



***KAUNO TECHNIKOS KOLEGIJOS
VEIKLOS VERTINIMO IŠVADOS***

***INSTITUTIONAL REVIEW REPORT OF
KAUNAS TECHNICAL COLLEGE***

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I hereby certify that this is the final text of the institutional review report of Kaunas Technical College.



Iztok Palčič

I. EXECUTIVE SUMMARY

1. The purpose of the external review is to determine the quality of the performance of a higher education institution based on the findings of the external review, to create prerequisites for improvement of the performance of a higher education institution, to promote a culture of quality, and to inform founders, academic community and the society about the quality of higher education institutions.
2. This review report is based on the evidence given in the self-evaluation report, additional evidence requested by the panel, information provided by the Centre for Quality Assessment in Higher Education (hereinafter – Centre, SKVC) and a site visit, where meetings with a wide range of audiences were held.
3. The Panel was composed of the reviewers, following the Experts Selection Procedure approved by the Director of Centre for Quality Assessment in Higher Education on 31 December 2019 [Order No. V-149](#) and included the following members:
 - Prof. Dr Iztok Palčič (Slovenia, Chair): Vice-Dean for Studies and Vice-Dean for Infrastructure and Cooperation with Industry, Faculty of Mechanical Engineering, University of Maribor; Evaluation expert within Slovenian Quality Assurance Agency for Higher Education, Assessor of higher education system within Slovenian Quality Assurance Agency for Higher Education, Slovenia.
 - Dr Demelza Curnow (UK, Secretary): Quality Enhancement Manager/Lead Quality Manager within the Quality Assurance Agency for Higher Education (QAA); experienced in the management of academic quality and standards, governance and research administration; international reviewer and Expert Panel member.
 - Dr Anneli Pirttila (Finland): Doctor of Science (Technology), Rector- Emerita (Saimaa University of Applied Sciences); experienced international expert for quality audits; former vice-chair of Finnish Universities of Applied Sciences Rector's Association and of the Finnish Education Evaluation Centre (FINEEC) Higher Education Evaluation Committee; former Honorary Consul of Sweden in Lappeenranta.
 - Prof Emeritus Mark G Richardson (Ireland): University College Dublin (UCD); former positions include Deputy Vice-President for Global Engagement, Head of UCD School of Civil Engineering, Chair of Academic Council's Quality Committee; recipient of awards for teaching, research and service to the profession; significant international experience in quality assurance, accreditation, peer-reviews, and as a member of technical and scientific committees.
 - Dr Vaidotas Šarka (Lithuania, employer representative): CEO at InnoBIM UAB, BIM manager; Head of BIM regional development WG at Public organization "Digital Construction", Lithuania.
 - Mr Mantas Gutauskas (Lithuania, student representative): student of Applied Communication study program in Kaunas University of Applied Science, and the President of Students Association of the institution
4. As a result of external review **Kaunas Technical College** is given a **positive evaluation**.
5. Evaluation areas:

Area	Assessment with points*
MANAGEMENT	2
QUALITY ASSURANCE	3
STUDIES AND RESEARCH (ART)	3
IMPACT ON REGIONAL AND NATIONAL DEVELOPMENT	4

*5 points - **excellent** – the area is rated exceptionally well in the national context and internationally;

4 points – **very good** – the area is rated very well in the national context and internationally, without any drawbacks;

3 points – **good** – the area is being developed systematically, without any major drawbacks;

2 points – **satisfactory** – the area meets the minimum requirements, and there are drawbacks that must be addressed;

1 point - **unsatisfactory** – the area does not meet the minimum requirements, there are fundamental drawbacks.

6. **11** examples of good practices were found; **14** recommendations are made.

II. INTRODUCTION

2.1. Background of the review process

7. The external review of **Kaunas Technical College** (hereafter referred to as **KTK** or the College) was organised by the Centre for Quality Assessment in Higher Education and carried out in May 2022 by an Expert Panel of international experts (hereinafter – the Panel). It was conducted in accordance with the Procedure for the External Evaluation and Accreditation of Higher Education Institutions and Branches of Foreign Higher Education Institutions, Evaluation Areas and Indicators approved by the Minister of Education, Science and Sport of the Republic of Lithuania (hereinafter – the Procedure) on 19 of December 2019 [Order No. V-1529](#) and the Methodology for Conducting an Institutional Review in Higher Education approved by the Director of SKVC on 9 of March 2020 [Order No V-32](#) (hereinafter – the Methodology).

8. According to the Procedure, the external review consists of the following stages: submission of a self-evaluation report prepared by a higher education institution to the Centre; formation of an Expert Panel and analysis of the self-evaluation report; Expert Panel visit to the a higher education institution; preparation of the external review report, decision-making on the external review as well as accreditation and publication thereof; follow-up activities aimed at improving the performance of the higher education institution, taking into account the external review report.

9. At the preparatory stage of the external review, the Panel received a Self-Evaluation Report (hereinafter – SER) with annexes. The Annexes included information on KTK’s management structure, strategy up to 2030, financial arrangements, quality manual, scientific publications, agreements with social partners and analysis of the professional development of its teaching staff. SKVC provided to the Panel additional information about the College, as set in the Methodology (Chapter 26), including statistical data on students and staff; financial data; data

about external reviews; report of previous institutional review; State-budget allocations for research activities; information on academic ethics from the Office of the Ombudsperson for Academic Ethics and Procedures of the Republic of Lithuania. The Panel requested additional information, such as governance structures and committee membership, minutes of key committees, examples of student feedback for courses and degree programmes, and confirmation of the number of students as a full-time equivalent (FTE). The Panel also requested access to the College's Virtual Learning Environment (VLE).

10. The site visit was undertaken after a two straining sessions organized by SKVC staff and preparatory Panel meetings. The Panel visited the College on 3-5 May 2022 where it had meetings with 11 separate groups of internal and external stakeholders. Due to the worldwide pandemic situation, the review visit was organised online using video-conferencing tool Zoom hosted by the Centre. Subsequently, the Panel met virtually to review and agree conclusions and recommendations. The review report was finalised by correspondence and submitted to the SKVC.
11. In line with the Procedure, the external review focused on four areas covered by the evaluation indicators and related criteria: **Management, Quality Assurance, Studies and Research (Art)** and **Impact on Regional and National Development**. In analysing the evidence collected, the Panel also gave due consideration to the recommendations of the previous review which took place on 15-17 October 2013 and had a positive evaluation.
12. The review of a higher education institution assesses each of the evaluation areas with one of five ratings: **excellent** – 5 points – the area is rated exceptionally well in the national context and internationally; **very good** – 4 points – the area is rated very well in the national context and internationally, without any drawbacks; **good** – 3 points – the area is being developed systematically, without any major drawbacks; **satisfactory** – 2 points – the area meets the minimum requirements, and there are drawbacks that must be addressed; **unsatisfactory** – 1 point – the area does not meet the minimum requirements, there are fundamental drawbacks.
13. The decision on **positive** evaluation is made when none of the evaluation areas is evaluated unsatisfactorily (1 point). The decision on **negative** evaluation is made when at least one of the evaluation areas is evaluated unsatisfactory (1 point).
14. In line with the Methodology, the review report, prepared by the Panel is reviewed by SKVC and sent to the higher education institution to submit comments on factual errors and the evaluations based thereon. The Panel revises the report in response to the comments from the higher education institution (if applicable) and submits it to SKVC.
15. The Panel received Kaunas Technical College's comments and considered them. Of the seven points made, the Expert Panel considered that six did not identify factual inaccuracies, as suggested. Two were rejected entirely but the Panel was willing to make clarifications to the text in response to the other four. The Panel accepted the seventh point as the identification of a misunderstanding in a meeting and was pleased to amend the text in response.
16. After the Panel considers comments from the higher education institution (if applicable) and finalizes it, the report is considered by the external Commission of the Higher Education Institutions' Review (hereinafter – the Commission), set up by SKVC. On the basis of the proposal, made by the Commission, provisioned in the Commission's regulations, approved by

the order of the Director of SKVC on 8 of January, 2020 order [No. V-5](#), SKVC takes one of the decisions:

- to evaluate the performance of the higher education institution positively;
- to evaluate the performance of the higher education institution negatively.

The higher education institution shall be entitled to lodge a reasoned complaint to the Commission for Appeals formed by the Centre.

The decisions of the Centre and the Commission for Appeals may be appealed against in accordance with the procedure established by the Law on Administrative Proceedings of the Republic of Lithuania.

17. On the basis of the external review decision SKVC takes one of the following decisions on the **accreditation** of the higher education institution:

- to **accredit for a period of seven years** if performance of the higher education institution is evaluated positively;
- to **accredit for a period of three years** if performance of the higher education institution is evaluated negatively;
- to **provide no accreditation** if the repeated external review results of the higher education institution are negative.

18. SKVC announces the decision on the external review together with the conclusions of the external review and the decision on the accreditation of the higher education institution on its website. The higher education institution respectively announces the decision on the evaluation of the higher education institution together with the external review report on its website and maintains it until the next external review.

2.2. Background information about the institution

19. Kaunas Technical College (KTK) is a higher education institution focusing exclusively on the training of specialists in the field of engineering. Founded by the Ministry of Transport and Communications of the Republic of Lithuania in 1920 as a Higher Technical School, it became a higher education institution in 2002. In 2011, its legal status changed from a state budget institution to a public institution.

20. There are eight study programmes across the fields of: electronics, electrical engineering, construction, transportation, mechanical and aeronautical engineering. In 2021/22, at the time of the expert team visit, there was a total of 1088 students enrolled, of which 401 were part-time and 687 were full-time. These were supported by 178 employees (occupying posts equivalent to 157.5 full-time positions with some employees working in several positions). This comprised 60 administrative staff (16 of whom also worked as teachers), 90 teachers (12 of whom additionally performed administrative work) and 28 service staff. The College's main campus is in Kaunas and it makes use of local specialist facilities where appropriate, for example to support practical experience in aeronautical engineering.

21. KTK's activities are guided by key documents of the European higher education area, including the Bologna Declaration (1999) and the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG 2015).

III. ANALYSIS BY EVALUATION AREAS

3.1. Management

Management area is analysed in accordance to the following indicators and criteria, set up in the Methodology.

1.1. Compliance of the higher education institution's strategic action plan with the mission, assurance of its implementation:

1.1.1. The strategic action plan is consistent with the mission of the higher education institution, legal acts regulating research and study activities and it takes into account the provisions of the national research and study policy, the European Higher Education Area and the European Research Area;

1.1.2. The parts of the strategic action plan (analysis of the current situation, priorities and aims, objectives of the activities, implementation means, resources, planned performance indicators) are appropriate and justified;

1.1.3. Regular monitoring of the implementation of the strategic action plan is carried out and the results are used to improve performance management.

22. The mission of KTK is “Engineering competencies for the well-being of a smart society”. In response to this, the Strategic Action Plan 2021-2025 places priority on digitization of studies (content, hybrid classrooms, VR laboratory and teachers’ digital competencies) and leadership in mobilizing national engineering competencies (creation of engineering competence centre, non-formal education services, on-demand national and international applied research engineering projects). The plan was prepared taking account of national legislation and of contemporary national policies (Lithuanian Progress Strategy “Lithuania 2030”, National Education Strategy 2013-2022 and “Learning Lithuania 2030”). Although the operational aspects of the current strategic action plan are consistent with the mission, national regulations and relevant national and European policies, including the provisions of the European Higher Education Area and the European Research Area, the strategic direction in respect of internationalisation (mobility, graduate attributes, internationalisation of study programmes) and research are lacking in ambition and specific stretch targets.
23. The KTK Strategy 2016–2030 has a vision of the College as the “leading university of applied sciences belonging to the elite of technical HEI’s in the Baltic states”. This includes an ambition to change the business model of KTK from a state institution to a private school of engineering in the period 2025-2030. The SER made no reference to this latter ambition, however, and the College’s leadership confirmed in meetings that this proposal was no longer being pursued.
24. The KTK Strategy 2016-2030 articulates its strategic goals through two “strategic challenges” and three “general aspirations”; the approach is underpinned by four “values”. The strategic challenges and general aspirations are (i) increasing efficiency related to improving the quality of services infrastructure and optimizing operating costs; (ii) active development concerned with revenue growth through new services, expanding markets and image strengthening; (iii) recognition as one of the top five engineering universities of applied sciences in the Baltic

region; (iv) significantly contributing to the development of Lithuanian industry and regions by actively conducting applied research; and (v) ensuring the development of lifelong learning in terms of professional and social competences. The Strategic Action Plan 2021-2025 restates the vision and mission of the Strategy 2016-2030 document, additionally providing quantified measures of success and underpinning resource requirements and proposed investment.

25. Whilst the format and statements in both documents - KTK Strategy 2016-2030 and Strategic Action Plan 2021-2025 – indicate forward ambitions, and the documents were prepared using SWOT and PEST analysis and the strategic planning methodology of the Lithuanian government, the review panel identified some opportunities to improve and strengthen the overall approach. As presented, the documents lacked analysis of the current situation which meant that the context of priorities and aims was not evident and the objectives of activities are not self-evidently linked to strategic ambition. Further, implementation means are sometimes a statement of what would ordinarily be regarded as normal day-to-day operations (for example, “improvement of pedagogical competence of teachers”); investment resource allocation is not self-evidently linked to stated priorities; planned performance indicators are typically year-on-year growth targets without an indication of the desired end result. Thus the justification of the implementation means and performance indicators does not always follow the Strategy logically.
26. The Expert Panel was provided with three documents that should have formed a coherent set (Strategy, Action Plan, Strategic Indicators) but cross referencing between the documents was not possible, other than in respect of developing more services and increasing efficiency. However laudable these aims are, they need to be in a context and there is a disconnect with the context. Specifically, the College states that its strategic ambition is to be one of the top five engineering universities of applied sciences in the Baltic region. However it does not set out what criteria would be used to benchmark and rank the higher education institutions (HEIs). Therefore the plan cannot state the specific actions that would be required in the College to meet this ambition. Nevertheless, following meetings with management, staff and external stakeholders it was clear to the Expert Panel that the College is highly successful in its stated mission and is responding dynamically to the needs of the region. This success however would appear to be based on the leadership qualities of the Director, referred to in the SER as “the single-person governing body”, rather than the community of the College working systematically together on an action plan linked to clearly articulated and measurable goals. The SWOT analysis notes that a key strength of the College is flexibility “due to a small administrative apparatus and modern management”. This flexibility is evident in the way there is emphasis on management tools to support short term planning and operations. However this emphasis on efficiency and a reactive approach to regional needs and opportunities could usefully be replaced by a more proactive approach, using a high level strategic plan with major long term goals from which delegated champions of studies, research and internationalisation could drive year-on-year progress towards a single overarching goal of becoming an internationally ranked College.
27. Given the ambition of the College to be recognised as “one of the top five engineering universities of applied sciences in the Baltic region”, the strategic goals might be more helpfully focussed around achieving graduate competencies based on a teaching and learning experience that ensures deep technical competence combined with strong interpersonal skills, through a more international study environment and a greater emphasis on research-led teaching. The

Strategic Action Plan is strong on operational detail (42 ‘objectives’) but may in consequence be weaker on strategic drivers of international recognition as a highly ranked College of technology.

28. The panel *commends* the monitoring of KTK activities by management, which is continuous, comprehensive and inclusive. Management is provided with detailed statistics on the year-on-year and the half-yearly performance of key indicators impacting on four strategic goals (confusingly referred to as ‘strategic objectives’ in the Action Plan, which has just one ‘goal’). Data are monitored across 42 aspects, referred to as ‘strategic objectives’ in some documents. Internal and external factors are monitored. The information is used proactively to influence end-of-year out-turn by sharing interim results with the academic community in addition to the Academic Council and the KTK Council. Thus the monitoring of probable achievement of short and medium term targets is well managed. A potential weakness, however, is the absence of the clear link, referred to earlier, between the long-term goals (Strategy 2016-2030) and short and medium-term goals (Strategic Action Plan 2021-2025). The monitoring system in place is robust and would better support the overall effectiveness of approach if the Strategy and Action Plan were better aligned. Therefore, the panel *recommends* the College reviews the emphasis on flexibility and a reactive approach to regional needs and opportunities, instead considering a more proactive approach, using a high-level strategic plan with major long term goals from which champions of studies, research and internationalisation could be tasked to drive year-on-year progress towards the single overarching goal of becoming an internationally-ranked College.

1.2. Effectiveness of process management of the higher education institution:

1.2.1. A clear structure for governance, decision making and distribution of responsibilities is defined;

1.2.2. Regular process management analysis is performed, preconditions for process improvement and risk management are planned;

1.2.3. Stakeholders are involved in the management process at an adequate level.

29. The structure for governance is set out in the KTK Statute and comprises the KTK Council, the Director and the Academic Council. The Director is the sole-person governing body. Decision-making related to the management of study programmes is delegated to the Study Programmes Department and the Study Programme Committees. Three study programme departments were merged into one during the review period.

30. The management structure was revised in 2018. The management team comprises the Director and two Deputy Directors. The directorate – an advisory body - comprises the Director, two Deputy Directors, four Heads of Department and a delegate of the Student Union. The Deputy Director for Studies and Science is accountable for the study processes. The Deputy Director for Infrastructure is accountable for facilities including library, IT, student accommodation. The four departments are: Study Programmes; Commercialisation of Applied Research and Services; HR and Administration; Accounting and Finance. In addition, the management structure includes two ‘offices’: Office of Study Organisation and Office of Study Communication. There is also a Dean and Faculty of Engineering Sciences. The Head of the Commercialisation of Applied Research and Services Department reports to the Deputy Director for Studies and Science. The Dean is accountable for student internships and the Faculty is the outward facing communication link with external agencies. The Expert Panel explored the

complexities of the management structure, including the reporting relationships, degree of autonomy, accountability and responsibility for aspects of strategic development. The Expert Panel learned that the former role of Dean and Faculty was superseded by the introduction of the Study Programme Committee structure in 2013 and that further change will occur when statutes are revised.

31. Distribution of responsibility is clearly defined across strategic management, finances and HR (Director); studies and related HR (Deputy Director for Studies and Science); curriculum (Head of Study Programme Department); facilities and related HR (Deputy Director for Infrastructure). The Expert Panel mapped the distribution of responsibility and accountability against the strategic goals. The correlation was not strong. Given the positive feedback that the Expert Panel received about KTK's programmes and support to the region it was clear that the structure is very successfully meeting operational needs. However the distribution of responsibilities at the most senior levels does not clearly align with strategic goals. For example, the absence of some specific senior positions, such as a deputy directorship for the significant strategic development of research and internationalisation, is potentially challenging for a College that aims to become "one of the top five engineering universities of applied sciences in the Baltic region" as there is no individual who is clearly accountable for one of the key developmental areas that will enable this aim to be achieved.
32. Process management is served by the data gathering and analytical tools that form the basis for quality assurance and quality improvement. The Expert Panel found this to be adequate for managing current operations but considered that, as the College progresses on its ambitious vision, it would be better-served by a management information system that enables more efficient oversight of progress towards the goal of being an internationally-recognised College of technology.
33. Risk analysis is suitably focussed on external factors such as demographics and policy changes but could usefully be extended to consider competition from comparable HEI's in other countries who are seeking international students from the same pool.
34. All stakeholders are involved in the management process. The KTK Council has nine members including four external members. The active engagement of the four external members of Council is characteristic of the reciprocal communication between the College and industry founded in management's highly effective networking capacity, which the panel commends. The Academic Council has 17 members including 13 delegates from the academic community. Students have a voice at both the KTK Council – one Student Union representative – and at the Academic Council – four Student Union representatives. However the Expert Panel learned that these student delegates are effectively acting in a personal capacity rather than as representatives of the entire student body. The reason for this is that the Student Union is set up as an organisation which students may choose to join. It is not a union of all students to which delegates representing each year of each programme are elected. The Expert Panel learned in meetings with students that Student Union representatives in the Council and Academic Council are not always aware that they are representing the whole institution's students. These student representatives are not informed in their decision-making at the Councils by democratically-developed policy documents or resolutions of a student body representing all students. Typically, a Students' Union or Association is constituted as a body to which all students are automatically enrolled, with democratic elections following for officership positions from which ex-officio

representatives are elected and, on occasion, additional representation on key decision-making bodies. The Expert Panel considers that the management of the College would benefit from the engagement of a more professionalised and genuinely-representative Student Union and **recommends** that the College takes action to achieve this.

1.3. Publicity of information on the performance of the higher education institution and its management effectiveness:

1.3.1. Systematic collection and analysis of the performance data, results (including student employment and graduate career monitoring) is in place, data is used for the improvement of performance of the higher education institution;

1.3.2. Information on the performance of the higher education institution is clear, accurate and accessible to the academic community and the public, and is provided regularly to the founders and members of the legal entity.

35. There is systematic collection and analysis of data across all aspects of KTK's operations. This is used by management to track performance within KTK and to prepare reports for internal and external stakeholders. Trends are currently analysed on admissions, withdrawals, employability, finances, mobility, research outputs, cooperation agreements, staff changes, and growth of non-formal education. The use and impact of communication channels is also analysed. The Expert Panel considers this approach to collecting and analysing a broad range of relevant data to be appropriate.

36. The Annual Report of the Director provides clear and accurate information to all stakeholders on the performance of KTK. The data and trends are presented in clear infographics. This and other reports are published on the College website and are accessible to the public. Draft internal reports are circulated to the College community on the intranet prior to finalisation at meetings of KTK Council or Academic Council and are subsequently made available to relevant stakeholders. Many reports are published on the College website for wider access by appropriate authorities and the public. The panel **commends** the College for its diligence in ensuring the clarity, accuracy and accessibility of information to relevant stakeholders, above and beyond minimum reporting requirements.

1.4. Effectiveness of human resource management:

1.4.1. Clear and transparent principles and procedures for the formation, management, evaluation of academic and non-academic staff are established and applied;

1.4.2. The higher education institution has sufficient academic (in-house academic staff) and non-academic staff to meet its operational objectives;

1.4.3. The qualifications of the academic and non-academic staff are appropriate for the purposes of the higher education institution;

1.4.4. Conditions are created for the academic staff to improve the knowledge and skills required for teaching and research activities;

1.4.5. Conditions are created for non-academic staff to develop competencies.

37. The main principles underpinning staff recruitment procedures are publicity, impartiality, transparency, equal opportunities and objectivity. The procedures for recruitment of academic and non-academic staff are similar except that the former have automatic access to a KTK Appeals Committee within five working days of publication of a competition result. Assessment

panels for academic staff include external members. During meetings with KTK administrators the Expert Panel learned that there is no formal requirement that committees should be gender balanced; and the final decision of an assessment panel is determined through a simple majority of secret votes. The current situation regarding gender distribution is satisfactory (38% female in teaching positions, 52% female in non-academic posts). All KTK committees are required to take account of objective criteria and factors. Nevertheless the Expert Panel is of the view that, without gender-balanced panels and transparent recording of each panel member's assessment of a candidate's score against the stated criteria for that appointment, the current recruitment practice is vulnerable to unconscious bias. Thus, whilst the current approach to recruitment is adequate, the Expert Panel *recommends* a review to ensure that all aspects are in line with best practice.

38. The management of staff is conducted in accordance with Lithuanian labour laws and codes together with published KTK directives on workload, qualification requirements, professional development, training, remuneration, incentivisation and performance evaluation. Induction courses are supplemented by guidebooks and manuals.
39. Staff evaluation is conducted in accordance with a formal methodology, most recently updated in 2019. Formal evaluation of a teacher for certification takes place every five years. In addition, annual reviews are conducted to identify performance development needs.
40. The College has sufficient staff resources to meet the teaching need with a student: staff ratio of 15:1. The total number of students is 1158 (full-time and part-time). There are 178 employees (157.5 FTE), comprising 90 teachers, 60 administrative staff and 28 service staff. Some employees perform both teaching and administration – 12 teachers have administrative duties and 16 people in administrative posts are also engaged in teaching. The Expert Panel learned from external stakeholders that KTK currently serves the applied research needs of the region. The proportion of teachers whose main employment is outside KTK is reasonably high, standing at 40% in 2020. Whilst this is better than the average, building an internationally-recognised applied research group to enable the realisation of the College's international ambition, at least within the Baltic states, would require a rebalancing of the proportion of full-time academic staff onsite conducting research-led teaching. Thus, the Expert Panel *recommends* the College reviews its approach to recruitment and retention of staff with a specific view to achieving the optimal balance of part-time, industry-engaged staff and full-time applied researchers. There could be particular advantages in targeting lecturers with promising potential as early career researchers as a priority and then supporting them to develop internationally-benchmarked applied research profiles.
41. The average age of academic and non-academic staff is 50 years and 46 years respectively. Half of the teachers fall into the 40 to 59 year age bracket. Almost one third (28%) are over 60, which provides a challenge and an opportunity. A succession plan could usefully embrace the targeted recruitment of early career researchers, in the context of KTK's ambition to be a top five engineering HEI in the Baltic region.
42. Appointment as a teacher requires a master's degree or higher qualification. Currently 35% of academic staff have a doctoral qualification, which is a sufficient number. Non-academic staff posts are filled with suitable assessment criteria including qualifications and/or relevant skill set

and experience. Specific competence tests are conducted in non-academic staff recruitment competitions where appropriate.

43. The College is moving to a system of annual performance reviews for all staff, from which individual staff development needs and opportunities can be identified. The panel *commends* this initiative which, if implemented successfully, will change the performance culture from one of incentivisation to one of self-motivation. The Department of Commercialisation of Applied Research and Services organises the reviews and 5% of the annual budget is invested in developing staff performance. A decentralised training budget is being distributed through each Study Programme Committee. The number of staff taking pedagogic studies is impressive – and two acquired formal teaching qualifications – but the Expert Panel found that investment in staff research profiles was less evident. Given the College’s international ambitions, there would be merit in increasing the investment in academic staff (especially full-time lecturers) to improve the necessary knowledge and skills for early career researchers to develop internationally-benchmarked applied research profiles.
44. Participation in personal development by non-academic staff has almost tripled over the review period in respect of training hours. The system of annual performance reviews from which to identify training needs is being rolled out for all staff. Currently this work-in-progress is more advanced for academic staff but the situation for non-academic staff is improving. The administrative staff that the Expert Panel met were satisfied with the support offered to them.
45. Systematic development of English language proficiency of all KTK staff is being rolled out. The first phase in 2021-2022 reached 19 employees. In the context of the international ambitions of the College, the Expert Panel *recommends* that continued efforts are made to support staff in developing greater confidence and proficiency in English language.

1.5. Efficiency of financial and learning resource management:

1.5.1. Financial resources are planned, allocated and used rationally;

1.5.2. Various financial resources for the implementation of higher education activities are attracted;

1.5.3. Learning resources for provision of studies and research (art) activities are planned and used rationally;

1.5.4. Learning resources for conducting studies and research (art) activities are appropriate, sufficient and available.

46. The planning and allocation of funds over the review period has been used very effectively to invest in people and infrastructure. Salaries have increased due to national increases for academics together with an incentivisation scheme for staff aligned with strategic objectives. There has been significant investment in facility enhancement, which is now nearing completion. The Expert Panel met with the heads of the academic units who outlined how they work collectively to agree use of funds allocated to study programmes. In the event that needs (for example software) exceed the budget, application is made to the Director for an additional allocation from central College funds. Each Study Programme Committee gets funds for research support. The amount allocated is based on metrics of historical performance in respect of research outputs. In the context of the College being a relatively small HEI, the distribution of research resources to staff at the level of study programmes potentially introduces a risk of spreading the available finance too thinly to enable significant impact on achieving the strategic

goal of international recognition. The College may wish to consider whether concentration of the budget into a single College research fund would be more effective, with responsibility for further developing research funds and impact resting in a senior management post with specific authority and accountability for this area. The scarce research funds could then be targeted in each strategic planning period at a small number of strategic research goals, ring-fenced from funds available to Study Programme Committees for more general personal development of staff.

47. The Expert Panel met with representatives of the Student Union and discussed their financial arrangements. There is a close relationship with the College and financial independence is limited. They typically operate with College funds and sponsorship from local companies for events. Application is made to the Director for funding of significant projects. Such funds are transferred from College accounts to the Student Union account on a case-by-case basis. The Expert Panel noted that this somewhat weakens the independence of the Student Union from the College management, although did not seem to be a concern to the student representatives. The Expert Panel would expect the College to include a review of financial arrangements as part of the action to address the recommendation above regarding the need for a properly-constituted and fully-representative Students Union.
48. Financial controls ensure the rational use of resources. The KTK Accounting Policy was last updated in 2020. The procedures ensure the proper establishment and implementation of the budget, in addition to protecting KTK assets. The state budget appropriation is ring fenced for use on teachers' salaries, social insurance, teaching researchers, utilities and base funding for maintaining facilities.
49. There is a good diversification of funding sources. The panel commend management for averaging 25% of College income from sources other than the state during the review period and its strategy of further reducing reliance on state funding in the years ahead. The College targets attracting 34.5% of its annual budget from sources other than the state budget appropriation. This is targeted from tuition fees (1.5%), rental income (5%), R&D (25%) and non-formal education (3%). The highest proportion is from R&D – a quarter of the annual budget - which begs the question from the Expert Panel as to why a Deputy Director for Research is not a separate responsibility post at senior management level. The amount targeted from non-formal education (3%) is very small at present and provides ample opportunity for growth. The demographics are such that KTK is planning to use this diverse portfolio to compensate for decreasing state budget appropriation through increased revenue from outsourced research commissions, services to industry and attraction of EU Structural Funds.
50. The responsibility for planning the use of physical resources is entrusted to a senior management post, the Deputy Director for Infrastructure. Space is allocated and managed on the basis of need. For example, the introduction of aeronautical studies required considerable reorganisation of space and this was successfully achieved.
51. The resources for teaching and research are good and a significant renovation plan is almost complete. Laboratory facilities have been upgraded and a Virtual Engineering Laboratory is currently being installed. The Expert Panel met with the Head of the Library and Interim Head of IT Services who each outlined the developments in their areas and their ability to provide for the needs of the KTK community within the allocated budget. The library is in new premises with

high quality computer lab, study areas and reading rooms. The renovated library is more accessible to those with disabilities and staff have been trained to assist those with special needs including reading disabilities. The needs of lifelong learners are now being actively catered for. Training, recreation and dormitory space is of good quality and increasingly more energy efficient, powered by renewable energy developed on site.

52. **In summary**, the Strategic Action Plan 2021-2025 is consistent with the College's mission and the College is highly successful in responding dynamically to the needs of the region through its teaching programmes and applied research, although it is at an earlier stage in its journey to achieve the more international vision set out in the KTK Strategy 2016–2030. However, the short and medium-term operational targets do not correlate with the long-term vision. Similarly, the Strategy, Action Plan and Strategic Indicators are weakened by the short and medium-term actions not aligning with the long-term vision.

Whilst process management is adequate for managing current operations, it presents some limitations as a tool to support the College in moving forward on its ambitious vision. Risk analysis is suitably-focused on external factors such as demography and policy changes but could usefully be extended to consider competition from comparable HEIs in other countries which are seeking international students from the same pool. It is *recommended* that the emphasis on flexibility and a reactive approach to regional needs and opportunities is replaced by a more proactive approach. To support this, process management could usefully be re-focused on the attainment of long-term goals and risk management be extended to include threats from globalisation of higher education.

Distribution of responsibility is clearly defined across strategic management, finances, studies, curriculum, facilities and HR. All stakeholders are involved in the management process. Nevertheless, the management structure, revised in 2018, is somewhat complex for a relatively small HEI and the distribution of responsibilities at the most senior levels is not always well-aligned with strategic goals, for example research and internationalisation. It is *recommended* that the College reviews the roles and responsibilities across the senior management team to ensure that oversight of, and authority in, key strategic areas is appropriate to enable success.

Students have a voice on key deliberative decision-making bodies of the College. However the Expert Panel learned that these student delegates are effectively acting in a personal capacity rather than as representatives of the entire student body, and are not informed in their decision-making at the Councils by democratically-developed policy documents or resolutions of a student body representing all students. Moreover, the Student Union is financially dependent on the College, which weakens the independence of the Student Union from the College management. The Expert Panel considers that the management of the College would benefit from the engagement of a more professionalised and genuinely-representative Student Union and it is *recommended* that the College takes action to achieve this. The Expert Panel learned in meetings with student representatives that the Student Representative Office was not exercising its financial, economic, organisational and legal autonomy as an Association and did not publish an Annual Report and Statement of Accounts as most of the funding was in grants from KTK for specific events and was reported in KTK's accounts. Thus, consideration of the financial arrangements should form part of the recommended review. Seeking affiliation with the LSS, the Lithuanian Students' Union, might be helpful in developing the Student Union and practices.

The procedures for recruitment of academic and non-academic staff are similar except that the former have automatic access to a KTK Appeals Committee within five working days of publication of a competition result. Assessment panels are formed after applications are received; there is no formal requirement that committees should be gender balanced; and the final decision of an assessment panel is determined through a simple majority of secret votes.

The College has sufficient staff resources to meet the teaching needs. However, realisation of KTK's international ambition, at least within the Baltic states, is likely to require a rebalancing of the proportion of full-time academic staff onsite conducting research-led teaching. It is **recommended** that the College reviews its approach to recruitment and retention of staff with a specific view to achieving the optimal balance of part-time, industry-engaged staff and full-time applied researchers. There could be particular advantages in targeting lecturers with promising potential as early career researchers as a priority and then supporting them to develop internationally-benchmarked applied research profiles.

The College is moving to a system of annual performance reviews for all staff. The process is currently more advanced for academic staff than non-academic. Individual staff development needs and opportunities can be identified and 5% of the annual budget is invested in developing staff performance. The number of staff taking pedagogic studies is impressive and there has been a significant increase in the proportion of professional services staff engaging in professional development. Systematic development of English language proficiency of all KTK staff is being rolled out. To enable the College to achieve its international ambitions, it is recommended that continued efforts are made to support staff in developing greater confidence and proficiency in English language.

Funding sources are diverse. The College targets attracting 34.5% of its annual budget from sources other than the state budget appropriation and has averaged 25% in the review period. The target from Research and Development is 25%. Research support is distributed to staff through study programmes committees, which potentially prevents some initiatives from achieving adequate funding and could, therefore, impact on achieving international recognition. The College may wish to consider whether concentration of the budget into a single College research fund would be more effective, with responsibility for further developing research funds and impact resting in a senior management post with specific authority and accountability for this area.

The current management of the College functions well and the panel **commend** the manner in which this has served regional and national needs very effectively for many years. Looking to the future, management must now respond to significant national opportunities in an increasingly international landscape. Embracing the opportunities brings challenges. Looking to the future the College must produce graduates who not only have laudable practical skills but also have competence to function effectively in international companies based in Lithuania and in local companies operating in globally competitive markets. Grasping these opportunities fully will require the College to further enhance graduate attributes through greater development of interpersonal and interdisciplinary skills, international outlook and more critical research skills. This cannot be achieved solely by incremental changes in module learning outcomes. It will require leadership in several areas by a strong management team. It is **recommended** that strategic goals be set in respect of graduate competencies based on deep technical competence

combined with strong interpersonal skills, a more international study environment and greater emphasis on research-led teaching.

53. **Judgement:** the area meets the minimum requirements, but there are drawbacks that must be addressed, and is given 2 points.

54. **Recommendations for the area:** there are five recommendations for the area.

- In order to best achieve its ambitions, the College should revisit its Strategy with particular attention to:
 - a) replacing the emphasis on flexibility and a reactive approach to regional needs and opportunities by a more proactive approach, using a high-level strategic plan with major long-term goals from which champions of studies, research and internationalisation could be tasked to drive year-on-year progress towards a single overarching goal of becoming an internationally-ranked College;
 - b) re-focusing process management on the attainment of long-term goals;
 - c) extending risk management to identify threats from globalisation of higher education; and
 - d) setting graduate competencies based on deep technical competence combined with strong interpersonal skills, a more international study environment and greater emphasis on research-led teaching.
- The College should review the roles and responsibilities across the senior management team to ensure that oversight of, and authority in, key strategic areas is appropriate to enable success. This may require centralisation of budget, instead of a devolved model, to provide maximum efficiency.
- The College should take action to develop and support a more professionalised and genuinely-representative Students' Union. Consideration of the financial arrangements should form part of the review to achieve this.
- The policies and procedures for recruitment and retention of staff should be reviewed so that:
 - a) practices are confirmed as in-line with current recognised best practice, particularly with respect to considerations of equality, diversity and inclusivity and to ensure transparency in decision-making of appointment panels; and
 - b) with a specific view to achieving the optimal balance of part-time, industry-engaged staff and full-time applied researchers.
- To enable the College to achieve its international ambitions, continued efforts should be made to support:
 - a) all staff in developing greater confidence and proficiency in English language; and
 - b) early career lecturers specifically to develop internationally-benchmarked applied research profiles.

55. **Good practice examples:**

- The monitoring of KTK activities by management is continuous, comprehensive and inclusive with detailed statistics on key performance indicators shared with the academic community at mid-point and year end.

- The highly effective reciprocal communication between the College and industry is founded in management's networking capacity, which encourages active participation by external stakeholders in the College's ongoing development.
- The College publishes much of its management information reports openly and transparently on the College website for wider access by appropriate authorities and the public. This is an example of management's diligence in ensuring the clarity, accuracy and accessibility of information to relevant stakeholders, above and beyond minimum reporting requirements.
- The diversification of funding sources has led to the College averaging 25% of income from sources other than the state during the review period and management has a strategy to further reduce reliance on state funding in the years ahead, targeting 34.5% of its annual budget from sources other than the state budget appropriation.
- The management of the College has served regional and national needs very effectively for many years, which provides a strong platform from which to tackle future challenges in an increasingly competitive international HEI environment.

3.2. Quality Assurance

Quality Assurance area is analysed in accordance to the following indicators and criteria, set up in the Methodology.

2.1. Implementation and effectiveness of the internal quality assurance system:

2.1.1. The higher education institution has approved and made publicly available internal quality assurance documents that are consistent with the Standards and Guidelines for Quality Assurance in the European Higher Education Area;

2.1.2. Internal quality assurance measures of planning, implementation and improvement are appropriate, applied periodically and ensure the involvement of the whole institution and stakeholders;

2.1.3. Processes for planning, implementation, monitoring, periodic evaluation and development of activities are specified;

2.1.4. Students and academic and non-academic staff of the institution receive effective support;

2.1.5. Provisions and procedures for academic integrity, tolerance and non-discrimination, appeal and ethics are specified and applied;

2.1.6. The results of the external review are used to improve the performance of the higher education institution.

56. The College's quality assurance system is based on a procedural approach and it conforms to the ISO 9001:2008 quality management standard, applying the principles of total quality management. KTK has clearly paid special attention to complying with the ESG 2015 i.e. the European Standards and Guidelines for Quality Assurance in higher education. Further, the College presents in a detailed and systematic way how the European higher education declarations and communiqués have informed its approach. In the previous external review in 2013 the panel recommended that the College should clearly indicate the relationship between its quality assurance system and its procedures and the ESG provisions and the College has followed this recommendation very meticulously.

57. The College's quality management system is described in the Quality Manual and the structure of the document follows closely the provisions of the ESG standards and guidelines. The manual includes a quality assurance policy, principles and objectives of the quality management system and a strategy for continuous quality improvement. Furthermore, approval, monitoring and periodic evaluation of study programmes and qualifications, assessment of student achievements, quality assurance of teachers' activities, provision of resources and support to students, maintenance of the information system and communication with the public and requirements of external quality assurance are described in the Quality Manual.
58. The student-centred learning, teaching and assessment that are imperative in the principles of ESG 2015 are emphasised further by the College defining its study quality assurance policy and performance improvement strategy in an additional document to the Quality Manual. The evidence of the documentation provided for the Expert Panel indicates a very clear orientation to quality assurance of the study process and students. However, the Expert Panel considered there would be some merit in combining these two documents into a single uniform quality manual so that the resources guiding quality management were contained in a single place. This would not present any risks to a clear and consistent quality assurance documentation conforming to the ESG guidelines.
59. In accordance with the ESG 2015 requirements, KTK has set out the information that informs decision-making in the institution. The responsibilities of the information management system have been defined in the Quality Manual and involve many groups in the organisation. In the documentation there is ample evidence of how the quantitative strategic indicators are followed and reported. During the online site visit interviews it became evident that the College combines the necessary monitoring reports manually and, if there is a special information need, the information is retrieved from various files in the College's IT systems on an ad hoc basis. The Expert Panel considers that the College would benefit from a quality information system tool instead of compiling the quality assurance reports manually and on an ad hoc basis. An integrated quality management information system would enable more effective sharing of the quality information to the academic community and external stakeholders and more efficient and comprehensive oversight of relevant information. Further, the Expert Panel considered that, in the quality system, there would be benefits to reassessing and improving the relevance of the information that the quality system produces to management, internal and external stakeholders. The key indicators that the quality system monitors do not always provide optimal support to these groups in their decision-making and efforts of continuous improvement of quality.
60. The Strategic Action Plan 2021-2025 restates the vision, mission and goals of the Strategy document that stretches to a very long-term period of 2016-2030. The very concrete quantitative indicators in the Strategic Action Plan - for example the number of students, publications, projects and research commissions - reflect the effectiveness of operations and cost efficiency, which are strategic objectives. However, it is not clear how these year-by-year indicators support KTK in achieving its vision and overall general strategic goals. In the interviews with management and the two councils it became evident that the quality system does not support the stakeholders as well as it could do as it does not provide information on whether the College is moving towards its strategic goals or not. As the College has set itself a vision to be the leader in the technical studies in the Baltic region, the quality system does not define the roadmap to this vision and does not give tools to monitor how this vision will be achieved.

61. As expected in the ESG 2015 criteria, the College publishes key information about its activities on its websites. This includes comprehensive information on: study programmes and their selection criteria and the learning outcomes; the provided qualifications and also the learning and assessment procedures; the learning opportunities available to students; and graduate employment information.
62. As internationalisation has a clear emphasis on the strategic development of the College, it is noteworthy that the website does not provide very much information on the aforementioned issues in English. In particular, there is relatively little English-language information for study programmes. The Quality Manual is, however, available on the English-language version of the website. The Expert Panel *recommends* that the College should consider publishing more information in English, particularly in the context of the importance of internationalisation in the College's strategic aims.
63. The College has described how it uses its management cycle for the systematic quality improvement of its activities. This sets out the stages of planning, implementation, evaluation and reflection of results and the subsequent improvement of activities. Based on the evidence provided in the documentation, the Expert Panel was satisfied that the cycle defines all the stages of the Deming PDCA-cycle in an appropriate manner, although somewhat superficially in the case of strategic management.
64. In the meetings with teachers, students and also external stakeholders, there was convincing evidence that the PDCA-cycle is implemented in the core tasks of the College, i.e. in education, in degree programmes and in applied research. The College's academic staff and the supporting non-academic - or professional services - staff operate according to the principles of continuous improvement and quality assurance involves all relevant stakeholders. The Expert Panel noted that there is ample and convincing evidence of how feedback is collected from students and also social partners by surveys, focus groups, interviews and informal oral communication, and also of how this feedback is used in the continuous improvement of quality. The management and staff gave examples of how they are very responsive to feedback and also illustrated how that feedback is then used effectively for purposes of continuous improvement. The Expert Panel commended the well-functioning informal communication culture in the College and also in its relations with social partners in the Kaunas region. Even if a more formal approach to collecting feedback would lead to more systematic documentation of the feedback and the corresponding development measures, in a relatively small organisation - such as KTK - a more formal approach risks suffocating the well-functioning relations and the quality culture that is clearly orientated to continuous improvement.
65. The College has successfully used its relatively small size and turned it into a strength. As opposed to economies of scale, KTK has managed to turn the sense of community and closeness to a competitive edge.
66. However, in management it is not quite clear how the PDCA-cycle actually functions in monitoring and comprehensive evaluation of quality. As mentioned in section 2.1.1 the action plan does not entirely succeed in providing a roadmap to the achievement of the vision and general, long-term strategic goals and does not, therefore, give tools to comprehensively monitor the achievement of the set targets. It must be emphasised, however, that the planning, implementation and also the quality culture of continuous improvement is evident in

management of KTK. The Director and the Deputy Directors are clearly the driving force in the organisation's continuous effort in improvement.

67. The monitoring and review period used in the management cycle for quality assurance is mainly annual. The results of the implementation of the College's strategic plan are assessed each year in accordance with the monitoring procedures provided for in the College's quality system as described in the Quality Manual. The monitoring procedures take the form of management analysis of annual plans for purposes of an internal monitoring procedure, and the College's Annual Activity Reports are reviewed in the Academic Council and appraised by the College Council. During the academic year, an interim evaluation of activities is also carried out by presenting half-yearly results at meetings of the academic community.
68. The responsibilities of management and staff have been very systematically defined in the quality documentation and based on this evidence the involvement of the members of the academic community is clear. During the site visit, the Expert Panel triangulated documentary evidence with the understanding and practices of staff and key stakeholders which confirmed that the quality system and the involvement of teachers and academic community function well and in the way that it has been described in the quality documentation.
69. The role of students in quality assurance is ambiguous as it is set out in the documentation. The College's quality management system emphasises a client orientation. The clients are defined as students of full-time studies and part-time education and also the social partners and employers. According to this definition students do not seem to be considered as members of the HEI community, but rather as a stakeholder group enjoying a service provided by the academic community of management and staff. As, in the ESG 2015, not only teaching, but also learning is crucial in the student-centred approach, this client definition might be indicative of the students' role and involvement in the College community and its quality assurance. Even if students' role in giving feedback is significant, the Expert Panel *recommends* that the students could be more clearly recognised as members of the academic community and their active role in the learning process be recognised.
70. The Student Union is clearly an under-utilised group in the development of the College. Its role in quality assurance, for example in providing feedback in continuous improvement of quality, is not fully exploited in the College. The Expert Panel *recommends* that the College would benefit from considering the Student Union as a collaborator and from raising their role in the quality assurance of the College.
71. In its general principles of the quality management system, KTK describes a procedural and systematic approach to quality assurance. The quality of the services provided to clients – defined as students, social partners and employers – is considered by the College to be dependent on the quality of the processes of the institution. According to the Quality Manual, the activity of the College takes place according to articulated processes of planning, organisation, implementation and control, thereby establishing a cycle of continuous improvement. The management cycle lists the different activities included in the four stages of the cycle.
72. In the Quality Manual, a systematic attitude to quality assurance is described as one in which the processes of the institution are defined, treated and managed as a uniform system: this is considered to be a comprehensive, aggregate system.. As an approach, it would normally be underpinned by more detailed process descriptions, although there was no evidence of these in

the documentation, either in the Quality Manual or the self-evaluation report, provided for the Expert Panel. In the meetings during the site visit, it became evident that the College implements all the processes by applying the overall process description described in the Quality Manual. In a larger academic community, definition and description of sub-processes would be necessary but, in a relatively small institution such as KTK, a uniform, comprehensive approach might operate adequately.

73. Some confusion is caused, however, by a statement in the Quality Manual that the systematic attitude to management is based on the differentiation between core and secondary processes. The Expert Panel inferred that this refers to KTK's distinction between "main" and "ancillary" processes. The main process is the provision of teaching services to "students and adults". The first level of support processes is described to include infrastructure maintenance, financial provision, staffing and quality assurance and second level support processes document preparation, staff recruitment and student admission and information flow management. However, in the Quality Manual several procedures and regulations are mentioned. These procedures define some of the details in the processes, for example different regulations on studies.
74. Based on the evidence provided in the documentation *a recommendation* could be made that the College would benefit from clarifying in more detail its processes of planning, implementation, monitoring, evaluation and development in its quality management system, even if evidence during the site visit indicated that the systemic approach functions fairly well. It would be reasonable to expect a quality management system and quality documentation to provide clear information on how the College community functions and assures the quality, irrespective of whether or not an individual was already familiar with KTK. The College might usefully reflect on whether the uniform systemic approach together with the detailed regulating procedures gives enough support to all internal stakeholder groups as currently presented.
75. The College recognises in its self-evaluation the insufficient implementation of systematic quality monitoring as an area of improvement. To address this, KTK proposes that student feedback from all groups of students in all study years should be intensified. The Expert Panel encourages the College indeed to further systematise the collection of student and social partner feedback, even if the use of feedback from informal oral communication is already evident in the academic community. However, the panel also notes that the College should pay attention to all monitoring activities to ensure that the quality system provides relevant information to relevant stakeholders as effectively as possible.
76. The College provides students with financial, academic and career support. Further, the students are provided with some psycho-social support in their studies. The College has a "Head of Year", who is a particular specialist member of staff allowed to give some counselling for students needing support around mental health and wellbeing and the actual care and therapy is provided by a health-care organisation. Provision of support to students with learning difficulties, disabilities and disorders is described adequately in the quality documentation and in the interviews there was no indication that this would not function in the way it should.
77. A mentoring procedure has been defined to support students in adjusting to being part of the academic community. An induction mentor is responsible for this transition process of first-year students and the introduction of the College's activities, and a "head of the year" is responsible

for advising students on organisational and administrative issues in the study process. Furthermore, heads of study programmes are responsible for advising students of each study programme on matters of implementation of the study programme and the academic advisor is helping to achieve, improve and develop students' academic achievements. If necessary, a student can choose a tutor, who is a student or a teacher who helps with studies and learning difficulties. During the site visit interviews the students did not recognize the mentoring system as such, but verified that this kind of mentoring help was provided. The Expert Panel considers that KTK students would benefit from the better communication of this support, and it would enable the College to support students in a more efficient way.

78. It is noteworthy that KTK also gives the students an opportunity to study in accordance with an individual study schedule. This flexibility is created for students who, due to their financial circumstances, have to combine work with studies. Flexibility is also adopted in the students' possibilities to transfer and change study programmes during the course of studies. KTK notes that, at the time of application, not all entrants' motivation and academic achievement allows for successful studies in the chosen study programme. During the site visit interviews, the Expert Panel gained evidence of the flexibility provided for students in their studies and heard that this was valuable in enabling successful achievement of a qualification.

79. In the interviews with students and graduates during the site visit, the Expert Panel was presented with several examples of how the College supports students in getting employment after graduation. The College's excellent relationships across the Kaunas region and with employers also helps the students and graduates in their integration to working-life after completion of their studies.

80. According to the Quality Manual, KTK aims to foster a quality culture, where all staff members are involved and motivated. The staff are mentioned as the core asset of the institution. The College endeavours to involve staff in implementation activities and to provide circumstances where individual abilities of each and every member of staff are supported and directed for maximum benefit. The College's staff are supported by continuous professional development opportunities, and also incentivisation schemes according to their individual performance. Members of the College community can be awarded various types of honorary orders or medals for a range of achievements and contributions, including: a significant contribution to the formulation and implementation of KTK's strategic objectives; activity which leads to recognition and promotion at the international and/or national level; those who work responsibly in the governing bodies of the College; the achievement of significant results in their professional activities; exceptional results of applied research and experimental activities; for professional, responsible and committed work; and for significant material or other support to the College aimed at the development of science, applied research or studies. Artistic and sporting activities are also recognised.

81. The evidence from the documentation conveys an impression that staff are not so much supported in their activities, but rather encouraged by incentives and acknowledged by merits due to good or excellent performance. As a consequence, this human resources policy appears competitive rather than directly supportive and KTK may wish to reflect on whether this achieves optimal staff performance.

82. As internationalisation is a strategic target for the College the Expert Panel also *recommends* that more efficient support to staff and students should be provided to develop abilities needed in the international environment. This entails better command of foreign languages, especially English, but also multicultural awareness that enables an ability to work in international organisations. The Expert Panel considers this to be essential so that staff have the ability to become competent members of the international academic community and the graduates to join and be employed in international business and industry communities.
83. In order to ensure the provisions of academic ethics, KTK follows the Code of Academic Ethics (hereinafter, the Code), which emphasises the key principles of the pursuit of truth, academic freedom and responsible use of it, as well as the main objectives of creating a democratic atmosphere that promotes trust and creativity in the institution. Also, the Code mobilises the College's teachers and students to recognise and uphold the most important ethical values in the academic field. Furthermore, the academic community is encouraged to consider the ethical dimension as an important part of any operational decision and to draw boundaries of tolerance, to highlight behaviours that are avoidable from the point of view of academic ethics. The Code aims to help the academic community to assess and address specific academic situations where ethical issues arise.
84. When implementing the provisions on academic ethics, two levels are distinguished: ethics of teachers/staff and student ethics. The Code of Teacher/Employee Ethics establishes the main provisions of ethical academic conduct, which are not directly regulated by legal acts of the Republic of Lithuania, employment contracts and internal procedure documents of the higher education institution. The Code of Teacher Ethics establishes the ethics of teaching and research activities. The students undertake to adhere to the principle of academic integrity and act in accordance with The Code of Student Ethics establishes the principles of academic integrity that students are required to commit themselves to.
85. The supervision of the implementation of the Code of Academic Ethics is carried out by the Professional Ethics Committee of the Academic Council. Sanctions for violations of academic ethics, depending on the gravity of the violation, may be: for teachers - measures of moral influence or all measures provided for in the Labour Code of the Republic of Lithuania, for students - measures of moral influence and disciplinary penalties (e.g. letter of reprimand, warning, disclosure of assessment, etc.) in accordance with the College Statute and the documents regulating internal procedures.
86. In the documentation provided for the Expert Panel there are examples of cases where ethical violations have been investigated by the Ethics Committee and disputes settled.. On the basis of the evidence presented, the Expert Panel was satisfied that academic integrity, tolerance and non-discrimination, appeal and ethics are specified in the KTK community and also applied in a professional manner. Moreover, the College has necessary and sufficient mechanisms to deal with problems and violations if these occur.
87. There is evidence that the College has reflected very carefully on the outcome and findings of the previous external institution-wide review from 2013. A meticulous quality improvement plan covering 16 recommendations presented by the previous Expert Panel has been implemented and the progress made is documented.

88. In quality assurance, there was a recommendation to make explicit the relationship between the institution's quality assurance system and procedures and the ESG 2015 standards and guidelines. As already noted in section 2.1.1 this recommendation and its provisions have been implemented in a convincing manner.
89. Another recommendation in the previous review of the quality assurance was to fully integrate quality assurance procedures into management procedures. The progress report states that this has been carried out; however, the extent to which this has been successful is questionable. Even if the strategy of systematic quality improvement is illustrated and described through a management cycle, the quality system does not provide support for the planning, implementation, reflection and continuous improvement of strategic goals. As noted, the College's vision in the strategic action plan is to "be a leader in technical studies in the Baltic region, actively sharing knowledge and contributing to the development of advanced society and industry" but the quality system does not give a roadmap for achieving this or sufficiently support management and decision-makers on their way to this vision.
90. **In summary**, within their quality assurance approach and processes, KTK has clearly paid special attention to complying with the European Standards and Guidelines for Quality Assurance in higher education (ESG 2015). In the previous external review, the panel recommended the College should clearly articulate the relationship between its quality assurance system and procedures and the ESG provisions and the College has followed this recommendation meticulously.

According to the ESG 2015 requirements, KTK has defined the information sets that inform decision-making in the institution and the processes by which these are considered. There is ample evidence of how the quantitative strategic indicators are followed and reported. The Expert Panel observed that the necessary monitoring reports are compiled manually and in many cases on an ad hoc basis. The Expert Panel *recommends* that an integrated quality information system tool would make more efficient use of resources and enable better sharing of the quality information to all stakeholders.

In the quality system, there is a clear need to reassess and improve the relevance of the information that is produced to management and stakeholders. The key indicators that the quality system monitors do not comprehensively support these groups in their decision-making and efforts of continuous improvement of quality. The very concrete quantitative indicators in the Strategic Action Plan reflect the effectiveness of operations and cost efficiency, but the indicators do not reflect entirely adequately how KTK aims to achieve its vision and long-term strategic goals. Although progress has been made, as the previous external review recommended, management procedures could still be better integrated to the quality system and its procedures.

The College has adopted a systemic and comprehensive approach with a uniform process of continuous improvement to quality assurance. The Expert Panel observed that in a relatively small institution such as KTK a uniform, comprehensive approach seemed a sufficient and accomplished approach. The quality system functions in core tasks in the College supporting members of the academic community in education and research well enough.

The College actively collects feedback from students and social partners and the academic community is responsive in using this feedback in continuous improvement of quality. The Expert Panel was impressed by the well-functioning informal communication culture in the

College and also in its relations with social partners in the Kaunas region. KTK has successfully turned its relatively small size into a strength. As opposed to economies of scale they have managed to make the strong sense of community and closeness a competitive edge.

91. **Judgment:** the area is being developed systematically, without any major drawbacks and is given 3 points.
92. **Recommendations for the area:** there are four recommendations for the area
- There is scope for management procedures to be integrated more fully into the quality system. Quality assurance is clearly functioning well on degree programme level, but the implementation, monitoring and continuous improvement on the strategic issues is not sufficiently supported by the quality system and its procedures.
 - KTK would benefit from a quality information system tool instead of compiling the quality assurance reports manually and on an ad hoc basis. An integrated quality information system would be more efficient in terms of resource and enable better sharing of the quality-related information with the academic community and external stakeholders.
 - More information should be provided in English, both in internal and external communication. KTK should provide more efficient support to staff and students to develop abilities needed in an international environment to enable the staff to become competent members of the international academic community and the graduates to be able to join and be employed in the international business and industry communities.
 - The College would benefit from integrating the Student Union as a partner in the continuous improvement and development of activities. Opportunities may exist for the Students' Union, as a related but independent body, to collect feedback from the student community which could then contribute to KTK's monitoring and review activities.
93. **Good practice examples:**
- KTK collects feedback actively and is very responsive to continuous improvement based on this feedback. As a consequence, the formal approach to the continuous improvement of quality is enriched by informal communication and mechanisms. This has embedded a culture of continuous improvement throughout all areas and levels of the College.
 - KTK has successfully made use of its relatively small size and turned it into a strength. As opposed to economies of scale they have managed to turn the sense of community and closeness to a competitive edge.

3.3. Studies and Research (Art)

Studies and Research (Art) area is analysed in accordance to the following indicators and criteria, set up in the Methodology.

3.1. The level of research (art), compatibility of studies and research (art) and its compliance with the strategic aims of activities:

3.1.1. The study and research (art) activities carried out and their results are consistent with the mission and strategic aims of the higher education institution;

3.1.2. The level of research (art) activities is sufficient for the ongoing studies of the higher

education institution;

3.1.3. Studies are based on research (art);

3.1.4. Consistent recognition of foreign qualifications, partial studies and prior non-formal and informal learning is performed.

94. KTK’s mission to provide “Engineering competencies for the well-being of a smart society” is supported by six engineering fields: electronic, electrical, civil, transportation, mechanical and aeronautical engineering, across which eight study programmes are offered: Motor Transport Electronics, Electronic Engineering, Automotive Engineering, Electric Energy, Materials Processing Engineering, Road Engineering, Construction Engineering, Aircraft Maintenance Engineering. A ninth programme - Avionics Systems Engineering - is scheduled to start in 2022/23. In addition, KTK offers two “double degree” study programmes in the fields of Civil Engineering (with Via University College, Denmark) and Electronic Engineering (with Schmalkalden Hochschulen, Germany).
95. The Expert Panel observed that, whilst the Academic Council of the College had representation across fields of study, this did not appear to correlate with all programmes of study or proportionately with the numbers of students enrolled on those programmes. The Expert Panel acknowledges that equal representation is not a requirement and the Academic Council appears to be functioning. However, the College may wish to consider reviewing whether the current membership is as effective and/or as representative as it might be. Revising membership to be more representative of the College community overall may be of benefit in informing decision-making.
96. Since KTK is a College of applied sciences it is vital that they focus on assessing the needs of the local and regional business environment. Based on the observations of the Expert Panel, the evidence provided through documentation and triangulation by discussion with the College’s staff and stakeholders, the Expert Panel was convinced of KTK’s good communication and relationship with many companies in the region and beyond. The College also has a good oversight of the business environment needs and they include them in existing study programmes as well as the development of new provision. For example, the new study programme from the field of aeronautical engineering was designed based on the needs of the aviation industry and aviation education in Kaunas region. Social partners also propose new ideas for study content and modules and an example of this is the area of electric cars.
97. KTK is an institution that educates and “produces” graduates that are important for the local and regional economy, and the social partners speak very positively of KTK graduates. The state profile data indicates that only 34% of the College’s graduates enter highly qualified employment, which is 10% below the sector average. The figures provided by the College indicated that employment figures had dropped across all subject areas over the last two years. However, the College has noted that the figures are not truly representative as the process for assessing graduate employment does not capture graduates who are employed outside of Lithuania or those who have moved into employment fields outside of engineering. The Expert Panel was advised by social partners that the need for graduates from the technical disciplines of the College is higher than supply. The main reason for the shortfall of graduates lately is a decline in the number of students entering the College, which is a consequence of demographic trends and changed admission requirements in Lithuania. To mitigate this, KTK has worked to improve retention of students. Whilst the College has managed to mitigate some of the external

factors, the Expert Panel considered that more could be done to increase recruitment by way of a more structured approach towards marketing and promotion of the College.

98. Applied research at KTK is organised according to the document Regulations on Applied Research and Experimental Development. Every three years, the Head of the Department of Commercialisation of Applied Research and Services writes the programme for KTK Research and Development (R&D) development, in which the main strategic orientation of R&D activities are defined. This document is a cornerstone to prepare short-term action plans for applied research activities. This is a process where Heads of Academic Units closely cooperate with the Head of the Department of Commercialisation of Applied Research and Services. Heads of Academic Units prepare the research actions plans together with the Head of the Department of Commercialisation of Applied Research and Services taking into account teachers' competences. They provide information on key aspects including what competences teachers and researchers develop and what can be offered to companies. The teachers are familiar with these research plans and implement their research and teaching according to them. For KTK, it is vital that areas of R&D activities of KTK departments are linked to the study programmes, ensuring the link between research and studies, and meeting the needs of the economic entities of the country/region. This is why the opinions/inputs of social partners, representatives of companies are considered in the development and upgrading of study programs.
99. The scope and quality of the research work at KTK is partly hindered by the fact that the funding of research activities in Colleges of applied sciences is significantly lower than in "classical" education-research universities. Therefore, even though the amount of financial resources from the government at KTK for basic research was increased from 39,700 Euros in 2018 to 149,000 Euros in 2021, this is still relatively low. For that reason, the focus is on systematic commissioned applied research activities for mostly domestic companies. In recent years, the income from applied research activities for companies increased, despite the College being limited in its scope in 2020 and 2021 due to the pandemic situation. The growing amount of applied research activities with companies also brings valuable input in the study process as teachers can provide practical experience to students in taught sessions and present real challenges.
100. Study programmes consist of theoretical and practical lectures. One of the most important KTK goals is to develop practical skills of students. Students and graduates were very positive about the extent of the practical work in study programmes. Examples were given of teachers including students in projects (such as in construction projects and racing car development). In addition, students also have opportunities to propose their own project ideas and KTK enables them to develop their ideas in laboratories. The majority of courses includes seminar work that is also based on practical / applied research work.
101. Students have opportunities to work on real practical cases from companies and other organisations. Graduate theses are also based on real challenges in cooperation with companies. KTK encourages students to write research papers and present their research work at the annual KTK conference which has been taking place since 2016. Students and graduates of the College spoke of their direct experiences of participating in the conferences and this opportunity had clearly been instrumental in students' motivation to engage in their studies.

102. The infrastructure of KTK of buildings, classrooms, rooms for teachers, offices, computer rooms and laboratories is at a high level and there has been recent investment in infrastructure which has benefited both students and social partners. This includes: new laboratories for electrical engineering and innovative construction technologies; a bespoke facility for the KTK motor club; significant upgrading of the car servicing centre; enhancement of the Bosch Training Centre; and the installation of a 41kW photovoltaic power plant. It allows applied and scientific research and it is very well used in the study process, where students have the possibility to work on modern hardware and software equipment. In addition to the improvement of technical and specialist facilities, two new language classrooms have been added and student study and leisure areas improved.
103. The College has made particular effort over recent years to train its staff in identifying and supporting students who are experiencing difficulties with their wellbeing and mental health. KTK's approach is to provide support internally where that is appropriate and safe, and to refer students to external sources where specialist support might be required. The Expert Panel considered this to be a responsible approach. It is important, however, to ensure that students can speak confidentially with someone outside of their studies and who is appropriately qualified. Thus, where counselling is offered within the College, KTK is encouraged to ensure that it is available from an independent and specially-trained member of staff.
104. Whilst applied research at the KTK is on a satisfactory level, the situation with scientific research is weaker. As already mentioned, funding of basic research at Colleges in Lithuania is rather modest. That also applies to the amount, quality and international publicity of scientific papers of teachers and lecturers of KTK. The yearly amount of JCR papers is rather small - between 4 and 10. KTK has its own journal, titled Engineering and Educational Technologies. The journal presents scientific and professional research work of KTK teachers and researchers, as well as other authors. The journal is so far not indexed in the most prestigious databases. KTK organises a scientific conference, where scientists from Lithuania and other countries present their research. Nevertheless, the quantity and quality of scientific research could be improved. One of the reasons for poorer results might also be the fact that, for nearly 40% of the teaching staff, KTK is their secondary employer. In order to engage in more focused research activities, it is vital to build a base of more full-time employed teachers and researchers and support research activities more systematically. The need to strengthen research activities was also acknowledged by KTK management.
105. KTK is currently not running any major research projects with companies or with other domestic and international partners, with the exception of the K2 project in sustainable construction and ongoing Erasmus mechanisms. From the evidence presented to them, the Expert Panel considered that there was potential for members of the College to increase the number of applications they made for funding of research activities within different international financing mechanisms. It is recommended that the College support KTK staff through additional expert and administrative support in identifying appropriate calls, writing proposals and managing research contracts, overseen directly by an identified member of the senior management team to ensure both the authority and accountability necessary to deliver the 25% target of income from research.
106. As noted above, whilst study programmes are informed by research, this is applied research rather than scientific research, so the needs and requirements from local and regional economies

are considered. Many teachers come from companies, which provides good opportunities to transfer practical knowledge from companies into academic programmes. However, as KTK is an engineering educational institution, developing and implementing study programmes in some very advanced engineering fields, it is important for the College research and teaching staff to engage more actively in research. The engineering fields are developing fast and require state-of-the-art knowledge and competencies that cannot be always available in local or regional industry.

107. The process of assessing competencies acquired through non-formal and informal learning is organised according to the Procedure approved by the Academic Council. There are around 4 to 5 requests for recognition of mostly prior non-formal and informal learning from students of the Aircraft Maintenance Engineering, Materials Processing Engineering, Construction Engineering and Electric Energy study programmes. The process of this recognition of prior learning is formalised and individual. Students at interviews gave some examples of procedures they were familiar with, and pointed out that no complaints were observed. A very similar process exists for recognition of ECTS obtained via Erasmus exchange. This procedure is organised to the Procedure for Recognising Learning Outcomes approved by the Academic Council. The Expert Panel was satisfied that this area was operating securely and that appropriate processes were both in place and being followed.

3.2. Internationality of studies, research (art):

3.2.1. The higher education institution has a strategy for internationalisation of research (art) and study activities (including indicators of internationalisation), means for its implementation, and measurements of the effectiveness of these activities are performed (not applicable to Colleges unless provided for in its strategic documents);

3.2.2. The higher education institution integrates aspects of internationalisation into the content of studies and research (art) activities.

108. KTK does not have a formal internationalisation strategy. This does not mean that there are no internationalisation activities, but a systematic approach towards internationalisation does not exist. KTK has been growing its network of foreign partners through the years, having 45 out-of-country partners from 20 countries in 2021. The majority of internationalisation activities revolve around Erasmus exchange programmes and internships for students and teachers. Different kinds of agreements are established with higher education institutions and business institutions. As noted previously, KTK offers two “double degree” study programmes in partnership with other higher education institutions within Europe.

109. Student exchange (mostly through the Erasmus exchange programme) in both directions is active with almost 300 outgoing KTK students and 97 incoming international students in the period 2016-2021. Unfortunately, whilst the number of international students who attend KTK for a full degree was not provided, the College noted that it is “too low”. KTK suggests a number of factors contribute to this, including what they describe as a “complicated procedure” for non-EU students to join a Lithuanian higher education institution and the legal restrictions around the framing of the names of applied science institutions with regard to the use of “university”. The College did also acknowledge that there was possibly insufficient publicity of the study programmes, and the Expert Panel agreed that there was scope for the College to increase marketing and promotion activities to attract more international students.

110. For the most part, internationalisation activities for teachers and administrative staff are implemented through the Erasmus+ programme as well, which allows KTK teachers and non-academic staff to visit other higher education institutions outside of Lithuania, participate in events organised abroad, seminars, courses, workshops, educational visits to higher education institutions or other enterprises/organisations. Before the Covid-19 pandemic the number of outgoing KTK teachers and staff had reached 42 as, in 2019, 29 members of KTK staff engaged in teaching visits and a further 13 in research visits. Each year several international teachers visit KTK for a shorter or longer period of time, although the incoming numbers are much smaller than the outgoing. To compare 2019 (as pre-Covid-19), there was a total of 13 incoming staff: 2 on teaching visits; 10 on research visits; and a further 2 as visiting lecturers selected through the Education Exchanges Support Foundation competition.
111. Aside from the very solid exchange of students and staff and its description in terms of activities and numbers through the years, the Expert Panel found no other major elements of internationalisation. In particular, no other major joint activities with international partners were observed, especially in terms of educational, research and scientific projects. Such projects are necessary to exchange experiences and develop new knowledge in the field of education and research activities. This, in turn, could develop into an opportunity to engage in more scientific research and obtain more financial funds and support activity in this area to build.
112. Since there is no internationalisation strategy the Expert Panel did not detect any exact indicators or measures on how to implement future internationalisation activities and how to measure the effectiveness of on-going and future activities. To strengthen performance in this area, the Expert Panel *recommends* that the College develops an Internationalisation Strategy, with clear goals and measurable key performance indicators, and underpinned by a detailed promotion plan, identifying countries and institutions from where KTK would like to attract more students and visiting teachers and other staff. Such a Strategy should be overseen directly by an identified member of the senior management team to ensure both the authority and accountability that are necessary to enable successful delivery.
113. KTK states that the main objectives of international cooperation are the modernisation of study programmes, the creation of suitable environments for studies, ensuring the scientific, methodological, professional and educational potential of teachers, and partnership networks through the dissemination of innovation and experience are integrated into the overall strategy of KTK. The observation of the Expert Panel is that this has been achieved mostly in the field of teachers, who have the opportunity to develop their potential via Erasmus and other exchange options. The knowledge, competencies and experiences through exchange then inform the College's study programmes via several mechanisms, including teaching and review of graduation theses from international teachers, updating modules, international student competitions, and visiting lecturers. The College's efforts in this area would be enhanced, however, by a more systematic approach to the modernisation of study programmes and, as mentioned previously, more formal partnerships in which different kinds of exchanges dissemination of innovation and experience are integrated into the overall strategy of KTK.
114. In the course of its meetings with staff, students and graduates of the College, the Expert Panel observed significant variation in English language skills and/or confidence in using the English language. This is likely to be a limiting factor in internationalisation and KTK is

encouraged to continue its support for staff and students in developing their English language skills and their confidence in using the English language.

115. **In summary**, the College's mission, strategy and programmes are clearly aligned with industry need. Further, KTK has genuine strengths in applied research which is then used effectively to inform and enhance its study programmes. In particular, efforts are made to achieve the optimal balance of practice with theory, and this is recognised and valued by all stakeholders. The College is clearly working effectively with the needs of social partners to achieve this. It is also a key factor in student motivation and success.

Intense cooperation with local and industrial industry in terms of study programmes. Social partners propose new ideas for study content and modules. Teachers and experts from KTK help in training employees in companies and engage in lifelong learning.

Ensuring fair and transparent representation of study fields, programmes of study and relative student cohorts in the College's deliberative bodies, particularly the Academic Council, will support KTK in maintaining the strengths it has in these key specialist engineering disciplines and provide opportunities for further enhancement.

The College's efforts to increase the level of applied research in recent years has been successful. This is enhancing the programmes of study and student academic experience and also contributes to the high esteem in which the College is held by social partners in Kaunas, which comprise regional, national and international companies.

Although KTK is engaged in scientific research, this is without the same success that is evident in applied research. Whilst the strength in applied research is supported by the relatively high proportion of the College's teaching staff that is part-time owing to substantive roles in industry, this same feature is not conducive to producing high-quality scientific research in any volume. A reconsideration of the balance of part-time and full-time teaching and research staff might be advantageous to KTK. This would also better enable effective internationalisation through research projects and activities.

Although there are national challenges around recruitment which are outside of the College's control, and these are impacting on student numbers, KTK is performing well against the sector overall and has focused on retention with some success. The Expert Panel considered there were opportunities for the College to develop its marketing and promotion activities, both within Lithuania and internationally, which might also support recruitment.

The College has made significant efforts to support students. As noted, this is evidenced through good retention. One area of focus has been students' mental health and KTK's approach seems entirely appropriate. The College is encouraged to keep its efforts in this area under review to ensure they remain fit for purpose, take account of developing best practice, and provide students with appropriate channels and confidentiality.

116. **Judgment**: the area is being developed systematically, without any major drawbacks and is given 3 points.

117. **Recommendations for the area**: there are three recommendations for the area

- In order to produce scientific research of greater scope and quality, the College is advised to review the balance of part-time teaching staff, who are also employed in industry, and full-time teacher/researchers.

- To strengthen the internationalisation of the College’s studies and research, KTK is advised to:
 - a) increase support for staff writing proposals for national and EU funding calls, overseen directly by an identified member of the senior management team to ensure both the authority and accountability necessary to deliver the 25% target of income from research;
 - b) seek opportunities to engage in joint research work and research projects with international collaborators; and
 - c) develop an internationalisation strategy, which is owned and managed by a designated member of the senior management team and which includes an explicit strand on marketing and promotion.
- KTK has made significant efforts to support its staff in recognising mental health issues in students and supporting those most affected through referral to specialist support. Where counselling is offered within the College, KTK is encouraged to ensure that it is available from an independent and specially-trained member of staff.

118. **Good practice examples:**

- Introduction of new study programmes from high-tech industry areas, such as Avionics Systems Engineering, following the general trends and national economy need and is evidence of the way in which the College engages with the regional and national strategies.
- Students are encouraged to propose innovative research projects and are supported in addressing these, including through the use of specialist KTK laboratories and facilities, fostering high levels of independence and innovation.

3.4. Impact on Regional and National Development

Impact on Regional and National Development area is analysed in accordance to the following indicators and criteria, set up in the Methodology.

4.1. Effectiveness of the impact on regional and national development:

4.1.1. The higher education institution carries out an analysis of national and (or) regional demands, identifies the needs to be met and foresees the potential impact on national and (or) regional development;

4.1.2. The monitoring, analysis and evaluation of the effectiveness of the measures on national and (or) regional development are performed.

119. The College Strategy and Strategic Action Plan set out how KTK aims to respond to the needs of the region and their ambitions to be within the top 5 technical Colleges in the Baltic region. This is an important and challenging goal in building a College identity in the region. Therefore, the distinctiveness of KTK in its focus on preparing technical specialists is in line with the progress strategy Lithuania 2030, and the first goal of the priority “New Economy” of Kaunas Region Development Plan (Kaunas Region Development Plan until 2020 approved by Decision No.1 of the Kaunas Regional Development Council of 25 May 2010; current version approved by Decision No. 6KS-45 of the Kaunas Regional Development Council of 4 November

2021). This goal is to develop the Kaunas region as an area where growth is based on scientific and business partnerships. Thus, the College's strategic ambitions are appropriate in the regional context.

120. In order to ensure the systematic implementation of outcomes, annual plans are created and evaluated by the College. As noted previously, whilst these are comprehensive and effective for the short and medium-term, there is some disconnect with the longer-term aspects of the Strategy.

121. The focus on preparing technical specialists is valued by social partners operating in the Kaunas region, several of which are international companies, and KTK has clearly forged strong and effective relationships with many of them. Graduates also recognise this strength in the College and clearly articulated how they had benefited from the College's approach, both as students and on entering employment. The proactivity in this area is also very important for the College itself, as it informs how the College's resources and facilities are effectively deployed to meet the strategic needs of the national market and the identified technical and technological competences development areas required within the region.

122. From the SER report and meetings with social partners and graduates from various fields, the Expert Panel observed that the College is strategically focused specifically on the areas of education of technical and technological engineering professions (6 areas) that business fully supports. The needs and directions of programme development are identified through active work with the social partners. New programmes or programme updates are formed based on market needs (for example, Aviation, Automotive, Road Engineering, Construction). In addition, international or national business companies are attracted to operate in the Kaunas region in Lithuania because of the developing infrastructure and the number of specialists in the region who have the necessary competencies to support their business development (for example, Continental, Kitron, Aviation). Through the documentation and the meetings, the Expert Panel was presented with evidence that the College has a comprehensive understanding of the market needs and works proactively to meet them. This also confirmed the maturity of KTK's relationship with regional social partners and understanding of the national and international strategic ambitions of the region. The College's current strategic plan places emphasis on digitisation. This is not yet reflected as strongly as it could be in the adoption of building information management (BIM) systems as a core element of the teaching and learning experience. It is recommended that the College builds on its strong links with industry to support the development of students' digital construction skills and experience.

123. Both the social partners and graduates now working in industry commented on the need to further increase the number of technical specialists in fields related to the College's specialisms in order to fulfil the requirements of business and industry in the region. Those social partners engaged in national and/or international companies also suggested there was significant potential for KTK graduates to integrate successfully into Lithuanian and international markets owing to the national and global requirements for technical skills in the areas in which the College specialises. Whilst there are challenges presented by the demography of Lithuania, the College's recruitment has been declining. As there is clearly the need for graduates in the specialist technology and engineering fields in which KTK is working, the Expert Panel recommends that the College explores further marketing and promotional opportunities to support recruitment.

124. Social partners participate in the successful delivery and assessment of the College's programmes via a range of different activities, including: supervising and reviewing graduation theses; presenting through guest lectures; organising work-based experience for students; participating as members of qualification commissions and Graduation Thesis Defence Boards; members of study programme committees; members of the study programme preparation and improvement working groups; and participating in and supporting conferences. Through these activities, the different stakeholders also contribute to the quality assessment of studies, for example advising on the introduction of curriculum adjustments to study programmes and professional development courses. Beyond the programmes of study, employers and social partners support KTK students through opportunities for internships and they actively seek to recruit KTK's graduates. External stakeholders are also involved in the management of KTK and its governing bodies. This includes the opportunity for representatives of social partners to be elected and/or appointed to the KTK Council and the Academic Council. The Expert Panel commends the efforts made by the College to engage social partners effectively at all levels and across all activity, thereby ensuring that KTK is both supporting and driving strategy and development in the region.
125. Overall, the number of different ways in which social partners integrated with KTK, as well as the nature of those social partners, assured the Expert Panel that the College has strong and effective partnerships across the region that are ensuring the curriculum is keeping pace with industry developments and directly benefiting students and graduates, as well as ensuring KTK is well-placed to meet regional needs. Further, many of KTK's social partners are Lithuanian leaders in their field and working at the cutting edge of innovative technology, including in construction, roads, automation and aviation sectors. The Expert Panel also observed that, within the social partners, there are several international corporations, which improves the College's position and potential to achieve its strategic ambitions.
126. In order to implement its Strategic Action Plan and contribute to the development of the region and the country, KTK is proactive in involving social partners. For example, the College conducts significant applied research; provides consulting activities to economic entities; and professional development services to employees of enterprises. These include: training according to the IPC-A-610 Acceptability of Electronic Assemblies Standard and the IPC 7711/7721 Rework, Modification and Repair of Electronic Assemblies Standard; training according to the Mechatronics, Automotive Mechanic and Metalworking Machine Tool programmes; road and rail design solutions, road building and structures; and developing entrepreneurial skills through teamwork methods. KTK also seeks ways to join and participate in social initiatives; carry out educational and cultural activities; and is open to the public by providing opportunities for the local community to use the premises of the sports complex, library collections, and other facilities. The College presented evidence of how it measured the effectiveness of the implementation of the specific impact measures, and how this, in turn, linked to the strategy documents. Additional evidence was provided at meetings with social partners and graduates participation.
127. Within the study programmes, and starting from the first year on course, students are actively involved in different practical activities through a range of collaboration activities with social partners. The Expert Panel saw the efforts made to relate practice to theory from the earliest stages of each study programme, and how the two aspects were closely integrated within overall

studies. This approach is clearly considered one of the most valuable aspects of how studies are designed to best-meet market needs. From the meetings with the students, lectures, graduates and social partners, there was clear evidence that the structure of the studies, especially the practice aspects and relationships with market companies, are strong and provide considerable value for the students from the beginning of their studies and play a critical part in supporting students' understanding of their programme material and, in addition, encourage student motivation.

128. Although not all stakeholders (students, social partners and graduates) that the Expert Panel met were sure that they had seen the College's Self-Evaluation Report for this review, those who had confirmed it was an accurate reflection of KTK. More broadly, these same stakeholders stated that they always have opportunities to present their proposals and remarks and the College is very responsive to their feedback. Examples of this were provided to the Expert Panel, including how study programmes were continually reviewed and adjusted to ensure currency with industry needs and developments. The Expert Panel *commends* the way in which the College engages with its social partners and its responsiveness to feedback.

129. The study programmes are well designed and the College is attracting male and female students onto them. The diversity of the student body was represented within the meetings with Graduates and Students and the Expert Panel heard about their respective experiences, including: their transition to studying at KTK whether as a first course or following a transfer from another high education institution; work-based experience within social partners; the balance of practice with theory and how the two parts were integrated; and how they have been supported in an early understanding of Engineering. Graduates reflected to the Expert Panel that, on successful completion of their studies and graduation, they entered the workplace with confidence in both their theoretical knowledge and practical skills.

130. In addition to industry links, KTK has strong relationships with other higher education institutions in the Kaunas region, such as Kaunas Technological University and Vytautas Magnus University. Collaborative arrangements are in place between these institutions, providing students and graduates with opportunities to use these universities' laboratories, continue to further study, attend special lectures and make use of non-formal education services. This collaboration was confirmed to the Expert Panel in the meeting with social partners. Furthermore, representatives of collaborating HEIs commented positively on the knowledge, abilities and self-motivation of students from KTK, noting strengths in innovation in particular.

131. KTK is a member of an extensive range of national, regional and local organisations and members of the KTK community contribute directly to the development of the region and the country by participating in the activities of various associations, expert groups and political party structures within their area of expertise. For example, KTK students participate in national entrepreneurship competitions "Profas", and the national "The Best Young Motorist" competition. Every year, events of the National Science Festivalis "Spaceship Earth" are organised. Folk dance group "Pušynėlis" has won a number of national and regional competitions, participates in international events, and contributes to the development of society's openness to culture both on a national and regional level. KTK also provides services to Kaunas City and Kaunas District municipalities. In 2021, KTK conducted a survey commissioned by Kaunas City Municipality.

4.2. Assurance of conditions for lifelong learning:

- 4.2.1. The higher education institution monitors and analyses the need for lifelong learning;*
- 4.2.2. The higher education institution anticipates the diversity of forms and conditions of lifelong learning and ensures their implementation;*
- 4.2.3. The higher education institution performs the evaluation of assurance of conditions for lifelong learning.*

132. KTK has developed an effective model for the development of lifelong learning and which takes account of a range of learning needs, not only in terms of professional competence but also transferable skills. The Expert Panel saw evidence that KTK systematically analyses the information provided by the social partners, cooperates closely with sectoral professional associations, Lithuanian Adult Education Association, Kaunas Chamber of Commerce, Industry and Crafts, Kaunas Region Association of Industrialists and Employers, sectoral professional committees, and prepares and implements non-formal education training programmes in order to meet their needs.
133. However, it is important to continue active communication with social partners and develop further sustainable networks of non-formal education services for participants. For example, there may be opportunities to introduce digitalization to the current portfolio. The Expert Panel also considered there may be opportunities to increase promotional activities of the lifelong learning. It is recommended that promotional activities be greatly increased at both regional and national level to raise awareness and uptake of lifelong learning opportunities at the College, including modular study options for drop-outs to complete their qualifications.
134. KTK offers formal applied science university studies and non-formal adult education and training. Conditions for lifelong learning are offered by KTK for people of all ages and backgrounds. During the assessment period, KTK provided different forms of the following additional services in the context of lifelong learning such as: part-time studies, integrated studies (for students who have already acquired some of the credit load at another higher education institution), Level 5 studies, foundation studies and informal professional development.
135. Currently, joint projects with Kaunas University of Technology (KTU) and Vytautas Magnus University (VMU) are being implemented. On the basis of the agreements, KTK students are granted access to the KTU laboratories, while KTU uses the KTK facilities in the field of practical skills development.
136. KTK is also developing targeted, tailored training packages for companies according to their particular needs.
137. The dynamics of the number of participants and the funds received in the provision of non-formal adult education services were presented to the Expert Panel. There was a noticeable increase in the number of participants in non-formal adult education and the funds received for the provision of such services during the period of 2016-2019. In 2020, the number of participants and the volume of funds decreased as the pandemic situation did not allow to conduct face-to-face events and training, which is especially important in the field of engineering and in practical skills' development. In response to the situation, some events and training were carried out remotely, but it was not possible to apply such teaching/learning methods to all

events since much of the training involves practical sessions. There may be opportunities for KTK to develop activities in this area, partly to mitigate the impact of a similar event in the future but also to extend its lifelong learning provision beyond the immediate region.

138. **In summary**, KTK has strong partnerships with a range of social partners, including business, industry and other higher education providers in the region. The Expert Panel saw evidence of how the College had worked closely and proactively to meet the needs of the region and, moreover, how it had aligned its strategy with that of the region of Kaunas and Lithuania nationally.

There was also evidence of the contribution that KTK is making in attracting international companies to establish in the Kaunas region. A particular example is in aviation, for which the Expert Panel was presented with evidence of how the College has worked with area social partners that unite a significant number of organisations working in civil aviation and has developed provision to meet their needs whilst also using those social partners' expertise to inform those developments. This has ensured excellent specialist facilities to support students' learning, as well as opportunities in work-based learning and internships. An example was provided of a major international airline choosing to base operations in Kaunas as a direct consequence of the College's work in this area.

Companies employing KTK graduates, or the higher education institutions to which KTK progress for further studies, are positive about their abilities, knowledge and skills. Examples were also given of student internships that worked very successfully for the host companies and the students. The Expert Panel heard of the skills need for technical specialists in the areas that the College offers and encouragement for KTK to expand to fulfil that need.

There is also robust evidence of the ways in which the College engages with social partners at all levels and across all areas of its provision, contributing to an excellent student experience and ensuring that the College is fully-engaged with the needs of the region at management and strategic levels.

KTK offers an appropriate range of lifelong learning opportunities and is engaging proactively with industry and the region more broadly, providing training and development opportunities for individuals and also contributing to the continued professional development programmes within major organisations.

139. **Judgement**: the area is rated very well in the national context and internationally, without any drawbacks and is given 4 points.

140. **Recommendations for the area**: there are two recommendations for the area

- KTK should further continue development of its existing strong collaboration with social partners network and also look for new forms and new initiatives to attract more strong national and international companies to enable it to reach its goal of being within the top five Baltic region technical Colleges.
- It is recommended that promotional activities be increased at both regional and national level to raise awareness and uptake of lifelong learning opportunities at the College, including modular study options for drop-outs to complete their qualifications.

141. **Good practice examples**: there are two instances of good practice for the area

- The proactive way in which KTK engages with social partners, enabling them to offer informed feedback from direct experience of the full range of the College's activities and then responding swiftly and visibly to that feedback.
- The leadership and highly-effective engagement of the College with its social partners at all levels and across all activities, thereby ensuring that KTK is both supporting and driving strategy and development in the region.

IV. EXAMPLES OF GOOD PRACTICE

The Panel identifies the following examples of good practice in:

Management:

- The monitoring of KTK activities by management is continuous, comprehensive and inclusive with detailed statistics on key performance indicators shared with the academic community at mid-point and year end.
- The highly effective reciprocal communication between the College and industry is founded in management's networking capacity, which encourages active participation by external stakeholders in the College's ongoing development.
- The College publishes much of its management information reports openly and transparently on the College website for wider access by appropriate authorities and the public. This is an example of management's diligence in ensuring the clarity, accuracy and accessibility of information to relevant stakeholders, above and beyond minimum reporting requirements.
- The diversification of funding sources has led to the College averaging 25% of income from sources other than the state during the review period and management has a strategy to further reduce reliance on state funding in the years ahead, targeting 34.5% of its annual budget from sources other than the state budget appropriation.
- The management of the College has served regional and national needs very effectively for many years, which provides a strong platform from which to tackle future challenges in an increasingly competitive international HEI environment.

Quality Assurance:

- KTK collects feedback actively and is very responsive to continuous improvement based on this feedback. As a consequence, the formal approach to the continuous improvement of quality is enriched by informal communication and mechanisms. This has embedded a culture of continuous improvement throughout all areas and levels of the College.
- KTK has successfully made use of its relatively small size and turned it into a strength. As opposed to economies of scale they have managed to turn the sense of community and closeness to a competitive edge.

Studies and Research (Art):

- Introduction of new study programmes from high-tech industry areas, such as Avionics Systems Engineering, following the general trends and national economy need and is evidence of the way in which the College engages with the regional and national strategies.
- Students are encouraged to propose innovative research projects and are supported in addressing these, including through the use of specialist KTK laboratories and facilities, fostering high levels of independence and innovation.

Impact on Regional and National Development:

- The proactive way in which KTK engages with social partners, enabling them to offer informed feedback from direct experience of the full range of the College's activities and then responding swiftly and visibly to that feedback.
- The leadership and highly-effective engagement of the College with its social partners at all levels and across all activity, thereby ensuring that KTK is both supporting and driving strategy and development in the region.

V. RECOMMENDATIONS FOR ENHANCEMENT

The Panel's recommendations for further enhancement are:

Management:

- In order to best achieve its ambitions, the College should revisit its Strategy with particular attention to:
 - a) replacing the emphasis on flexibility and a reactive approach to regional needs and opportunities by a more proactive approach, using a high-level strategic plan with major long-term goals from which champions of studies, research and internationalisation could be tasked to drive year-on-year progress towards a single overarching goal of becoming an internationally-ranked College;
 - b) re-focusing process management on the attainment of long-term goals;
 - c) extending risk management to identify threats from globalisation of higher education; and
 - d) setting graduate competencies based on deep technical competence combined with strong interpersonal skills, a more international study environment and greater emphasis on research-led teaching.
- The College should review the roles and responsibilities across the senior management team to ensure that oversight of, and authority in, key strategic areas is appropriate to enable success. This may require centralisation of budget, instead of a devolved model, to provide maximum efficiency.
- The College should take action to develop and support a more professionalised and genuinely-representative Students' Union. Consideration of the financial arrangements should form part of the review to achieve this.

- The policies and procedures for recruitment and retention of staff should be reviewed so that:
 - a) practices are confirmed as in-line with current recognised best practice, particularly with respect to considerations of equality, diversity and inclusivity and to ensure transparency in decision-making of appointment panels; and
 - b) with a specific view to achieving the optimal balance of part-time, industry-engaged staff and full-time applied researchers.
- To enable the College to achieve its international ambitions, continued efforts should be made to support:
 - a) all staff in developing greater confidence and proficiency in English language; and
 - b) early career lecturers specifically to develop internationally-benchmarked applied research profiles.

Quality Assurance:

- There is scope for management procedures to be integrated more fully into the quality system. Quality assurance is clearly functioning well on degree programme level, but the implementation, monitoring and continuous improvement on the strategic issues is not sufficiently supported by the quality system and its procedures.
- KTK would benefit from a quality information system tool instead of compiling the quality assurance reports manually and on an ad hoc basis. An integrated quality information system would be more efficient in terms of resource and enable better sharing of the quality-related information with the academic community and external stakeholders.
- More information should be provided in English, both in internal and external communication. KTK should provide more efficient support to staff and students to develop abilities needed in an international environment to enable the staff to become competent members of the international academic community and the graduates to be able to join and be employed in the international business and industry communities.
- The College would benefit from integrating the Student Union as a partner in the continuous improvement and development of activities. Opportunities may exist for the Students' Union, as a related but independent body, to collect feedback from the student community which could then contribute to KTK's monitoring and review activities.

Studies and Research (Art):

- In order to produce scientific research of greater scope and quality, the College is advised to review the balance of part-time teaching staff, who are also employed in industry, and full-time teacher/researchers.
- To strengthen the internationalisation of the College's studies and research, KTK is advised to:
 - a) increase support for staff writing proposals for national and EU funding calls, overseen directly by an identified member of the senior management team to ensure both the authority and accountability necessary to deliver the 25% target of income from research;

- b) seek opportunities to engage in joint research work and research projects with international collaborators; and
- c) develop an internationalisation strategy, which is owned and managed by a designated member of the senior management team and which includes an explicit strand on marketing and promotion.

- KTK has made significant efforts to support its staff in recognising mental health issues in students and supporting those most affected through referral to specialist support. Where counselling is offered within the College, KTK is encouraged to ensure that it is available from an independent and specially-trained member of staff.

Impact on Regional and National Development:

- KTK should further continue development of its existing strong collaboration with social partners network and also look for new forms and new initiatives to attract more strong national and international companies to enable it to reach its goal of being within the top five Baltic region technical Colleges.
- It is recommended that promotional activities be increased at both regional and national level to raise awareness and uptake of lifelong learning opportunities at the College, including modular study options for drop-outs to complete their qualifications.

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