

# Expert group joint opinion

Evaluation Procedure: Assessment of Study Field

Higher Education Institution: Riga Technical University

Study field: Transport Services

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

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1. The study field "Transport Services" (study field) at Riga Technical University (RTU) is recognized for its strong management system, which is well-structured at both central and decentralised levels. The study field's quality assurance system is robust, incorporating effective feedback mechanisms that ensure continuous improvement. The study field benefits from strong ties with industry and political institutions, which facilitate the integration of practical knowledge and business trends into the curriculum.

However, the study field faces challenges, particularly with overcrowded courses where up to 150 students may be enrolled in auditorias, potentially affecting the quality of education ( see more in programme assessment 2.2.). Additionally, while the programmes are well-organised and modern in their approach, including an ethical framework to prevent plagiarism, they struggles with the long-term financial stability, relying heavily on student fees and limited project income.

A significant strength of the study field is its infrastructure, which is modern and well-equipped, supporting smooth organisation of the study process. The study field's alignment with RTU's strategic goals ensures that it meets the needs of both the national economy and society. Despite this, there is a need for greater cooperation between RTU's various logistics-related programmes to maximise synergies and development opportunities.

The study field's internationalisation efforts are currently limited, with low levels of student and staff mobility. This is partly due to the employment commitments of students, financial constraints, and logistical challenges such as incompatible semester schedules. The low level of international cooperation may hinder the programme's ability to engage effectively in European Union projects.

Previous accreditation recommendations have been partially implemented, with ongoing issues in areas such as internationalisation, e-learning expansion, and publication output. These areas require attention to enhance the programme's effectiveness and ensure it remains competitive and relevant in the long term. The study field's development is still in its early stages, but addressing these challenges will be crucial for its future success.

2. Short-cycle professional higher education study programme "Logistics" 41840 (SCSP Logistics) at RTU is designed to blend theoretical knowledge with practical experience, preparing students for careers in logistics. A key strength of the programme is its practical learning component, notably through structured internships, which are supported by strong industry collaboration. Employers are actively involved in setting internship goals and evaluating student performance, ensuring that the programme remains aligned with labour market needs. Additionally, initiatives like RTU Career Day and the RTU Development Fund offer career counselling, skill enhancement, and networking opportunities, while foreign academic staff and advanced teaching methods contribute to a well-rounded educational experience.

Despite these strengths, the programme faces several challenges. The curriculum, though regularly updated, may struggle to incorporate emerging topics due to its strong alignment with current standards. Some students have experienced difficulties securing internships, indicating a potential need for better individual placement support. Concerns have also been raised about the standardisation of course materials on the Moodle platform and the effectiveness of the learning environment given the large class sizes.

Financial sustainability is another challenge, with the programme heavily reliant on student fees and facing limitations due to its early-stage development. To enhance long-term success, it is crucial to increase student enrollment, secure additional funding, and boost the visibility of scientific research activities.

The programme benefits from a well-qualified and diverse teaching staff, including guest lecturers

from the industry, which positively impacts the quality of education. However, clarifications are needed regarding study continuation options in case of programme closure, and the programme does not feature a "C part," which requires further attention. Overall, while the programme offers a solid foundation for professional growth, addressing its weaknesses could further enhance its effectiveness and sustainability.

3. The Second-cycle professional higher education (master) study programme "Logistics and Supply Chain Security" 47840 (MASP Logistics and Supply Chain Security) at RTU offers a flexible and comprehensive educational experience that caters to students with varying educational backgrounds. The programme features three implementation variants, allowing students to engage with the curriculum at different levels while maintaining core objectives that align with industry standards. The programme emphasises a strong link between theoretical knowledge and practical application, which is reinforced through internships and master's theses. Internships are designed to develop key professional skills, such as decision-making and communication, with direct feedback from industry professionals. However, despite the support provided by internship coordinators and career services, graduates have reported difficulties in securing internships and jobs due to a perceived lack of practical experience.

The master's theses are closely tied to industry-relevant topics, supported by economic analysis, and defended before industry professionals, ensuring the programme's continued alignment with labour market needs. The programme is regularly updated to reflect industry trends and includes guest lecturers to provide current perspectives. However, challenges remain, such as the need for more frequent curriculum updates, inconsistent use of digital platforms like Moodle, and large class sizes. Additionally, the programme has limited focus on internships in foreign languages and international mobility opportunities for students.

The programme benefits from strong library resources, material support, and strategic financial management, though it faces financial sustainability challenges due to its reliance on student fees and its early stage of development. To ensure long-term success, efforts should focus on increasing enrollment, securing additional funding, and enhancing the visibility of research activities. The teaching staff is well-qualified and diverse, contributing positively to the programme, with good publication activity and efforts to engage students in research. The programme complies with state education standard.

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

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

##### **Analysis**

1.1.1. The new study field "Transport Services" (study field) has been implemented in accordance with order No. 475 (06.07.2022) of the Cabinet of Ministers. Both the Ministry of Economics of the Republic of Latvia and the Ministry of Transport of the Republic of Latvia welcomed and approved RTU's intention to create a new study field "Transport Services" and study programmes, according to the Cabinet of Ministers order annotation (SAR, p. 17). Additionally, the Employers' Confederation of Latvia also stressed the need to prepare high-level specialists with professional competence in the logistics sector. (SAR, p. 17) The responsible institutions, such as the Cross-Sectoral Coordination Centre and the Council of Higher Education, when evaluating the new study field, recognized that it complies with the National Development Plan of Latvia and the Sustainable Development Strategy of Latvia 2030 (<https://polsis.mk.gov.lv/documents/3323>).

Two new study programmes "SCSP Logistics" and "MASP Logistics and Supply Chain Security" have been implemented in the study field "Transport Services" by the Faculty of Engineering Economics

and Management (FEEM) and these new programmes were licensed on 22.12.2022 (SAR, p. 17). The starting point for the implementation of the study field "Transport Services" reaches back to when the Government of Latvia took a decision to reorganize the Latvian Maritime Academy (LJA) adding the LJA to Riga Technical University (RTU) as an autonomous structural unit. By doing so, the study field "Transport Services" was taken over from the LJA and is being implemented at the Faculty of Engineering Economics and Management (FEEM). As a consequence, two new study programmes are being implemented and licensed in the study field "Transport Services": the short-cycle professional higher education study programme and the professional master study programme. Both study programmes of the study field are logistics-oriented and they include the study programme "Transport Services", formerly implemented by the LJA of RTU, focusing on the preparation of specialists for the maritime transport sector with higher professional maritime education (SAR, p. 18).

SCSP Logistics offers short-cycle professional higher education in the field of logistics and qualification of a logistics specialist in accordance with the developed profession standard "Logistics Specialist" (approved in 2021, SAR p. 18). The aim of the study programme is to develop students' professional competence for work in the field of logistics in accordance with the profession standard "Logistics Specialist" together with the development of research skills to ensure the basic processes of logistics, as well as to evolve an understanding of the impact of logistics on the environment and responsible management. Until 2023, in the study field "Transport Services", the professional bachelor's study programme "Port and Maritime Management" was implemented by the LJA with a final professional bachelor's degree in management and administration and qualification of a port and shipping management specialist. Since the awarded qualification has not been accepted by employers, from September 1, 2023, admission to this study programme does not take place. In order to maintain this study field, from 2023 the specialisation "Logistics of ports and sea transport" was created within the professional bachelor's programme "Business Logistics" of RTU where the qualification "Logistics Manager" was kept and has not been changed (SAR, p. 18).

Between 2019-2023 the project "SAM 8.2.1. reducing fragmentation of study programs at RTU and strengthening resource sharing" was implemented at RTU aiming for reduction of fragmentation of study programmes and to strengthen resource sharing. Within the framework of this project the MASP Logistics and Supply Chain Security in the study field "Transport Services" has been developed. Both study programmes, i.e. SCSP Logistics as well as the MASP Logistics and Supply Chain Security has been licensed in 2022 as mentioned already earlier (SAR, p. 18).

The studies in the study field allow students to acquire practical and professional competences, knowledge and skills necessary for successful work in companies in the field of logistics in Latvia and abroad. Great emphasis in the study process is laid on improving professional and practical competencies based on scientific achievements, theoretical knowledge and specifics of the field by implementing study courses in English to improve the use of professional terminology and to facilitate the integration of students and graduates in internationally operating institutions (SAR, p. 19). The teaching staff consists of both academic university staff as well as highly qualified practitioners in logistics (assessment of visit).

Within the framework of the study field "Transport Services", the aim has been set to provide students with sustainable multi-stage education in the field of transport services, promoting competitive and welfare-promoting career development and preparing internationally recognized, highly qualified specialists in the logistics field (SAR, p. 19). Hence, the aim of the study programme has been clearly defined, they are attainable and they comply with the main directions of the strategic development of RTU and FEEM. During assessment visit discussion with employers confirmed that the study programme meets the needs and the development trends of the society and national economy.

Currently, the study programmes are situated in a starting phase and it is financed by tuition fees and FEEM budgets. The current situation is linked to a shortage of financial means making it

complicated to hire more foreign and high-level practitioners into the study process. The long-term expectation is that tuition fees and project budgets should safeguard the survival of the study programme, which represents a high risk due to unpredictable project incomes. Currently, the study field focuses on preparation of national project application; here a diversification towards EU projects could be a favourable development direction. First steps are already reached by the implementation of the new project "Green gases and their synergy with other RES in a smart city" where parts of the academic staff are involved.

1.1.2. An annual study report for improvement evaluates the development of the study field (SAR, p. 22). The report is elaborated by an expert appointed by the Vice-Rector for Studies and later approved by the RTU Senate. A mandatory section of the improvement report is a SWOT analysis allowing an analysis of what has been done and to illustrate tentative problems. The current SWOT analysis of the study field "Transport Services" comprises a list of points that are reflecting the results of the analysis but it had to be completed due to the assessment of experts visit (SAR, p. 22-23; visit notes). Hence, it can be stated that the necessary information is sufficiently integrated into the planning documents.

In accordance with RTU SWOT analysis, the management of the study field "Transport Services" works on the elimination of weaknesses and the reduction and elimination of threats. In cooperation with RTU ICD (Department of International Cooperation and Foreign Students) the promotion and dissemination of study programmes abroad takes place (in India, in Turkey, in Sri Lanka). Students and teaching staff are invited to take advantage of mobility opportunities and to participate in thematic guest lectures and study tours organised by the management of study programmes, but current administrative and organisational obstacles are hindering the participation of mobility opportunities (SAR, p. 23-24).

Currently, the study field "Transport Services" focusses on preparation of national project application, only one EU project application is in preparation for CB Interreg programme (additional information 06.09.24; Annex 13: Summary of quantitative data of research and related activities; visit notes). Here, a strengthening of internationalisation activities of the study programmes together with a better integration into EU university networks can improve the number submitted applications together with a higher success rate in EU projects.

According to the study field development plan (Annex: "Annex 3. Study field development plan.pdf") a continuous cooperation with industry representatives will be continued and extended in the next six years in order to constantly update the study content so that it meets the needs and trends of the industry.

1.1.3. On the level of the study field, the internal quality is supervised and safeguarded by various institutions comprising the council of the faculty, the commission of the study field and the director of the study field, the directors of study programmes, and as well of the administration of institutes implementing study programmes (SAR, p. 24-25).

The continuous development of study programmes is supervised by the RTU study field commissions being responsible for the academic activities comprising content and quality of study programmes as well as the accreditation of the study field. The inclusion of representatives of employers in the composition of the commission is compulsory for the study field. The commission of study field works in accordance with the "By-laws of the Commission for the Study Direction" (approved by the RTU Senate on 26.04.2021, Protocol No. 649) by realising the following basic tasks:

- Analysing the labour market situation and suggesting the creation or closure of study programmes.
- Carrying out expert-examination of the content and quality of study programmes and benchmarking the defined objectives and requirements with science and the labour market.
- Organisation and supervision of the accreditation of the study field and licensing of study programmes.

- Execution of the analysis of the self-assessment report of the study field, as well as the annual report on the improvement measures of the study field;
- Evaluation and recommendation of changes in study programmes concerning the quality of all study programmes included in the field of study.
- Analysis of the survey results of students, graduates and employers to eliminate detected shortcomings.

Currently, the two programmes in the study field "Transport Services" are under accreditation, i.e. SCSP Logistics and MASP Logistics and Supply Chain Security. Both study programmes are headed by one programme director who ensures the hierarchical supervision of the total study content (SAR, p. 25).

The commission of the study field consists of 9 participants with 5 members of the academic staff of study programmes, 3 members of employers, and 1 student without the right to vote.

The study field at RTU is provided by the Governance and Security Institute of RTU FEEM and realises teaching and methodological work, i.e. establishing and updating the study course programmes, ensuring the teaching of the relevant study courses, the management and defence of final works and thesis, and the execution of other activities related to teaching, methodological and scientific work. The work of the Governance and Security Institute is supported by RTU FEEM Customs Control Laboratory, the Bloomberg laboratory at FEEM, and the RTU Design Factory and laboratories (SAR, p. 25). During the assessment visit together with the related discussions revealed that the involved administrative, technical and educational staff is highly motivated and the management structures are sound.

The teaching staff is enabled to develop and improve the study programmes. Currently, the participation in international activities of the teaching staff also allows the introduction of international impulses for the study field. It would be recommendable to strengthen the international impact on the study programmes by initiating twinning events with partner institutions or by enlarging the participating in international university networks related to the study field in order to facilitate the experience flux into the study programmes.

The existing cooperation with the employers of the business sector also shows a positive impact on the development of the study field including the management part (SAR, p.25). The discussions with the representatives of the employers during the assessment visit revealed that the Latvian logistics sector discloses only a weakly developed cluster structure.

Here, RTU can use its high reputation to take over a stronger and more active role within the management of the Latvian logistics cluster as neutral and highly competent moderator and cluster facilitator. Examples from other countries (e.g. Germany: Logistik-Initiative Hamburg; Estonia: PROLOG) show that a stronger University-Business engagement spurs cluster development but also sets powerful impulses to the development of study field management.

1.1.4. The admission of matriculation of students follows the RTU Admission Regulations based on the Law on Higher Education Institutions and Cabinet Regulations No. 846 issued 10.10.2006 "Regulations on Requirements, Criteria and Procedures for Enrolment in Study Programmes" together with the specific requirements of study programmes and the industry. The RTU Admission Regulations are approved by the RTU Senate and published on 1st November each year (see the files of Annex "List\_of\_internal\_regulations.zip" 29-35 of the List of Internal regulations).

Admission requirements are logical, understandable, and linked to the goals defined in the RTU Strategy. The admission system is modern, easily accessible and logically structured by reflecting the current digitalization trends so that interested students can easily use the university registration tool for application (SAR, p. 29).

Applicants are admitted to full-time and part-time undergraduate programmes based on the results of the Centralised Examinations (CE) in Mathematics, in Latvian language, in foreign language and the final grades in individual subjects obtained in the Secondary Education together with the results

of their entry test. In case that the applicant needed an additional CE in Physics or Chemistry, the results of these CEs are considered in the ranking calculation. In the competition of state budget funded seats, the rating in Mathematics CE is calculated as the average value of all Mathematics CE rating sections and must reach at least 15 percent. An applicant with a CE in mathematics of less than 15 percent may apply only for a study place with tuition fee. Until the year 2022, the CE rating minimum value was set to 12 percent (SAR, p. 29).

A candidate's rank in the competition is calculated as an average of all CE evaluation sections and each entry test (if applicable) is integrated in the final sum by weighting with an appropriate factor. In case a study programme applicant must pass an entry test, then the result is gained by multiplying with an appropriate weighting factor and summing up in the total calculation of rank. Persons with a secondary education prior to 2009 (including) and persons, who have received secondary education abroad, or persons, who were exempted from passing the secondary education state examinations in accordance with the procedure set by regulatory enactments, can be admitted to the study programmes based on their year grades in the secondary education document in those subjects mentioned in the RTU Admission Regulations. Until 2019, the admission based on the secondary education year grades was attributed to persons who completed secondary education prior to 2004. Persons who have completed secondary education and have not passed any of the CEs mentioned in the RTU Admission Regulations or have failed the year grade, can pass the CE in accordance with the Cabinet Regulations No. 398 "Rules on the content and procedure for centralised examinations" (only available in Latvian language). Finally, persons who have not passed CE in Latvian and who do not meet the requirements of RTU Admission Regulations, can pass the entrance examination in Latvian as prescribed by RTU. The result is evaluated in percentage (SAR, p. 29).

A CE in a foreign language can be replaced with a foreign language examination conducted by an international testing institution the certificate of which must be presented to the RTU Admission Committee, which is in line with Cabinet Regulations No. 795 adopted on 20.12.2022 "Regulations on Replacement of the Foreign Language Centralized Examination in the General Secondary Education Program by Foreign Language Examinations Conducted by International Testing Institutions"(only available in Latvian language).

The applicants holding a bachelor's degree in a study field relevant to the study programme can be enrolled to the graduate study programmes. The applicants take part in the competition with a weighted average grade from the Bachelor or professional study programme records. The weighted average grade is calculated as the sum of all the grades received in each study course multiplied by the credit points acquired in the study programme and then divided by the total number of credit points within the study programme. If credit points are not verified, the weighted average grade is calculated as the multiplication of the grades and contact hours obtained in each study course divided by the total number of contact hours (SAR, p. 29-30).

From the summer of 2020, the admission process has been improved so that there are now two ways to apply for the state budget funded seats in undergraduate study programmes:

- electronically in the Joint Enrolment Undergraduate Study Programme information system, using the e-service portal (<https://www.latvija.lv>). In case that the secondary education was obtained abroad or until the 2019/2020 school year, the applicants must confirm their electronic applications by arriving at the designated locations within the deadlines and presenting the originals of the required documents;
- arriving at the RTU Admission Committee in person and presenting the originals of the required documents.

The application for state budget funded seats in the graduate study programmes, graduates of RTU undergraduate study programme can be realised by submitting the applications online on RTU portal ORTUS. Since summer 2020 admission, graduates of other Latvian state-accredited higher education institutions' undergraduate study programmes can submit their applications also electronically on

the RTU website, or by visiting RTU Admission Committee (SAR, p. 30).

Applicants not qualifying for state budget funded seats and applicants who have received their education outside Latvia, must appear in person at the RTU Admission Committee within the admission deadline together with the required documents. With the summer admission of 2021, electronic application for studies for a study place with tuition fee has been started also in undergraduate and higher-level study programmes.

The recognition of previously acquired formal and non-formal education at RTU is carried out in accordance with 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 04.04.2016) 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 23.09.2019, Minutes No 632) (available at <https://international.rtu.lv/study-regulations/> and in the file of Annex 09 of the List of Internal regulations). All RTU Admission Regulations are published electronically under: <https://www.rtu.lv/lv/studijas/uznemsana/uznemsanas-noteikumi> in Latvian for local students and under: <https://www.rtu.lv/en/studies/admission-1> for foreign and exchange students.

There exists the possibility of recognition of study periods, professional experience and previously acquired formal and non-formal education within the framework of the study direction representing a convenient and relatively simple procedure for students. In case of submission of a recognition application of a student, the application has to be accompanied by the necessary evaluation documents concerning the acquisition of previous similar study courses and/or professional experience. In case of professional experience, students must prepare and submit a description of their professional activity, which is evaluated by the commission and if necessary, an additional interview is possible to clarify unclear issues. Students matriculated in later stages of their studies are subject to recognition of study courses acquired at the previous level of studies, or in study programmes of the first level higher vocational education (college), if the study courses and their amount correspond to the RTU study programmes.

The development and licensing of SCSP Logistics and MASP Logistics and Supply Chain Security of the RTU study field "Transport Services" are subordinated to the accreditation year of the study field "Transport Services". After the implementation of these new study programmes in the academic years 2022/2023 and 2023/2024, students have been enrolled in new study programmes to initiate the accreditation process of the study field "Transport Services".

1.1.5. The assessment of the student learning outcomes is carried out in accordance with the "Regulation on the Assessment of Learning Outcomes" (approved at the Meeting of RTU Senate on 30.05.2022, 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); the English translation is in the file of Annex "List\_of\_internal\_regulations.zip" 04 of the List of Internal regulations).

The instructors responsible for the study courses choose the pedagogical methods used in the implementation of study courses together with the assessment forms and methods in compliance with course curriculum and specifics of the programme, as well as the student needs. There exists no specific RTU requirements for study attendance, except for 1st year students, for whom attendance of classes is mandatory in accordance with the rector's order. In other courses, structural units and teaching staff have the right to determine their own requirements for attending classes, informing students about this at the beginning of the course (SAR, p.30).

The study course descriptions of the study programme fixes a set of relevant knowledge, skills and competences together with their evaluation system for defined learning outcomes for which credit points are awarded. Based on these descriptions, a summative assessment system is applied in appraisal of student achievements, i.e. it implies that the final grade is composed of several

components. The criteria for assessment of the study courses and individual/home tasks are published on ORTUS e-study system beforehand. During the semester, the assessment for each home task, test, report, presentation and any other task is linked with certain weights in the final grade. Exam grade may not exceed 50% of the final grade. The final mark of the final works is composed of the arithmetically average of the individual assessment of the members of the committee for the evaluation of final works taking under account the assessment of the supervisor, as a member of the commission for the evaluation of the final thesis and the assessment of the reviewer of the final work, as well as the student performance in the development of final papers during the semesters (SAR, p. 33-34).

As already mentioned, the academic staff may take into consideration and also assess student attendance and the assessment structure for a certain study course is determined by the academic staff themselves by selecting the assessment criteria and methods for evaluation of student achievements. The familiarisation of students of the study programme with the criteria and conditions for the assessment of the examination of study courses is safeguarded in person during the implementation of the study course, before the examination or immediately before the examination. In case of the study field "Transport Services" with study courses within the framework of the study programmes, the familiarisation of students of the is ensured at two levels (SAR, p. 33):

- through the internal system of the university "ORTUS", in accordance with the order of the Vice-Rector for Studies on the use of the RTU e-learning system in study courses.
- in person during the implementation of the study course, i.e. at the beginning of the implementation of each study course by the responsible teaching staff in the first lesson.

In order to develop further the professional pedagogical competences of the academic staff, courses and seminars on the newest pedagogical methods are organised regularly. Qualification advancement activities are offered centrally on university level as well as decentrally on faculty level by organising training, academic conferences and methodological seminars. The Centre for Academic Excellence has been established at RTU organising successfully a variety of events and trainings aiming for professional advancement of academic personnel at the university level.

1.1.6. Since 2010 all students that graduate from any RTU study programmes should upload electronic versions of their graduation papers in 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. For plagiarism control there are two major tools used in the study process (SAR, p. 34):

- Since 2015 graduation papers have been checked in the joint computerised plagiarism control system (JCPCS) after uploading to the ORTUS environment.
- From 20.12.2017, RTU uses the world's leading tool Turnitin® for the correction of written papers and combating plagiarism. The Turnitin® tool is integrated with 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, i.e. RTU is using the advantages of both systems. Doctoral Theses are similarly controlled with extreme scrutiny. Since 2005, the Code of Ethics of RTU Students, Academic Personnel and Staff has been effective at RTU (see the file of Annex 19 of the List of Internal regulations). On 29.02.2016 the RTU Senate approved the Academic Integrity Code aiming to strengthen academic culture and integrity in the academic environment of RTU, to explain the concept of academic integrity and related actions, to define main procedures in examination of academic fairness violations (in Latvian: [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), English translation is in the file of Annex 38 of the List of Internal regulations). Additionally, students and academic staff have access to the book "Glossary for Academic Integrity" published by RTU publishing house (available at <http://www.academicintegrity.eu/wp/glossary/>). Furthermore, RTU participates in

different initiatives on academic integrity related issues, e.g. as members and founders of the European Network for Academic Integrity (ENAI).

The organisational units involved in the implementing the study programme have developed a control mechanism in form of an initial check that is performed in the process of interim assessment realised by the Advisory Examination Commission. Students that come to examinations should submit an electronic version of the performed work so that paper undergoes a check with free plagiarism control tools in presence of the student. Students drafting their graduation papers are instructed about plagiarism and its severe consequences. Besides that, methodological materials contain detailed instructions on correct referencing with the consequence of reduced plagiarism in the student's paper. Papers showing 20 percent or more matches receive messages from the system, i.e. the papers are examined and the reasons of matches in the text are evaluated whether the student should be allowed to defend his or her thesis. Since there is only one graduate in the programmes of the study field "Transport Services", examples of specific actions and specific cases are currently not further described (SAR, p. 35).

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

RTU enjoys a high reputation and the management system is well developed on central but also on decentral level. The quality assurance system is well developed and there exists also a powerful complaint/feedback management on different levels so that a continuous improvement of the study programme is safeguarded. The management involved in the study field on all levels is well educated, motivated and very engaged in their work. The management has excellent links to related business and there is a strong cooperation and integration with political but also business institutions and organisations.

The infrastructure is well equipped and modern and the organisation of the study process is running smoothly. Only exception is related to overloaded courses with 100-150 students per course, which took place in a few situations. The admission system and the assessment of students' achievements and learning outcomes is logical, effective and modernly organised. There exists an ethical framework and plagiarism is prevented by specific methodology using anti-plagiarism software. The integration of university-business cooperation into the management of the study programme safeguards the orientation towards the development of the study field and facilitates the integration of practitioners into the education and cooperation in business projects. By doing so, the study programme complies with the main directions of the strategic development of RTU and FEEM and meets the needs and the development trends of the society and national economy. In this context it should be also recommended to improve the cooperation between all logistics related programmes within RTU (Logistics, Business Logistics, Logistics and Supply Chain Management) to generate synergies and to find common development directions.

Development opportunities for the study programmes exist in the field of e-learning and long-distance studies since the technical base is available but only first steps are done currently (SWOT analysis 1.1.2, p.11; visit notes). Here, more activities are recommended due to the large number of students in part-time studies as well as by taking account of the high number of students in employment. E-learning and long-distance study form can also be used to offer training and further education to companies as well as for long-distance studies of remote students in order to widen the financial base of the study programme.

An important uncertainty of the study programme is linked to the unstable long-term financing of the study programme representing an important insecurity for sustainable development of the study field. Currently, the management of the study programmes aims to increase the income with projects, which is only partly successful. In order to motivate employees to contribute to project applications and project work, an incentive system was established so that employees can personally benefit from their additional engagement.

It is recommendable to think about other options to widen the financial base of the study programme. One direction could be like just mentioned the offering of company training, the offer of long-distance studies to reach also foreign students or to establish dual study programmes with companies where companies take over the tuition fees for their employees. In the context of project work the current focus of the management of the study programmes is on national projects. Another important area of project work is related to international and especially EU projects which are usually created and submitted in cooperation with several international partners. Here, the study programmes should be tackled as quickly as possible the shortcomings in the field internationalisation since the success of EU projects depends to a big extent on the integration into international networks that have to be developed via the exchange of teachers.

Strengths:

- 1) Good management structures including quality assurance, organisation and well-educated and motivated employees on all levels.
- 2) Good infrastructure and modern management processes including admission, assessment, ethics and plagiarism.
- 3) Excellent cooperation with business and political level to safeguard the development of the study programme towards the needs of society and economy.
- 4) Incentive system for project work.

Weaknesses:

- 1) Unstable long-term financial base of the study field.
- 2) Low international cooperation level reduces the submission/success rate in international (EU) projects (currently only one CB Interreg application).

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

### **Analysis**

1.2.1. RTU has implemented an internal quality management system (SAR, section 2.2.1.) that aligns with the standards of the European Higher Education Area (ESG), specifically focusing on the "Excellence approach" (link: [https://www.rtu.lv/writable/public\\_files/RTU\\_excellence\\_approach.pdf](https://www.rtu.lv/writable/public_files/RTU_excellence_approach.pdf)), (SAR, section 2.2.1.) and the RTU Quality Policy (link: [https://www.rtu.lv/writable/public\\_files/RTU\\_quality\\_policy\\_of\\_rtu.pdf](https://www.rtu.lv/writable/public_files/RTU_quality_policy_of_rtu.pdf)). This system, approved by the RTU Senate in 2017, is designed to ensure the university's strategic objectives are met through continuous development and improvement across all areas, including research, study processes, and organisational practices.

Central to RTU's quality management is the integration of the European Foundation for Quality Management (EFQM) model, which emphasises collaboration with a wide range of stakeholders, including students, staff, partners, and professional organisations. This collaborative approach is critical for maintaining an open dialogue to understand the needs of all parties involved and to respond with effective feedback mechanisms. RTU's commitment to quality has been recognized with a four-star rating from EFQM, highlighting the university's clear strategic goals, strong partnerships across various sectors, and visible positive trends in long-term development.

Moreover, RTU's quality assurance is participatory, involving staff in providing feedback and suggestions for improving the system. Department heads are tasked with executing internal quality assurance processes, while regular surveys of students and graduates inform ongoing enhancements to the study process. External stakeholders, including public authorities and industry partners, play a significant role in evaluating and improving study programmes through mechanisms like State Examinations, internships, and accreditation processes.

RTU operates under its Constitution, approved in May 2022, and has established a comprehensive

Strategy Management System to align strategic objectives with organisational units and staff. The internal quality management system, rooted in the RTU Quality Policy and the RTU Excellence Approach, both approved in 2017, is integrated with the university's broader Quality Management System. This system adheres to ENQA standards and employs the EFQM quality model, ensuring alignment with RTU's mission to achieve excellence in research, academics, infrastructure, and organisational practices.

Quality assurance at RTU is a multi-level process involving various university bodies, including departments, faculty councils, and the RTU Senate. These bodies evaluate study fields and programs, including the development of new programs and annual self-assessment reports. Additionally, Study Field Committees oversee academic activities and curriculum development, ensuring program quality through accreditation processes.

Student involvement is also a key aspect, with members of student self-government actively participating in decision-making bodies. Continuous improvement is emphasised through regular consultations with senior students, as demonstrated by meetings held in early 2023 to discuss and enhance study content in logistics programs. Overall, RTU's quality management system ensures the university's strategic goals are effectively met across all levels of the institution.

1.2.2. The development and revision of study programmes at RTU are highly structured, "Excellence approach" (link: [https://www.rtu.lv/writable/public\\_files/RTU\\_excellence\\_approach.pdf](https://www.rtu.lv/writable/public_files/RTU_excellence_approach.pdf)), (SAR, section 2.2.1.) with clear procedures in place, ensuring alignment with national regulations and thorough expert assessments. Feedback from various stakeholders, including students, employers, and alumni, is systematically gathered and used to enhance the study programmes.

This comprehensive feedback loop, coupled with the involvement of experienced faculty and industry representatives, strengthens the quality and relevance of the programmes.

1.2.3. The process for handling student complaints and suggestions at RTU is thorough and structured, reflecting a commitment to continuous improvement in line with ESG standards. The university has established clear procedures for submitting and addressing feedback, with multiple channels available, including direct submission, the Student Council, and senior students (SAR, section 2.2.3.). The inclusion of detailed statistics on the nature and frequency of complaints, as well as their resolution, highlights RTU's transparency and responsiveness. For instance, the significant number of submissions regarding sudden changes in teaching format and the attention to specific issues like IT support and dormitory conditions demonstrate a proactive approach to problem-solving.

However, the analysis also reveals areas for improvement. The recurring issues with communication, such as the delay in announcing schedule changes and misunderstandings regarding scholarship procedures, suggest gaps in the timely and effective dissemination of information to students. Additionally, the fact that some complaints, like dormitory insect infestations, have persisted over time indicates that not all problems are being resolved promptly. While the system is robust, there is a need for more efficient follow-through to ensure that feedback leads to tangible improvements in the student experience.

1.2.4. RTU's Quality Policy establishes a robust framework for continuous improvement in research, study, and organisational processes through a fact-based, data-driven approach. By systematically collecting and analysing performance indicators, RTU ensures that decisions are grounded in objective data, which enhances the overall quality of its academic offerings (SAR, section 2.2.4.). The annual quality reviews summarise performance indicators, such as student enrollment, academic success rates, and faculty qualifications, which provide insights into the effectiveness of study programmes. This rigorous approach is further supported by the development of a Power BI-based visualisation tool that allows for a comparative analysis of study programs, facilitating

targeted improvements.

However, while the policy is comprehensive, its effectiveness largely depends on the timely implementation of the suggested improvements. The text highlights ongoing efforts to refine data collection and feedback mechanisms, particularly through regular student, graduate, and employer surveys. The involvement of stakeholders, including employers and alumni, is critical for aligning academic programs with industry needs. Yet, the success of these initiatives hinges on the responsiveness of RTU's administration and faculty in addressing identified issues promptly and effectively. Overall, RTU's quality management system is well-structured, but continuous vigilance is necessary to ensure that the identified improvements lead to tangible outcomes.

1.2.5. RTU provides comprehensive, easily accessible information about its study fields and programmes (SAR, section 2.2.5.) through multiple online platforms catering to both Latvian and international audiences:

RTU FEEM website in Latvian - <https://www.rtu.lv/lv/ievf> and English - <https://www.rtu.lv/en/feem>

RTU web page in the section on education opportunities in the Latvian language (<https://www.rtu.lv/lv/studijas>)

RTU web page in the section containing comprehensive information on education opportunities in the English language (<https://www.rtu.lv/en/studies>)

The centralised portal ORTUS (<https://ortus.rtu.lv>)

The RTU use of interactive web pages, social media, and dedicated sections for different languages ensures that potential and current students can access detailed descriptions of courses, admission processes, and student mobility opportunities. Each platform is managed by specific departments, emphasising RTU's structured approach to communication. Additionally, the active use of social media by the FEEM enhances outreach and engagement with the university community and beyond.

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

RTU has established a comprehensive internal quality management system aligned with European Higher Education Area standards and the EFQM model. This system, approved in 2017, emphasises continuous improvement across research, study processes, and organisational practices. RTU's quality approach includes extensive stakeholder engagement, evidenced by its four-star EFQM rating, and involves regular feedback from students, faculty, and external partners. The university's robust structure supports strategic alignment through detailed feedback loops, accreditation processes, and active student participation.

However, the complexity of RTU's quality management processes can sometimes slow responsiveness to immediate educational trends and industry needs. Despite the well-developed feedback mechanisms, challenges persist, such as delays in communicating schedule changes and unresolved issues with dormitory conditions. These delays highlight the need for more efficient processes to ensure that feedback leads to timely and effective improvements. Overall, while RTU's quality management system is well-organised and data-driven, ongoing vigilance and refinement are necessary to enhance responsiveness and address persistent issues effectively.

Strengths:

1) RTU demonstrates a robust and comprehensive quality management system that is deeply integrated across various levels of the institution. The involvement of multiple bodies, including faculty councils, student representatives, and administrative units, ensures a thorough and participatory approach to maintaining and improving the quality of education. This integration with the EFQM quality model and alignment with ENQA standards highlights RTU's commitment to achieving academic, research, and organisational excellence.

2) RTU demonstrates a strong commitment to continuous improvement through comprehensive feedback mechanisms. The university systematically gathers input from students, employers, and graduates, using surveys and direct engagement to refine and enhance its study programmes. This inclusive approach ensures that programmes are aligned with industry needs and student expectations.

3) The robust and transparent process for handling student complaints and suggestions at RTU is a significant strength. The university's structured approach, which includes clear procedures, multiple feedback channels, and regular monitoring, ensures that student concerns are systematically addressed, fostering a student-oriented learning environment.

4) One of RTU's significant strengths is its comprehensive and systematic approach to quality management. The university's Quality Policy is deeply integrated into its strategic framework, ensuring continuous improvement through a fact-based approach. The use of 28 performance indicators to assess the quality of the study process, combined with annual reviews and detailed data analysis, reflects a strong commitment to maintaining and enhancing educational standards.

5) RTU excels in providing detailed and accessible information about its study programmes through multiple well-maintained online platforms in both Latvian and English. This extensive digital presence ensures that prospective and current students, including international ones, can easily access relevant details about courses, admission, and mobility opportunities.

Weaknesses:

None

### 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

A continuous improvement, development as well as an efficient performance of the study field is safeguarded through the existing management structures together with an effective quality assurance system

(SAR, p. 2.1-2.2) as well as in accordance with the Joint report (1.1 - 1.2)

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

**Assessment of compliance:** Fully compliant

The development and revision of study programmes at RTU are highly structured, "Excellence approach" , (SAR, section 2.2.1.) with clear procedures in place, ensuring alignment with national regulations and thorough expert assessments.

- 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

The university has established clear procedures for submitting and addressing feedback, with multiple channels available, including direct submission, the Student Council, and senior students (SAR, section 2.2.3.)

- 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

The assessment of the student learning outcomes is carried out in accordance with the “Regulation on the Assessment of Learning Outcomes”, which is available on Studies Regulations page of RTU web page (in Latvian and in English translation)

- 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

RTU has established a comprehensive Human Resources Development Plan, centralising its approach to academic staff management around three main goals (per SAR p 62-63).

- 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

By systematically collecting and analysing performance indicators, RTU ensures that decisions are grounded in objective data, which enhances the overall quality of its academic offerings (SAR, section 2.2.4.)

- 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

Quality assurance at RTU is a multi-level process involving various university bodies, including departments, faculty councils, and the RTU Senate. (Report (1.2.1.)

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

#### Analysis

1.3.1. According to SAR (chapter 2.3.) available data regarding determining and redistributing the financial support for the period 2022-2023 (Annex: “Finansējuma\_sadales\_un\_izlietojuma\_metodika\_RTU\_struktūrvienībām\_2022.2023.akadēmiskajā\_gadā.docx”), document shows that the RTU has established a system for determining and redistributing the financial support required for the implementation of the study field and the corresponding study programmes, which as well follows and is based on the three pillars from Conceptual Report “Introduction of a New Higher Education Financing Model in Latvia” approved by the Cabinet on 29 June 2015. The Mentioned Conceptual Report determines base funding for the provision of the study process-1st pillar, performance funding-2nd pillar, and development funding-3rd pillar.

According to methodology RTU financial funding consists of multiple sources:

- state budget financing;
- fee-paying student funding;
- fee debtors (including recoveries)
- performance funding;
- Science base funding.

Study field includes multiple programmes which financial funding differs from each other. Study base funding from the state budget is allocated for full-time studies. The amount of the basic funding for studies is determined on the basis of the number of study places at RTU, the basic cost

of a study place as determined by the state and the cost of studies in the thematic areas of education cost coefficients. According to RTU, state budget financing has shifted to institutional funding, which in comparison with previous practices can be evaluated as better, when state budget financing were targeted rather to students not institution, which could lead institution to financial difficulties, if student enrolment could not reach its target.

During the assessment visit experts were clarified about the study field financial support situation. There were several factors mentioned that showed FEEM ability to successfully fund whole study field:

- Study field has attracted solvent students;
- FEEM are regularly distributing financial resources in savings for unexpected funding situations;
- Study field, if necessary, is capable of taking up to approximately 50% funding cut and still maintain high quality studies and its funding;
- Financial support system was being planned 3-4 years ahead.

According to SAR the funding for the study field has been stable in recent years. Its main flow of funding for study programmes is provided solely by students' own funding. RTU's financial support system for the study field, particularly within FEEM, is currently well-structured and sufficient. At the moment, the institution benefits from a diversified funding model, proactive financial planning, safeguarding its financial stability. However, the heavy reliance on student fees as the main source of funding indicates that maintaining strong enrolment and attracting solvent students will continue to be crucial for the financial health of the study field.

1.3.2. FEEM located at Kalnciema street 6, Riga (per SAR Table 2.3.2. ) consists of a sufficient number of premises, which includes 30 auditoriums, 33 cabinets, 5 laboratories and other types of premises that are necessary for the study field. Its location is convenient for its purpose, even though it is separate from RTU Kipsala campus (where all other faculties, laboratories and library are located) and it has a lack of free parking areas around facilities. Main factors for location convenience are developed infrastructure-accessibility of public transport stops, cafes, a supermarket, a sports centre.

FEEM facilities are providing sufficient amount and quality of equipment and technologies which are necessary for study field and relevant study programmes. It includes laptops, PCs, projectors, HP Shareboard digital cameras which allows capturing of everything written on a whiteboard during lectures (per SAR Table 2.3.3.). FEEM students and employees like rest of RTU students have free of charge access to the Office365 platform and have all access of every benefit RTU Kipsala campus provides (per SAR p. 55) In FEEM there are also dedicated premises for “study stimulation”, support in the study process, research and creative work which are called “Study room”, FEEM Creative Lab, “Bloomberg” laboratory etc.

During assessment visits, experts were guided through facilities of FEEM, shown premises were equipped with ARANET air quality sensors which helps maintain necessary environments for students and academic staff. As well, premises which were in use as a study field had been improved in well financially sustainable practices, for example computer classrooms are regularly improved by updating PCs hardware instead of replacing them with new ones, which saves quite a large amount of financial resources for FEEM. Students and academic staff have access to SAP program, SAP is one of the leading enterprise resource planning (ERP) systems globally, widely used across industries to manage business operations and customer relations. It equips students with industry-relevant skills, offers practical experience with a leading ERP system, and prepares them for successful careers in logistics and supply chain management. During assessment visits experts were told that purchase of material, methodological, informative provision is centralized with whole RTU per faculty needs.

Considering the above mentioned, FEEM at Kalnciema Street 6 provides a robust and technologically advanced educational environment that supports the academic and professional growth of its

students. The faculty's strategic location, commitment to sustainable practices, and provision of industry-relevant training like the SAP program significantly enhance the value of education offered. However, there are some areas for improvement, particularly in terms of parking facilities, the potential for isolation from the main campus, and the long-term sustainability of its resource management practices. Addressing these issues will further strengthen FEEM's position as a leading educational institution within RTU, ensuring it continues to provide high-quality education while meeting the evolving needs of its students and staff.

1.3.3. Available resources for information that are necessary for study field and relevant study programmes can be evaluated as compliant. As RTU's strong suit information wise is their Scientific Library which is library of national importance. Library itself is well organised, it has four group rooms and six individual booths, a rare book reading room and a conference room and it is also accessible for users with disabilities. Per SAR chapter 2.3.3. total area of the Scientific Library premises is 6393 m<sup>2</sup>, of which 3417 m<sup>2</sup> are reader service premises. The library is available for all students on working days from 8:30 to 19:00 (Fridays till 17:00) and on Saturdays from 10:00 to 15:00, have to mention that students are able to use the 24-hour reading room outside of opening hours. Overall those premises provide plenty of space for students, there are workstations with computers, dedicated rooms for individual work, printing and scanning services. Regarding FEEM and its location in comparison with other faculties, it disadvantages students due to the distance they have to go from their lecture premises to Kipsala and back, but there are also available educational materials in FEEM.

According to SAR the library stock in 2023 was 11,792,19 units, Scientific Library includes many databases, ones which are relevant to study field are following:

- ScienceDirect
- ProQuest
- O'Reilly
- EBSCOhost eBook Academic Collection
- SpringerLink
- LETA fields: Transport and Transportation
- SCOPUS
- Wiley
- etc.

According to annex 2.3.1. ("2.3.1.pielikums. Pamatinformācija par bibliotēkas nodrošinājumu studējošajiem.pdf") RTU Scientific Library offers 83 full text e-books and 117 full text e-journals which have been released in the past 5 years and are directly relevant to study field.

As per SAR chapter 2.3.3. improvement and purchase of methodological and informative provision is based on database subscription agreements which are concluded both directly with the supplier and through the state agency Cultural Information Systems Centre.

Overall RTU provided range or information resources are completely compliant to study field and other faculties, as their procedures

1.3.4. RTU has a high level of digitalisation, which enhances its competitiveness, operational quality, and effectiveness (per SAR p 60-62). This digital infrastructure is crucial for supporting both traditional and distance learning modes. The RTU ICT solutions integrate administrative, academic, and research processes, providing a unified, reliable, and secure IT environment for all users, which is vital for the seamless execution of distance learning programs. The central intranet portal ORTUS serves as a comprehensive digital gateway, integrating information from all RTU information systems. This portal provides an accessible and user-friendly interface for accessing IT services and resources. The use of ORTUS is crucial for distance learning, as it centralises access to essential information and services, facilitating easier navigation and management of academic and

administrative tasks. Additionally, the Moodle e-learning platform plays a crucial role in facilitating distance education by automating course management and enabling communication between students and instructors. Moodle supports the creation and distribution of course materials, assignments, and assessments, making it an indispensable tool for remote learning environments. RTU provides access to Microsoft Office 365, which includes cloud storage and various productivity tools. This suite of applications is crucial for both students and staff, as it offers the latest software for document creation, data analysis, and collaboration. The cloud storage feature allows users to store and share files easily, while tools like Microsoft Teams and SharePoint facilitate collaboration on group projects and coursework. For distance learners, having access to these resources ensures that they can complete assignments and engage in collaborative activities effectively, regardless of their location.

Overall RTU's ICT solutions are well-suited to support distance learning, providing a comprehensive and integrated digital environment that addresses the needs of both students and staff. The effective management of identity and access, the centralisation of resources, and the deployment of robust communication tools all contribute to a seamless and effective distance learning experience. The university's focus on network reliability, IT support, and administrative efficiency further enhances the overall effectiveness of its distance learning programs, ensuring that students and faculty can engage in education and research activities with minimal barriers.

1.3.5. RTU has established a comprehensive Human Resources Development Plan, centralising its approach to academic staff management around three main goals (per SAR p 62-63):

- Academic Staff Renewal: Involves recruitment of doctoral candidates into academic roles;
- Competence Enhancement: Focuses on the professional development of existing staff;
- Attraction of Foreign Faculty: Targets the recruitment of international scholars.

RTU adheres to the "Augstskolu likums" (Law on Higher Education Institutions) and "Ministru kabineta noteikumi" (Cabinet Regulations) for the recruitment and appointment of academic staff. This ensures that the procedures are legally sound and align with national standards. One of main factors that helps attract qualified academic staff is their ability to ensure competitive salaries and development programmes.

RTU has implemented a comprehensive and effective system for recruiting and managing qualified teaching staff, characterised by well-defined procedures that adhere to both legal and institutional standards (per SAR p. 64). The recruitment and management processes are conducted with transparency, supported by detailed documentation that is readily available to stakeholders. Ongoing evaluations and active involvement of relevant parties guarantee the recruitment process is both fair and effective. Moreover, adherence to national laws and institutional regulations upholds the credibility and integrity of the university's staffing practices.

1.3.6. According to SAR p. 65-69, RTU employs various methods to determine the development needs of its teaching staff. This includes surveys where faculty members express their interests and areas for improvement. Additionally, feedback from students and student self-governance bodies is considered, reflecting a broad and inclusive approach to identifying needs. There is also an element of proactive assessment to anticipate potential needs, ensuring that the development programs remain relevant and forward-thinking. RTU Academic Excellence Center organises diverse educational events, including seminars, workshops, guest lectures, and conferences. These activities cater to various aspects of teaching, intercultural communication, and personal development, indicating a well-rounded approach to professional growth. Participants of development activities fill out evaluation forms, which are analysed to refine and improve future offerings. This feedback loop ensures that programs are continually adapted based on participant experiences. Regular analysis of student feedback and consultation with faculty representatives helps gauge the impact of development programs on teaching quality and student satisfaction. Initiatives such as the

Academic Excellence Awards and the RTU Student Parliament's annual awards serve to celebrate and incentivise high standards of teaching and support. These awards are based on both internal evaluations and student nominations, reflecting a broad recognition of achievements.

This all-encompassing strategy cultivates an environment where ongoing improvement and academic excellence are integral to the institution's core mission.

1.3.7. Study field consists of 38 teaching staff members with 65% holding permanent academic positions and 35% being temporary (Annex 9). Most permanent staff members have doctoral degrees, while a small percentage hold master's degrees. Academic staff proportion of permanent and temporary positions gives a perfect combination between theory and practical experience in the logistics industry that can be passed to FEEM students.

According to the assessment visit the academic workload seems well-distributed, with a clear distinction between roles such as professors and lecturers. Professors and associate professors, who are responsible for course development and research, are supported by lecturers and researchers who handle a different set of responsibilities. This structure ensures a balanced academic workload across different levels of staff. Overall experts highlight individualised approach to workload distribution, taking into account staff roles, competencies, and project involvement.

1.3.8. The RTU appears to have a well-rounded approach to student support, addressing career development, psychological well-being, and specific needs for various student categories.

International students receive dedicated career counselling in English, which includes guidance on CV writing, cover letters, and job interviews. The presence of career support in English is crucial for non-native speakers and helps them integrate into the job market in a foreign country. There is a specific focus on easing the immigration process for international students. This includes organising seminars on immigration issues, such as visa requirements and residency documentation, and assisting with the registration process at the Latvian Citizenship and Migration Affairs Office. An online career portal provides access to resources and job opportunities, helping international students navigate the job market (per SAR p. 72-75)

During assessment visit experts were shown that RTU has made physical adjustments to facilities, such as ramps, accessible elevators, and special restrooms, ensuring that students with mobility impairments can navigate the campus comfortably.

A range of career support services is available, including regular seminars, individual consultations, and workshops focused on CV preparation, job interviews, and career management skills. Special events like Career Days connect students with industry professionals.

All students have access to participating in Quality and Assurance procedures, there are possibilities of handing in 3 level feedbacks that can help FEEM reach all necessary information to meet needs of their students. RTU offers as well support for staff and faculty members, addressing work-related and academic issues. This includes consultations and assistance with professional development. Have to highlight that academic staff feedback cannot be made anonymously, which might impact quality overall feedback from academic staff.

Considering the above mentioned-RTU has developed a strong and thorough support system designed to meet the varied needs of its student body. The university offers specialised assistance for international students, students with special needs, and other specific groups, ensuring both inclusivity and accessibility. By incorporating career and psychological support services, as well as adapting facilities and services in response to COVID-19, RTU demonstrates its dedication to improving the student experience and fostering success. Ongoing assessment and refinement of these services will be essential for sustaining their effectiveness, especially for part-time and distance learning students.

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

FEEM exhibits a well-structured financial support system, effectively leveraging a diverse range of funding sources including state budget allocations, student fees, and performance-based funding, though it remains heavily dependent on student fees, making it vulnerable to fluctuations in enrollment. As there are such relays on enrolment numbers, FEEM should consider different approaches on attracting higher numbers for such a study field. RTU is not the only university which is offering such a study field, meaning, it has to outcompete other higher education institutions for new student attraction. It would include more regular FEEM ambassador visits to high schools and other environments which could lead to an increase of enrolment numbers. Identification of factors why students are choosing competitive higher institutions over RTU would help work on and improve lacking areas in the study field. The institution benefits from well-equipped and strategically located facilities, supported by sustainable financial practices, yet faces challenges with limited parking and potential isolation from the main campus. RTU's extensive library resources and methodical acquisition processes provide strong academic support, though the distance between FEEM and the main library can hinder access. However, RTU should improve its library databases, as current database subscriptions can be evaluated as satisfying, but its depth has wide potential for improvement. For example, increasing available e-resource amounts from the same databases by procuring more resourceful subscriptions. Its high level of digitalization, with integrated ICT solutions like ORTUS and Moodle, supports effective distance learning, though disparities in technology access and the need for adequate technical support are areas to watch. The comprehensive recruitment and management system for teaching staff ensures transparency and adherence to legal standards. Professional development is well-supported through various initiatives, yet there may be variability in program quality and a need for faster implementation of feedback. The student support system excels in addressing diverse needs, including career counselling and accessibility, though challenges remain with non-anonymous feedback and the need for ongoing service refinement. Overall, RTU demonstrates significant strengths across these criteria but must address identified weaknesses to enhance its effectiveness and maintain its high standards.

### Strengths:

- 1) FEEM's infrastructure is robust, with ample facilities including auditoriums, laboratories, and dedicated study areas that support both academic and research activities.
- 2) RTU's Scientific Library is a significant asset, providing extensive resources and access to key databases relevant to the study field, improvement and acquisition of resources following a structured approach based on subscription agreements, ensuring that the materials remain up-to-date and relevant.
- 3) RTU's digital infrastructure, including the ORTUS portal and Moodle e-learning platform, is well-integrated and supports both traditional and distance learning, access to Microsoft Office 365 and other digital tools enhances collaboration and productivity for distance learners.
- 4) Competitive salaries and development programmes help attract and retain qualified teaching staff.
- 5) RTU uses a variety of methods to determine teaching staff development needs, including surveys, feedback, and proactive assessments.
- 6) The approach to workload management considers individual staff roles, competencies, and project involvement, promoting a fair distribution of responsibilities.

### Weaknesses:

- 1) The heavy reliance on student fees as a primary funding source means that the financial health of the study field is closely tied to maintaining strong enrollment numbers and attracting solvent students.

2) The location of FEEM, while strategically positioned, lacks adequate parking and is somewhat isolated from the main RTU campus, potentially affecting accessibility and integration with broader university resources.

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

### **Analysis**

1.4.1. Section 2.4.1 of the SAR states that RTU requires and encourages academic staff to participate actively in both the teaching process and scientific research and that an internal normative framework has been established for this purpose. Specifically, concerning scientific research, it is stated that the academic staff, in carrying out their research, will strive for high performance and the valorisation of the results obtained, which will subsequently be integrated into the teaching process (if possible and appropriate). On this basis, it can be said that there is a link between the academic work of university teachers and the learning process and that these two objectives are complementary. To ensure the sustainability of these goals, RTU has linked the funding of faculties and their units to the results they achieve in the field of scientific research.

Section 2.4.2 of the SAR identifies the key strategic areas that underpin the long-term research objectives of the teaching staff. They aim to promote successful research and help early-stage researchers enter the profession.

The academic staff of the study field "Transport Services" participate in the development of projects of a scientific and research nature, the results of which contribute both to the enrichment of practice with good ideas and to science. They are also active in inter-university cooperation aimed at creating and implementing joint courses or modules. Most of the projects are not aimed at the transport sector but are interdisciplinary with other RTU platforms and departments.

Given the above, it can be assumed that the RTU's development goals are being met, since the practically tested research can be successfully implemented in the educational process and reflect the most modern and effective solutions, including for the construction and operation of various transport and logistics systems.

1.4.2. According to 2.4.2 of the SAR, the link between scientific research and the educational process is ensured through the transfer of knowledge and the continuous improvement of competencies, which is manifested in the integration of research results into educational courses and the educational process, the involvement of students in research, the familiarisation of students with the results of ongoing research, the provision of opportunities for independent and collaborative research (group work). The research component of working with students is also provided through participation in projects, contract work and conferences, as well as the development of various publications. In the same section of the SAR, some examples are given that demonstrate the usefulness of scientific research for future professionals in the field of transport and logistics.

In Annex 14 "List of academic staff publications" provides a comprehensive list of publications, indicating which are indexed in the SCOPUS or WoS databases. However, considering the data on this criterion in section 2.4.4 of the SAR, the trend in the number of publications with a high impact factor specifically for the teaching staff in the field of Transport Services over the evaluated period is not indicated. Such data would make it possible to draw a clear conclusion on the quality of the team's scientific research, which is also an excellent prerequisite for improving the quality of the educational process by integrating its results. Considering the overall performance of the team and the excellence of some of the faculty in this regard, it is assessed that the department is provided with sufficient high-quality publications. However, a recommendation is made to improve publication activity, especially among those faculty members who do not yet have indexed publications. During the assessment visit to RTU, both the professors and the former and current students confirmed

that, wherever possible, the results of scientific research are incorporated into the specialist courses. Incorporating material from such research into the learning process ensures that there is a constant transfer of up-to-date knowledge from teachers 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, organisation of and participation in international scientific conferences and seminars, and publication of articles in scientific journals indexed in recognised databases (WoS, Scopus) (2.4.3 of the SAR). International projects include joint research and publications with partners from other universities on various logistical problems.

In section 2.4.3 of the SAR, some examples of successfully implemented projects with the participation of teachers in the field of study field 'Transport Services' are given, some of which are international, while others are of local importance to Latvia.

To ensure the continuous participation of academic staff involved in the implementation of the study programmes in scientific projects, applications for new projects are regularly written. At the time of submission of the SAR, an Erasmus+ project application "Strengthening Higher Education Institutes to Enhance Regional Sustainable Development in Maritime, Port, Transport and Logistics in Bitung, Ternate and Kalimantan" was submitted together with cooperation partners from the Netherlands and Indonesia. This project aims to develop and test Bachelor's and Master's courses in logistics and to adopt the best practices of both countries in logistics education.

During the assessment visit to the RTU and the meeting with the professors of the programme, the question was raised about the small number of projects specifically in the area of transport services and not in general for RTU (which data is sufficiently provided in the SAR and Annex 13), it was pointed out that they have some difficulties in registering and applying for projects due to the high requirements. It would be useful to organise specialised training for teachers in project management. The recommendation made is aimed at improving skills and subsequently strengthening project activity in the study field.

1.4.4. According to the RTU Senate decision No. 633 "Regarding the approval of the RTU Regulations "Regarding the procedure for selecting a candidate for the position of professor or associate professor and the procedure for evaluating the qualifications of a tenured professor or associate professor" in the new version of 30 May 2022, habilitated teachers are subject to periodic evaluation, one of the main criteria being their publication activity and participation in research projects. There is also a similar requirement regarding the possibility for them to supervise doctoral students (RTU Senate Decision No. 602 "On Amendments to the RTU Regulations on the Doctoral Degree" of 26 September 2016). These requirements are an important motivation for RTU teachers to engage in scientific research.

By order of the Rector of RTU No. 01000-1.1-e/48 "Regulations of RTU on the Fund for the Support of Scientific Research and Innovation" dated 2 February 2024, a mechanism (fund) was introduced for financing individual faculties according to the results achieved (2.4 .4 of the SAR). This is a prerequisite for internal competition and an additional motive for increased activity of teachers. 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. One of these platforms is aimed at research in the field of transport, which is currently under-utilised but represents a good opportunity for academics to develop good research. Section 2.4.4 of the SAR states that publications indexed in SCOPUS and WoS have increased over the period 2013-2019. The total number of publications is said to have increased from about 440 per year in 2013 to 879 in 2021, and the number of SCOPUS publications per researcher expressed in full-time equivalents (FTE) increased from about 0.9 in 2013 to about 1.7 publications per year in 2021. However, these data do not correspond to the data on publications by year of teachers in the

study field "Transport services" presented in Annex 14. "List of academic staff publications". It is clear from the document that the number of publications indexed in the SCOPUS or WoS database is significantly lower than the data presented above, which are most likely aggregated data for the university or faculty as a whole.

From the data presented in section 2.4.4 of the SAR, and more specifically in Figure 2.4.1. Total number of publications, it can be seen that the number of publications has a clear tendency to decrease, as in 2016 they were 76, while in 2022 they were only 40. This is a decrease of almost 50%, which does not speak well of the scientific research and publication activity of the academic staff.

More than one-third of the total number of publications are journal publications, and the three most common types of publications - journal publications, conference proceedings and journal publications - account for 96% of the total number of publications. This shows the active participation of the teaching staff in scientific conferences and, to a large extent, the compliance of the educational activity with the modern trends in the presented sector.

The number of citations of their work is evidence of the quality of the research activities of the teachers. The SAR lacks data on this criterion, so no conclusions can be drawn on the interest, usefulness and significance of their research.

During the evaluation visit to RTU and the discussions with the professors, it became clear that the decreasing number of publications and citations is largely due to their commitment to the teaching process and that they have almost no time left for scholarship. To improve this, RTU is trying to attract lecturers from abroad, and during the evaluation period, they worked with several such lecturers.

Based on the reported participation of study field teachers in research projects, a conclusion can be drawn about their activity and their striving for results with high added value for both science and practice. In Annex 13 a summary of quantitative data on research and related activities, a detailed list with detailed information on the activities of teachers is presented. A large part of the academic staff is involved in existing or in the preparation of projects promoting entrepreneurship, education and the overall development of the sector.

Teaching staff are actively involved in supervising and reviewing doctoral theses and in 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 dissertations and their supervisors are directly involved in their research activities.

1.4.5. RTU has mechanisms in place to attract and fund young and talented researchers, students 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 to support them. Particular attention has been paid to the established Design Factory (DF) of the RTU Science and Innovation Centre and the activities carried out there with students.

Some of the scientific research and projects involve students (2.4.1 of the SAR), and some criteria give additional credit if they involve students at the bachelor, master or doctoral level (2.4.5 of the SAR). 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 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, as well as through the production of publications.

RTU regularly organises student conferences on science and technology, which also encourages learners to publish their views on various topical issues. This practice is of great benefit to the

students, as they are expected to analyse and summarise information they have become aware of during the learning process, or to search for additional data that can be used to represent a particular process or activity. In this way, students' success in perceiving the learning material and transforming it into knowledge, skills and competencies can be tracked.

In section 2.4.5 of the SAR, there is no specific information on the involvement of students in scientific research in the study programmes in the field of transport services, which makes it impossible to draw any clear conclusions on the fulfilment of this criterion.

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 organisational innovation is based on the digitalisation of learning courses. This approach is in line with modern learning trends and ensures significantly better performance for today's students (Generation Z).

Many of the teachers' scientific discoveries 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 real practice and will be able to use the most modern methods and technologies in their work.

Teaching staff at all faculties of the University provide training in the presentation and commercialisation of innovative products, ensuring creativity, innovation development and continuous knowledge transfer. As a result of these activities, student start-ups are created, which continue their development in one of the RTU or Latvian Business Incubators. RTU provides students with an opportunity to develop entrepreneurial skills and to realise if this field of activity is important for them. They learn how to turn previously identified user needs into a product or service. This is an important skill that has not been given much attention in the past.

In general, innovative solutions and international and local experiences are actively integrated into the learning process. The main shortcoming is a lack of scientific ambition and self-criticism on the part of researchers in strengthening cooperation with the world's leading research industry.

### **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 "Transport Services" covers the main objectives of the RTU, as the results of the research, tested in practice, are successfully applied in the educational process and reflect the most modern and effective solutions for the construction of transport and logistics systems. Incorporating material from such research into the learning process ensures that students receive up-to-date knowledge from their teachers.

Lecturers participate in national and international projects, publish their results, organise and participate in international scientific conferences and seminars, publish articles in scientific journals indexed in recognised 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 nationally and internationally. However, these processes need to be strengthened as there are areas of weakness.

The university has introduced a change in teaching methodology, prioritising the use of interactive and innovative learning methods. Investments have been made in new laboratories, equipment and technologies, which will further contribute to improving the quality of both the research activities of the professors and the education of the students.

Strengths:

- 1) A vision for the application of the results of scientific research in practice and in the educational process;
- 2) Mechanisms developed to motivate teachers and students to participate in research activities;
- 3) Orientation towards interactive and innovative learning methods.

Weaknesses:

- 1) Poorly developed cooperation with international organizations in scientific research in the field of transport and logistics;
- 2) A clear tendency to decrease the number of publications by academic staff;
- 3) The majority of scientific research projects are not aimed at the transport sector.

## 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. RTU enjoys a high reputation in Latvia as the best national engineering university. Hence, this reputation attracts students but also highly skilled teachers and facilitates the interest of institutions outside the university. In order to keep this high standing recognition, the university established an effective quality assurance system together with a complaint management system on central but also on decentral level. Additionally, the university utilises its high reputation as a momentum to establish strategic university-business cooperation for improving education, research and employability of graduates and to contribute to universities third task in regional development (SAR, p. 86).

Agreements have been concluded between RTU and the University of Latvia, RSU on mutual cooperation in the implementation of the study process and on issues of scientific development, which provide for cooperation in all areas, ranging from free student mobility between the two universities to the implementation of joint projects in various fields. The FEEM has also concluded agreements with most of the Latvian colleges on cooperation and opportunities to continue their studies.

The study field has a long history of successful cooperation with companies, industry associations and state organisations (SAR, p. 86). The main areas of cooperation and activities within the framework of study field are:

- ensuring and improving the study process, the content and the quality.
- ensuring internships and professional development by offering internships and jobs;
- management and review of studies, final theses, and offering of topics for final works.
- custom research and approbation of the results of scientific research for students.
- involvement of professionals in the study process and in commissions.
- organisation and implementation of non-study events.
- representation of university in national and international organisations.

Employers, alumni, RTU academics and students can meet in various events in order to discuss and improve the quality of the programmes, the content and form of study courses, the organisation and implementation of practical work. The study programmes are supplemented and updated on the basis of labour market studies and consultations with employers and practitioners. Surveys of graduates and employers are regularly conducted to evaluate the programmes, the knowledge and skills of graduates of the programmes, as well as their compliance with the requirements of the labour market. The results of surveys show that employers positively evaluate the study programmes and it can be concluded that employers welcome graduates of the programmes, emphasise the desire of young specialists to improve professionally, as well as the need for closer cooperation, especially in the field of practical training (visit notes).

In October 2017, the RTU FEEM was established, and the FEEM Council meeting approved the FEEM Convention of Councillors with the aim to promote the development of RTU and the faculty and to meet the RTU strategy and the needs of the national economy. The main tasks of the 11 members of the Convention are to advise the faculty administration, to provide opinions and proposals on the development of the faculty and RTU as a whole, improvements in the study process, on planned financial investments, changes in management model and other significant issues of the faculty's activities. Chairman of the Board of SIA Vollers – Rīga, President of the Association of Road Hauliers "Latvijas Auto", Chairman of the Board of SIA "Grif", Head of the Civil Protection Department of the VUGD, Member of the Board of SIS LATSIGN, Director of the Latvian Zaia Point, Chairman of the Board of SIA Leilands un Putnis, Executive Director of the Association of Regional Development Centres, Head of the Procurement Monitoring Bureau, Deputy Chairman of the Board of the Latvian Union of Civil Engineers, Member of the Board of SIA MAXIMA Latvija (SAR, p. 87).

The members of the Convention were introduced to the ESF project (No.8.2.2.0/18/A/017) "Strengthening the academic staff of Riga Technical University in areas of strategic specialisation" (SAM 8.2.2.) on the provision of internship opportunities for academic staff of Riga Technical University in enterprises. As well as discussing industry maps and profession standards, the development of profession standards and the delegation of representatives to working groups for the development of profession standards.

Representatives of the FEEM Convention are actively involved in the development of sectoral qualification structures and occupational standards. Within the framework of the study field in cooperation with various professional organisations, both the organisation of joint conferences and the organisation of seminars, as well as scientific cooperation, consultations on the development of the industry and the necessary changes and improvements in the education system take place. Among the most important cooperation partners of the direction in this field should be mentioned:

- Employers' Confederation of Latvia (LDDK);
- Association of Latvian Economists;
- Investment and Development Agency of Latvia;
- Latvian Logistics Association;
- Latvian National Association of Freight Forwarders and Logistics (LAFF);
- Latvian Chamber of Commerce and Industry (LCCI);
- Latvian Transport Development and Education Association;

The management of the study field is ensured by the commission of the study direction, where specialists in the field are also included (see annex 20 ( Annex 20. Study field "Transport services"/ Studiju virziens\_sastavs\_EN.pdf) composition of the commission of the study field). The specialists are very important in creating the content of study programmes, as they help to maintain a close connection with current trends in the national economy and processes taking place in local governments. According to the study field and study programmes, cooperation partners are selected according to the content of the programmes, including practice tasks and topics of final theses.

Parallel, the academic staff of the study field participates in nationally significant sectoral expert councils, e.g. the Expert Council of the Transport and Logistics Sector, study field "Transport

Services" director as deputy chairman of the Council of Experts in the Transport and Logistics Sector. Academic staff of the study field was also involved in the tripartite social dialogue institution of the national level - the Sub-Council for Tripartite Cooperation in Vocational Education and Employment (PINTSA), in which delegated representatives of the Ministry of Education and Science, the Employers' Confederation of Latvia (LDDK) and the Free Trade Union Confederation of Latvia (LBAS) act as social partners, RTU is represented as a member of the LDDK by the Deputy Dean of the FEEM (SAR, p. 88).

The annex adds information on the concluded cooperation agreements with other institutions, including the provision of internships (both Latvian and foreign), the subject of the agreement and the term of operation.

1.5.2. The selection of cooperation partners is based on the previous experience of the study field and cooperation of experts with foreign institutions in the forms of studies, science, project development, participation in associations, etc. Among the objectives of international cooperation of the study field "Transport Services" is the promotion and implementation of internationalisation activities, etc. by participating in international projects, ensuring representation in international professional organisations corresponding to the direction, as well as improving study programs in accordance with international standards (SAR, p. 88-89).

Considering the integration of Latvia into the European Union and the globalisation of business, the programmes of the study field are implemented in both Latvian and English. As a result, students also learn international business terminology better. The strategy of the FEEM and RBS (Riga Business School) is to become internationally recognized and open to international students, therefore the following international development goals have been set:

- internationalisation of studies, training and research;
- development of international partnerships and cooperation;
- expanding the international experience of students;
- effective attraction of international students;
- improving the quality of studies of international students;
- expanding the opportunities and motivation of personnel to engage and actively participate in the process of internationalisation.

Within the framework of this field of study, FEEM has close cooperation with several Latvian higher education institutions and foreign universities (SAR, p. 88-89). Within the framework of the study field, FEEM participates in the work of several important international organisations and the implementation of international projects. Each of the FEEM and the internationalisation goals set out has detailed sub-objectives and tasks to be performed. It should be noted that the number of foreign higher education institutions with which cooperation is ensured is growing every year, thus providing an opportunity for students to study or practice abroad, as well as international cooperation of academic staff, which takes place both in the fields of research and academic work (SAR, p. 88-89).

Within the framework of the study field, visits by students of higher education institutions from EU Member States:

A group of logistics and industrial design students from study field Erasmus+ partner university Windesheim University of Applied Sciences (Netherlands) visited FEEM. On the first day of the visit, lectures were held, but on the second day of the visit, students visited SIA "Rīgas universal terminals" and JSC "Aldaris".

1.5.3. RTU uses a communication strategy to attract foreign students where the main communication target groups are internal, i.e. management team; general staff, academic staff; existing students, and external, i.e. tentative foreign students and graduates, educational institutions, multiplier and diplomatic missions of the Republic of Latvia. Marketing communication represents an essential part of the communication strategy and reaches the foreign audience

through participation in educational exhibitions and seminars organised by educational agencies in target markets. The promotion of studies is furthermore ensured by the long-term cooperation with partner universities and educational agencies and by opening specific RTU information and study centres in selected countries (SAR, p. 89-90).

In the study field "Transport Services" international exchanges and mobility of academic staff and students belong to the goals of the field of study. Nevertheless, the implementation of incoming and outgoing mobility of academic staff and students faces several problems and as specific obstacles of internationalisation the university mentions different study semester start and end dates, the coordination of study courses and learning at partner universities as well as the evaluation of study course results (SAR, p. 90; visit notes).

The study programmes enjoy some institutional links but the international cooperation level including mobility of teachers and students is quite low. Annex 17 (Statistics on Student Outgoing Mobility in the Study Field) shows that only one MASP student went for one week to the Sapienza Università di Roma in Rome (Italy) as Erasmus+ mobility student (SAR, p. 90) and none of the SCSP programme participated in an outgoing mobility. One reason for this situation might be related to the short existence of the study field but RTU itself is also internationally a well-known university and enjoys a long history in international cooperation, i.e. the development opportunities for outgoing student mobility are not fully used currently.

During the visit it turned out that financial issues of the mobility grants, parallel work during studying and the long duration of normal Erasmus mobility stays are often named as organisational obstacles for non-participation in mobility options for students. The SAR (p. 90) points out the existence of organisational obstacles by stating that the "university faces such problems as different study semester start and end dates, coordination of study courses and learning at partner universities, evaluation of study course results" when "implementing the incoming and outgoing mobility of academic staff and students".

The situation looks totally different concerning the presence of foreign students as well as of incoming mobility students in the study field (Annex 16: Statistical data on foreign academic staff and students for study field "Transport services"). Here the MASP enjoys a large number of foreign students but the assessment of the visit, especially the discussion with foreign and LV students revealed that there is only low interaction between the LV students and the foreign students. The foreign students pointed out that they would like to have more mixed (LV & foreign) social events in order to improve and deepen the links between the two groups of students (visit notes). This approach should be appreciated and facilitated by the management of the study direction because a closer social relationship between domestic and foreign students raises the interest for outgoing student mobility among LV students.

The situation looks better in the field of academic staff mobility because several teachers of the study field "Transport Services" programme took part in outgoing mobility and concerning incoming staff mobility foreign teaching staff from Estonia and Lithuania appeared in RTU and gave lectures in Riga e.g. the study course "Globalization and integration processes in the world economy" by lecturer at Tallinn University, and the study course "Global Logistics and Transport" by Professor of Klaipeda University.

A closer look to Annex 16 (Statistical data on foreign academic staff and students for study field "Transport services") reveals that 4 guest lecturers visited RTU in 2022/23 and contributed to the study field and this number should be the guideline for integration of foreign teachers per academic year. The number was not reached in 2023/24 since only 1 foreign teacher visited RTU in the study field. Furthermore, Annex 16 highlights that all guest lecturers taught only in the MASP "Logistics and Supply Chain Security", i.e. according to the Annex 16 no guest lecturers were active in the SCSP "Logistics".

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

“Transport Services” is still in the starting phase but already now a strong level of cooperation is developed. Unfortunately, the strong part of cooperation is mainly only based on national cooperation with other Latvian institutions and especially with professional organisations and business partners, which are well developed. An important step forward towards a stronger international orientation represents the cooperation with FIATA (International Federation of Freight Forwarders Associations) opening up the preparation of internationally recognized certificate in supply chain management. On university level a cooperation with Università di Verona in Italy is started in order to reach a joint study programme in supply chain management together with an exchange of students and teachers.

This allows the study programme to integrate highly relevant knowledge about business trends, the continuous update of the study programme, the integration of practitioners into the teaching process, the procurement of internship places for students and the cooperation in projects.

The study programme enjoys some institutional links but the international cooperation level including mobility of teachers and students is quite low. Annex 17 (Statistics on Student Outgoing Mobility in the Study Field) shows that only one outgoing MASP student. Furthermore, the visit revealed that an improved interaction between domestic and foreign students in the frame of more common social events might increase the interest of student mobility abroad.

Annex 16 (Statistical data on foreign academic staff and students for study field “Transport services”) revealed that 4 guest lecturers visited RTU in 2022/23 and contributed to the study field and this number should be the guideline for integration of foreign teachers per academic year. The number was not reached in 2023/24 since only 1 foreign teacher visited RTU in the study field. Furthermore, Annex 16 highlights that all guest lecturers taught only in the MASP “Logistics and Supply Chain Security”, i.e. according to the Annex 16 no guest lecturers were active in the SCSP “Logistics”. Since the SCSP students are prepared to work also in an international environment, it is recommendable to let these students also benefit from international lecturing experience. Hence it is recommendable that the low number of only outgoing students in the study field has to be improved and that the SCSP Logistics has to be better integrated into the international activities of the study field.

The visit revealed that a bundle of obstacles are hindering the internationalisation progress (visit notes). The employment of a large part of students during their studies, financial reasons of not sufficient mobility grants and the long period of stay abroad (usually one semester) cause problems in internationalisation. Additionally, organisational problems were mentioned comprising deviating semester schedules, overloaded teachers as well as compatibility and recognition of foreign courses. All these reasons apply to most universities and there are standard solutions for overcoming these problems.

A closer look at the negative implications of the low current internationalisation level of the study programme reveal that more energy to push the internationalisation is worth doing it. Each outgoing mobility student is an ambassador of RTU and attracts future incoming students and promotes Latvia as an attractive logistics location abroad. Each incoming or outgoing staff mobility deepens the cooperation level, trust and knowledge exchange between RTU and a foreign university and helps so to develop sustainable relationships in education and research which is crucial to be integrated into international, especially European, networks because without this integration into EU networks no success in EU projects is possible. The management of the study direction and FEEM is aware of the need to improve the internationalisation activities and pointed out during the visit that the faculty plans to hire foreign professors in the future (visit notes).

A closer look at the project activities of the study direction “Transport Services” reveals that the focus as well as the majority of project application activities is laid on national projects. Nevertheless, international projects are gaining importance, which is visible by two EU projects

implemented during reporting time (ERASMUS+ and Horizon) and three EU project applications that are prepared for submission (CB Interreg, ERASMUS+, Connecting Europe Facility) stressing the intention of the study field to further internationalize the project activities in the future. Here, a better integration into European university networks can help to increase the number of applications as well as the success rate of EU applications. A recent step ahead towards international project diversification represents the submission of the Erasmus+ project application: "Strengthening higher education institutes to enhance regional sustainable development in maritime, port, transport & logistics in Bitung, Ternate and Kalimantan" that was submitted during the time of the submitting of the accreditation report with cooperation partners from the Netherlands and Indonesia.

Strengths:

- 1) High national reputation and excellent cooperation with Latvian organisations and good university-business cooperation on national level.
- 2) Good cooperation in the fields of internships for students, integration of teaching practitioners and national projects with business.
- 3) Large number of foreign students in the study field.
- 4) Recruiting plans of international teachers and researchers.

Weaknesses:

- 1) Decreasing number of guest lecturers from 4 in 2022/23 to 1 in 2023/24.
- 2) Low number of outgoing student mobility in the study field.
- 3) Unsolved organisational obstacles for facilitating international cooperation.
- 4) Low number of international project applications, especially EU projects.

### **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:** Partially compliant

The cooperation on the national level is excellent and fully compliant whereas the international cooperation level is too low when it comes to outgoing students, incoming foreign teachers and EU project level. The reasons that are appearing represent standard reasons and the case of other universities show that they can be solved easily.

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

#### **Analysis**

1.6.1. On 05.07.2022, the Cabinet of Ministers of the Republic of Latvia adopted a decision to add the Latvian Maritime Academy (LJA) to RTU from 31.10.2022, concurrently continuing the study process of the LJA, maintaining a certified quality management system that ensures supervision of the process of professional training of seafarers in accordance with external regulatory enactments and compliance with the International Convention on Training and Certification of Seafarers of 1978 as well as guard duty (SAR, p. 91). Consequently, the professional bachelor's study programme "Ports and Shipping Management" was excluded from the study field "Transport Services" so that this study field was not considered in the recommendations since it was integrated as specialisation "Port and Maritime Transport Logistics" into the professional bachelor's study programme "Business Logistics" (SAR, p. 91).

Annex 19 ("Annex 19. Review of implemented recommendations.pdf") reveals the recommendations

received for both study fields in previous accreditation and licensing. For SCSP Logistics four short-term recommendations and six long-term recommendations were given. A review of the status during the visit shows the following picture:

Fully compliant short-term recommendations of SCSP Logistics:

- 1) An explanation was provided how the Study Programme complies with industry trends in the European Union countries and the world (Annex 19).
- 2) Information on the availability of business simulations, IT systems and software in the field of logistics was provided (Annex 19).
- 3) CV's of four faculty members were provided (Annex 19).
- 4) The opening process of the study field of transport services and inclusion of the study programme has not formally been started since the study programme management points out that since the Latvian Maritime Academy was reorganised, i.e. RTU has taken over the study field "Transport Services". Thus, RTU currently considers it inappropriate to start work on the process of opening this study field (Annex 19)

The fulfilment status of the four short-term recommendations is based on the SAR (p.91-92, Annex 19, visit notes, assessment report).

Fully compliant long-term recommendations of SCSP Logistics:

- 1) An updated study course of the study programme with more recent literature sources has been prepared (Annex 8: Mapping of the study courses in study program "Logistics")
- 2) An agreement has been concluded between Riga Technical University and Riga Technical College on the provision of the possibility of continuing studies in the respective study programmes, specifying that students from Riga Technical University will be admitted to Riga Technical College (Annex 19, visit notes)

Non compliant long-term recommendations of SCSP Logistics:

- 1) No agreement has been established between the Latvian University of Agriculture and Riga Technical University on the provision of opportunities to continue studies in the respective study programmes, specifying the study programme of the Latvian University of Agriculture corresponding to the first level professional higher education study programme "Logistics" to be licensed (Annex 19, visit notes).

Partly compliant long-term recommendations of SCSP Logistics:

- 1) An agreement of intent with more employers for provision of student internships has not been concluded but there exists a close and regular communication with the employers and a supply of student internships (Annex 19, visit notes).
- 2) The number of participation of academic staff in projects directly related to the field of logistics has not been increased but there exists an engagement in the application and implementation of projects related to the field of transport and logistics (Annex 19, visit notes, assessment report)
- 3) The number of academic staff publications directly related to the field of logistics has been partly increased (visit notes, assessment report)

For MASP Logistics and Supply Chain Security there were three short-term recommendations after study programme licensing, four short-term recommendations after study program inclusion in study field "Transport services", five long-term recommendations after programme licensing and finally four long-term recommendations after study program inclusion in study field "Transport services. The fulfilment status of the MASP related recommendations is based on the SAR (p.91-92, Annex 19, visit notes, assessment report):

Fully compliant recommendations of MASP Logistics and Supply Chain Security:

1) Information concerning the conformity of the translation of the program into English with the content of the study programme was provided together with an assessment of whether the concept of "supply chain management" should not be included in the title of the study programme, taking into account that upon graduation the professional (Annex 19)

2) Additional information about business simulations, IT systems and software directly in the field of logistics was provided (Annex 19)

The opening process of the study field of transport services and inclusion of the study programme has not formally been started since the study programme management points out that since the Latvian Maritime Academy was reorganised, i.e. RTU has taken over the study field "Transport Services". Thus, RTU currently considers it inappropriate to start work on the process of opening this study field (Annex 19)

3) A separate confirmation of compensation for losses listing the study programmes of the field of study will be prepared (Annex 19)

Partly compliant recommendations of MASP Logistics and Supply Chain Security:

1) Updated forecasts and planning of student numbers for the upcoming 3-5 years of students has been currently only discussed RTU-internally.

2) A full or partial merger with the study programme "Logistics Systems & Supply Chain" from RTU's Faculty of Computer Science and Information Technology has been rejected by the study programme management (Annex 19, visit notes). Nevertheless, a stronger cooperation between both Supply Chain programmes is recommendable.

3) A revisions of the use of dedicated study rooms and labs is discussed among the academic staff (Annex 19)

4) New project applications have been prepared and submitted from the researchers and the academic staff of the study programme but until now no EU project has been approved (Annex 19, assessment report, visit notes). More project application activities within international university networks as well as together with companies is recommendable.

5) Number of participations of teaching staff in projects directly related to the field of logistics have been partly increased ( Assessment report, visit notes)

6) The number of academic staff publications directly related to the field of logistics has been partly increased (visit notes, assessment report)

7) An agreement between RTU and LLU providing equivalent professional qualifications has not been concluded; nevertheless, RTU considers the possibility of including students from a particular study programme in another RTU study programme in case of emergency (Annex 19)

Finally, the management of MASP Logistics and Supply Chain Security is aware and confirms that as a long-term goal, a continuous further education of the academic staff in English language competence and the utilisation of new IT tools represents an important task, especially due to large number of foreign students in the study programme.

Altogether it can be stated, that the recommendations of licensing experts were taken into account both regarding the implementation of IT solutions to be included in the study programmes in logistics courses, on involvement in local and international projects, as well as on the publications of academic staff and the integration of their content into the study courses.

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

The recommendations provided during the previous accreditation process have been fulfilled only partly. Most of the long-term recommendations are only taken into account and they are appearing again as recommendations in the current accreditation. Special issues that have been already part

of the previous recommendations and that are highlighted again in the current accreditation are concerning the cooperation of the different logistics related programmes of RTU and even beyond, the success of project applications in the context of sustainable financing of the study programme, internationalisation issues, the use of e-learning as well as the improvement of publication output. Since most of the recommendations can be realised in a short term and by taking under account the short existence of the study programme, most of the unfulfilled recommendations should be tackled in the near future in the frame of available resources.

Strengths:

- 1) Most of the short-term recommendations have been fulfilled.
- 2) The visit showed the awareness of involved people of the study programme about the open recommendations so that ongoing efforts can be expected.

Weaknesses:

- 1) Some of the recommendations like improved publication output or improved cooperation among logistics related programmes in Latvian universities can be realised easily without too much progress since the previous recommendation.
- 2) The financing situation is complicated to be changed since it depends on a lot of parameters that are placed outside FEEM and even outside RTU.

#### 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:** Partially compliant

Some of the shortcomings have been eliminated already but some that are eliminable in the short-term range have not been tackled since previous time. The long-term deficits are more complicated to eliminate but more initiative esp. In the case of financing the programme is recommendable.

### 1.7. Recommendations for the Study Field

#### Short-term recommendations

Strengthening the partnership in scientific research within the framework of the contracts already signed with foreign partners.
Organise specialised training for teachers in project management.
Increasing publication activity, especially in referenced databases (SCOPUS or WoS).
Encourage the use of online tools for administrative tasks, academic support, and even hybrid learning. Ensuring that students and staff at FEEM can access resources, events, and services remotely will improve their connection to the main campus.
Strengthen the cooperation with other logistics study programmes in RTU.
Improve the organisational frame conditions for internationalisation in the study field.
Intensify application writing activity in the field of international projects.
Increase the number of guest lecturers.

Solve organisational obstacles for facilitating international cooperation.

### Long-term recommendations

Broadening the scope of cooperation with international organisations in the field of transport and logistics.

Organise a specialised training course to improve the qualifications of teaching staff in the development and administration of scientific projects in the field of transport and logistics.

Partner with industries related to the study field for sponsorships, scholarships, or collaborative projects. Corporations may be willing to support academic programmes that align with their business interests.

Broaden the financial base for the study field by offering company training and increasing activities in EU projects.

Play a more active role as a moderator/facilitator in the regional logistics cluster.

Increase the number of foreign academic staff (teachers, researchers).

Increase the low number of outgoing student mobility in the study field.

Increase the submission of project applications with a focus on EU projects.

## II - "Logistics" ASSESSMENT

### II - "Logistics" ASSESSMENT

#### 2.1. Indicators Describing the Study Programme

##### Analysis

2.1.1. The contents of Short-cycle professional higher education study programme "Logistics" 41840 (SCSP Logistics) is within the scope of study field "Transport services" (code 840) described in Regulation No. 322 "Regulations on the Classification of Latvian Education" by the Latvian Cabinet of Ministers. The intention of the study programme is to equip students with the necessary skills and knowledge to become specialists in logistics, with a focus on logistics operations and transport economics (SAR p.100). The curriculum is intended to align with outlined competencies in the professional standard of "Logistics Specialist". Therefore by contents, aims and outcomes programme is compliant with the study field.

2.1.2. The aim of the SCSP Logistics is to prepare students for employment in the logistics industry in accordance with the profession standard "Logistics Specialist," (approved in 2021, <https://registri.visc.gov.lv/profizglitiba/dokumenti/standarti/2017/PS-148.pdf> / only in Latvian) as well as to develop research skills to create specialists capable of ensuring the fundamental logistics processes, as well as to create an understanding of how logistics affects the environment and responsible management. (SAR. p.100)

SCSP "Logistics" is being implemented in 3 study modes - [1]Full time studies with length of 2 years, 0 months, [2]Part time extramural studies with length 2 years, 5 months, [3]Part time studies with length of 2 years, 5 months. Study programme is being implemented only in Latvian language. Overall volume of the study programme is 120 ECTS.

Upon completion, graduates receive a short-cycle professional higher education and the fifth level

professional qualification as "Logistics Specialist," with the option to continue their studies in related bachelor's programmes, including the RTU professional bachelor's programme in "Business Logistics".

The expected outcomes of the programme align with the profession standard "Logistics Specialist" and LQF (LKI) level 5. According to the classification of education (Cabinet of Ministers of the Republic of Latvia Regulations No.322, 2017) the code of the study programme is 41840, where the last three numbers 840 corresponds to "Transport Services", while 41 corresponds to short-cycle professional higher education.

According to RTU SCSP Logistics strives to provide competitive education in logistics that meets both professional and international standards, focusing on developing theoretical knowledge, practical skills, and professional competencies aligned with labour market needs. It prepares students for roles in logistics and transport economics through a combination of academic learning and practical experience, including internships and industry collaboration. It is expected that graduates are equipped to handle professional tasks, contribute to the development of the logistics field, and pursue further education or retraining if needed. The study process integrates experienced faculty and industry experts to ensure a balanced acquisition of theoretical and practical skills, with learning outcomes closely aligned with the profession standard "Logistics Specialist" and LQF level 5. Evaluation of students' performance includes a state qualification paper, focusing on research, problem-solving, and practical business solutions. The admission process requires a secondary education or 4-year vocational secondary education, or with first level (short cycle) professional higher education in business and management are enrolled in the first level (short cycle) professional higher education study programme. Admission takes into account results of the centralized examinations (CE) in mathematics, Latvian and a foreign language and annual marks in certain subjects in the secondary education document (SAR p. 102)

The title, code, professional qualification awarded, aims, objectives, learning outcomes and admission requirements are interrelated. Duration of SCSP Logistics, scope and implementation language are reasonable and justified.

2.1.3. SCSP Logistics can be considered as a new programme - implemented in February 2023. The content of the study programme has been adjusted to align with the transition to ECTS credit points by RTU internal order (SAR p. 99, Annex "Rikojums par KP uz ECTS.pdf"). However, in practice, change seems to be only partial, as full rounding of all courses has not taken place yet. Provided study plan (Annex "Annex 9. Study program implementation plan (1).pdf") features unrounded study courses, for example, CA105 Civil Defence and IĀS709 Introduction to Study Field is 1.5 ECTS each. In addition, as RTU points out, several updates have been made to the SCSP Logistics. The list of professional specialisation courses (B1 part) has been expanded to include the course "International Marketing" and the course "Legal Basis of Entrepreneurship" (SAR p. 99) . All changes made to the SCSP Logistics so far are justified and would be supported.

2.1.4. The SCSP Logistics was implemented in February 2023, initially enrolling four students in part-time studies. Full-time studies began in September 2023, with an intake of fifteen students. This programme operates on a tuition fee basis, with no state funded positions available. As the SCSP Logistic is offered exclusively in Latvian and was only recently introduced, it is too early to analyse trends in student enrollment, changes over time, or the reasons for any dropouts.

SCSP Logistics aims to produce internationally recognized, highly qualified professionals for the logistics industry while promoting research and practical solutions through collaboration with businesses. RTU points out (SAR, p.102), that in order to maintain the competitiveness of logistics as an industry, it is crucial to continue developing 5th level education (LQF 5) to prepare industry workers.

Logistics specialists - which coincides with the awarded qualification at the end of this programme -

plan and manage the movement, storage, and logistics processes within companies. They evaluate inefficiencies, analyse costs, handle inventory, and coordinate with suppliers and carriers. These professionals work independently or under a logistics manager in industries such as transport, freight, warehousing, and manufacturing, leading small teams in logistics operations. Graduates can expect to find employment in logistics, cargo and passenger transportation, retail, production, service companies, and government institutions related to logistics. According to the Ministry of Economics, the transport and storage sector is expected to grow by 1.5% annually from 2020-2027 and 2.5% per year from 2028-2040. This will drive demand for mid- and high-level logistics professionals. By 2027, a shortage of 1,500 higher-educated logistics specialists is anticipated, due to workforce ageing and changes in the economy. (SAR. p.103). However, given that the programme is new, actual employment data of graduates cannot be properly analysed.

2.1.5. N/A

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

The SCSP Logistics aligns with the professional standard “Logistics Specialist” and offers both full-time and part-time study modes that seems to cater to diverse student needs. The programme is designed to meet labour market demands by providing comprehensive theoretical and practical education, including internship. It prepares students for employment as logistics specialists and allows for further education in related bachelor's programmes. Although the programme is new, introduced in 2023, and lacks long-term data on student enrollment and employment outcomes, it addresses a growing demand for qualified logistics professionals in Latvia.

Strengths:

1) The SCSP Logistics structure, aims, tasks and learning outcomes to contribute to the logistics industry needs.

Weaknesses:

None.

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

### **Analysis**

2.2.1. SCSP Logistics at RTU is designed to provide a competitive education that aligns with both professional standard and international benchmarks (SAR, section 3.2., Annex 6. Compliance with the State Education Standard (2).pdf and Annex 7. Compliance with the profession standard.pdf). The programme aims to equip students with the knowledge and skills necessary for employment in the logistics sector, focusing on practical competencies, analytical abilities, and the development of personal and professional growth. By engaging students in practical tasks, projects, and internships, the programme ensures a strong connection between theoretical knowledge and real-world applications. Additionally, collaboration with industry experts and practitioners enriches the learning experience and aligns the curriculum with labour market demands.

One of the programme's key strengths is its emphasis on practical, hands-on experience, including a four-month internship that allows students to apply their knowledge in industry settings (Annex 9. Study program implementation plan (1).pdf, D. Practical Placement - 24 ECTS). This approach not only enhances employability but also ensures that graduates are well-prepared to meet the challenges of the logistics profession.

However, the detailed structure and rigorous processes involved in aligning the programme with industry standards may slow responsiveness to rapidly changing trends in logistics and transport,

potentially impacting the timeliness of curriculum updates. Despite this, the programme provides a solid foundation for further academic pursuits or professional advancement in logistics.

SCSP Logistics is designed to provide students with a comprehensive education that combines theoretical knowledge with practical experience. The programme's structure includes 120 credit points, divided into study courses, internships, and a state examination, culminating in the defence of a qualification paper. This balanced approach ensures that students not only acquire essential academic knowledge but also develop practical skills through research projects and internships focused on the transport and logistics sector. The curriculum is regularly updated to align with industry trends and student feedback, which highlights the programme's commitment to maintaining relevance in a rapidly evolving field.

Furthermore, the programme's emphasis on professional competence and research skills prepares graduates to address the practical challenges of logistics, such as problem-solving, adapting to unpredictable changes, and understanding the broader social impact of logistics.

According to subsection (c) of the second paragraph of Article 55 of the Law on Higher Education Institutions, the study programme must include mandatory, limited elective, and free elective courses. RTU's current programme (SCSP Logistics) does not comply with this requirement as the programme does not feature free elective part (Annex 9. Study program implementation plan (1).pdf).

Study programme features mandatory environmental and civil protection course (CA105 Civil Defence) in 1,5 ECTS amount. In addition the law requires that short-cycle professional higher education programmes must include a module focused on developing business professional competences, with a minimum of 9 ECTS credits. Currently, no formal module has been implemented, but several courses appear to address the required topics within their curriculum. These courses include Economics (6 ECTS), Business Management (3 ECTS), Accounting (3 ECTS), and Legal Basis of Entrepreneurship (3 ECTS).

#### 2.2.2. N/A

2.2.3. SCSP Logistics is characterised by a robust and modern didactic approach that integrates advanced teaching methods and practical experiences. This approach ensures that students not only acquire theoretical knowledge but also develop practical skills essential for the logistics industry. The study programme emphasises interactive learning through group work, case studies, seminars, and study tours to industry-leading companies, both domestically and internationally (According to SAR p. 3.2.3.). These experiences enable students to connect classroom knowledge with real-world logistics challenges, fostering a deeper understanding and the ability to solve practical problems.

The study programme's structure supports a student-centered learning environment, offering flexibility in balancing studies with work and family life. The use of the RTU's interactive e-learning platform, based on Moodle, facilitates continuous learning and communication between students and faculty, providing access to essential study materials, evaluations, and feedback. This system also encourages active student participation in the quality assessment and improvement of the study process through regular surveys and meetings.

Moreover, the SCSP Logistics promotes the development of teaching and learning methods, including the involvement of foreign academic staff, which enriches the curriculum with international perspectives. The collaboration with librarians and access to specialised resources like the Bloomberg lab further enhance the learning environment, supporting both research and practical application.

However, while the SCSP Logistics is comprehensive and well-rounded, it requires continuous adaptation to stay ahead of industry changes and emerging trends. The strong focus on established standards, while beneficial for current industry alignment, may limit the programme's flexibility in

integrating new and innovative content that could be crucial for future logistics professionals.

Overall, the SCSP Logistics is well-equipped to prepare students for successful careers in logistics, offering a balanced mix of theoretical and practical learning, supported by a flexible and student-centred approach.

The following points in the implementation of teaching methods should also be considered as shortcomings.

Firstly, during the assessment visit with representatives of both students and graduates on August 21, 2024, it was revealed that educational excursions to enterprises are not implemented at all. Expert group met with representatives of students and graduates from different forms of education, however, representatives present were not able to recall such instances of educational excursions. Thus, the development of practical skills of students of this programme is carried out only partially.

Secondly, despite the fact that both the administration and the teaching staff inform students about the Erasmus program and the possibility of participating in projects, students and graduates do not participate at all.

The third drawback noted by the group of experts is the use of the Moodle program in the learning process. During the assessment visit to the university on August 21, 2024, the administration representatives showed two examples of filling the pages of educational courses with methodological materials. However, during the discussion it was established that these educational and methodological materials were developed within the framework of special projects. The structures of these pages are significantly different, the systematisation and structure of topics are not standardised, the amount of information is excessively overloaded. The administration was unable to show the remaining pages from more than 28 educational courses. Thus, the university administration does not pay the necessary attention to the standardisation of educational courses in the Moodle program. This is especially negative when it comes to achieving learning outcomes for part-time students.

The fourth weakness was also identified during the assessment visit with teachers (August 21, 2024) and student and graduate representatives (August 22, 2024). All three groups noted as a negative aspect the administration's attempt to organise separate mandatory and shared courses simultaneously for an excessively large number of students in one classroom (in some cases - 120-150 students). During the assessment visit with the Vice-Rector for Strategic Development and Finance, this issue was also raised; the administration is aware of this problem and will try to divide students into two streams in such cases.

2.2.4. The study plan for SCSP Logistics has a well-structured and comprehensive internship component, according to SAR p. 3.2.4., Annex 9. Study program implementation plan (1).pdf, D. Practical Placement - 24 ECTS), which is a critical aspect of its curriculum. The ECTS amount dedicated for internships is in adherence with regulatory enactments. The programme includes detailed "Methodological Guidelines" that outline the tasks, procedures, and expectations for students during their internships. These guidelines ensure that students are well-prepared to apply their theoretical knowledge in real-world logistics environments.

Internships are designed to enhance students' professional abilities, such as independent work in a logistics setting, making economically sound decisions, and effectively communicating and defending their ideas (Annex 11. Description of the organisation of the internship of the students (1).pdf). These objectives are aligned with the professional standards of the logistics field, ensuring that the students' experiences are relevant to industry needs.

The programme facilitates strong connections between the university and industry by involving employers in setting internship goals and evaluating student performance. This collaboration not only provides students with valuable industry insights but also allows the programme to stay aligned with labour market demands. The internship offers tasks aligned with achievable learning outcomes and fully adheres to the requirements of regulatory enactments.

Support for students is robust, with internship coordinators and the Career Support and Services Department playing a vital role in helping students secure and succeed in internships. The department offers career counselling, organises an annual Career Day, and maintains an online platform where companies can post relevant job and internship opportunities.

Additionally, the RTU Development Fund supports the enhancement of practical skills through various competitions organised in collaboration with industry partners. These initiatives ensure that students are well-prepared for their professional careers by the time they graduate.

Overall, the internship component of the programme is a strong feature that significantly contributes to the practical and professional development of students, making them more competitive in the logistics field.

However, a weakness was identified during the assessment visit with student and graduate representatives (August 22, 2024), where although the administration informs students about possible companies for internships, individual students encountered the problem of finding a company in the logistics field.

2.2.6. The qualification papers in SCSP Logistics are rigorously evaluated by industry experts, ensuring a strong connection between the academic content and real-world logistics practices. The involvement of experienced professionals from leading companies like Procter & Gamble and Itella Logistics in the defence commissions guarantees that students' work is relevant to current industry needs. This process ensures that the study programme remains closely aligned with labour market demands, providing students with valuable insights and feedback directly from potential employers. The recent launch of the programme means an assessment of students' final work topics is not yet available (According to SAR p. 3.2.6.).

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

SCSP Logistics offers a comprehensive education that balances theoretical knowledge with practical experience, ensuring students are well-prepared for careers in the logistics sector. One of the programme's main strengths is its emphasis on practical learning, particularly through a structured internship component, which allows students to apply their academic knowledge in real-world settings. This hands-on approach is reinforced by strong industry collaboration, where employers help set internship goals and evaluate student performance, aligning the programme with labour market demands.

Additionally, the programme supports student development through various initiatives such as the RTU Career Day and the RTU Development Fund, which provide opportunities for career counselling, skill enhancement, and networking. The inclusion of international perspectives through foreign academic staff and advanced teaching methods further enriches the learning experience.

However, the programme also faces challenges. While the curriculum is regularly updated to reflect industry trends, its strong alignment with current standards may limit its flexibility to incorporate emerging topics and innovative content. Furthermore, some students have encountered difficulties in securing internships, highlighting a potential gap in support for individual placements. Additionally, concerns were raised about the standardisation of course materials on the Moodle platform and the large class sizes, which may hinder the effectiveness of the learning environment.

In conclusion, SCSP Logistics is well-structured and provides a solid foundation for professional growth in the logistics field. However, addressing the identified weaknesses, such as improving internship placement support and ensuring consistency in course delivery, could enhance the programme's overall effectiveness and better prepare students for future challenges in the industry.

Strengths:

1) The study programme effectively integrates practical experience with academic knowledge,

ensuring that students develop both professional competencies and real-world skills. This is achieved through internships, project work, and collaboration with industry experts, making graduates well-prepared to meet the demands of the labour market.

2) The programme's strong alignment with industry standards and trends ensures that graduates are well-prepared for the demands of the logistics sector. By incorporating practical experiences such as internships and research projects directly tied to real-world logistics challenges, students gain hands-on skills that are immediately applicable in their professional careers.

Weaknesses:

1) There is no organisation of educational excursions for students to large enterprises in the field of logistics.

2) Despite the fact that both the administration and the teaching staff inform students about the Erasmus program and the possibility of participating in projects, students and graduates do not participate.

3) The university administration does not pay enough attention to the standardisation of courses in the Moodle e-platform.

4) The successful acquisition of learning outcomes is hampered by the administration's attempt to organise separate study courses simultaneously for an excessively large number of students in one classroom (in some cases, 120-150 students).

5) SCSP Logistics does not include free elective courses.

### **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

N/A

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

#### **Analysis**

2.3.1. Study provision is strongly supported by the RTU Scientific Library, which offers a wide range of resources essential for logistics and supply chain management. The library's vast collection, which includes 1.3 million printed documents and extensive electronic resources, ensures that students have access to relevant and up-to-date information (per SAR p 113). The library also provides specialised resources through its central and branch locations, ensuring that materials are accessible to students regardless of their location. The presence of group study rooms, individual study cabins, and access to databases like ProQuest Ebook Central and ScienceDirect underscores the library's role in supporting both coursework and research activities. This infrastructure effectively meets the educational needs of the program, ensuring that students can engage deeply with their studies. Databases are critical for conducting advanced research in logistics and supply chain management. These resources provide access to peer-reviewed journals, conference papers, and e-books, which are essential for developing a robust scientific foundation in the field. The text also mentions the integration of research activities into the library's services, with provisions for accessing specialised resources via interlibrary loans and international subscriptions.

This indicates that the programme is well-supported by scientific resources, although more specific examples of research projects or scientific activities could further strengthen this point.

The informative provision, particularly through the RTU Scientific Library, is a standout feature, providing comprehensive resources and services that support both teaching and research. Material and technical provisions are modern and inclusive, ensuring that all students can benefit from the resources available. Finally, the financial provision is strategically managed, ensuring that the programme remains well-resourced without financial waste.

### 2.3.2. N/A

2.3.3. Study programme funding completely relies on student study fees. The cost per student remains the same at EUR 1 728,68 across both academic years. In comparison with first year funding of EUR 4 800, there has been a rise of EUR 23 035 for 2nd year of programme (per SAR Table 3.1 p. 112). This implies that the programme costs are fixed per student, regardless of the total number of students or total funding. The current financial model poses a risk if the programme does not optimise student amounts to cover its fixed costs. This could lead to a broader financial impact on the FEEM if the issue is not addressed. Therefore, increasing student enrollment or securing additional funding sources is critical. As a result, current student enrollment numbers might be lower, but there is potential for growth as the programme matures. RTU mentions that state funding would majorly improve the popularity of study programmes which could lead to significant increase of students.

Facilities which are in use of study programme are:

- Auditoriums;
- PCs Laboratories;
- Methodological office;
- RTU Scientific Library.

Additionally, other RTU and FEEM facilities are available if needed, which suggests that the infrastructure supporting the program is adequate.

To ensure the programme's success, it is essential to focus on increasing student enrollment and exploring additional funding opportunities, particularly from state sources. By addressing these financial challenges, the programme can transition from an initial investment phase to a sustainable and thriving part of RTU's offerings, securing its long-term viability and impact.

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

The study programme at RTU demonstrates strong provisions in terms of library resources, material and technical support, and strategic financial management. However, the programme faces challenges related to financial sustainability due to its reliance on student fees and fixed programme funding and the early-stage nature of the programme. To ensure long-term success and high-quality outcomes, it is crucial to focus on increasing student enrollment, securing additional funding, and enhancing the visibility of scientific research activities. By addressing these weaknesses, the program can transition from an investment phase to a sustainable and impactful offering within RTU.

Strengths:

- 1) The programme is supported by access to peer-reviewed journals, conference papers, and e-books through various databases, facilitating advanced research in logistics and supply chain management. The inclusion of international subscriptions and interlibrary loans further strengthens the scientific provision.
- 2) The library's support for research activities, including access to interlibrary loans and international subscriptions, reflects a strategic alignment with the academic and research goals of the program. This integration enhances students' ability to engage in high-level research, critical for advancing knowledge in the field.

Weaknesses:

- 1) As a new programme launched in February 2023, it is still in its early stages, which means student enrollment may be lower than expected. This presents a challenge in reaching financial sustainability and requires strategic efforts to increase enrollment and secure additional funding sources.
- 2) The programme's funding is entirely dependent on student fees and dedicated programme funding, which for example in 2023/2024 was EUR 23 035, which poses a risk if enrollment numbers are not optimised to cover fixed costs. This reliance makes the programme vulnerable to financial instability, particularly in its early stages.

## 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:** Fully compliant

The study field or the study programme complies with the prescribed requirements. The programme is supported by various resources of information, which helps FEEM students to exceed in studies, although the study programme since it is relatively new is struggling with enrollment numbers, which leads to impact on funding.

## 2.4. Teaching Staff

### Analysis

2.4.1. The implementation of SCSP Logistics involves both selected academic teachers and guest teachers from the RTU, as well as highly qualified leading specialists in the field. In chapter 3.4.1. of SAR it is stated that 16 teachers are involved in the implementation of the curriculum, of which 5 (31%) are elected to the position of professor, 6 (37.5%) to the position of associate professor and 6 (37.5%) to the position of assistant. From the data in SAR 3.4.1. the list of academic staff shows that 2 research assistants, 5 lecturers and 6 visiting lecturers were also recruited to the curriculum team. From the quantitative data presented, it is clear that the curriculum is provided with a sufficient number of teachers, while at the same time, from a qualitative point of view, the majority of them are qualified persons - professors and associate professors.

From the attached curriculum vitae of the teaching staff (Annex: "Annex 10. Academic staff CV.zip") it is clear that all of them have extensive teaching, research and practical experience, which is a good testimony of their qualification and ability to achieve the goals and outcomes of the training in the classroom programme. 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 of logistics.

Teachers participating in the programme take advantage of international cooperation and mobility programmes, detailed data on which are presented in Annex 18 ("Annex 18. Statistical data about academic staff mobility.pdf"). Statistical data about academic staff mobility. However, not all of them take advantage of the opportunities offered by the Erasmus+ programme, which should change given the possibility of deriving several benefits from it. The lecturers of the SCSP Logistics are actively involved in the implementation of projects (national and international) related to the field of logistics ("Annex 13. Summary of quantitative data of research and related activities.xlsx" and related activities to chapter 2.4.4 of the SAR). This is a good prerequisite for the regular updating of the contents of the programme and the use of training methods following the latest

trends in the world, which helps to achieve better results in logistics training.

A good example of confirming the qualification of teaching staff is the bilateral exchange of teachers with the Lithuanian Maritime Academy. This initiative enables internationalisation between the universities of both countries, exchange of experience and transfer of specific knowledge to students in the curriculum.

Leading specialists from industry and business representatives take part in the educational process: they conduct training courses, give lectures, supervise and review diploma theses, participate in the work of the State Examinations Board, provide internships for students, participate in joint research with RTU academic staff, publish scientific articles, participate in conferences and international projects.

2.4.2. To ensure the learning process and improve the quality of teaching, the programme often has to change the teaching staff, both due to the retirement of experienced teachers and the appointment of new highly qualified specialists, including those with practical experience. It should be noted that the existing teaching staff of SCSP Logistics regularly develop their professional skills by participating in conferences, projects, seminars and courses both nationally and internationally, which provides students with continuous improvement of courses, updating of content and application of new teaching 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 meeting with the teachers at the RTU, it was also noted that the young teachers are supported by qualified teachers and the management, which ensures continuity between them and good working conditions.

Table 4.1 in Chapter 3.4.2 of the SAR shows the changes in academic staff over the period 2021-2023. The data shows that the number of professors remains constant, the number of associate professors (with a PhD) increases by one during the period under review, and the biggest change in a positive direction is in the number of visiting lecturers from practice with a high level of expertise, which has a positive effect on the quality of education. The majority of SCSP Logistics faculty members are young, which is a prerequisite for a long future teaching and research career and sustainability in programme development. The SAR lacks information on a policy to attract the best students for future academic and research careers, but it was clear from discussions with professors and students during the visit to the RTU that work is being done in this direction.

2.4.3. N/A

2.4.4. Annex (Annex 14. List of academic staff publications.pdf) for the reporting period to Chapter 1.4 Scientific research and artistic creation from the SAR of the study field 'Transport Services' shows that the teaching staff of the SCSP Logistics were active in scientific research during the reporting period. All teachers reported publication activity, some of them being particularly productive (more than 10 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 teachers within the curriculum. The publications provide original research results and contribute to the theoretical understanding of the specificities of logistics as a scientific research field.

Some of the publications are co-authored by more than one representative of the department, and some of them are indexed in internationally recognised databases such as Scopus and Web of Science. After checking the relevant databases, noteworthy achievements in the publication activity in refereed editions were made by Professor E.G. (a total of 55 publications in Scopus / WoS), Associate Professor J.I. (a total of 20 publications in Scopus / WoS) and Assistant Professor A.A. (a total of 13 publications in Scopus / WoS). This result of the teachers of the curriculum is due to their participation 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, some professors have

either few indexed publications or none at all, which should also be considered by the programme management and the RTU. However, the total number of publications can be considered sufficient to support the quality of the curriculum.

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

2.4.5. The curriculum (Annex 9. Study program implementation plan (1).pdf) includes a variety of study blocks covering both general and professional competences. An audit of the programme's courses takes place every year, as well as various seminars in which the teachers involved in the programme present the course topics and teaching methods and discuss improvements that would ensure a higher quality of the programme's content and relevance to current events in the sector. The teachers involved in the programme work together within their courses to ensure that the courses are interlinked.

The courses in the curriculum are organised in such a way that the basic knowledge acquired at the beginning is gradually supplemented with technological knowledge so that by the end of their studies the students are ready for practice. The organisation of the courses involves a certain number of teachers (at least two), which leads to cooperation and interchangeability, as well as better management of the learning process and initiatives.

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

Several mechanisms have been put in place at the RTU to encourage teachers to collaborate in the implementation of the curriculum, including departmental meetings or participation in refresher courses organised by the RTU.

In chapter 3.4.5. the SAR indicates that the ratio of students to selected academic staff is 1:7 (five selected teachers and two specialists in the field of one student).

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

A sufficient number of teachers are involved in the implementation of the curriculum, well distributed in terms of age, position and level of education, which allows the expert group to determine that all the conditions are in place to achieve the objectives and learning outcomes of the curriculum. 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 logistics.

Relations between teachers can be defined 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 RTU.

The publication activity of the teaching staff is good, with several publications indexed in internationally recognised 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 teachers and guest lecturers from practice in the learning process is successfully combined.
- 2) Teachers have extensive academic, research and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the curriculum.
- 3) Teachers receive regular professional development and junior teachers are supported by senior teachers and management.

4) Regularly develop new courses and update existing ones with new learning methods and economic trends, maintaining the interrelationship between them.

Weaknesses:

1) Some teachers 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

Despite the identified problem with the number of publications of high scientific value, 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 curriculum 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 "Annex 6. Compliance with the State Education Standard (2).pdf" generally confirms that the study programme complies with Cabinet Regulation No. 305 "Noteikumi par valsts profesionālās augstākās izglītības standartu".. Civil and Environmental protection courses are present in the programme in necessary amount. Law stipulates that mandatory content of the short-cycle professional higher education courses includes a module for the formation of business professional competences in no less than 9 ECTS amount. There are no formal module implemented, however as of now, there are study courses that seemingly cover mandated topics within their syllabus - Economics (6 ECTS), Business Management (3 ECTS), Accounting (3 ECTS) and Legal Basis of Entrepreneurship (3 ECTS), however clarification is required.

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 profession standard.pdf") confirms that the programme is compliant with the professional standard of "Logistics specialist" (4.PKL, 5.LKI and approved on 10.02.2021)

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

Attached study course descriptions ("Annex 10. Course module descriptions.zip") are prepared

in Latvian. Descriptions complies with regulations set forth in Law on Higher Education Institutions. However, there is no uniform standardisation of courses in the Moodle e-platform.

- 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 (provided by RTU with list of comments on factual errors at 22.10.2024, see annex Diploma pielikuma paraugs\_Logistika\_41840\_LV\_EN (1).pdf and Diploma paraugs\_Logistika\_41840\_LV (2).pdf of programme annexes) 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 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

Attached resumes of staff ("Academic\_staff\_CV\_EN.zip") and confirmation ("Annex 11. 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 attached study agreement ( "Annex 7. Sample of study agreement.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

Attached contracts ("Annex 4. Agreements of continuing education (in Latvian).zip" and 5.pielikums. Apliecinājumi par izglītības turpināšanu.zip) confirms that the institution provides the possibility to continue studies within the following options:

[1]Transport and Telecommunication Institute (TSI) professional bachelor study programme "Transportation and Logistics" (42840), however, as of now TSI does not offer programme with such title. It could be assumed that the programme current title is "Transport and Business Logistics". Nevertheless, clarification is needed. Study programme is not of comparable level and the offered qualification is different.

[2]Riga Technical College (RTK) college level programme "Telematics and Logistics" (41840). Study programme is comparable both in level and awarded qualification. However, the contract addendum features RTU study programme "Logistics" which is part of study field "Management, Administration and Management of Real Property" instead of "Transport Services", therefore update is needed as the document is signed in 2021 and field name should be specified as well.

- 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 ("On compensation for losses.pdf") 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:** Partially compliant

The study programme does not feature a C (free elective) part as per the Law on Institutions of Higher Education; it should be specified in the curriculum of the study programme and other relevant documents

**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:** Partially compliant

Study programme in general complies with regulatory requirements, however study programme does not feature C part and there are clarifications needed regarding options to continue studies in case of study programme closure. There are no clear and well defined module or courses for the formation of business professional competencies.

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

The SCSP Logistics at RTU is designed to blend theoretical knowledge with practical experience, preparing students for careers in logistics. A key strength of the programme is its practical learning component, notably through structured internships, which are supported by strong industry collaboration. Employers are actively involved in setting internship goals and evaluating student performance, ensuring that the programme remains aligned with labour market needs. Additionally, initiatives like RTU Career Day and the RTU Development Fund offer career counselling, skill enhancement, and networking opportunities, while foreign academic staff and advanced teaching methods contribute to a well-rounded educational experience.

Despite these strengths, the programme faces several challenges. The curriculum, though regularly updated, may struggle to incorporate emerging topics due to its strong alignment with current standards. Some students have experienced difficulties securing internships, indicating a potential need for better individual placement support. Concerns have also been raised about the standardisation of course materials on the Moodle platform and the effectiveness of the learning environment given the large class sizes.

Financial sustainability is another challenge, with the programme heavily reliant on student fees and facing limitations due to its early-stage development. To enhance long-term success, it is crucial to increase student enrollment, secure additional funding, and boost the visibility of scientific research activities.

The programme benefits from a well-qualified and diverse teaching staff, including guest lecturers from the industry, which positively impacts the quality of education.

The evaluation of the study programme reveals it to be average due to several critical shortcomings. While it provides a solid foundation for professional growth, it lacks essential components such as a formal module for business professional competencies, which should be clearly indicated in the documents. Additionally, the absence of a 'C part' (free elective courses) further limits the programme's flexibility and alignment with educational standards. These gaps, along with the need for clarifications regarding study continuation options, indicate that while the programme has potential, it requires significant improvements to enhance its effectiveness and sustainability.

#### Strengths:

- 1) The programme structure, aims, tasks and learning outcomes contribute to the logistics industry needs.
- 2) The study programme effectively integrates practical experience with academic knowledge, ensuring that students develop both professional competencies and real-world skills. This is achieved through internships, project work, and collaboration with industry experts, making graduates well-prepared to meet the demands of the labour market.
- 3) The programme's strong alignment with industry standards and trends ensures that graduates are well-prepared for the demands of the logistics sector. By incorporating practical experiences such as internships and research projects directly tied to real-world logistics challenges, students gain hands-on skills that are immediately applicable in their professional careers.
- 4) The programme is supported by access to peer-reviewed journals, conference papers, and e-books through various databases, facilitating advanced research in logistics and supply chain

management. The inclusion of international subscriptions and interlibrary loans further strengthens the scientific provision.

5) The library's support for research activities, including access to interlibrary loans and international subscriptions, reflects a strategic alignment with the academic and research goals of the programme. This integration enhances students' ability to engage in high-level research, critical for advancing knowledge in the field.

6) The participation of academic teachers and guest lecturers from practice in the learning process is successfully combined.

7) Teachers have extensive academic, research and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the curriculum.

8) Teachers receive regular professional development and junior teachers are supported by senior teachers and management.

Weaknesses:

1) There is no organisation of educational excursions for students to large enterprises in the field of logistics.

2) Despite the fact that both the administration and the teaching staff inform students about the Erasmus programme and the possibility of participating in projects, students and graduates do not participate.

3) The university administration does not pay enough attention to the standardisation of courses in the Moodle programme.

4) The successful acquisition of learning outcomes is hampered by the administration's attempt to organise separate study courses simultaneously for an excessively large number of students in one classroom (in some cases, 120-150 students).

5) As a new programme launched in February 2023, it is still in its early stages, which means student enrollment may be lower than expected. This presents a challenge in reaching financial sustainability and requires strategic efforts to increase enrollment and secure additional funding sources.

6) The programme's funding is entirely dependent on student fees and dedicated programme funding, which for example in 2023/2024 was EUR 23 035, which poses a risk if enrollment numbers are not optimised to cover fixed costs. This reliance makes the program vulnerable to financial instability, particularly in its early stages.

7) Some teachers do not have publications indexed in Scopus and Web of Science.

8) SCSP Logistics does not include free elective courses.

## **Evaluation of the study programme "Logistics"**

Evaluation of the study programme:

Average

## **2.6. Recommendations for the Study Programme "Logistics"**

### **Short-term recommendations**

Develop an annual plan for organising educational excursions to large enterprises in the logistics sector (separately for full-time and part-time students).

Increase the number of students involved in the Erasmus programme.

Develop rules/recommendations for standardisation, development and design of training courses in the Moodle programme.

Develop rules/guidelines for regulating combined groups, defining the maximum number of students in a stream.

Update the contracts regarding study continuation options in case of programme closure.

Study plan should include the C (free elective) part.

### **Long-term recommendations**

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

Work with private companies or governmental organisations to offer financial aid packages, sponsorships, or tuition reimbursement for students who agree to work with the company post-graduation.

Create certificate programmes that offer specialised training in areas related to the main degree. This can attract those who are not ready to commit to a full degree programme but are interested in upskilling.

## **II - "Logistics and Supply Chain Security" ASSESSMENT**

### **II - "Logistics and Supply Chain Security" ASSESSMENT**

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

##### **Analysis**

2.1.1. The contents of Second-cycle professional higher education (master) study programme "Logistics and Supply Chain Security" 47840 (MASP Logistics and Supply Chain Security) is within the scope of study field "Transport services" described in Regulation No 322 "Regulations on the Classification of Latvian Education" by the Latvian Cabinet of Ministers. The intention of the programme is to increase students' professional competence for employment in the fields of logistics, supply chain management, and its security. It also aims to equip students with the research skills necessary to prepare specialists who can guarantee high quality throughout all supply chain processes as well as an understanding of the supply chain's effects on the environment and responsible management. (SAR p. 125). The curriculum is intended to align with the competencies outlined in the professional standard "Supply Chain Manager" framework. Therefore by contents, aims and outcomes programme is compliant with the study field.

2.1.2. RTU applies for 6 full-time study modes. 3 in Latvian, 3 in English. Accordingly - 1 year programme in both languages. 1 year 5 month programme in both languages and 2 year programme in both languages. It is important to note, that as of now, only English language mode is being implemented at RTU.

Students holding a professional bachelor's degree in business logistics with a qualification as a logistics manager can be admitted to the programme, which consists of 60 ECTS and has a duration of 1 year.

Students holding professional bachelor degree and/or first-cycle professional higher education in commercial sciences and administration, economics, law, engineering and technology, manufacturing and processing or construction thematic areas or comparable education and at least one year of work experience in the field of logistics, can apply for 90 ECTS 1 year 5 month

programme.

While the rest of students, who hold academic bachelor degrees in natural sciences, engineering, environmental sciences, economics, management science and administration or comparable education can be admitted to 120 ECTS 2 year programme.

All English language programmes have additional requirements for English language proficiency equivalent to be at least B2 level.

The aim of the study programme is to increase students' professional competence for employment in the fields of logistics, supply chain management, and its security. It also aims to equip students with the research skills necessary to prepare specialists who can guarantee high quality throughout all supply chain processes as well as an understanding of the supply chain's effects on the environment and responsible management. At completion of studies graduates receive a Professional master degree in supply chain management and qualification of Supply chain manager (5.PKL, 7.LKI and approved on 10.02.2021).

According to the classification of education (Cabinet of Ministers of the Republic of Latvia Regulations No.322, 2017) the code of the study programme is 47840, where the last three numbers 840 corresponds to "Transport Services", while 47 corresponds to second-level professional higher education

However, regarding title it must be highlighted that RTU features academic masters programme "Logistics and Supply Chain Management" (see: <https://www.rtu.lv/en/studies/all-study-programmes/open/logistics-and-supply-chain-management?id=141>) which is part of the study field of Information Technology, Computer Engineering, Electronics, Telecommunications, Computer Control and Computer Science. In contrast to the study programme in question titled "Logistics and Supply Chain Security". Therefore some adjustments to programme titling is needed, as to avoid confusion and differentiate programmes more. Same considerations regarding title can be corroborated by the Joint opinion regarding Riga Technical University, Study field Information Technology, Computer Hardware, Electronics, Telecommunications, Computer Management, and Computer Science. (<https://eplatforma.aika.lv/index.php?r=site%2Fprogram%2Fview&id=863> P. 207)

Code, degree and professional qualification of the study programme, aims, objectives, learning outcomes and admission requirements are interrelated. Study language and implementation modes are reasonable.

2.1.3. Since the licensing of the study programme in 14.12.2022 (<https://eplatforma.aika.lv/index.php?r=site%2Fprogram%2Fview&id=2098>), following updates have been made as indicated by RTU (SAR p. 124): the number of mandatory courses (Part A) has been reduced: in Variant 1 from 10 CP / 15 CP to 6 CP / 9 CP, and in Variants 2 and 3 from 16 CP / 24 CP to 12 CP / 18 CP. Conversely, the number of compulsory elective courses (Part B) and field-specific courses (Part B1) has been increased: in Variant 1 from 4 CP to 6 CP / 9 CP, and in Variants 2 and 3 from 18 CP / 27 CP to 20 CP / 30 CP. Additionally, 2 CP of free elective courses (Part C) have been added.

Following the initial semester review, several adjustments were made to enhance the programme. The course "Global Markets and Supply Chains" was removed from the mandatory section (Part A) and added as a 2 CP / 3 CP elective. Similarly, "Strategic Management in Supply Chains" (4 CP / 6 CP) was replaced by "Supply Chain Management Strategy" (2 CP / 3 CP) in the field-specific courses (Part B1).

All changes made to the programme are justified and would be supported.

2.1.4. As the MASP Logistics and Supply Chain Security is being implemented at RTU from February 2023, there is no significant track record regarding dynamics of student numbers. As of now there are 53 students. Out of them, 7 are local students, 2 EU students, 44 non-EU students. Programme is

being implemented currently only in English. There are no state funded places - all students are self-funded tuition fee paying. According to RTU (SAR p. 129) graduates of the study programme are expected to find employment in logistics companies, international and domestic transport, wholesale, retail, production, service industries, and government institutions involved in transport and logistics. Latvia's sustainable development strategy aims to enhance transport and storage sectors by improving infrastructure, including national airports and motorways, and advancing projects like Rail Baltica for faster rail transport. Policy 5 of the Transport Development Guidelines 2021-2027 seeks to increase the number of graduates in transport and logistics by about 1,000 annually, with a focus on obtaining professional qualifications. The Ministry of Economics forecasts a 1.5% annual growth in the transport sector until 2027 and 2.5% from 2028 to 2040, leading to increased demand for skilled logistics professionals. By 2027, a shortage of 1,500 higher-educated logistics specialists is anticipated due to an ageing workforce and economic changes. The demand for higher-skilled and vocationally educated workers is expected to rise, while the need for those with only secondary education will decline. Employers emphasise the need for skills in analysing industry trends, identifying new markets, attracting customers, and developing new products and services.

During the assessment visit, stakeholders expressed concerns about the employability of future graduates. However, additional data is needed to make a definitive evaluation. It is recommended that the institution closely monitor student employment outcomes.

2.1.5. N/A

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

MASP Logistics and Supply Chain Security at RTU is aligned with the "Transport Services" study field; only the English version of the programme is currently active. It admits students with varying backgrounds, from logistics managers to those with degrees in related fields. Since its launch in February 2023, the programme has enrolled 53 students, primarily international. Updates have been made to the curriculum to better align with industry demands. Future graduates are expected to find employment in logistics and transport sectors, however more data is needed as the programme is being implemented over the time. Study title in the broader context of programmes offered at RTU can be considered as not descriptive enough.

Strengths:

- 1) Various study modes cater to students with diverse educational backgrounds.
- 2) Study programme has strong demand from students of non-EU states.

Weaknesses:

None

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

### **Analysis**

2.2.1. The MASP Logistics and Supply Chain Security offers three different implementation variants (SAR, section 3.2.1.), each tailored to students' prior educational backgrounds. Despite differences in the number of credit points required for each variant, the core objectives and expected outcomes remain consistent across all versions. The MASP Logistics and Supply Chain Security is carefully

aligned with the professional standard for a supply chain manager, ensuring that the curriculum, which includes study courses (f.e. Global Markets and Supply Chains, Logistics Systems Management, Customs and Security Processes in Supply Chains, Supply Chain Strategy Management, e.o.), internships (Annex 9. Curriculum of the study programme (4).pdf - 18 CP), and a final examination (including a master's thesis, 30 CP), ensures the achievement of learning outcomes.

The three variants of the programme differ primarily in their scope. The first variant requires 60 CP, the second 90 CP, and the third 120 CP. These variations allow for flexibility in accommodating students with different levels of prior education. However, all students, regardless of the variant they choose, engage in rigorous academic work, including the development and defence of study projects that involve research and analysis of real-world transport and logistics enterprises. This ensures that graduates are equipped with both theoretical knowledge and practical skills essential for their careers.

The MASP Logistics and Supply Chain Security is dynamic, with regular updates to course content based on industry trends and student feedback. This adaptability is further enhanced by the involvement of guest lecturers who are specialists in the field, providing students with up-to-date insights and knowledge. The MASP Logistics and Supply Chain Security design ensures that it remains relevant and aligned with both state educational standards (Annex 6. Compliance with the State Education Standard.pdf) and the evolving demands of the logistics industry. Analysing compliance with standards (professional and state) in various versions of the programme implementation (60, 90, 120 credit points), no weaknesses were identified.

Study programme features a mandatory Latvian language course for foreign students (Annex 9. Curriculum of the study programme (4).pdf), However there is an issue regarding CP amount - Latvian language course description features course in 1 CP/1,5 ECTS amount, while study plan features course in 2 ECTS amount, however the study plan in Latvian must also include information about Latvian language courses for international students (essentially, the plans cannot differ), in accordance with subsection 7 of article 56 of the Law on Higher Education Institutions Environment and Civil protection course (ICA301Civil Defence) are included in the programme if the student has not taken it before.

The state education standard mandates that programmes must include a module or courses dedicated to the development of business professional competences. According to RTU, the 60 and 90 ECTS programme versions ("Annex 7: Compliance with the Professional Standard (3).pdf,") do not include such a module or courses, as students are expected to have acquired these competences in prior education. However, the 120 ECTS programme version, which has most flexible admission criteria, does not clearly feature a module or courses that can be identified as specifically focused on the development of business professional competences.

In conclusion, the study programme is comprehensive and flexible, offering multiple pathways to achieve the same high standards of professional competence. It effectively integrates academic rigour with practical application, preparing students to excel in the logistics and supply chain management field.

2.2.2. The study programme at RTU is distinguished by a strong integration of academic research and industry practices, facilitated by a highly qualified academic staff (SAR, section 3.2.2.). Professors, lecturers, and guest speakers from partner universities (f.e.: University 1, Lyon, France; University of Latvia, Latvia; State Agency for Social Integration, Latvia; Transport and Telecommunications Institute, Latvia; e.o.) and the industry (f.e.: World Energy Council, England; SIA "TNT Latvia" (Aviation security and dangerous goods); SIA "GEFCO" (Corporate Energy Sector); Luminor Group; Bank of Latvia, Riga, Latvia; Containerships - CMA CGM GmbH, Latvija; European Quality Assurance Register, Belgium; e.o.) ensure that the programme remains relevant to current trends in transport and logistics. This blend of theoretical knowledge and practical experience,

coupled with continuous curriculum updates and strong industry connections, prepares students for the dynamic demands of the sector. Additionally, the programme's focus on research, including the mandatory publication of a scientific article in English as part of the master's thesis, ensures that graduates are well-equipped with advanced research skills, enhancing their competitiveness in the job market.

However, a notable challenge for the programme is the high demand for continuous adaptation to rapidly evolving industry standards and scientific advancements. While the programme successfully updates its content annually, the pace of change in the logistics and transport sectors may require even more frequent revisions to maintain cutting-edge relevance. Furthermore, the complexity and rigorous nature of aligning the programme with both academic and professional standards could potentially limit its flexibility in addressing emerging topics that are not yet fully recognized by existing regulations or professional standards.

2.2.3. The study programme under review demonstrates several strengths in terms of its didactic approach, student involvement, and teaching methods (SAR, section 3.2.3.). The MASP Logistics and Supply Chain Security is designed to employ advanced and modern teaching methods, emphasising the development of both theoretical knowledge and practical skills in logistics and supply chain management. The use of interactive learning methods, such as group work, case studies, and study tours to leading industry companies, enhances the practical understanding of students and connects academic content with real-world applications. The integration of RTU's interactive e-learning platform based on Moodle further supports students' learning by providing them with access to up-to-date course materials, communication tools, and self-assessment resources.

Moreover, the MASP Logistics and Supply Chain Security actively engages students in the development and evaluation of the study process through regular feedback mechanisms, such as surveys and meetings with programme directors. This student-centred approach allows for continuous improvement and ensures that the programme remains relevant and aligned with industry needs. Additionally, the programme supports student mobility and involvement in international projects, contributing to a broader educational experience and the adoption of best practices from foreign academic institutions.

However, the MASP Logistics and Supply Chain Security also faces significant challenges. One key issue is the insufficient development of practical skills among students, particularly in finding internships and employment in the logistics field. This gap suggests that the current efforts of the administration and academic staff may not be enough to adequately prepare students for the labour market. Furthermore, the use of the Moodle platform, while beneficial, lacks standardisation across courses, leading to inconsistencies in the quality and structure of course materials. This inconsistency can negatively impact the learning outcomes, especially for part-time students who rely heavily on these resources.

Another area of concern is the management of large student cohorts in single classrooms, which can hinder the effectiveness of teaching and learning. The administration acknowledges this issue and has indicated plans to address it by dividing students into smaller groups. Lastly, the programme's focus on extracurricular activities and scientific research is commendable, but there seems to be a lack of active student participation in international mobility programmes like Erasmus, which could further enrich their academic and professional experience.

In conclusion, while the MASP Logistics and Supply Chain Security at RTU is strong in its theoretical and interactive approach to teaching, there are areas that require improvement to better align with the needs of students and the labour market. Addressing the gaps in practical training, standardising the use of digital learning platforms, and managing class sizes more effectively will be crucial steps in enhancing the overall quality and effectiveness of the programme.

2.2.4. The internship component of MASP Logistics and Supply Chain Security is well-structured to

bridge theoretical knowledge with practical experience. The programme includes different variants of internships, with varying credit points based on the chosen implementation path. Internships are designed to develop students' abilities to work independently, make practical decisions, and enhance communication skills. These internships are closely aligned with professional standards, ensuring that students apply their theoretical knowledge in real-world contexts. The internship of the study programme is planned - in the amount of 9 CP in 1st and 2nd implementation variant and in amount of 39 CP in 3rd implementation variant (SAR, section 3.2.4.). Provision of practice opportunities in a foreign language is not particularly emphasised.

RTU facilitates internships through agreements with employers, ensuring that the goals and objectives of the internships are met, and students receive feedback from industry professionals (SAR, section 3.2.4.). Additionally, RTU supports students in securing internships through an internship coordinator, the Career Support and Services Department, and events like Career Day. The RTU Development Fund further promotes practical skills through various competitions.

While the programme offers substantial support and resources for internships, there is limited emphasis on providing internship opportunities in foreign languages.

During the assessment visit with graduate representatives (22.08.2024), it was revealed that graduates find it difficult to find an internship in the field of logistics and it is especially difficult to find a job, since students / graduates do not have enough practical experience in the field of logistics. This means that the efforts of the administration and academic staff are not enough for graduates to find an internship and find employment in the labour market.

#### 2.2.5. N/A

2.2.6. Master's thesis topics in MASP Logistics and Supply Chain Security are closely aligned with the qualifications students seek to obtain, focusing on improving various supply chain processes with support from economic calculations (SAR, section 3.2.6.). The relevance and analytical depth of these topics are emphasised in each thesis. Importantly, only industry professionals review the theses, ensuring practical relevance and alignment with current industry standards.

The thesis defence commissions consist predominantly of experienced industry experts, with 4-5 members from the industry and 1-2 academic staff involved in the programme. This structure ensures that the study programme remains closely connected to the labour market, incorporating real-world perspectives and needs. Leading professionals from companies such as RX-Logistics, Procter & Gamble Latvia, and Itella Logistics are among those who have participated in these commissions.

Given that the programme began in February 2023, there is not yet enough data to assess the relevance and quality of students' final theses. However, the strong industry involvement in the thesis review process suggests that future assessments will reflect the programme's practical and market-oriented approach.

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

MASP Logistics and Supply Chain Security offers a flexible and comprehensive educational experience tailored to students' varying educational backgrounds. The programme's three implementation variants allow students to engage with the curriculum at different levels, depending on their prior knowledge, while maintaining consistent core objectives aligned with industry standards.

The programme emphasises a strong connection between theoretical knowledge and practical application, which is reinforced through internships and master's theses. Internships are structured to develop key professional skills, such as independent decision-making and effective

communication, with direct feedback from industry professionals. However, despite substantial support, including internship coordinators and career services, graduates report challenges in securing internships and employment due to insufficient practical experience in logistics.

Master's theses are closely aligned with the qualifications being pursued, focusing on relevant industry issues and supported by economic analysis. The thesis defence process is rigorously overseen by industry professionals, ensuring that the program remains connected to the labour market and its evolving needs.

The programme's strengths lie in its adaptability and relevance, with regular updates to course content and the inclusion of guest lecturers to keep pace with industry trends. However, challenges such as the need for more frequent curriculum updates, inconsistent use of digital learning platforms like Moodle, and large class sizes could affect the programme's effectiveness. Additionally, there is limited focus on internships in foreign languages and on encouraging student participation in international mobility programs.

In conclusion, while the programme successfully integrates academic rigour with practical industry needs, improvements in practical training, digital learning standardisation, and class management are necessary to enhance the overall student experience and better prepare graduates for the labour market.

#### Strengths:

1) The study programme's adaptability to students' diverse educational backgrounds through its three implementation variants is a strong point. This flexibility allows students to choose a pathway that best suits their prior education while ensuring they all achieve the same high standards of professional competence.

2) One of the key strengths of the study programme is its strong integration of academic research with industry practices. The programme leverages the expertise of highly qualified academic staff, including professors with doctoral degrees and industry professionals. This ensures that the curriculum remains relevant to current industry trends, providing students with up-to-date knowledge and practical skills. The programme's alignment with cutting-edge research and the inclusion of guest lecturers and industry representatives further enhance the learning experience, making graduates highly competitive in the job market.

#### Weaknesses:

1) There is no organisation of educational excursions for students to large enterprises in the field of logistics.

2) Despite the fact that both the administration and the teaching staff inform students about the Erasmus programme and the possibility of participating in projects, students and graduates do not participate.

3) The university administration does not pay enough attention to the standardisation of courses in the Moodle programme.

4) The successful acquisition of learning outcomes is hampered by the administration's attempt to organise separate study courses simultaneously for an excessively large number of students in one classroom (in some cases, 120-150 students).

5) There is limited emphasis on providing internship opportunities in foreign languages.

6) It is difficult for graduates to find an internship in the field of logistics and it is especially difficult to find a job.

7) There is no clear module or courses for development of business professional competences as required by state education standard.

### **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:** Partially compliant

While the foundational premise of a master's degree is to build upon the achievements and findings of a specific field, the current programme's weaknesses—such as lack of practical exposure, limited international engagement, and challenges in course management—suggest that it may not fully achieve this goal. Addressing these issues is crucial for ensuring that the programme effectively prepares students for professional success in their respective fields.

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

#### Analysis

2.3.1. Study provision is strongly supported by the RTU Scientific Library, which offers a wide range of resources essential for logistics and supply chain management. The library's vast collection, which includes 1.3 million printed documents and extensive electronic resources, ensures that students have access to relevant and up-to-date information (per SAR p. 141). The library also provides specialised resources through its central and branch locations, ensuring that materials are accessible to students regardless of their location. The presence of group study rooms, individual study cabins, and access to databases like ProQuest Ebook Central and ScienceDirect underscores the library's role in supporting both coursework and research activities. This infrastructure effectively meets the educational needs of the program, ensuring that students can engage deeply with their studies. Databases are critical for conducting advanced research in logistics and supply chain management. These resources provide access to peer-reviewed journals, conference papers, and e-books, which are essential for developing a robust scientific foundation in the field. The text also mentions the integration of research activities into the library's services, with provisions for accessing specialised resources via interlibrary loans and international subscriptions. This indicates that the program is well-supported by scientific resources, although more specific examples of research projects or scientific activities could further strengthen this point.

The informative provision, particularly through the RTU Scientific Library, is a standout feature, providing comprehensive resources and services that support both teaching and research. Material and technical provisions are modern and inclusive, ensuring that all students can benefit from the resources available. Finally, the financial provision is strategically managed, ensuring that the programme remains well-resourced without financial waste.

#### 2.3.2. N/A

2.3.3. MASP Logistics and Supply Chain Security funding completely relies on student study fees. The cost per student remains the same at EUR 2,881.13 across both academic years, despite the drop in total funding, which went from programme funding of EUR 9,400 to relying on student fees, which is EUR 2,684.5 for study year total (per SAR Table 3.1 p 140). This implies that the programme costs are fixed per student, regardless of the total number of students or total funding. Given fundings cannot surpass current costs per student as it opens up financial gap. The current financial model poses a risk if the programme does not attract sufficient students to cover its fixed costs. This could lead to a broader financial impact on the FEEM if the issue is not addressed. Therefore, increasing student enrollment or securing additional funding sources is critical. Since the study programme was launched in February 2023, it is still in its early stages and can be seen as an "investment" rather than a fully operational programme compared to other FEEM Master's programmes. As a result, current student enrollment numbers might be lower, but there is potential for growth as the programme matures. RTU mentions that state funding would majorly improve the

popularity of study programme which could lead to significant increase of students.

Facilities which are in use of study programme are:

- Auditoriums;
- PCs Laboratories;
- Methodological office;
- RTU Scientific Library.

Additionally, other RTU and FEEM facilities are available if needed, which suggests that the infrastructure supporting the programme is adequate.

To ensure the programme's success, it is essential to focus on increasing student enrollment and exploring additional funding opportunities, particularly from state sources. By addressing these financial challenges, the programme can transition from an initial investment phase to a sustainable and thriving part of RTU's offerings, securing its long-term viability and impact

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

The MASP Logistics and Supply Chain Security at RTU demonstrates strong provisions in terms of library resources, material and technical support, and strategic financial management. However, the programme faces challenges related to financial sustainability due to its reliance on student fees and the early-stage nature of the programme. To ensure long-term success and high-quality outcomes, it is crucial to focus on increasing student enrollment, securing additional funding, and enhancing the visibility of scientific research activities. By addressing these weaknesses, the programme can transition from an investment phase to a sustainable and impactful offering within RTU.

Strengths:

- 1) The programme is supported by access to peer-reviewed journals, conference papers, and e-books through various databases, facilitating advanced research in logistics and supply chain management. The inclusion of international subscriptions and interlibrary loans further strengthens the scientific provision.
- 2) The library's support for research activities, including access to interlibrary loans and international subscriptions, reflects a strategic alignment with the academic and research goals of the programme. This integration enhances students' ability to engage in high-level research, critical for advancing knowledge in the field.

Weaknesses:

- 1) As a new programme launched in February 2023, it is still in its early stages, which means student enrollment may be lower than expected. This presents a challenge in reaching financial sustainability and requires strategic efforts to increase enrollment and secure additional funding sources.
- 2) The programme's funding is entirely dependent on student fees, which poses a risk if enrollment numbers are insufficient to cover fixed costs. This reliance makes the programme vulnerable to financial instability, particularly in its early stages.

### **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:** Fully compliant

The study programme complies with the prescribed requirements. The programme is supported by various resources of information, which helps students to exceed in studies, although the study programme since it is relatively new is struggling with enrollment numbers, which leads to impact on funding.

## 2.4. Teaching Staff

### Analysis

2.4.1. In the implementation of MASP Logistics and Supply Chain Security both selected academic teachers and guest teachers of the RTU, as well as highly qualified leading specialists in the field participate. In chapter 3.4.1. of the SAR it is stated that 12 selected teachers are involved in the implementation of the curriculum, of which 4 (33%) are appointed as professors, 6 (50%) as lecturers and 2 (17%) as assistants. From the data in Appendix 3.4.1. The list of academic staff shows that 1 research assistant, 1 lecturer and 2 guest lecturers from practice were also recruited to the curriculum team. From the quantitative data presented, it is clear that the curriculum is provided with a sufficient number of teachers, while at the same time, from a qualitative point of view, the majority of them are qualified persons - professors and associate professors.

From the attached curriculum vitae of the teaching staff (Annex: "Annex 10. Academic staff CV.zip") it is clear that all of them have extensive teaching, research and practical experience, which is a good testimony of their qualification and ability to achieve the goals and outcomes of the training in the classroom programme. 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 of logistics. The teaching staff of the curriculum regularly participate in professional development events organised by the RTU, the Centre for Academic Excellence, the Student Parliament, the IT Department and the Department of Studies.

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

Teachers participating in the programme take advantage of international cooperation and mobility programmes, detailed data on which are presented in Annex 18. Statistical data about academic staff mobility. They also participate in the implementation of projects (national and international) related to the field of logistics (Annex 13. Summary of quantitative data of research and related activities on chapter 2.4.4 of the SAR). Examples include the completed project "Conducting a study on the implementation of investment prerequisites for the implementation of a comprehensive transport planning system" and the "UniLog" project, which developed training courses in logistics. The following new projects in the field of logistics have also been submitted for approval Erasmus+ project "Train4RailBaltica" and the Connecting Europe Facility project "Cross-border Operational Digital Platforms for Energy and Transport". These activities are a good prerequisite for the regular updating of the programme's content and the use of training methods according to the latest trends in the world, which helps to achieve better results in logistics training.

A good example of confirming the qualification of teaching staff is the bilateral exchange of teachers with the Lithuanian Maritime Academy. This initiative enables internationalisation between the universities of both countries, exchange of experience and transfer of specific knowledge to students in the curriculum.

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 review diploma theses, participate in the work of the national examination commission, provide internships for students, participate in joint research with academic staff from RTU, publish scientific articles, participate in conferences and international projects.

2.4.2. To ensure the learning process and improve the quality of teaching, the programme often has to change the teaching staff, both due to the retirement of experienced teachers and the appointment of new highly qualified specialists, including those with practical experience. It should be noted that the existing teaching staff of the MASP Logistics and Supply Chain Security regularly develop their professional skills by participating in mobilities, conferences, projects, seminars, courses, both nationally and internationally, which provides students with continuous improvement of the training courses, updating the content and applying new training methods in accordance with the principles and requirements of education. This also provides an opportunity for mutual exchange and transfer of knowledge and experience. During the assessment visit meeting with the teachers at the RTU, it was noted that the young teachers are supported by the qualified teachers and the management, which ensures continuity between them and good working conditions.

Table 4.1 in Chapter 3.4.2 of the SAR shows the changes in academic staff over the period 2021-2023. The data show that the number of professors, lecturers and assistants remains constant. The most dynamic change is in the number of lecturers and guest lecturers with a high level of expertise, which has a positive effect on the quality of education.

The age structure of the academic staff is good, with the majority of teachers being young, which allows for the sustainability and development of the programme in this staff. The SAR lacks information on a policy for the next generation of teachers by attracting the best students to a future academic and scientific career, during the visit to the RTU it was confirmed by teachers and students that work is being done on this issue.

#### 2.4.3. N/A

2.4.4. Annex 3.4.2. List of academic staff publications for the reporting period to Chapter 1.4 Scientific research and artistic creation from the SAR of the study field "Transport Services" shows that the teaching staff of the MASP Logistics and Supply Chain Security were active in scientific research during the reporting period. All lecturers reported publication activity, some of them particularly productive (more than 10 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 curriculum. The publications provide original research results and contribute to the theoretical understanding of the specificities of logistics as a scientific research field.

Some of the publications are co-authored by more than one member of the department, and many of them are indexed in internationally recognised databases such as Scopus and Web of Science. After checking the relevant databases, the achievements in publication activity in refereed editions of Professor I.L. (a total of 42 publications in Scopus / WoS), Associate Professor J.I. (a total of 20 publications in Scopus / WoS) and Assistant Professor A.A. (a total of 13 publications in Scopus / WoS) deserve attention. The credit for this result for the teaching staff of the curriculum is their participation in international projects and research, the results of which have a high impact factor and are well received for publication in refereed journals. However, some professors have either few indexed publications or none at all, which should also be considered by the curriculum management and the RTU. However, the total number of publications can be considered sufficient to support the quality of the curriculum.

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

2.4.5. The curriculum includes a variety of study blocks covering both general and professional competences. An audit of the programme's courses takes place every year, as well as various seminars in which the teachers involved in the programme present the course topics and teaching methods and discuss improvements that would ensure a higher quality of the programme's content

and relevance to current events in the sector. The teachers involved in the programme work together within their courses to ensure that the courses are interlinked.

The courses in the curriculum are organised in such a way that the basic knowledge acquired at the beginning is gradually supplemented with technological knowledge, so that by the end of their studies the students are ready for practice. The organisation of the courses involves a certain number of teachers (at least two), which leads to mutual cooperation and interchangeability, as well as better management of the learning process and initiatives.

In addition to teaching, teachers also collaborate in other ways, such as participating in joint projects at national and international level, in scientific activity and research, etc. Some examples of cooperation between teachers in these areas are given in the SAR.

A number of mechanisms have been put in place at the RTU to promote the cooperation of teaching staff in the implementation of the curriculum, including during departmental meetings or through participation in refresher courses organised by the RTU. All doctoral students participate in the provision of the learning process during their studies by giving lectures, conducting practical classes or laboratory exercises.

In chapter 3.4.5. the SAR indicates that the ratio of students to selected academic staff is 1:7 (five selected teachers and two specialists in the field of one student).

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

A sufficient number of teachers participate in the implementation of the curriculum, well distributed in terms of age, position and educational level, which allows us to state that all the conditions for achieving the objectives and learning outcomes of the curriculum are in place. 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 logistics. The relationship between teachers can be defined 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 good, with some publications indexed in internationally recognised 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 teachers and guest lecturers from practice in the learning process is successfully combined.
- 2) Teachers have extensive academic, research and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the curriculum.
- 3) Teachers receive regular professional development and junior teachers are supported by senior teachers and management.
- 4) Regular development of new courses and updating of existing courses with new teaching methods and economic trends, maintaining the interrelationship between them.

Weaknesses:

- 1) Some of the teachers do not have publications indexed in Scopus or 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, despite weakness, 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 curriculum 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:** Partially compliant

Annex ("Annex 6. Compliance with the State Education Standard.pdf") confirms that the study programme complies with Cabinet Regulation No. 305 "Noteikumi par valsts profesionālās augstākās izglītības standartu". Environment and Civil protection course (ICA301 Civil Defence) are included in the programme if the student has not taken it before. Study courses or study modules for the development of professional competences in entrepreneurship are not well defined in 120 ECTS variant.

- 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 Standard (3).pdf") confirms that the programme (and its 60, 90 and 120 ECTS variants) is compliant with the professional standard of "Supply Chain Manager" (5.PKL, 7.LKI and approved on 10.02.2021).

- 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

Attached study course descriptions ("Annex 10. Course module descriptions.zip") are prepared in Latvian and English. Descriptions comply with regulations set forth in 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 ("Annex 3.3.1. Diploma sample and Annex 3.1.2. Diploma supplement sample.zip") 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 apliecinošus 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 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

Attached resumes of staff ("Academic\_staff\_CV\_EN.zip") and confirmation ("Annex 11. 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

Attached resumes of staff ("Annex 10. Academic staff CV.zip") and confirmation ("Annex 12. Confirmation - knowledge of the foreign language.edoc") verifies 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 attached study agreement ("Annex 7. Sample of study agreement.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

Attached contracts ("Annex 4. Agreements of continuing education (in Latvian).zip" and 5.pielikums. Apliecinājumi par izglītības turpināšanu.zip) confirms that the institution provides the possibility to continue studies within the following option - Transport and Telecommunication Institute (TSI) academic masters programme "Intelligent transport and smart logistics" (45840),

however TSI webpage does not feature programme with such title. It could be assumed that the programme's current title is "Transport and logistics". Nevertheless, clarification is needed.

- 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 ("On compensation for losses.pdf") 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

According to Section 56. Point 7 of the Law on Higher Education Institutions, the study programme includes a mandatory Latvian language course for foreign students. However, there is an inconsistency regarding the credit point allocation. The Latvian language course description lists it as 1 CP/1.5 ECTS, while the study plan lists it as 2 ECTS.

### **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:** Partially compliant

Study programme in general complies with regulatory enactments, however clarifications needed regarding options to continue studies in case of study programme closure. Mandatory study courses or study modules for the development of professional competences in entrepreneurship are not well defined in 120 ECTS variants and the amount of CP/ECTS for the Latvian language course should be specified in all relevant resources.

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

MASP Logistics and Supply Chain Security at RTU offers a flexible and comprehensive educational experience that caters to students with varying educational backgrounds. The programme features three implementation variants, allowing students to engage with the curriculum at different levels while maintaining core objectives that align with industry standards. The program emphasises a strong link between theoretical knowledge and practical application, which is reinforced through internships and master's theses. Internships are designed to develop key professional skills, such as decision-making and communication, with direct feedback from industry professionals. However, despite the support provided by internship coordinators and career services, graduates have reported difficulties in securing internships and jobs due to a perceived lack of practical experience. The master's theses are closely tied to industry-relevant topics, supported by economic analysis,

and rigorously defended before industry professionals, ensuring the programme's continued alignment with labour market needs. The programme is regularly updated to reflect industry trends and includes guest lecturers to provide current perspectives. However, challenges remain, such as the need for more frequent curriculum updates, inconsistent use of digital platforms like Moodle, and large class sizes. Additionally, the programme has limited focus on internships in foreign languages and international mobility opportunities for students.

The programme benefits from strong library resources, material support, and strategic financial management, though it faces financial sustainability challenges due to its reliance on student fees and its early stage of development. To ensure long-term success, efforts should focus on increasing enrollment, securing additional funding, and enhancing the visibility of research activities. The teaching staff is well-qualified and diverse, contributing positively to the programme, with good publication activity and efforts to engage students in research. The programme complies with state education standard.

Although some deficiencies were identified, these are primarily intended to highlight areas for improvement and do not have a significant impact on the overall programme assessment.

#### Strengths:

- 1) The programme is supported by access to peer-reviewed journals, conference papers, and e-books through various databases, facilitating advanced research in logistics and supply chain management. The inclusion of international subscriptions and interlibrary loans further strengthens the scientific provision.
- 2) The library's support for research activities, including access to interlibrary loans and international subscriptions, reflects a strategic alignment with the academic and research goals of the program. This integration enhances students' ability to engage in high-level research, critical for advancing knowledge in the field.
- 3) The participation of academic teachers and guest lecturers from practice in the learning process is successfully combined.
- 4) Teachers have extensive academic, research and practical experience which demonstrates their qualifications and ability to achieve the objectives and learning outcomes of the curriculum.
- 5) Teachers receive regular professional development and junior teachers are supported by senior teachers and management.
- 6) Regular development of new courses and updating of existing courses with new teaching methods and economic trends, maintaining the interrelationship between them.
- 7) Various study modes cater to students with diverse educational backgrounds.
- 8) Study programme has strong demand from students of non-EU states.

#### Weaknesses:

- 1) There is no organisation of educational excursions for students to large enterprises in the field of logistics.
- 2) Despite the fact that both the administration and the teaching staff inform students about the Erasmus programme and the possibility of participating in projects, students and graduates do not participate.
- 3) The university administration does not pay enough attention to the standardisation of courses in the Moodle programme.
- 4) The successful acquisition of learning outcomes is hampered by the administration's attempt to organise separate study courses simultaneously for an excessively large number of students in one classroom (in some cases, 120-150 students).
- 5) As a new programme launched in February 2023, it is still in its early stages, which means student enrollment may be lower than expected. This presents a challenge in reaching financial sustainability and requires strategic efforts to increase enrollment and secure additional funding

sources.

6) Some of the teachers do not have publications indexed in Scopus or Web of Science.

## Evaluation of the study programme "Logistics and Supply Chain Security"

Evaluation of the study programme:

Good

## 2.6. Recommendations for the Study Programme "Logistics and Supply Chain Security"

### Short-term recommendations

Develop an annual plan for organising educational excursions to large enterprises in the logistics sector (separately for full-time and part-time students).

Increase the number of students involved in the Erasmus programme.

Develop rules/recommendations for standardisation, development and design of training courses in the Moodle programme.

Develop rules/guidelines for regulating combined groups, defining the maximum number of students in a stream.

Increase the number of internship options in foreign languages.

Update the contracts regarding study continuation options in case of programme closure.

Study plan ECTS amount should match provided course description amounts (e.g. Latvian for Foreign Students).

Study programme should have well defined study module or study courses on entrepreneurship as mandated by Clause 33 of State Education Standard (No. 305).

### Long-term recommendations

It is necessary to increase the number of scientific studies for the academic staff, indexed in the world databases Scopus and Web of Science, for which more resources should be allocated from RTU.

Work with private companies or governmental organisations to offer financial aid packages, sponsorships, or tuition reimbursement for students who agree to work with the company post-graduation.

Create certificate programmes that offer specialised training in areas related to the main degree. This can attract those who are not ready to commit to a full degree programme but are interested in upskilling.

To achieve financial sustainability, consider focusing on initiatives to boost student enrollment and diversify funding sources.

## 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>	Fully compliant		<p>A continuous improvement, development as well as an efficient performance of the study field is safeguarded through the existing management structures together with an effective quality assurance system (SAR, p. 2.1-2.2) as well as in accordance with the Joint report (1.1 - 1.2)</p>
<p>R2 - Compliance of scientific research and artistic creation with the level of development of scientific research and artistic creation (if applicable)</p>	Fully compliant		<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>		Partially compliant	<p>The cooperation on the national level is excellent and fully compliant whereas the international cooperation level is too low when it comes to outgoing students, incoming foreign teachers and EU project level. The reasons that are appearing represent standard reasons and the case of other universities show that they can be solved easily.</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.		Partially compliant	Some of the shortcomings have been eliminated already but some that are eliminable in the short-term range have not been tackled since previous time. The long-term deficits are more complicated to eliminate but more initiative esp. In the case of financing the programme is recommendable.

### 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	Logistics (41840)	Not relevant	Fully compliant	Fully compliant	Partially compliant	Average
2	Logistics and Supply Chain Security (47840)	Partially compliant	Fully compliant	Fully compliant	Partially compliant	Good

### The Dissenting Opinions of the Experts

There are no dissenting opinions of the experts.