that the funding issues are not only influenced by the RTU but are dependent on the state level, however, RTU has been proactive and will start to pilot the new funding system, which could offer better conditions also to the PHE SP “Fire Safety and Civil Protection”. Also, the weaknesses identified primarily serve as indicators of areas that could be considered for developmental activities, however, fundamentally, these do not impact the substantive quality of the PHE SP “Fire Safety and Civil Protection”. Additionally, there is partial compliance with the regulatory framework as well, however, the only issue identified is the fact that RTU does not have a contract in place with a comparable study programme providing an opportunity to continue the studies if the programme PHE SP “Fire Safety and Civil Protection” is being closed. However, it must be noted that the Expert group acknowledges the uniqueness of the study programme and it is justified that at this moment there is no such contract in place and such shortcoming does not affect the overall curriculum of the study programme.

Strengths:

- 1) Unique study programme with the demand of SFRS, which complies with all the related regulations.
- 2) Graduates of the PHE SP “Fire Safety and Civil Protection” have good employability opportunities in SFRS.
- 3) State is funding a definite number of study places in the PHE SP “Fire Safety and Civil Protection”.
- 4) Good cooperation with SFRS, which ensures practical placement possibilities, career opportunities, research topics, etc.
- 5) Well-regulated processes as well as the quality management system which supports implementation and development of the PHE SP “Fire Safety and Civil Protection”.

- 6) Highly valued graduates by employers, as well as the high recommendation index by employers.
- 7) Highly motivated students and teaching staff with democratic relations.
- 8) Opportunities to participate for students and teaching staff in local and international scientific conferences and seminars.
- 9) Since 2017 Fire Safety Laboratory has been regularly upgraded installing new equipment. This trend must continue in the future as much as possible.
- 10) Regular professional development of the teaching staff and support for junior lecturers from senior lecturers and management.
- 11) The participation of academic staff and guest lecturers from practice is successfully combined in the learning process.
- 12) Lecturers have extensive academic, research, and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the PHE SP "Fire Safety and Civil Protection".
- 13) Good publication activity in the area of courses in the PHE SP "Fire Safety and Civil Protection", including peer-reviewed publications in Scopus and Web of Science.

Weaknesses:

- 1) The number of potential students is limited by admission requirements regarding previous education.
- 2) The number of state budget-funded places is limited in the PHE SP "Fire Safety and Civil Protection".
- 3) The code of the PHE SP "Fire Safety and Civil Protection" is not clearly indicated, in SAR p.180 it is mentioned as 44862, and in SAR p.184 it is mentioned as 44861.
- 4) An Insufficient number of students to start a part-time group and low or close to zero number of students paying tuition fees, as well as the high dropout rates in the PHE SP "Fire Safety and Civil Protection".
- 5) The number of students is stable, but not increasing in recent years.
- 6) Availability of lecturers with a small number of publications that are indexed in Scopus and the Web of Science.
- 7) Only 1% of the budget is assigned for the purchase and modernization of equipment, however, there is a lack of appropriate simulation software as well as a well-equipped laboratory.
- 8) Real funding of the PHE SP "Fire Safety and Civil Protection" is lower than it should be according to the optimal level which is calculated according to legislation (real 4903,73 vs optimal 6846,46 euros per student in a year)
- 9) No comparable alternative to continue studies if the programme is being closed.

### **Evaluation of the study programme "Fire Safety and Civil Protection"**

Evaluation of the study programme:

Excellent

### **2.6. Recommendations for the Study Programme "Fire Safety and Civil Protection"**

#### **Short-term recommendations**

- 1) Ensure activities to promote the PHE SP "Fire Safety and Civil Protection" and increase the number of students in the PHE SP "Fire Safety and Civil Protection", especially the ones for the part-time group and tuition fee-paying students, at least by 20% annually.
- 2) Look for opportunities to increase the number of state funded places in the PHE SP "Fire Safety and Civil Protection".

3) Review and change the code of the study programme to 44861.

4) Ensure investment in a full version of appropriate simulation software and laboratory equipment.

5) It is necessary to increase by at least 50% the number of scientific researches of the teaching staff indexed in the world databases Scopus and Web of Science, for which more resources should be allocated by the RTU.

### **Long-term recommendations**

1) Develop targeted interventions to lower dropout rates, such as enhanced academic advising, mentoring programmes, and early identification of at-risk students to provide them with additional support.

2) Craft a clear, strategic proposal for the necessary modernization of equipment, and actively pursue alternative funding sources such as grants, partnerships, and alumni donations specifically for this purpose.

3) Look for possibilities to provide opportunities for students to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

## **II - "Administration of Customs and Taxes" ASSESSMENT**

### **II - "Administration of Customs and Taxes" ASSESSMENT**

#### **2.1. Indicators Describing the Study Programme**

##### **Analysis**

###### **2.1.1.**

The Professional Master's study programme "Administration of Customs and Taxes" 47861 (hereinafter PMA SP "Administration of Customs and Taxes") fully complies with the study field "Internal security and civil protection". Based on SAR, the PMA SP "Administration of Customs and Taxes" is fully in line with the study field "Internal Security and Civil Protection" and its objectives and sub-objectives: to provide students with a sustainable multi-level education in areas such as border security, economic security, security of economic entities, providing a set of knowledge and skills in customs and tax administration. Accordingly, the programme aims to provide higher professional education in customs and taxation, as well as to develop research skills to prepare middle- and senior-level managers and professionals to manage customs and tax administration (SAR, p.301).

The PMA SP "Administration of Customs and Taxes" covers such study courses as Tax Analysis and Forecasting 2 CP, Legal Aspects of National Economic Security 4 CP, Examination and Control of Commercial Activities 4 CP, Tax Planning 2 CP, Customs Audit 2 CP, Tax Audit 2 CP, Supply Chains and Border Security 2 CP, which are related to security issues and protection of persons and property.

###### **2.1.2.**

Based on SAR, the PMA SP “Administration of Customs and Taxes” is implemented in two modes - full-time intramural and part-time extramural. The PMA SP “Administration of Customs and Taxes” is provided in the Latvian or English language, with both public and private funding. Depending on the previous education of the applicant, the full-time programme can be offered for 2 years (80 CP), 1 year and 6 months (60 CP), and 1 year (40 CP). Part-time programmes accordingly can be provided in 2 years and 6 months (80 CP), 2 years (60 CP), and 1 year and 6 months (40 CP).

Admission requirements are clearly described in RTU admission regulations. Such diversity in programme’s modes and volumes is an example of a student-centered approach, allowing students to choose the most appropriate version to their previous education and study load.

Graduates of the PMA SP “Administration of Customs and Taxes” will obtain a Professional Master's Degree in Administration of Customs and Taxes and a professional qualification “Manager in Customs and Tax Administration” (SAR, p.302). In addition to that graduates also obtain the World Customs Organisation (WCO) Certificate and the European Commission (EC) Certificate of Compliance with the European Union Customs Competences, which certifies that their competencies meet the WCO and EC international standards (SAR, p.301).

According to the classification of education (Cabinet of Ministers of the Republic of Latvia Regulations No.322, 2017) the code of the PMA SP “Administration of Customs and Taxes” is 47861. with the last three numbers (861) standing for Protection of persons and property, it sets 861 09 “Administration of Customs and Taxes”, which corresponds to the field of study (SAR, p.301).

The PMA SP “Administration of Customs and Taxes” is unique in Latvia and there are only a few similar programmes in the international education space in the European Union, so the competitiveness of its graduates is very high.

The main aim of the study is to provide higher professional education in the areas of customs and taxes, to enable graduates to occupy relevant job positions at the senior and middle management in the field of customs and taxes in organizations or companies as well as to build the career in research or carry out pedagogical work (SAR, p.293). The main tasks are to ensure the acquisition of broad knowledge and professional and practically oriented skills allowing graduates to easily adapt to the labour market and research; to provide the students with theoretical and practical training appropriate for the fifth level professional qualification enabling them to obtain the qualification of the manager of customs and tax administration; to create an opportunity for the students to obtain the qualification in close connection with their future job; to ensure the acquisition of up-to-date general knowledge, to develop economic thinking and analytical abilities and skills required for solving professional problems and tasks assigned; to develop team-building and cooperation skills and to provide opportunities for developing foreign language skills that will help in cooperation with colleagues from other countries (SAR, p.293).

The learning outcomes of the PMA SP “Administration of Customs and Taxes” meet the requirements of the Administration of Customs and Tax Manager standard (SAR Annex 7). The knowledge, skills, and competencies acquired in the PMA SP “Administration of Customs and Taxes” corresponds to the seventh level of the Latvian Qualifications Framework (LQF 7). The mapping of the study course and learning outcomes is clearly described in SAR Annex 8. The PMA SP “Administration of Customs and Taxes” is fully compliant with Cabinet Regulations No 305 (13 June 2023) on the State Standard of Professional Higher Education (SAR Annex 6).

The title, code, the obtained degree, and professional qualification of the PMA SP “Administration of Customs and Taxes”, as also aims, objectives, learning outcomes and admission requirements are clearly defined and interrelated, as well as the duration, language and the scope of the are reasonable and justified.

### 2.1.3.

Based on SAR p.300, the main changes were made in the programme concerning the volume of the

PMA SP "Administration of Customs and Taxes" in relation to the previous education of the applicant.

Following the changes in the Cabinet of Ministers Regulation No 512 of 26 August 2014 "Regulations on the State Standard of the Second Level Professional Higher Education" (no longer in force), in the academic year 2015/2016 the PMA SP "Administration of Customs and Taxes" was supplemented and updated. Based on labour market research and consultations with employers and practitioners, a new study option was created - for students with a previously acquired Professional Bachelor's degree in Administration of Customs and Taxes and/or the sixth-level professional qualification in Administration of Customs and Taxes, following the decision of the Study Accreditation Commission No 23-A of 25.08.2016. Thus, the programme has different admission requirements and study duration (Option 1 (60 ECTS / 40 CP); Option 2 (120 ECTS / 80 CP); Option 3 (80 ECTS / 60 CP) (SAR, p.300).

All the corrections done during the assessment period are justified and fully supported.

#### 2.1.4.

Based on SAR, the PMA SP "Administration of Customs and Taxes" is economically viable, although public funding is lacking. The administration of customs and tax is a strategic area for the country, but it is not properly valued at the national level. The analysis of graduate employability shows a very high, positive result. For example, 95% of 2017 graduates were employed, 87% of them in higher-level occupations (according to the Classification of professions: Managers, Senior Specialists, Specialists), and as many as 97% in higher-level occupations 3 years after graduation. The median income of 2017 graduates was 16 thousand EUR, while in the third year, it reached 20.6 thousand EUR. Similar trends were observed for other recent graduates. Of the 2018 graduates, 94% were employed, 74% in the first year, and 75% in higher-level occupations in the second year. The average income for 2018 graduates was 19.2 thousand, while in the following year, it was 20.2 thousand. And 97% of 2019 graduates are employed, 82% of them in higher-level occupations. The median income of 2020 graduates was 17 thousand EUR. Most are employed in public administration and professional services.

As the PMA SP "Administration of Customs and Taxes" is one of the most popular at RTU and in Latvia, students have no problem finding a job after graduation. The State Revenue Service and other competent authorities are short-staffed and graduates from the programme are very welcome to work for them. Graduates often choose to pursue careers in the private sector because of insufficiently competitive salaries. Graduates of the programme are highly sought-after by international audit firms, and some graduates go on to work for multinational companies abroad (SAR, p.303). Graduate surveys show that almost all students were already employed, most of them in a field related to their studies. In 2020/21, 75% of graduates were already working in the sector during their studies. As the PMA SP "Administration of Customs and Taxes" is one of the most popular at RTU, the state budget-funded places are filled at 100% rate. The number of state budget-funded places was increased for 2021/2022, but in fact, it is insufficient. Regular publicity events are organized to attract more students to study at their own expense (SAR p.304).

To ensure the cost-effectiveness of the PMA SP "Administration of Customs and Taxes", RTU has set the minimum number of students in each study year: 19 full-time domestic students at the first cycle, Bachelor's and Master's levels; 15 part-time in-person and part-time extramural domestic students at first-level, Bachelor's, Master's levels. The total number of full-time in-person students by year in the PMA SP "Administration of Customs and Taxes" varies from 68 to 93 (SAR Annex 5\_Statistical data on students) (SAR, p.304). The ratio of students financed by the state budget has increased proportionally in recent years (SAR Annex 5\_4.Distribution of the number of students by funding sources). While in the 2013/2014 academic year only 29% of all students were state-funded, in the 2020/2021 academic year 60% of all students were state-funded. During the assessment visit,

the experts got evidence that tuition fees are increasing annually and fewer students are admitted to study on their personal funds. For example, in the 2021/2022 academic year, only 5 students are based on private financing.

The number of students enrolled in the programme, broken down by admission requirements, has varied over the 9 years, but the overall trend is for the largest number of students to have previously obtained a Professional Bachelor's degree in Administration of Customs and Taxes. The number of students by full-time and part-time mode of study is also variable (SAR Annex 5\_5.Distribution of the number of students by type of studies). The number of graduates depends on the number of students in a given academic year and there have been no significant dropouts (SAR Annex 5\_2.Dynamics of the number of graduates). The number of student dropouts from the PMA SP "Administration of Customs and Taxes" varies during the reporting period (SAR Annex 5\_3.Student dropouts). In recent years, the main reason for dropping out has been academic failure or dropping out of one's own free will. This is mainly because many students work in addition to their studies and are therefore unable to cope with their studies. The situation caused by COVID-19 also contributed to this situation. During the reporting period, the PMA SP "Administration of Customs and Taxes" was implemented in the Latvian language, which foreign students haven't studied so far (SAR, p.305).

The PMA SP "Administration of Customs and Taxes" has high local and international recognition. It was developed in cooperation with the World Customs Organisation (WCO) and was the first in the world to be recognized as compliant with the WCO International Occupational Standards for Operational Managers/Leaders and Strategic Managers/Leaders, for which a certificate was awarded. The PMA SP "Administration of Customs and Taxes" has also been awarded a Certificate of Recognition by the European Commission (EC) for compliance with the European Union (EU) Customs Competences. The PMA SP "Administration of Customs and Taxes" is designed in cooperation with representatives of the State Revenue Service (SRS) tax and customs authorities so that students acquire in-depth knowledge of the activities of these authorities and can apply it in practice. The PMA SP "Administration of Customs and Taxes" has been highly ranked in the international ranking "Eduniversal Best Masters Ranking", where the study programme is ranked 29th in the world among the TOP 100 programmes in the field of tax administration (SAR, p.300).

2.1.5.

N/A

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

The PMA SP "Administration of Customs and Taxes" fully complies with the study field and its objectives and sub-objectives: to provide students with a sustainable multi-level education in areas such as border security, economic security, security of economic entities, providing a set of knowledge and skills in customs and tax administration. The PMA SP "Administration of Customs and Taxes" is implemented in full-time and part-time modes with three options of volume and duration, providing a student-centred approach to choosing the most appropriate option of the programme. The PMA SP "Administration of Customs and Taxes" is provided in the Latvian or English language, with both public and private funding.

Graduates of the PMA SP "Administration of Customs and Taxes" will obtain a professional Master's degree in customs and tax administration, the professional qualification "Manager in Customs and Tax Administration", the World Customs Organisation (WCO) Certificate and the European Commission (EC) Certificate of Compliance with the European Union Customs Competences. The title, code, the obtained degree, and professional qualification of the PMA SP "Administration of

Customs and Taxes”, as also aims, objectives, learning outcomes and admission requirements are clearly defined and interrelated, as well as the duration, language and the scope are reasonable and justified.

The main changes in the PMA SP “Administration of Customs and Taxes” were done in the 2015/2016 academic year concerning the volume of the study programme in relation to the previous education of the applicant. A new study option was created - for students with a previously acquired Professional Bachelor's degree in Administration of Customs and Taxes and/or the sixth-level professional qualification in Administration of Customs and Taxes. The majority of students are studying in state budget-funded places.

The number of students paying tuition fees is strongly decreasing. The reason can be the growing tuition fee and inability to pay. The majority of graduates continue their careers in their chosen fields. The PMA SP “Administration of Customs and Taxes” is highly recognized on local and international levels and it has been highly ranked in the international ranking "Eduniversal Best Masters Ranking", where the study programme is ranked 29th in the world among the TOP 100 programmes in the field of tax administration.

Strengths:

- 1) The PMA SP “Administration of Customs and Taxes” complies with all the related regulations.
- 2) Graduates of the PMA SP “Administration of Customs and Taxes” have good employability opportunities.
- 3) The State is funding a definite number of study places in the PMA SP “Administration of Customs and Taxes”.
- 4) Different duration and volume of the PMA SP “Administration of Customs and Taxes” to meet the needs of students.
- 5) WCO and EC certification.
- 6) Close cooperation with the industry.

Weaknesses:

- 1) Insufficient number of state-funded places in the PMA SP “Administration of Customs and Taxes”.
- 2) Very low number of students paying tuition fees.
- 3) Annually growing tuition fee.
- 4) High dropout rates in the PMA SP “Administration of Customs and Taxes”.

## **2.2. The Content of Studies and Implementation Thereof**

### **Analysis**

#### **2.2.1.**

The PMA SP “Administration of Customs and Taxes” is offering Master's studies with necessary competencies to be acquired by 3 options regarding the previous work and study experience. Students of the PMA SP “Administration of Customs and Taxes” acquire the necessary knowledge, skills, and competencies corresponding to the professional qualification “Manager in Customs and Tax Administration”.

A detailed comparison is provided in the PMA SP “Administration of Customs and Taxes” SAR annexes between:

- "Regulations on the state standard of professional higher education" (Regulations of 21.06.2023 No. 305 requirements) and PMA SP “Administration of Customs and Taxes”. (See annex: Annex 6\_Compliance to Education standarts (Regulation nr.305).pdf)
- Occupational Standard for a Manager in Customs and Tax Administration and the study courses of

the PMA SP “Administration of Customs and Taxes”. (See annex: Annex 7\_Compliance with the Professional Standards.pdf)

From the comparison documents, it is seen how compliance with the national regulations is guaranteed and how the competencies from the standards are achieved. After completing the PMA SP “Administration of Customs and Taxes”, a manager of customs and tax administration professional Master's degree in administration of customs and taxes, as well as the seventh-level professional qualification “Manager of customs and tax administration” are awarded.

The cooperation agreement was concluded with the State Revenue Service, in which different forms of cooperation, internships, final theses, studies, and research were agreed and positive examples of joint research work and updating the curriculum were given. During the assessment visit, it was confirmed by the employers that they have used outcomes from the research and value this activity highly, as well as the students brought several examples of involvement in projects. In no doubt, that kind of close cooperation has a positive impact on the studies itself but also ensures the expected outcome.

Additionally, a detailed description of the study courses and how it is ensured they achieve the learning outcomes stated in the PMA SP “Administration of Customs and Taxes” SAR. Those courses include the development of the ability to analyze and understand regulations and laws, process planning, the concept of critical thinking, effective research, business development, etc, which were also key competencies mentioned by the employers during the assessment visit.

It is said in the study programme SAR that the PMA SP “Administration of Customs and Taxes” involves studying relevant courses in customs, taxation, security, management, etc through lectures, practical classes, laboratory work, and literature studies. It is noticed that practical work and study projects are organized on topical themes. Several examples are given of how the PMA SP “Administration of Customs and Taxes” is improved according to the feedback from students, graduates, and employers as well as renewed standards or regulations.

During the assessment visit, one focus of the discussion with employers was on identifying areas for improvement in the study field. While the employers expressed their satisfaction with the knowledge and skills of the graduates, they also acknowledged the need for further development concerning current global events and their impact on security and civil protection. Employers expressed the need to integrate the necessary (mostly sensitive information regarding security issues) information regarding globally impactful events into education at a faster pace in a manner that strengthens internal security without compromising it. At the same time, it was clearly recognized that the accessibility of relevant, up-to-date information on a short-term basis is not only a university matter, but the state service also has a role to play in ensuring the timely acquisition of necessary information.

Connected to the aforementioned topic, employers also highlighted the need for a greater emphasis on teaching critical thinking, communication, and analytical skills, which are equally relevant to the security situation. This is necessary to better recognize relevant information, draw conclusions from it, and effectively communicate it.

Overall a strong impression remained from several discussions which reflected the high level of satisfaction with the studies from students, graduates as well as employers. All target groups confirmed the topicality of the PMA SP “Administration of Customs and Taxes” as well as the learning outcomes that meet the needs of the industry.

It confirms that the feedback from the students, graduates as well as employers has been analyzed and improvements have been considered. This is a good example of how the quality management system has been implemented in the FEEM and continuous improvements have been made. Nevertheless, while listening to various stakeholders, some untapped opportunities became apparent. On one hand, it was evident that the university aspires to become an EU education center in the Baltic region. However, concerns were raised about the underutilization of paid positions due

to the increase in tuition fees, as it was emphasized that the field of study as a whole is not something to "sell," but rather it is important for security and the state. Experts see an opportunity here to capitalize on the university's strengths and recognized curriculum by marketing it not only domestically but also internationally, which would be a good first step towards becoming an EU training center.

#### 2.2.2.

It is stated in the PMA SP "Administration of Customs and Taxes" SAR section 3.2.2 that the study process is implemented in a student-centered approach and is based on scientific and creative achievements in the field of customs and taxation - linking scientific and research activities with the study process, as well as with final thesis. As it was mentioned in the previous chapter during the assessment visit some examples were given by the students about the participation in the research project, including internationally. In the PMA SP "Administration of Customs and Taxes" SAR several examples are offered of how the students are involved in the research activities which influence the study courses as well, for example it is mentioned that the collaborative research carried out with students is integrated and used in the further implementation of the study process - in the work with students, thus starting the cycle of this process from the beginning.

Also, several students have been awarded on a national level for the research paper they have produced (PMA SP "Administration of Customs and Taxes" SAR section 3.2.2.), which is a good compliment for the student, supervisor as well as the university, however, it was noted that most of the highlighted publications, awarded researches as well as collected the best feedback from the students during the assessment visit, it is mainly one name from the teaching staff involved which seems to hold up the whole PMA SP "Administration of Customs and Taxes" and relevant activities. It is not considered a weakness, because it is fortunate to have an employee like that, but it should be a concern as a threat for the university in two ways - firstly, how to keep that valuable staff and secondly, how to mitigate the risk if that person in some reason will leave the organization.

Several scientific researches are carried out in cooperation between students and teaching staff (examples are provided in the PMA SP "Administration of Customs and Taxes" SAR section 3.2.2), which have results to introduce in scientific conferences as well as several scientific publications that have been cited in international databases. During the assessment visit it was understood that the cooperation is at a good level and employers are satisfied with the graduates as well final thesis was mentioned which has had some useful outcomes for the companies, however, the expectation is going higher with the accomplishments of the students and teaching staff. It was asked from the employers what could be the area for development in this study direction and two main key activities highlighted. Mainly if the question was about the skills of the graduates, analytical and critical thinking was the key issue and overall expectations were involved with the event which influenced the study direction as well as the security itself. Questions were raised about how to find a mechanism to get the sensitive information without losing time and how to deliver it in the study process in a way that will be more useful than harmful.

In conclusion, the SAR details a student-centered approach within the PMA SP "Administration of Customs and Taxes", highlighting research integration into coursework and theses. Students' active involvement in research, both locally and internationally, is evidenced and commended, with some recognized at a national level. Efforts in scientific research, with cooperation between students and staff, have yielded notable contributions to conferences and publications. Feedback from employers is generally positive, but higher expectations are placed on analytical and critical thinking skills. Future development should focus on acquiring and utilizing sensitive information effectively within the educational framework.

#### 2.2.3.

Reflection from the students during the assessment visit confirmed that most of the teaching staff is using different methods and put an effort to change the teaching more for the learning approach. Continuous change of the information is a key activity and the quality management system of RTU provides good support for that. It is described in the study course SAR that at the start of each course, students are informed about the course objectives, expected outcomes, assessment, topics, and other practical issues, and have an opportunity to express their priorities or expectations for the course.

It was heard during the assessment visit that most of the teaching staff is very open to the instant feedback, discussions, and developments that have been raised during the lectures. Relations between students, teaching staff, and administration are definitely the strength of the study field, which was also reflected very well during the assessment visit.

A detailed overview is given in the SAR section 3.2.3, where several methods are named, such as group work, discussions, situational analysis, presentations, workshops to promote analytical, critical, and creative thinking, reasoning and communication skills, lectures, seminars and practical work, independent, practical and research work, meetings with industry professionals and guest speakers as part of the studies. However, it was mentioned by students that a considerable amount of the Master's programme consisted of the independent literature reading, which the students felt was unproductive without subsequent meaningful discussion with the lecturer. They believed that general reading could be undertaken without attending university, but they expected the academic environment to provide added value through the creation of connections, the provision of examples, and the integration of theory with real-life applications. In that matter some subjects could be revised and additional activities could be included in the study process.

During the assessment visit, the teaching staff showed high motivation and gave several examples from their teaching experiences as well as they felt support and encouragement from their supervisors so far. However, it is important to note that several weeks before the assessment visit, there were changes in the FEEM structure. As a result, there was some uncertainty about the future, particularly regarding the supervision system. The teaching staff displayed an understandable mix of open-mindedness, optimism, and slight concern in response to these change processes, which can be considered a normal and appropriate reaction.

Several very well-implemented study courses were demonstrated in the e-platform Moodle where the H5P was integrated, but it was admitted that a considerable amount of courses are still at the basic level and could be developed. However the students valued the courses in Moodle during the assessment visit, they also highlighted the wish to have more practical studies as well as the guest lecturers who could be involved more as they connected the theoretical studies very well with practical examples.

Student participation in short-term mobility programmes indicated high satisfaction, though overall engagement with these opportunities was low. This indicates a need for strategies to boost involvement in mobility programmes, which could significantly enhance the overall educational experience, however as the master's students are employed, it was brought up that there is interest in participating, but it is complicated because of the work responsibilities. It could be considered an opportunity to improve cooperation with employers.

According to the PMA SP "Administration of Customs and Taxes", the studies are also implemented in English. However, during the assessment visit, it was clarified that there haven't been implementations in English yet, but the goal is to open it in September 2024. Also, it was confirmed that no different approach is provided for the implementation of the PMA SP "Administration of Customs and Taxes" in English, but it should be noted that the programme implemented in English provides a study course for the acquisition of the Latvian language, as well as the implementation of the internship is ensured in English. The preparation of the employers to host an internship in English was asked during the assessment visit and it turned out that they were not only ready to host, but they were expecting foreign students as a lot of the companies are active in several

countries.

In conclusion, student feedback during the assessment affirmed that FEEM is effectively utilizing diverse pedagogical strategies and shifting towards a more learner-centered approach, supported by RTU's robust quality management system. The SAR details a variety of engaging teaching methods aimed at developing analytical, critical, and creative thinking skills. However, there is room to improve elements of the Master's programme, particularly concerning the independent literature reading component, to ensure it translates into value-added discussions and practical applications in the field. FEEM is motivated and responsive to feedback, though structural changes before the assessment visit have caused some uncertainty. Course offerings on the e-platform Moodle, including the integrated H5P tool, were well-received by students, even as they voiced the need for more hands-on experiences and expert guest lectures. While short-term mobility programmes received positive feedback, participation is limited, suggesting a need for solutions to accommodate working master's students. The "Administration of Customs and Taxes" programme is set to offer English-language studies by September 2024, with industry partners expressing readiness to support internships in English, anticipating the enrollment of international students.

#### 2.2.4.

According to the SAR practical placement is a part of the PMA SP "Administration of Customs and Taxes", 6 CP internship for Master Thesis Practical Placement and 20 CP Practical Placement for students whose previous education is an Academic Bachelor degree. The main focus of the Practical Placement is said in the PMA SP "Administration of Customs and Taxes" SAR section 3.2.4: collecting, processing, analyzing, and systematizing information to understand the principles, significance, and relevance of the Practical Placement, then the student becomes familiar with the current issues and problems of the Practical Placement, obtains, processes, analyses and systematizing information necessary for the development and defense of the Master Thesis.

RTU has established a regulation "On the Procedure for Organising Internship at Riga Technical University" (approved at the RTU Senate meeting on 28 January 2019, protocol No 626). The main concept is that the internship procedure is the cooperation between FEEM, students, and employer, who should evaluate the possibility of achievement of the learning outcomes, appoint the supervisor, and sign the tripartite agreement. In master's studies, it is said in the SAR section 3.2.4 that the Practical Placement usually takes place at their workplaces, both at the State Revenue Service Customs (SRS) Administration, the Tax Administration, the Tax and Customs Police, SRS offices, Custom checkpoints etc as well as in various companies.

It is also said in the SAR that the PMA SP "Administration of Customs and Taxes" also organizes the recognition of Practical Placement, which has been used several times. However, as the Practical Placement is usually completed at the workplace and its tasks are according to SAR section 3.2.4 contribute to the achievement of the PMA SP "Administration of Customs and Taxes" outcomes, the students acquire practical skills, the ability to identify and analyze topical problems as well as to collect and research the information necessary for the Master Thesis, it is a good opportunity to use the internship time at work. Especially during the assessment visit, it was expressed by the employers how interested they were about research and development ideas in their organizations which students could offer. Also, it is an opportunity to get useful feedback from the supervisor who will also give an evaluation of the students and his/her knowledge and skills to the Practical Placement report which is produced at the end of the internship.

According to the SAR section 3.2.4, the PMA SP "Administration of Customs and Taxes" in English will provide opportunities to organize Practical Placement in workplaces where the language of communication will be English, because, for example, the administration of customs affairs is closely related to international trade, which in turn is unthinkable without communication skills in English. Also, one example was given how in 2020 internship opportunities abroad were used by one

master's student in an international company. It gives the confidence that when the PMA SP "Administration of Customs and Taxes" is implemented in English, it is possible to have an internship in English, however, there is a lack of international students so far.

In conclusion, practical placements are an essential component of the Professional Master's programme "Administration of Customs and Taxes" and its aim is to engage students in active data collection, analysis, and application relevant to their Master Thesis and professional acuity. RTU's structured internship approach encourages collaboration among FEEM, students, and employers through a formal tripartite agreement. The PMA SP "Administration of Customs and Taxes" acknowledges the value of on-the-job training at students' workplaces and the positive employer feedback on student contributions during internships. This combination enhances the practical experience, with the added benefit of allowing students to work on research and development projects of interest to their employers. Looking ahead, the PMA SP "Administration of Customs and Taxes" expansion into English-speaking environments aligns with the necessities of global trade and customs operations. The anticipated increase in international student enrollment should lead to greater opportunities for internships conducted in English, though current international student engagement remains limited.

#### 2.2.5.

N/A

#### 2.2.6.

At the end of the PMA SP "Administration of Customs and Taxes", students are required to produce a Master Thesis on a topical issue in the administration of customs or administration of taxes, and the Master Thesis is publicly defended at the State Examination Commission. Students carry out independent research, integrating scientific and professional achievements in the field of customs and tax administration to reflect the latest developments in the industry and the labour market, and include in-depth problem analysis, practical proposals, and scientific innovations.

The final theses were appreciated by the employers during the assessment visit, which confirms the interest of the employers and relevance for the field. It was noted that most of the students were already employed in their final course years, which, on one hand, required balancing studies with professional responsibilities, but on the other, offered the opportunity to investigate aspects significant to their employer's operations or the industry at large. Consequently, most of the theses produced have substantial value to the employers and contribute added value to the field overall.

It should be noted that the support during the studies is well maintained by the RTU, students are involved in several research activities as well as student conferences are organized where students can present their findings. Also, some opportunities are offered to participate in international conferences and workshops.

Some examples of topics of the final thesis are provided in the SAR section 3.2.6 which has the highest rating from the examination commission: "Conceptual solution for the application of the Combined Nomenclature codes for fuels", which develops a conceptual approach to improve the classification of goods to improve customs control and the application of appropriate customs duties, "Opportunities to improve tax accountability to improve the tax debt recovery process", which develops a specific model that the tax administration could use for strategic tax debt management, "Strategy for the introduction of a digital service tax in Latvia", which develops a strategy that the Ministry of Finance could use to introduce a digital service tax, "Concept for combating undeclared work in Latvia", which develops a concept for the tax administration to improve its combatting of illegal employment, etc.

Based on the assessment, it can be concluded that the final theses topics chosen by students are

relevant to the field of study and demonstrate a high level of quality. This confirms that the students have successfully achieved the desired study outcomes and are in alignment with the PMA SP “Administration of Customs and Taxes”. The SAR outlines the comprehensive support provided to students throughout their studies, including various study courses and internships that are integrated into the final thesis process.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

In conclusion, it can be said that the curriculum holds significance on both a national and international scale, satisfying the expectations of students, graduates, and employers in its structure and content. The FEEM members are highly esteemed, and the teaching methods effectively support the achievement of learning outcomes. However, there are also some areas for further development to consider. Students express a desire for greater practical orientation in their studies and guest lecturers who can effectively bridge theoretical knowledge with practical applications. Employers expect graduates to possess enhanced analytical, critical thinking, and communication skills to navigate complex global events, extract relevant information, and apply it accordingly. Additionally, to realize its ambition of becoming the primary EU training center in the Baltic region, the university needs to engage in boulder marketing efforts and exude confidence. Contrary to some opinions, experts affirm that security-related topics are currently in focus and have a market appeal. Students themselves also confirmed that when choosing their field of study, they sought uniqueness and reputation in the curriculum.

Strengths:

- 1) Unique PMA SP “Administration of Customs and Taxes” with international recognition.
- 2) Well-regulated processes as well as the quality management system which supports the implementation and development of the study programmes.
- 3) Highly motivated students and teaching staff with democratic relations.
- 4) Highly valued graduates by employers, as well as a high recommendation index by employers.
- 5) Opportunities to participate (students as well as teaching staff) in scientific conferences and seminars (including international).

Weaknesses:

- 1) Insufficient student mobility within the learning process.
- 2) Lack of the implementation of PMA SP “Administration of Customs and Taxes” in English as well as the lack of international students.

### **Assessment of the requirement [5] (applicable only to master's or doctoral study programmes)**

- 1 R5 - The study programme for obtaining a master's or doctoral degree is based on the achievements and findings of the respective field of science or field of artistic creation.

**Assessment of compliance:** Fully compliant

The study field is covered with a good amount of publications by the teaching staff as well as examples were provided about joint research projects where students were involved and activities were related to the PMA SP “Administration of Customs and Taxes”.

## **2.3. Resources and Provision of the Study Programme**

### **Analysis**

2.3.1.

Administration, academic staff and students have a sufficient number of auditoriums with relevant equipment in the FEEM building at Kalnciema Street 6. As well, the study process is ongoing in several more locations, including the Kipsala Campus.

There are two computer classrooms which are used for tactical tasks. In computers are available such specific softs as EMDAS, EDS, and ITVS which are important for customs and taxes students. Everyone involved in the study process (academic staff and students) has access to the ORTUS system.

Students can use the Scientific Library located on the Kipsala campus with great resources available, including literature and access to different databases, like EBSCOhost Ebook Academic Collection, Science Direct, Scopus, Web of Science, O'Reilly Learning Platform (access to over 47,100 e-books), Proquest Ebook Central, SpringerLink, IEEE Xplore Digital Library, ACM Digital Library, Wiley Online Library, Latvian Standards Database.

RTU has agreements with the State Revenue Service to use in the training process infrastructure and technical resources of the Service and National Customs Board.

2.3.2.

N/A

2.3.3.

Since 2017 till 2021 the number of students for the PMA SP "Administration of Customs and Taxes" has decreased more than double: from 93 students to 45. It's still above the minimum number of students (which is 15) to ensure the profitability of the programme. However, a tendency is worrying.

In the file "Funding by Positions by the period from 2013-2022" there are included preferable (or optimal) costs for one student for every year of every programme. According to this, the optimal cost per student in PMA SP "Administration of Customs and Taxes" in 2021/2022 was 10269,46 euros in a year. However, real funding (including state funding and tuition fees) for the programme was just 5754,66 euros per student. There is a significant gap between optimal and real costs. Preferable cost is calculated according to Regulations No 994 of the Cabinet of Ministers "Procedures for Financing Institutions of Higher Education and Colleges from the Funds of the State Budget". In Regulations is described procedure of how costs should be calculated.

According to the annex "Breakdown of funding between cost items" for purchase of books and magazines is assigned 3% of the whole budget, but for the purchase and modernization of equipment - 0%.

The limited budget might have a negative impact on the study process and set some limitations to developing content of the programme, study provision, scientific provision, material and technical provision etc.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

For the PMA SP "Administration of Customs and Taxes", there is a sufficient number and quality of premises and IT equipment. FEEM has close cooperation (agreement) with the State Revenue Service to use its infrastructure and technical resources.

For students available and ensured different software that is needed in the study process and later in their work.

Students can use the Scientific Library located on the Kipsala campus with great resources available, including literature and access to different databases

Unfortunately, since 2017 the number of students has been decreasing every year.

A limited budget (the gap between optimal and real) should hurt the study process and set some limitations to developing the content of the programme, study provision, scientific provision, material, technical provision, etc. No funding was identified for the purchase and modernization of equipment.

Strengths:

- 1) Close cooperation and support from the State Revenue Service.
- 2) The Scientific Library has great resources available for students, including literature and access to different databases.

Weaknesses:

- 1) Real funding of the programme is lower than optimal (defined in Legislation). This limits development possibilities.
- 2) 0% of the budget is assigned for the purchase and modernization of equipment.
- 3) Since 2017, the number of students has been decreasing every year.

## **Assessment of the requirement [6]**

- 1 R6 - Compliance of the study provision, science provision (if applicable), informative provision (including library), material and technical provision and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of learning outcomes

**Assessment of compliance:** Partially compliant

Ensured sufficient level of all kinds of provisions to ensure successful implementation of the program. Identified: a) need to reduce the negative gap between real funding (state budget + tuition fees) and optimal (calculated according to legislation) regarding cost per student; b) increase funding for the purchase and modernization of equipment which currently is 0%.

## **2.4. Teaching Staff**

### **Analysis**

#### **2.4.1.**

The PMA SP “Administration of Customs and Taxes” is delivered by 6 PhD-educated FEEM members who regularly upgrade their qualifications. The diverse national and international activities of the lecturers provide them with the opportunity to have a broad view of the problems of the border management segment, an analytical assessment of the practical benefits of applying the latest scientific knowledge in management, including the development of strategic management in customs, and practical experience in developing strategic and operational documents and recommendations at different levels. In section 3.4.1 of the SAR, several examples from the professional career of lecturers are given, which show that they are fully committed to the goal of ensuring high competence in higher education.

Several guest lecturers with extensive professional experience in customs, tax, security, and legal matters are also involved in the organization of the PMA SP “Administration of Customs and Taxes”. This is a prerequisite for ensuring that the educational process is updated and developed following the latest trends in practice and that scientific research is in line with its needs.

It is stated in the SAR and confirmed by the attached CVs of the teaching staff, that those participating in and delivering the programme in English have at least a B2 level of English.

Given the above, it can be concluded that the qualifications of the teaching staff enable the

objectives and learning outcomes of the PMA SP “Administration of Customs and Taxes” and the relevant courses to be achieved.

#### 2.4.2.

The PMA SP “Administration of Customs and Taxes” is delivered by lecturers selected by the RTU elected lecturers, guest lecturers, and guest assistant professors, as well as representatives of the scientific staff. The number of teaching staff has remained practically unchanged since the beginning of the reporting period.

During the reporting period, one lecturer defended his PhD thesis, thereby introducing scientific knowledge and the latest achievements in the field of customs into the teaching process, encouraging the use of research methods, and conducting in-depth research in the teaching process. During the reporting period, two lecturers were appointed as associate professors, thus strengthening the capacity of the PMA SP “Administration of Customs and Taxes”. Doctoral students are also involved in the learning process, which contributes to the introduction of new teaching methods and the integration of the learning process with their scientific research. This trend can be defined as positive, as it reflects the generational renewal of the teaching staff.

#### 2.4.3.

N/A

#### 2.4.4.

The annex List of the publications, patents, and artistic creations of the teaching staff over the reporting period" to Section 2.4 “Scientific Research and Artistic Creation” from the SAR of the study field "Internal Security and Civil Protection" shows that the teaching staff of the PMA SP “Administration of Customs and Taxes” (code 47861) had good publication activity during the reporting period. All 6 lecturers have reported publication activity, and a review shows that the topics of their publications correspond to the profile of the courses they teach within the PMA SP “Administration of Customs and Taxes”.

Many publications are co-authored by more than one member of the Department, and 25 of them are indexed in internationally recognized databases such as Scopus and Web of Science. After checking the relevant databases, it is worth mentioning the high performance in peer-reviewed publications of Associate Professor Māris Jurušs (8 publications in Scopus / WoS, h-index 3) and Associate Professor Justīna Hudenko (7 publications in Scopus / WoS, h-index 3). This high score for the PMA SP “Administration of Customs and Taxes” FEEM is due to their well-developed international partnership and intensive involvement in international projects and research, the results of which have a high impact factor and are well-accepted for publication in peer-reviewed journals.

There is a balanced distribution of the geographical scope of the publications, with a slightly larger share of those in national publications (mainly of RTU) compared to foreign ones, but this in no way diminishes their qualities and contributions of a scientific and practical nature.

Some of the lecturers have more than 15 years of practical experience, as shown in their CVs, which is a testament to their professionalism and insight into the field in which they teach

#### 2.4.5.

Faculty members participating in the PMA SP “Administration of Customs and Taxes” work together within their courses to ensure that they are linked and that there is no overlap. Course topics are determined based on recommendations from faculties or employers, thus involving all faculties in

addressing current issues. The organization of a study project involves a certain number of lecturers, which leads to both collaboration with students and cooperation in the management of the respective study projects.

Several mechanisms have been put in place to promote the collaboration of teaching staff in the implementation of the PMA SP “Administration of Customs and Taxes”, which are planned and listed in a general development plan. Some examples are given in the SAR, such as participation in departmental and FEEM meetings, joint participation in national and international conferences and seminars, mobility under the Erasmus+ programme, participation in various activities for the implementation of the BOMCA project, etc. All these activities are useful in the delivery of training courses and keep lecturers abreast of current developments in the field of customs and tax administration.

According to SAR in the academic year 2022/2023, there were 40 students, 10 lecturers, and 7 guest lecturers, so the ratio is 4:1.

### **Conclusions on this set of criteria, by indicating strengths and weaknesses**

A relatively small number of lecturers are involved in the implementation of the PMA SP “Administration of Customs and Taxes”, well distributed in terms of positions and educational levels, which allows the expert group to conclude that good conditions are in place to achieve the objectives and learning outcomes of the PMA SP “Administration of Customs and Taxes”. Guest lecturers from practice are also involved in the educational process, which has an additional positive impact on its quality and the overall training of future specialists in the field of customs and taxation.

Relations between teaching staff can be described as good, with evidence of good cooperation and continuity in teaching and research activities. Efforts are being made to attract more active students to research and to motivate them to start a teaching career at the RTU.

The publication activity of the teaching staff is at a very high scientific and professional level, as evidenced by the available publications indexed in internationally recognized databases such as Scopus and Web of Science.

The training courses are regularly updated, respecting the principle of interrelation between them and not allowing the duplication of training content.

Strengths:

- 1) The participation of academic staff and guest lecturers from practice is successfully combined in the learning process.
- 2) Lecturers have extensive academic, research, and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the PMA SP “Administration of Customs and Taxes”.
- 3) Regular professional development of the teaching staff and support for junior lecturers from senior lecturers and management.
- 4) Good publication activity in the area of courses in the PMA SP “Administration of Customs and Taxes”, including peer-reviewed publications in Scopus and Web of Science.

Weaknesses:

- 1) Availability of lecturers with a small number of publications that are indexed in Scopus and the Web of Science.

### **Assessment of the requirement [7]**

- 1 R7 - Compliance of the qualification of the academic staff and visiting professors, visiting associate professors, visiting docents, visiting lecturers and visiting assistants with the conditions for the implementation of the study programme and the requirements set out in the respective regulatory enactments.

**Assessment of compliance:** Fully compliant

The expert group considers that there is sufficient evidence to support the claim that the qualification of the programme's teaching staff fully meets the conditions for the implementation of the PMA SP "Administration of Customs and Taxes" and the requirements defined in the relevant legal acts.

## 2.5. Assessment of the Compliance

### Requirements

- 1 1 - The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard

**Assessment of compliance:** Fully compliant

Annex 6 ("Annex 6\_Compliance to Education standarts (Regulation nr.305).pdf") confirms that the PMA SP "Administration of Customs and Taxes" complies with Cabinet Regulation No. 305 "Noteikumi par valsts profesionālās augstākās izglītības standartu".

- 2 2 - The study programme complies with a valid professional standard or the requirements for the professional qualification (if there is no professional standard required for the relevant occupation) provided if the completion of the study programme leads to a professional qualification (if applicable)

**Assessment of compliance:** Fully compliant

Annex 7 ("Annex 7\_Compliance with the Professional Standarts.pdf") confirms that the PMA SP "Administration of Customs and Taxes" is compliant with the professional standard of " Manager in Customs and Tax Administration " (approved on 14 December, 2022)

- 3 3 - 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 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education Institutions.

**Assessment of compliance:** Fully compliant

The attached study course descriptions ("Annex 10\_Description of Study Courses (1).pdf") are prepared in Latvian and English. Descriptions comply with regulations outlined in the Law on Higher Education Institutions.

- 4 4 - The sample of the diploma to be issued for the acquisition of the study programme complies with the procedure according to which state recognised documents of higher education are issued.

**Assessment of compliance:** Fully compliant

The provided Diploma sample ("Diploma\_Diploma\_Supplement\_.pdf") complies with the procedure by which state-recognized documents of higher education are issued in accordance with Cabinet Regulation No. 202 "Kārtība, kādā izsniedz valsts atzītus augstāko izglītību apliecinošus dokumentus".

- 5 5 - 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 Higher Education Institutions.

**Assessment of compliance:** Not relevant

- 6 6 - 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 Higher Education Institutions.

**Assessment of compliance:** Not relevant

- 7 7 - 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 (if applicable).

**Assessment of compliance:** Not relevant

- 8 8 - 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 attached resumes of staff ("Academic\_staff\_CV\_EN.zip") and confirmation ("Confirmation - knowledge of the state language.edoc") verifies that state language proficiency is compliant with Cabinet Regulation No. 733 "Noteikumi par valsts valodas zināšanu apjomu, valsts valodas prasmes pārbaudes kārtību un valsts nodevu par valsts valodas prasmes pārbaudi".

- 9 9 - 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 (if applicable).

**Assessment of compliance:** Fully compliant

The attached resumes of staff ("Academic\_staff\_CV\_EN.zip") and confirmation ("Confirmation - knowledge of the foreign language.edoc") verify that language proficiency in English is at least B2.

- 10 10 - The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

**Assessment of compliance:** Fully compliant

Sample of the attached study agreement ("Study\_agreements.zip") complies with Cabinet Regulation No. 70 "Studiju līgumā obligāti ietveramie noteikumi".

- 11 11 - The higher education institution / college has provided confirmation that students will be provided with opportunities to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

**Assessment of compliance:** Fully compliant

The attached contracts ("Līgums\_Stud.turpināšana\_Agreement\_Transition.zip") confirm that the

institution provides the possibility to continue studies within the following options - University of Latvia: Academic Master's Study Programme "Accounting and Audit"; Professional Master's Study Programme "Work Environment and Expertise"; Professional Master's Study Programme "Financial Economy".

Rezekne Academy of Technology: Professional Master's Study Programme "Financial Management".

- 12 12 - The higher education institution / college has provided confirmation that students are guaranteed compensation for losses if the study programme is not accredited or the study programme's license is revoked due to the actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.

**Assessment of compliance:** Fully compliant

RTU confirmation ("Confirmation - on compensation for losses.edoc") states, that students are guaranteed 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 college (actions or failure to act) and the student does not wish to continue the studies in another study programme.

- 13 13 - The joint study programmes comply with the requirements prescribed in Section 55.(1), Paragraphs one, two, and seven of the Law on Higher Education Institutions (if applicable)

**Assessment of compliance:** Not relevant

- 14 14 - Compliance with the requirements specified in other regulatory enactments that apply to the study programme being assessed (if applicable)

**Assessment of compliance:** Not relevant

### **Assessment of the requirement [8]**

- 1 R8 - Compliance of the study programme with the requirements set forth in the Law on Higher Education Institutions and other regulatory enactments.

**Assessment of compliance:** Fully compliant

PMA SP "Administration of Customs and Taxes" complies with regulatory requirements.

### **General conclusions about the study programme, indicating the most important strengths and weaknesses of the study programme**

The PMA SP "Administration of Customs and Taxes" fully complies with the study field "Internal Security and Civil Protection" and all related legal regulations. The PMA SP "Administration of Customs and Taxes" provides students with a sustainable multi-level education in areas such as border security, economic security, and security of economic entities, providing a set of knowledge and skills in customs and tax administration. The PMA SP "Administration of Customs and Taxes" is implemented in full-time and part-time modes with three options of volume and duration, providing a student-centered approach to choosing the most appropriate option for the programme. The PMA SP "Administration of Customs and Taxes" is provided in the Latvian or English language, with both public and private funding.

Graduates of the PMA SP "Administration of Customs and Taxes" will obtain a professional Master's degree in customs and tax administration, the professional qualification "Manager in Customs and Tax Administration", the World Customs Organisation (WCO) Certificate, and the European Commission (EC) Certificate of Compliance with the European Union Customs Competences.

“Internal Security and Civil Protection”.

The PMA SP “Administration of Customs and Taxes” holds significance on both a national and international scale, satisfying the expectations of students, graduates, and employers in its structure and content. The FEEM members are highly esteemed, and the teaching methods effectively support the achievement of learning outcomes. However, there are also some areas for further development to consider. Students express a desire for greater practical orientation in their studies and guest lecturers who can effectively bridge theoretical knowledge with practical applications. Employers expect graduates to possess enhanced analytical, critical thinking, and communication skills to navigate complex global events, extract relevant information, and apply it accordingly. Additionally, to realize its ambition of becoming the primary EU training center in the Baltic region, RTU needs to engage in boulder marketing efforts and exude confidence. Contrary to some opinions, experts affirm that security-related topics are currently in focus and have a market appeal. Students themselves also confirmed that when choosing their field of study, they sought uniqueness and reputation in the curriculum.

For the PMA SP “Administration of Customs and Taxes”, there is a sufficient number and quality of premises and IT equipment. FEEM has close cooperation with the State Revenue Service to use its infrastructure and technical resources. For students available and ensured different software that is needed in the study process and later in their work. Students can use the Scientific Library located on the Kipsala campus with great resources available, including literature and access to different databases.

Unfortunately, since 2017 the number of students has been decreasing every year. Limited budget - the gap between optimal and real budget - should have a negative impact on the study process and set some limitations to developing the content of the programme, study provision, scientific provision, material, technical provision, etc. No funding was identified for the purchase and modernization of Equipment.

A relatively small number of lecturers are involved in the implementation of the PMA SP “Administration of Customs and Taxes”, well distributed in terms of positions and educational levels, which allows the expert group to conclude that good conditions are in place to achieve the objectives and learning outcomes of the PMA SP “Administration of Customs and Taxes”. Guest lecturers from practice are also involved in the educational process, which has an additional positive impact on its quality and the overall training of future specialists in the field of customs and taxation.

Relations between teaching staff can be described as good, with evidence of good cooperation and continuity in teaching and research activities. Efforts are being made to attract more active students to research and to motivate them to start a teaching career at the RTU. The publication activity of the teaching staff is at a very high scientific and professional level, as evidenced by the available publications indexed in internationally recognized databases such as Scopus and Web of Science.

Comment on Excellent evaluation: the expert group has an opinion that even though there is an evaluation partially compliant under the Resources and Provision of the PMA SP “Administration of Customs and Taxes”, because of the negative gap between real funding (state budget + tuition fees) and optimal (calculated according to legislation) regarding cost per student, the overall evaluation of the PMA SP “Administration of Customs and Taxes” could be excellent. It was found that the funding issues are not only influenced by the RTU but are dependent on the state level, however, RTU has been proactive and will start to pilot the new funding system, which could offer better conditions also to the PMA SP “Administration of Customs and Taxes”. Also, the weaknesses identified primarily serve as indicators of areas that could be considered for developmental activities, however, fundamentally, these do not impact the substantive quality of the PMA SP

“Administration of Customs and Taxes”.

Strengths:

- 1) The unique PMA SP “Administration of Customs and Taxes” with international recognition (WCO and EC certification), which complies with all the related regulations and offers different durations and volumes of the PMA SP “Administration of Customs and Taxes” to meet the needs of students.
- 2) Close cooperation with the industry and support from the State Revenue Service.
- 3) State is funding a definite number of study places in the PMA SP “Administration of Customs and Taxes”.
- 4) Highly motivated students and teaching staff with democratic relations.
- 5) Highly valued graduates by employers (good employability opportunities), as well as the high recommendation index by employers.
- 6) Well-regulated processes as well as the quality management system which supports implementation and development of the study programmes.
- 7) Opportunities to participate (students as well as teaching staff) in scientific conferences and seminars (including international).
- 8) The Scientific Library has great resources available for students, including literature and access to different databases.
- 9) Regular professional development of the teaching staff and support for junior lecturers from senior lecturers and management.
- 10) The participation of academic staff and guest lecturers from practice is successfully combined in the learning process.
- 11) Lecturers have extensive academic, research, and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the PMA SP “Administration of Customs and Taxes”.
- 12) Good publication activity in the area of courses in the PMA SP “Administration of Customs and Taxes”, including peer-reviewed publications in Scopus and Web of Science.

Weaknesses:

- 1) Very low number of students paying tuition fees.
- 2) An Insufficient number of state budget-funded places in the PMA SP “Administration of Customs and Taxes”.
- 3) Annually growing tuition fees, which have led to a decreasing number of students.
- 4) Relatively high dropout rates in the PMA SP “Administration of Customs and Taxes”.
- 5) Insufficient student mobility within the learning process.
- 6) Lack of the implementation of PMA SP “Administration of Customs and Taxes” in English as well as the lack of international students.
- 7) Real funding of the programme is lower than optimal (defined in Legislation), which limits development possibilities.
- 8) 0% of the budget is assigned for the purchase and modernization of equipment.
- 9) Availability of lecturers with a small number of publications that are indexed in Scopus and the Web of Science.

### **Evaluation of the study programme "Administration of Customs and Taxes"**

Evaluation of the study programme:

Excellent

### **2.6. Recommendations for the Study Programme "Administration of Customs and Taxes"**

## Short-term recommendations

- 1) Ensure activities to promote the PMA SP "Administration of Customs and Taxes" and increase the number of students in the programme at least by 20% annually.
- 2) Look for opportunities to increase the number of the state budget or industry-sponsored places in the PMA SP "Administration of Customs and Taxes".
- 3) Extend partnerships with other universities to facilitate exchange programmes and increase student mobility.
- 4) It is necessary to increase the number of scientific research of the teaching staff indexed in the world databases Scopus and Web of Science, for which more resources should be allocated by RTU.

## Long-term recommendations

- 1) Ensure the development of studies in the English language and attraction of international students.
- 2) Craft a clear, strategic proposal for the necessary modernization of equipment, and actively pursue alternative funding sources such as grants, partnerships, and alumni donations specifically for this purpose.
- 3) Develop targeted interventions to lower dropout rates, such as enhanced academic advising, mentoring programmes, and early identification of at-risk students to provide them with additional support.

## II - "Occupational Safety" ASSESSMENT

### II - "Occupational Safety" ASSESSMENT

#### 2.1. Indicators Describing the Study Programme

##### Analysis

##### 2.1.1.

The professional Master's study programme "Occupational Safety" 47862 (hereinafter PMA SP "Occupational Safety") fully complies with the study field "Internal Security and Civil Protection". It covers such courses as Labour Protection and Safety 5 CP, Environment Protection 2 CP, Topical Problems of Labour and Labour Safety Law 3 CP, Occupational Health and Ergonomics 5 CP, Safe Working Practice with Dangerous Substances 2 CP, Civil Defence and Fire Safety 3 CP, Means of Personal and Collective Labour Protection 2 CP, Dangerous Equipment and Electrical Safety 3 CP, Occupational Safety and Environmental Protection 2 CP, Principles of Designing Labour Protection Equipment 2 CP. All these subjects are in the scope of internal security and civil protection.

The aim and objectives of the PMA SP "Occupational Safety" are in accordance with the aim and objectives of the study field (SAR, p.215).

##### 2.1.2.

Based on SAR, PMA SP "Occupational Safety" is implemented in two modes - full-time intramural and part-time extramural and it is provided only in the Latvian language, with only private funding.

Depending on the previous education of the applicant, the full-time programme can be offered for 2 years (80 CP), 1 year and 6 months (60 CP). Part-time programmes accordingly can be provided in 2 years and 6 months (80 CP) or 2 years (60 CP).

Admission requirements are clearly described in RTU admission regulations. Such diversity in programme's modes and volumes is an example of a student-centred approach, allowing students to choose the most appropriate way of studying for their previous education and study load.

Graduates of the PMA SP "Occupational Safety" will obtain a Professional Master's degree in occupational safety and the professional qualification "Senior Specialist in Occupational Safety". In SAR, in English translation is used the word "Chief", but the experts recommend applying the translation "Senior" (SAR, p.216-218). The PMA SP "Occupational Safety" has interdisciplinary components.

According to the classification of education (Cabinet of Ministers of the Republic of Latvia Regulations No.322, 2017) the code of the PMA SP "Occupational Safety" is 47862. 4 stands for higher education, 47 for the 2nd level professional higher education professional Master's degree with/or the 5th level professional qualification; 86 stands for civil and military defence, and 862 stands for occupational protection and safety. Based on SAR, the study programme is in the thematic area of Civil and Military Protection Services - Occupational health and safety - code 862, ISCED-2013 classification: 1022 Occupational health and safety. The professional qualification "Senior Specialist in Occupational Safety" and the corresponding professional code 2133 02 comply with Cabinet of Ministers Regulation No 264 "Regulations on the Classification of Professions, Key Tasks and Basic Qualification Requirements Corresponding to the Profession" (SAR, p.220).

The aim of the PMA SP "Occupational Safety" is to prepare a specialist who has knowledge and skills in the areas of management, organisation and supervision of the labour protection system, risks of the working environment, analysis, forecasting and who would be able to set a project goal, participate in its development and implementation, make calculations, take decisions on improving the labour protection system and implement them in accordance with the requirements of the profession of Senior Specialist in Occupational Safety, as well as to continue studies in the doctoral programme. The main tasks of the PMA SP "Occupational Safety" are mentioned: to provide knowledge in setting up and managing a company's labour protection system; to assess and manage occupational risks, to develop practical work skills in the use of various decrees and regulations (SAR, p.215). The main learning outcomes in SAR are mentioned ability to establish and manage the company's labour protection system, to manage and train human resources in labour and environmental protection matters, to plan, implement and improve the internal monitoring of the working environment, to assess, analyse and manage work environment risks (SAR, p.216).

The PMA SP "Occupational Safety" is completed by a final examination – Master's thesis defence. The specific objectives of the PMA SP "Occupational Safety" are defined in cooperation with experts in the field of occupational safety and civil protection and employers. Compliance of the study programme with national education standard – Regulations No.305 (21.06.2023.) on the State Standard of Professional Higher Education – is proved in SAR Annex 6. Compliance of the PMA SP "Occupational Safety" with sector-specific regulatory framework is provided in SAR Annex "Specifiskais normatīvais regulējums\_Specific Regulatory Framework\_DA\_OS.pdf", and full compliance with related professional standards is provided in SAR Annex 7. The PMA SP "Occupational Safety" is designed to prepare senior occupational health and safety professionals for the demands of the Latvian and global labour market (SAR, p.221).

The title, code, the obtained degree, and professional qualification of the PMA SP "Occupational Safety", as well as aims, objectives, learning outcomes and admission requirements are clearly defined and interrelated, as well as the duration, language and scope are reasonable and justified.

### 2.1.3.

Based on SAR, the following changes have been made to PMA SP “Occupational Safety” parameters during the assessment period. In December 2022, it was decided to add the professional qualification "Senior Specialist in Occupational Safety" to the PMA SP “Occupational Safety”. The changes were necessary because of the meeting of the Tripartite Sub-Council for Professional Education and Employment on 9 February 2022 (Minutes No.1.). The requirements for the professional qualification of a Senior Specialist in Occupational Safety, corresponding to the seventh level of the Latvian Qualifications Framework (LQF 7), were approved. Until 2022, the LQF 7 had no such requirements and did not award professional qualifications, only a Professional Master's degree. In December 2022, it was decided to change the admission requirements to read as follows: 'A Professional Bachelor's degree in occupational protection and safety; or a Professional Bachelor's degree in environmental sciences, engineering and technology, public health, management science, law, physical sciences, life sciences or equivalent, and at least one year's professional experience in a field related to occupational safety'.

In December 2022, it was decided to create a second version of the PMA SP “Occupational Safety” in the amount of 80 CP (including the course ICA712 "Internship" in the amount of 20 CP in the 80 CP version of the programme), setting the following programme parameters: Scope of studies: 80 CP; Duration of studies in years: full-time - 2 years; part-time - 2 years, 6 months; Degree and qualification: Professional Master's degree in occupational safety and qualification as a senior occupational safety specialist; Required previous education: Academic Bachelor's degree in environmental sciences, engineering and technology, public health, management science, law, physical sciences, life sciences or equivalent and at least two years professional experience in a field related to occupational safety (SAR p.219).

All the corrections done during the assessment period are justified and fully supported.

#### 2.1.4.

The Labour Protection Law (in force since 01.01.2002) requires employers to set up an occupational safety system and to take measures to protect workers, such as training, risk assessment and preventive measures. The employer is responsible for the health and safety of employees at work, according to the provisions of the Labour Protection Law, but to ensure the necessary quality, an occupational health and safety specialist or a competent authority should be hired in accordance with Paragraphs 5.1. and 5.2. of the Cabinet of Ministers Regulation No.99 "Regulations on types of commercial activity in which the employer involves a competent body" (SAR, p.222-223).

Consequently, in accordance with the requirements of the laws and regulations of the Republic of Latvia, all companies need an occupational health and safety officer. According to the Latvian Employers' Confederation, senior occupational safety and health specialists are in high demand in the labour market and can train as fire safety and civil protection officers. The Latvian Association of Occupational Safety and Health Professionals, on the other hand, believes that a generational change is needed, given the general level of technological development. Currently, 154 senior occupational safety and health specialists have completed their Master's degrees between 2013 and 2022, and with an average of more than 90,000 companies operating in the country, there is a great need for such specialists in the country.

The PMA SP “Occupational Safety” has received very high international recognition, it was ranked 15th in Eduniversal 2021 ranking of the top 100 business information and strategy programmes worldwide. In 2022, the PMA SP “Occupational Safety” was ranked 4th in Cybersecurity, Systems Security and Data Protection (TOP 30) and 12th in Environmental Security (TOP 100). Despite being a fee-only programme, it is still in demand, as evidenced by the number of graduates (SAR, p.224).

Looking at the graduate statistics, the highest number of graduates was in the 2015/2016 academic year (26 graduates) and the lowest in the 2020/2021 academic year (10 graduates). The low number of graduates in the 2020/2021 academic year is because some students had an academic year,

resulting in only some renewing and completing their studies, as well as the fact that the previous academic year (pandemic year) had a lower number of enrolled students. Looking at the number of graduates for the reporting period, the average number of graduates per year is 18, which is a good indicator for the further development and improvement of the PMA SP "Occupational Safety" (SAR, p.224). The highest number of students in the 1st year was in the academic year 2015/2016 - 24 students. This is due to the economic upturn in the country, which led to an increase in the number of enterprises requiring qualified occupational safety and health professionals. The lowest number of students in the 1st year is observed in the academic years 2019/2020 and 2021/2022 - 7 students each. This is because the economic situation was uncertain in the context of the pandemic, both nationally and at a company level, so potential students were very conscious of their ability to pay for their studies. The highest number of students in the 2nd year was in the academic year 2016/2017 - 31 students, and the lowest was in the academic year 2020/2021 - 12 students (SAR, p.225).

Analysing the reasons for dropout, the highest proportion (1.5%) of students in the 1st year dropped out for poor performance and 0.75% were ex-matriculated upon their request. The main reason for poor performance in the 1st year is that students are unable to combine their studies with their workload. The reasons for voluntary dropout include the inability to combine work and study, as well as health and family circumstances. In the 2nd year, the highest dropout rate in the reporting period was for poor performance (10%) and the second reason for dropout was those who left their studies voluntarily (0.95%). In this case, the reasons for poor performance are mainly the number of outstanding courses since the first year is carried over to the second year, but this increases the workload and ultimately results in students being unable to meet their academic obligations (SAR, p.225). Overall, the dynamics of student enrolment reflect the correlation between the number of students enrolled and the overall economic situation in the country, as the number of students has increased during years of economic stability and growth but declined during the economic crisis and pandemic. However, given that the need for specialists in this PMA SP "Occupational Safety" is maintained in the country and is not fully met, it would be necessary to find a way to offer state budget-funded places as well (SAR, p.226).

2.1.5.

N/A

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

The PMA SP "Occupational Safety" fully complies with the study field "Internal Security and Civil Protection". The PMA SP "Occupational Safety" is implemented in two modes - full-time intramural and part-time extramural and is provided only in the Latvian language, with only private funding. Depending on the previous education of the applicant, the full-time programme can be offered for 2 years (80 CP), 1 year and 6 months (60 CP). Part-time programmes accordingly can be provided in 2 years and 6 months (80 CP) or 2 years (60 CP). Admission requirements are clearly described in RTU admission regulations. Such diversity in the programme's modes and volumes is an example of a student-centred approach, allowing students to choose the most appropriate way of studying for their previous education and study load. Graduates of the PMA SP "Occupational Safety" will obtain a professional Master's degree in occupational safety and the professional qualification "Senior Specialist in Occupational Safety". The programme has interdisciplinary components.

The title, code, the obtained degree, and professional qualification of the PMA SP "Occupational Safety", as well as aims, objectives, learning outcomes and admission requirements are clearly defined and interrelated, as well as the duration, language and scope are reasonable and justified.

The PMA SP "Occupational Safety" fully complies with all related regulations.

The main corrections made in the PMA SP "Occupational Safety" during the assessment period are related to the introduction of the professional qualification "Senior Specialist in Occupational Safety" to the study programme, as well as the introduction of the 80 CP programme version and updating of the admission requirements.

Following the legal requirements of the Republic of Latvia, all companies and organisations need an occupational health and safety officer. The PMA SP "Occupational Safety" has received very high local and international recognition. There are no state budget-funded places in the programme, all students must pay tuition fees. Demand for the PMA SP "Occupational Safety" follows the trend of economic development, in better years – more admitted students. Dropout rates are rather high in the PMA SP "Occupational Safety". The need for specialists in this programme is maintained in the country and is not fully met, it would be necessary to find a way to offer state budget-funded places as well.

Strengths:

- 1) The PMA SP "Occupational Safety" complies with all the related regulations.
- 2) Graduates of the PMA SP "Occupational Safety" have good employability opportunities.
- 3) Different duration and volume of the PMA SP "Occupational Safety" to meet the needs of students.
- 4) Close cooperation with industry.

Weaknesses:

- 1) There is no state budget funding for PMA SP "Occupational Safety".
- 2) Rather low number of students.
- 3) High dropout rates in the PMA SP "Occupational Safety".

## **2.2. The Content of Studies and Implementation Thereof**

### **Analysis**

#### 2.2.1.

The PMA SP "Occupational Safety" is offering Master's studies with necessary competencies to be acquired by 3 options regarding the previous work and study experience. Students of the PMA SP "Occupational Safety" acquire the necessary knowledge, skills, and competencies corresponding to the professional qualification "Senior Specialist in Occupational Safety".

Detailed comparison is provided in the PMA SP "Occupational Safety" SAR annexes between:

- "Regulations on the state standard of professional higher education" (Regulations of 21.06.2023 No. 305 requirements Part VI) and PMA SP "Occupational Safety". (See annex: 6.pielikums\_Annex 6\_atbilstiba\_valsts\_izglitiba\_standartam\_compliance\_with\_the\_national\_education\_standard\_DA\_OS.pdf)
- Professional standard of senior labour protection specialist and the relevant study courses of the PMA SP "Occupational Safety". (See annex: 7.Pielikums\_Annex 7\_Atbilstiba\_profesijas\_standartam\_Compilance\_with\_professional\_standard.pdf)
- Performance of the basic tasks and duties of the professional activity specified in the "Senior Specialist in Occupational Safety" and the relevant study courses of the PMA SP "Occupational Safety". (See annex: Specifiskais\_normativais\_regulejums\_Specific\_Regulatory\_Framework\_DA\_OS.pdf)

From the comparison documents, it is seen how compliance with the national regulations is

guaranteed and how the competencies from the standards are achieved. After completing the PMA SP “Occupational Safety”, a Senior Specialist in Occupational Safety, as well as the seventh-level professional qualification “Professional Master's Degree in Occupational Safety” are awarded, which offers the conclusion that the PMA SP “Occupational Safety” complies with national regulations.

It is said in the study course SAR that the PMA SP “Occupational Safety” is constantly updated and improved in line with the latest trends in occupational safety and health, fire safety and civil protection, as well as the situation in the labour market and its requirements. Several examples are given in the SAR of how the PMA SP “Occupational Safety” is improved according to the feedback from students, graduates, and employers as well as renewed standards or regulations. During the assessment visit it was asked about study courses that could be replaced or improved and the observation that both students and employers faced challenges in answering the question and did not identify any notable deficiencies indicates that the PMA SP “Occupational Safety” has undergone regular updates and fulfills the expectations of stakeholders.

However, during the assessment visit, certain feedback was received from employers regarding potential areas for improvement within the study field generally. It was noted that while employers expressed overall satisfaction with the graduates' knowledge and skills, there is room for further development specifically concerning events impacting global security and civil protection. The PMA SP “Occupational Safety” is designed to incorporate current research and scientific trends, however, employers identified the need to explore methods for integrating sensitive topics into the studies, in a manner that strengthens internal security without jeopardizing it. A key concern raised was how to obtain relevant information on a short-term basis in order to address these emerging challenges effectively.

During the assessment visit a strong impression remained from several discussions which reflected the high level of satisfaction with the studies from students, graduates as well as employers. All target groups confirmed the topicality of the PMA SP “Occupational Safety” as well as the learning outcomes that meet the needs of the industry.

Nevertheless, it could be considered in the development aspect that there is an emerging need to address mental health issues within the PMA SP “Occupational Safety”, which is predominantly composed of technical courses with few concerning health, particularly mental health. Supporting data from countries like Canada and Australia, as well as research conducted by Gallup, highlight that mental health problems in the workplace, such as stress and burnout, are costly for employers, often more so than physical injuries. The prevalence of work-related mental health issues, such as burnout, which the World Health Organization has recognized in the International Classification of Diseases, indicates the seriousness of the problem. Consequently, Safety Specialists and Engineers require training not only in technical aspects but also in recognizing and managing mental health concerns in the workplace. Knowledge in areas like employee well-being, engagement, mindfulness, and emotional intelligence is crucial for effectively communicating with employees, management, and Human Resources departments. Without tangible signs like physical injuries, mental health issues can still lead to substantial workplace losses due to reduced productivity, increased absenteeism, and a higher likelihood of physical injuries due to reduced mindfulness. Thus, integrating comprehensive mental health education into safety training is essential.

During the assessment, the topic of mobility opportunities was brought up, and it was noted that information about these possibilities is available. However, it was also acknowledged that utilizing these opportunities can be challenging for individuals with full-time employment commitments as well and the topic is moreover related to national regulations.

In conclusion, the PMA SP “Occupational Safety” aligns with national standards and professional qualifications for a Senior Specialist in Occupational Safety. It offers three paths, respecting students' previous work and study experience. Stakeholder feedback confirms the PMA SP “Occupational Safety” relevance and ongoing alignment with industry needs, continually incorporating the latest trends and standards in occupational safety and civil protection. In

development plans it should be considered to involve broader competency in mental health issues, recognizing their impact on workplace wellbeing and productivity. There is a consensus in global research on the importance of integrating mental health training to complement technical knowledge. Mobility opportunities are noted, but their uptake is limited by students' work commitments and regulatory requirements. Overall, satisfaction levels among students and employers are high, suggesting the programme effectively meets industry demands while also highlighting areas for evolution and improvement.

### 2.2.2.

It is stated in the SAR section 3.2.2 that the PMA SP “Occupational Safety” incorporates interdisciplinary studies in the social sciences, focusing on acquiring competencies related to occupational health organizational structures, training of professionals, identification of occupational diseases, accident investigation and recording, health checks, employee rights and obligations, emergency response, occupational health, teleworking, and more. It is also said that the PMA SP “Occupational Safety” is designed to incorporate the latest scientific and research findings in the field, which are supported by FEEM members' (teaching staff as well as students) scientific articles, recommended as reading material for students.

Additionally, it was described that a course "Scientific Seminars" of the PMA SP “Occupational Safety” has been introduced to equip students with research skills and an understanding of social science research methodologies, and students undertake independent research, including literature reviews, questionnaire development, data analysis, interpretation, and integration into their final Master's Thesis. The course aims to deepen knowledge in social science research, develop analytical skills, and enable students to present their findings at conferences.

During the assessment visit, it was understood that the cooperation is at a good level between students, teaching staff as well as employers, who are interested in the research activity in their area. Several examples were mentioned which have had some useful outcomes for the companies. A quite impressive list of scientific research which is carried out in cooperation between students and teaching staff is provided in the SAR section 3.2.2 and has results to introduce in scientific conferences as well as several scientific publications.

It could be noted as a compliment when the scientific activity is highly valued and supported as well as integrated into the studies. Notably, according to the SAR, several students have continued their academic journeys, pursuing doctoral studies and joining the FEEM as researchers, demonstrating the PMA SP “Occupational Safety” emphasis on both professional competency and research excellence. Graduates are well-prepared to pursue successful careers in occupational health and safety within various sectors and are equipped with the necessary knowledge for further academic pursuits.

In conclusion the PMA SP “Occupational Safety” focuses on key occupational health competencies and incorporates contemporary scientific and research insights, also reflected in FEEM and student publications. Collaboration between students, staff, and industry partners is notably effective, yielding practical and beneficial research outcomes. The SAR additionally points out the transition of some students into doctoral programmes and research positions, underlining the PMA SP “Occupational Safety” commitment to professional and research proficiency. Graduates are thus well-equipped for careers in occupational health and safety and have a solid foundation for further scholarly endeavors.

### 2.2.3.

Reflection from the students during the assessment visit confirmed that most of the teaching staff is using different methods and put an effort to change the teaching more for the learning approach.

Continuous change of the information/feedback is a key activity and the quality management system of RTU provides good support for that. It is described in the SAR that the didactic concept of the PMA SP “Occupational Safety” is based on the use of the latest and most advanced teaching methods. Later it describes how the methods are used such as real practical examples and problem-solving, group work, situational analyses, seminars, discussions, study excursions, practical work on the fire safety and civil protection laboratory, guest lecturers, etc.

It was heard during the assessment visit that most of the teaching staff is very open to the instant feedback, discussions, and developments that have been raised during the lectures. Relations between students, teaching staff, and administration are definitely the strength of the study field, which was also reflected very well during the assessment visit. It was described by the students that if they have any kind of questions, problems, or suggestions they first communicate with the teaching staff and mostly they get the solution.

The teaching staff showed high motivation and gave several examples from their teaching experiences as well and they felt support and encouragement from their supervisors so far. However, it is important to note that several weeks before the assessment visit, there were changes in the FEEM structure. As a result, there was some uncertainty about the future, particularly regarding the supervision system. The teaching staff displayed an understandable mix of open-mindedness, optimism, and slight concern in response to these change processes, which can be considered a normal and appropriate reaction.

Several very well-implemented study courses were demonstrated in the e-platform Moodle where the H5P was integrated, but it was admitted that a considerable amount of courses are still at the basic level and could be developed. However the students valued the courses in Moodle during the assessment visit, they also highlighted the wish to have more practical studies (including in the laboratory) as well as the guest lecturers who could be involved more as they connected the theoretical studies very well with practical examples. It was highly appreciated by the students that they had the possibility to have guest lecturers from different countries and organizations. Additionally, it was observed that some guest lecturers were RTU alumni themselves, which highlighted their professional growth and the opportunities available to current students.

As most of the students have work experience, it is a good opportunity for the teaching staff also to use teaching methodologies that are useful for both sides, for example, study projects and analyzing different situations, which relates the studies with the work field and gives the information about the latest trends. It was seen during the assessment visit that the environment was friendly and positive, which encouraged the students to express their views in dialogue and share their professional experiences.

It is important to mention that RTU offers different options for learning according to previous education and work experiences. In the SAR section 3.2.3, it is described how the learner-centered approach entails different approaches for part-time and full-time learners. For example, considerations are made for working students with lectures often scheduled in the evenings. This approach places greater emphasis on engaging discussions between the instructor and learner, problem-based and case-based solutions, as well as the lecturer taking on the role of a facilitator rather than a traditional lecturer.

In conclusion, it can be said that various teaching methods are employed in the implementation of the PMA SP “Occupational Safety”, tailored to the specific course requirements and yielding better results. Individualized approaches are taken towards students, based on their needs, which is reflected in the highly valued relationships between learners, instructors, and employers, all of whom hold the studies and the educational process in high regard.

#### 2.2.4.

Practical placement is a part of the PMA SP “Occupational Safety”, 9 CP internship for Master Thesis

Practical Placement, and 26 CP Practical Placement for students whose previous education is an Academic Bachelor degree. The main focus of Practical Placement is said in the SAR section 3.2.4: to obtain the practical skills of independent work, systematize, strengthen and expand theoretical and practical knowledge, strengthen the existing knowledge, solve occupational safety tasks, develop work skills with specific data of the national economy, industry or company, to develop the ability to prove the importance of the problem under consideration, as well as to develop and show ways of solving it.

RTU has established a regulation "On the Procedure for Organising Internship at Riga Technical University" (approved at the RTU Senate meeting on 28 January 2019, protocol No 626). The main concept is that the internship procedure is the cooperation between FEEM, students, and employer, who should evaluate the possibility of achievement of the learning outcomes, appoint the supervisor, and sign the tripartite agreement. It is considered to enable internship in the company in which the student is already employed, but if the student is not employed anywhere, the placement is provided by the department or RTU offers the assistance of a Student Career Support Officer who can find a suitable placement.

During the assessment visit, employers expressed a keen interest in incorporating research and development ideas within their organizations. They have already witnessed several successful examples and expressed a desire to acquire or enhance the necessary capabilities in the future, as outlined in the study programme SAR section 3.2.4: as a result of the internship, the skills are developed to prove the importance of the problem under consideration, as well as to develop and demonstrate ways of solving it, taking into account occupational safety, economic, social and ecological interests in general.

Based on the assessment, it can be concluded that students are offered opportunities for internships, and the organization of work during internships is effective. The tasks assigned during the internship are closely aligned with the achievable learning outcomes, particularly in relation to the Master's Thesis. These tasks require students to demonstrate analytical thinking, research skills, independent work, problem-solving abilities, and others. The internship complies with the requirements of regulatory enactments at the RTU as well as the national level.

2.2.5.

N/A

2.2.6.

Students formulate and develop the topics of their Master's thesis according to the qualification they are obtaining, which means that they write about various occupational safety issues, and their improvement, which is necessarily supported in the practical part with substantiated proposals. As previously mentioned, employers have shown during the assessment visit significant interest in the final thesis. According to the SAR, employers willingly participate in the final thesis commission, enabling them to provide suggestions on research topics that they would like to see students explore in the near future, topics that are relevant to the labour market. This cooperative effort has been positively received by employers, and students often receive invitations to participate in projects organized by employers or are offered positions in commercial or government structures.

It should be noted that the support during the studies is well maintained by the RTU, students are involved in several research activities as well as student conferences are organized where students can present their findings. Also, some opportunities are offered to participate in international conferences and workshops.

Some examples of topics of the final thesis are provided in the SAR section 3.2.6 which has the highest rating from the examination commission: "Improvement of the occupational safety system

and integration of Russian-speaking foreign migrant workers into the labour protection environment in Latvia", "Implementation of the LEAN system approach in a metalworking company in a repairer's working environment", "Solutions to reduce psycho-emotional risks in remote working", "Reducing the impact of shift rotation on workers' health and work capacity in Latvian manufacturing companies", "Improving occupational safety and health in fire and rescue operations using motorized saws and chainsaws" etc.

Based on the assessment, it can be concluded that the final theses topics chosen by students are relevant to the field of study and demonstrate a high level of quality. This confirms that the students have successfully achieved the desired study outcomes and are in alignment with the PMA SP "Occupational Safety". The SAR outlines the comprehensive support provided to students throughout their studies, including various study courses and internships that are integrated into the final thesis process.

### **Conclusions on this set of criteria, by specifying strengths and weaknesses**

In conclusion, it can be said that the PMA SP "Occupational Safety" satisfies the expectations of students, graduates, and employers in its structure and content. The FEEM members are highly esteemed, and the teaching methods effectively support the achievement of learning outcomes. However, there are also some areas for further development to consider. Students express a desire for greater practical orientation in their studies and guest lecturers who can effectively bridge theoretical knowledge with practical applications. Employers expect graduates to possess enhanced analytical, critical thinking, and communication skills to navigate complex global events, extract relevant information, and apply it accordingly.

Strengths:

- 1) Unique PMA SP "Occupational Safety", which attracts the students.
- 2) Well-regulated processes as well as the quality management system which supports the implementation and development of the study programmes.
- 3) Highly motivated students and teaching staff with democratic relations.
- 4) Highly valued graduates by employers, as well as the high suggestion index by employers.
- 5) Good cooperation with employers, which ensures practical placement possibilities, career opportunities, research topics, etc.
- 6) Opportunities to participate (students as well as teaching staff) in scientific conferences and seminars (including international).

Weaknesses:

- 1) Insufficient student mobility within the learning process.

### **Assessment of the requirement [5] (applicable only to master's or doctoral study programmes)**

- 1 R5 - The study programme for obtaining a master's or doctoral degree is based on the achievements and findings of the respective field of science or field of artistic creation.

**Assessment of compliance:** Fully compliant

The study field is covered with a good amount of publications by the teaching staff as well as examples were provided about joint research projects where students were involved and activities were related to the PMA SP "Occupational Safety".

## **2.3. Resources and Provision of the Study Programme**

### **Analysis**

### 2.3.1.

For students of the PMA SP "Occupational Safety", there is the Scientific Library, located on Kipsala Campus, where there are many books related to the study field. Also, some resources are available in the FEEM building at Kalnciema 6 (e.g. Methodology Room). Academic staff and programme directors have the right to purchase needed new books.

Students have access to two teaching laboratories with relevant equipment (Fire Safety Laboratory and Occupational Safety Laboratory).

Administration, academic staff, and students have a sufficient number of auditoriums with relevant equipment in the FEEM building at Kalnciema Street 6. Teaching and academic staff are ensured with modern laptops. All members of the RTU are granted access to the ORTUS system.

The FEEM has articulated a requirement for the enhancement and expansion of laboratory facilities, as well as the procurement of advanced equipment. Additionally, there is a discernible preference among the student body for an increase in hands-on experiential learning opportunities.

According to the Annex "Breakdown of funding between cost items" of the Self-Assessment Report from the whole budget of the PMA SP "Occupational Safety", for purchase and modernization of equipment is assigned 0% of the budget. For the purchase of books and magazines assigned 4% of the budget. However, students of this PMA SP "Occupational Safety" can use the same resources as students of PBA SP "Safety Engineering".

### 2.3.2.

N/A

### 2.3.3.

The PMA SP "Occupational Safety" is not subject to state financial support. It is structured as a part-time programme conducted exclusively in the Latvian language. Consequently, the financial burden for participation in the programme falls entirely upon the individual students and sponsoring legal entities.

Although, students should pay for studies, in this PMA SP "Occupational Safety", the number of students shows positive movement. In 2022 first, there were 18 students in the 1st year which is the highest number since 2018. The total number of students in 2022/2023 is 30 which is sufficient to ensure the cost-effectiveness of the PMA SP "Occupational Safety", taking into account the minimum cost-effective number of students in the study programme - 15 students.

According to the annex "Funding by Positions by the period from 2013-2022", the optimal cost (according to legislation) per one student per year should be 7090,98 Euro (year 2021). As there is no state funding, the only available budget for this PMA SP "Occupational Safety" is from students' tuition fees. The total budget in 2021 was 36950 Euros which means 1679,54 Euro per student per year. In the SAR (p. 245) RTU confirms that funding is sufficient for the implementation and development of PMA SP "Occupational Safety" as this is part-time extramural study and it is cheaper than full-time studies.

The tuition fee is 1750 Euro/year which is significantly below the calculated optimal level (7090,98 Euro for full-time students). As for this PMA SP "Occupational Safety" no state funding, execution of the programme must be ensured within budget from tuition fees. So far, RTU has managed to do so and ensure the cost efficiency of the PMA SP "Occupational Safety". However, such a negative gap can threaten the sustainability of the programme.

Positively, in 2022/2023 (no data available for 2023/2024) there is a significant increase of students in the first year - 18 students, which is the highest number since 2018.

## Conclusions on this set of criteria, by specifying strengths and weaknesses

PMA SP "Occupational Safety" needs can use the same facilities, tools, equipment and laboratories as for programmes "Safety Engineering" and "Fire Safety and Civil Protection".

PMA SP "Occupational Safety" is exclusively financed through tuition fees, receiving no subsidies from governmental funds. The programme's logistical and equipment requirements are met by utilising the existing facilities and resources allocated for the "Safety Engineering" and "Fire Safety and Civil Protection" programmes, ensuring that no supplementary financial outlay is necessary.

In the last 3 years, the number of students has slightly increased. In 2022/2023 the number of first course students increased more than double compared to the previous 3 years.

The tuition fee is 1750 Euro/year which is significantly below the calculated optimal level (7090,98 Euro). Although optimal cost is calculated for full-time studies, the difference still is very high.

Total number of students in 2022/2023 is 30, which is sufficient to ensure the cost-effectiveness of the PMA SP "Occupational Safety" (according to RTU regulations), the minimum number of students in the study programme to ensure cost-effectiveness is 15 students.

Strengths:

- 1) Stable and even slightly increasing number of students in recent years.
- 2) Can use the same resources and facilities as programmes "Safety Engineering" and "Fire Safety and Civil Protection".
- 3) Significantly increased number of first-year students in the year 2022/2023, hopefully, this tendency will continue.

Weaknesses:

- 1) Available funding is lower than optimal. It can threaten the cost-effectiveness of the PMA SP "Occupational Safety" and its further development.
- 2) Tuition fees are significantly below the optimal costs per student. As for this PMA SP "Occupational Safety", there is no state funding, RTU should ensure the cost-efficiency of the PMA SP "Occupational Safety" from tuition fees, which are relatively low.

## Assessment of the requirement [6]

- 1 R6 - Compliance of the study provision, science provision (if applicable), informative provision (including library), material and technical provision and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of learning outcomes

**Assessment of compliance:** Partially compliant

Ensured sufficient level of all kinds of provisions to ensure successful implementation of the program. Identified the need to reduce the negative gap between real funding (state budget + tuition fees) and optimal (calculated according to legislation) regarding cost per student.

## 2.4. Teaching Staff

### Analysis

#### 2.4.1.

In total there are 12 academic staff members involved in the implementation of the PMA SP "Occupational Safety" - 3 professors, 1 associate professor, 2 assistant professors, 2 lecturers and 4 field experts. The teaching staff of the PMA SP "Occupational Safety" actively enhances their professional and academic knowledge through various means, such as seminars, national and international conferences, scientific research, and engagement in projects and contractual works.

Notably, during the reporting period, academic staff participated in numerous academic conferences, made presentations at international scientific conferences, published articles, and engaged in mobility programmes.

The selection of teaching staff is based on their scientific and pedagogical expertise, aligning with the PMA SP "Occupational Safety" specifics. According to SAR, 2 professors demonstrate a commitment to continuous improvement and contribute significantly to research and international projects.

International cooperation and mobility programmes, involvement in projects, and collaboration with foreign partners enrich the study experience, allowing for exposure to new teaching methods. The teaching staff's practical experience and expertise in various organisations contribute to their role as competent contractors in contract works and provide up-to-date information for students.

In summary, the collective competence, knowledge, and practical experience of the teaching staff contribute significantly to achieving the study programme's objectives and ensuring successful outcomes.

#### 2.4.2.

The PMA SP "Occupational Safety" is delivered by a combination of academics and industry experts, a structure appreciated by students according to surveys. Noteworthy is the inclusion of industry experts from the Latvian Council of Science since the 2013/2014 academic year. Changes in staff composition were influenced by programme improvements, staff turnover, and retirements. The process considers generational shifts, aiming to attract promising graduates for academic roles. Examples include 5 staff members, all programme alumni who continued their studies and contributed as researchers and lecturers. The involvement of highly qualified academic staff, industry specialists, and experts aligns with student feedback, ensuring the PMA SP "Occupational Safety" content remains closely connected to industry specifics. Overall, the qualifications of the teaching staff align with programme implementation conditions and regulatory requirements.

#### 2.4.3.

N/A

#### 2.4.4.

The SAR Annex "List of the publications, patents, and artistic creations of the teaching staff over the reporting period" to Section 2.4 "Scientific Research and Artistic Creation" from the SAR of the study field "Internal Security and Civil Protection" shows that the teaching staff of the PMA SP "Occupational Safety" (code 47862) had good publication activity during the reporting period. The lecturers have reported 275 articles in international scientific journals and conference proceedings (section 3.4.1 Teaching Staff from SAR). A review shows that the topics of the publications correspond to the profile of the courses in which the authors are involved as lecturers within the PMA SP "Occupational Safety".

Many publications are co-authored by more than one member of the FEEM, and 20 of them are indexed in internationally recognised databases such as Scopus and Web of Science. After checking the relevant databases, the good achievements in the publication activity in peer-reviewed journals of Professor Ieviņš Jānis (6 publications in Scopus / WoS, h-index 2) and Assistant Professor Mihails Urbans (5 publications in Scopus / WoS, h-index 1) deserve attention. Despite the difficulties reported during the assessment visit at RTU with the teaching staff of the study field, related to the small number of specialised journals in the area of the PMA SP "Occupational Safety", the lecturers participate in international projects and research, the results of which have a high impact factor and

are well accepted for publication in peer-reviewed journals.

There is a balanced distribution of the geographical scope of the publications, with a slightly larger share of those in national publications (mainly of RTU) compared to foreign ones, but this in no way diminishes their qualities and contributions of a scientific and practical nature.

Some lecturers have many years of practical experience, as shown in their CVs, which is a testament to their professionalism and insight into the field in which they teach. Since the programme's teaching staff members work as experts not only in the Latvian Academy of Sciences but also in various organisations representing the field, they are called upon as competent contractors in various contract works related to the field.

#### 2.4.5.

Collaboration between teaching staff within the PMA SP "Occupational Safety" takes place both during the semester in the teaching of courses and in the planning and development of changes and developments necessary to update the curriculum. Course audits are carried out annually to identify possible improvements. Lecturers within the PMA SP "Occupational Safety" communicate with each other both formally (during meetings and other general events) and informally (individual face-to-face meetings, telephone communication, etc.). Section 3.4.5 of the SAR gives some examples of joint initiatives in which representatives of lecturers from different positions in the academic hierarchy have participated, which confirms the good cooperation between them (for example, together with the representatives of the practice, the professional standard was developed and updated, etc.).

Regular meetings and methodological sessions of the teaching staff are held to discuss the topics of the PMA SP "Occupational Safety" and the necessary improvements in the study content, to agree on topics, directions, responsibilities and compliance with regulatory requirements. All members of the teaching staff involved in the training course participate in the process of coordinating the training courses to ensure that the topics included in the PMA SP "Occupational Safety" do not overlap and are continuously improved and updated in collaboration with the professionals involved in the field. This ensures that issues related to the learning process and its improvement are discussed on time, that the topics taught in the training courses are aligned with the PMA SP "Occupational Safety" objectives, and that the learning outcomes of the training courses are integrated into the overall learning outcomes of the PMA SP "Occupational Safety", e.g. considering different work schedules and workloads.

The data given in the SAR regarding the ratio of students to teaching staff within the PMA SP "Occupational Safety" shows that in the academic year 2022/2023 the ratio is approximately 1:3, while the ratio of professionals to students is approximately 1:6.

### **Conclusions on this set of criteria, by indicating strengths and weaknesses**

Enough lecturers participate in the implementation of the PMA SP "Occupational Safety", well distributed in terms of positions and educational level, which allows the expert group to state that there are good conditions for achieving the objectives and learning outcomes of the PMA SP "Occupational Safety". Some of the lecturers have many years of practical experience, and at the same time, guest lecturers from practice (including from abroad) are involved in the educational process, which has a positive impact on its quality and the overall training of future specialists in the field of safety engineering.

Teaching staff relations can be described as good, with evidence of good cooperation and continuity in teaching and research activities. Efforts are being made to attract more active students to research and to motivate them to start a teaching career at the RTU.

The publication activity of the teaching staff is at a high scientific and professional level, as

evidenced by the available publications indexed in internationally recognized databases such as Scopus and Web of Science.

The training courses are regularly updated, respecting the principle of interrelation between them and not allowing the duplication of training content.

Strengths:

- 1) The participation of academic staff and guest lecturers from practice is successfully combined in the learning process.
- 2) Lecturers have extensive academic, research, and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the PMA SP "Occupational Safety".
- 3) Regular professional development of the teaching staff and support for junior lecturers from senior lecturers and management.
- 4) Good publication activity in the area of courses in the PMA SP "Occupational Safety", including peer-reviewed publications in Scopus and Web of Science.

Weaknesses:

- 1) Availability of lecturers with a small number of publications that are indexed in Scopus and the Web of Science.

### **Assessment of the requirement [7]**

- 1 R7 - Compliance of the qualification of the academic staff and visiting professors, visiting associate professors, visiting docents, visiting lecturers and visiting assistants with the conditions for the implementation of the study programme and the requirements set out in the respective regulatory enactments.

**Assessment of compliance:** Fully compliant

The expert group considers sufficient evidence to support the claim that the qualification of the PMA SP "Occupational Safety" teaching staff fully meets the conditions for the implementation of the PMA SP "Occupational Safety" and the requirements defined in the relevant legal acts.

### **2.5. Assessment of the Compliance**

#### **Requirements**

- 1 1 - The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard

**Assessment of compliance:** Fully compliant

Annex 6 ("6.pielikums\_Annex 6\_atbilstība valsts izglītības standartam\_compliance with the national education standard\_DA\_OS.pdf") confirms that the PMA SP "Occupational Safety" complies with Cabinet Regulation No. 305 "Noteikumi par valsts profesionālās augstākās izglītības standartu".

- 2 2 - The study programme complies with a valid professional standard or the requirements for the professional qualification (if there is no professional standard required for the relevant occupation) provided if the completion of the study programme leads to a professional qualification (if applicable)

**Assessment of compliance:** Fully compliant

Annex 7 ("7.Pielikums\_Annex 7\_At bilstība profesijas standartam\_Compilance with professional standard.pdf") confirms that the PMA SP "Occupational Safety" is compliant with the professional standard of "Senior Specialist in Occupational Safety" (approved on 9 February, 2022).

- 3 3 - 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 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education Institutions.

**Assessment of compliance:** Fully compliant

The attached study course descriptions (“Annex 10\_Study courses\_Occupational safety.pdf”) are prepared in Latvian. Descriptions comply with regulations outlined in the Law on Higher Education Institutions.

- 4 4 - The sample of the diploma to be issued for the acquisition of the study programme complies with the procedure according to which state recognised documents of higher education are issued.

**Assessment of compliance:** Fully compliant

The provided Diploma sample (“Occupational Safety\_ENG\_diploma and diploma supplement.pdf”) complies with the procedure by which state-recognized documents of higher education are issued in accordance with Cabinet Regulation No. 202 “Kārtība, kādā izsniedz valsts atzītus augstāko izglītību apliecinošus dokumentus”

- 5 5 - 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 Higher Education Institutions.

**Assessment of compliance:** Not relevant

- 6 6 - 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 Higher Education Institutions.

**Assessment of compliance:** Not relevant

- 7 7 - 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 (if applicable).

**Assessment of compliance:** Not relevant

- 8 8 - 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 attached resumes of staff (“Academic\_staff\_CV\_EN.zip”) and confirmation (“Confirmation - knowledge of the state language.edoc”) verifies that state language proficiency is compliant with Cabinet Regulation No. 733 "Noteikumi par valsts valodas zināšanu apjomu, valsts valodas prasmes pārbaudes kārtību un valsts nodevu par valsts valodas prasmes pārbaudi".

- 9 9 - 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 (if applicable).

**Assessment of compliance:** Not relevant

- 10 10 - The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

**Assessment of compliance:** Fully compliant

Sample of the attached study agreement ( "Study\_agreements.zip") complies with Cabinet Regulation No. 70 "Studiju līgumā obligāti ietveramie noteikumi".

- 11 11 - The higher education institution / college has provided confirmation that students will be provided with opportunities to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

**Assessment of compliance:** Partially compliant

The attached contracts ("Līgums\_Stud.turpināšana\_Agreement\_Transition.zip") confirm that there are no comparable options regarding curriculum and study level, where students can continue their studies. However, the expert group found that although there is partial compliance de facto by law, from a substantive perspective, the RTU cannot fulfill this condition as it involves a unique curriculum that is not replicated elsewhere, and from a national standpoint, it is not reasonable to duplicate the teaching of a narrow field. Therefore, the experts believe that in this section, partial compliance should not influence the final evaluation since the opportunity for students to change their field of study within the university is already provided.

- 12 12 - The higher education institution / college has provided confirmation that students are guaranteed compensation for losses if the study programme is not accredited or the study programme's license is revoked due to the actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.

**Assessment of compliance:** Fully compliant

RTU confirmation ("Confirmation - on compensation for losses.edoc") states, that students are guaranteed 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 college (actions or failure to act) and the student does not wish to continue the studies in another study programme.

- 13 13 - The joint study programmes comply with the requirements prescribed in Section 55.(1), Paragraphs one, two, and seven of the Law on Higher Education Institutions (if applicable)

**Assessment of compliance:** Not relevant

- 14 14 - Compliance with the requirements specified in other regulatory enactments that apply to the study programme being assessed (if applicable)

**Assessment of compliance:** Fully compliant

The study programme complies with a list of specified regulatory enactments relevant to labour protection. ("Specifiskais normatīvais regulējums\_Specific Regulatory Framework\_DA\_OS.pdf")

**Assessment of the requirement [8]**

- 1 R8 - Compliance of the study programme with the requirements set forth in the Law on Higher Education Institutions and other regulatory enactments.

**Assessment of compliance:** Fully compliant

The PMA SP “Occupational Safety” aligns with regulatory requirements. However, if the programme were to be discontinued, there is currently no equivalent study programme available for students to pursue. The expert group determined that while there is partial compliance with the law, the RTU cannot fulfill this condition due to the unique curriculum not being replicated elsewhere, and it's not reasonable to duplicate the teaching of a narrow field from a national standpoint. Therefore, the experts believe that partial compliance should not influence the final evaluation in this section, as the university already provides the opportunity for students to change their field of study.

### **General conclusions about the study programme, indicating the most important strengths and weaknesses of the study programme**

The PMA SP “Occupational Safety” fully complies with the study field "Internal Security and Civil Protection" and related legal regulations. The PMA SP “Occupational Safety” is implemented in two modes - full-time intramural and part-time extramural and is provided only in the Latvian language, with only private funding. Depending on the previous education of the applicant, the full-time programme can be offered for 2 years (80 CP), 1 year and 6 months (60 CP). Part-time programmes accordingly can be provided in 2 years and 6 months (80 CP) or 2 years (60 CP). Such diversity in the programme’s modes and volumes is an example of a student-centred approach, allowing students to choose the most appropriate way of studying their previous education and study load. Graduates of the study programme will obtain a professional Master's degree in occupational safety and the professional qualification “Senior Specialist in Occupational Safety”. The programme has interdisciplinary components.

Following the legal requirements of the Republic of Latvia, all companies and organisations need an occupational health and safety officer. The PMA SP “Occupational Safety” has received very high local and international recognition. There are no state budget-funded places in the PMA SP “Occupational Safety”, all students must pay tuition fees. Demand for the PMA SP “Occupational Safety” follows the trend of economic development, in better years – more admitted students. Dropout rates are rather high in the PMA SP “Occupational Safety”. The need for specialists in this programme is maintained in the country and is not fully met, it would be necessary to find a way to offer budget places as well.

The PMA SP “Occupational Safety” satisfies the expectations of students, graduates, and employers in its structure and content. The FEEM members are highly esteemed, and the teaching methods effectively support the achievement of learning outcomes. However, there are also some areas for further development to consider. Students express a desire for greater practical orientation in their studies and guest lecturers who can effectively bridge theoretical knowledge with practical applications. Employers expect graduates to possess enhanced analytical, critical thinking, and communication skills to navigate complex global events, extract relevant information, and apply it accordingly.

PMA SP “Occupational Safety” needs can use the same facilities, tools, equipment, and laboratories as for programmes “Safety Engineering” and “Fire Safety and Civil Protection”, so no additional expenditures are needed for that. In the last 3 years, the number of students has slightly increased. In 2022/2023 the number of first course students increased more than double compared to the previous 3 years. The tuition fee is 1750 Euro/year which is significantly below the calculated optimal level of 7090,98 Euro. Although optimal cost is calculated for full-time studies, the difference still is very high. The total number of students in 2022/2023 is 30, which is sufficient to ensure the cost-effectiveness of the RTU study programme.

Enough lecturers participate in the implementation of the PMA SP “Occupational Safety”, well distributed in terms of positions and educational level, which allows the expert group to state that there are good conditions for achieving the objectives and learning outcomes of the PMA SP

“Occupational Safety”. Some of the lecturers have many years of practical experience, and at the same time, guest lecturers from practice, including from abroad, are involved in the educational process, which has a positive impact on its quality and the overall training of future specialists in the field of safety engineering. Teaching staff relations can be described as good, with evidence of good cooperation and continuity in teaching and research activities. Efforts are being made to attract more active students to research and to motivate them to start a teaching career at the RTU.

The publication activity of the teaching staff is at a high scientific and professional level, as evidenced by the available publications indexed in internationally recognised databases such as Scopus and Web of Science.

In conclusion, the expert group has an opinion that even if there is an evaluation partially compliant under the Resources and Provision of the PMA SP “Occupational Safety”, because of the negative gap between real funding (state budget + tuition fees) and optimal (calculated according to legislation) regarding cost per student, the overall evaluation of the PMA SP “Occupational Safety” could be excellent. It was found that the funding issues are not only influenced by the RTU but are dependent on the state level, however, RTU has been proactive and will start to pilot the new funding system, which could offer better conditions also to the PMA SP “Occupational Safety”. Also, the weaknesses identified primarily serve as indicators of areas that could be considered for developmental activities, however, fundamentally, these do not impact the substantive quality of the PMA SP “Occupational Safety”. Additionally, there is partial compliance with the regulatory framework as well, however, the only issue identified is the fact that RTU does not have a contract in place with a comparable study programme providing an opportunity to continue the studies if the programme PMA SP “Occupational Safety” is being closed. However, it must be noted that the Expert group acknowledges the uniqueness of the study programme and it is justified that at this moment there is no such contract in place and such shortcoming does not affect the overall curriculum of the study programme.

#### Strengths:

- 1) The unique PMA SP “Occupational Safety” complies with all the related regulations and offers different durations and volumes of the study programme to meet the needs of students.
- 2) Graduates of the PMA SP “Occupational Safety” have good employability opportunities.
- 3) Well-regulated processes as well as the quality management system which supports implementation and development of the PMA SP “Occupational Safety”.
- 4) Good cooperation with employers, which ensures practical placement possibilities, career opportunities, research topics etc.
- 5) Opportunities to participate (students as well as teaching staff) in scientific conferences and seminars (including international).
- 6) Stable and even slightly increasing number of students in recent years.
- 7) Regular professional development of the teaching staff.
- 8) Highly motivated students and teaching staff with democratic relations.
- 9) Highly valued graduates by employers (good employability opportunities), as well as the high recommendation index by employers.
- 10) Close cooperation with industry.
- 11) Can use the same resources and facilities as programmes “Safety Engineering” and “Fire Safety and Civil Protection”.
- 12) The participation of academic staff and guest lecturers from practice is successfully combined in the learning process.
- 13) Lecturers have extensive academic, research and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the PMA SP “Occupational Safety”.
- 14) Good publication activity in the area of courses in the study programme, including peer-

reviewed publications in Scopus and Web of Science.

Weaknesses:

- 1) High dropout rates in the PMA SP "Occupational Safety".
- 2) There is no state budget funding for PMA SP "Occupational Safety" and available funding is lower than optimal (tuition fee). It can threaten the cost-effectiveness of the study programme and its further development.
- 3) Availability of lecturers with a small number of publications that are indexed in Scopus and the Web of Science.
- 4) Insufficient student mobility within the learning process.

## **Evaluation of the study programme "Occupational Safety"**

Evaluation of the study programme:

Excellent

## **2.6. Recommendations for the Study Programme "Occupational Safety"**

### **Short-term recommendations**

- 1) Look for opportunities to increase the funding possibilities (tuition fee is significantly below the optimal cost) to ensure the cost-effectiveness of the study programme and its further development.
- 2) It is necessary to increase the number of scientific research of the teaching staff indexed in the world databases Scopus and Web of Science, for which more resources should be allocated by RTU.
- 3) Extend the partnerships with other universities to facilitate exchange programmes and increase student mobility.
- 4) Look for possibilities to provide opportunities for students to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

### **Long-term recommendations**

- 1) Develop targeted interventions to lower dropout rates, such as enhanced academic advising, mentoring programmes, and early identification of at-risk students to provide them with additional support.

## **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
<p>R1 - Pursuant to Section 5, Paragraph 2.1 of the Law on Higher Education Institutions, the higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study field whilst implementing its internal quality assurance system:</p>	<p>Fully compliant</p>	<p>RTU has established solid regulations and mechanisms under the Internal Quality Assurance System. The continuous improvement of the study process, study programmes, and teaching methods is acknowledged as an integral part of the RTU daily activities, feedback is collected in several ways (formal, informal, surveys, reports, etc) and examples are given of how it is implemented to the development process.</p> <p>No significant weaknesses were identified, however, two weaknesses are mentioned only for improvement purposes regarding the availability of the feedback results and information provided about English programmes on the RTU webpage</p>
<p>R2 - Compliance of scientific research and artistic creation with the level of development of scientific research and artistic creation (if applicable)</p>	<p>Fully compliant</p>	<p>Despite the presence of some weaknesses, they do not have a significant negative impact on the level of development of scientific research activity in the study field at RTU. There are a number of examples of success in research activities and a drive for improvement, which is why experts consider the requirements to be fully met.</p>
<p>R3 - The cooperation implemented within the study field with various Latvian and foreign organizations ensures the achievement of the aims of the study field.</p>	<p>Fully compliant</p>	<p>RTU's efforts to build a network of national and international partners are undeniable, especially in the field of customs and taxation. The study field has many active partners, aligning with RTU's goals. RTU has made efforts to increase activities in foreign cooperation and student mobility. However, the pandemic period and the subsequent war in Ukraine disrupted collaboration with several partners. As these impacts were due to force majeure, the experts consider the proposal to have been taken into account and implemented to the extent possible. Looking to the future, there is still a recommendation to continue increasing mobility and expanding the network of foreign partners.</p>

Requirements	Requirement Evaluation			Comment
R4 - Elimination of deficiencies and shortcomings identified in the previous assessment of the study field, if any, or implementation of the recommendations provided.	Fully compliant			While there have been some noted shortcomings in implementing recommendations, the study field has shown its capability to address the issues raised during previous evaluation procedures. Continuous efforts are still expected, but overall, the study field is now largely in full compliance with the implementation of previous recommendations.

### 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	Administration of Customs and Taxes (42861)	Not relevant	Partially compliant	Fully compliant	Fully compliant	Excellent
2	Safety Engineering (42862)	Not relevant	Partially compliant	Fully compliant	Fully compliant	Excellent
3	Fire Safety and Civil Protection (44862)	Not relevant	Partially compliant	Fully compliant	Fully compliant	Excellent
4	Administration of Customs and Taxes (47861)	Fully compliant	Partially compliant	Fully compliant	Fully compliant	Excellent
5	Occupational Safety (47862)	Fully compliant	Partially compliant	Fully compliant	Fully compliant	Excellent

### The Dissenting Opinions of the Experts

All experts are united in the provided assessment of the study field and its study programmes and their joint opinion.