HAKA
Estonian Quality Agency for Education

Institutional Accreditation

Assessment report on Estonian Aviation Academy

2023

Table of contents

Introduction

Institutional accreditation

'Institutional accreditation' is the process of external evaluation which assesses the conformity of a University or higher education institution`s management, work procedures, study and research activities and environment to both legislation and the goals and development plan of the higher education institution itself. This is feedback-based evaluation in which an international assessment panel analyses the strengths and weaknesses of the institution of higher education based on the self-assessment report of the institution and on information obtained during the assessment visit, providing recommendations for improvement and ways of implementing them.

The goal of institutional accreditation is to support the development of strategic management and quality culture that values learning-centeredness, creativity and innovation in the higher education institutions (**HEIs**), as well as to increase the societal impact of education, research and development delivered by the HEIs.

HEIs are assessed according to twelve standards of institutional accreditation. Assessment focuses on the core processes of the HEI – learning and teaching, research, development and creative activities, and service to society – as well as on strategic management of the organisation and resource management. The learning and teaching process is examined in more detail under five standards (study programme, teaching staff, learning and teaching, student assessment, and learning support processes). Throughout the assessment process, there is a focus on academic ethics, quality culture and internationalisation.

The Institutional Accreditation Report consists of evaluation of twelve institutional accreditation standards. **Achievements that exceed the level of the standard (not compliance with the standard) are presented as strengths**. **Areas of concern and recommendations point to shortcomings in meeting the requirements of the institutional accreditation standard** and affect the formation of the final decision of the Council. **Opportunities for further improvement are proposals for improvement that do not contain a reference to noncompliance with the standard** and the inclusion or exclusion of which is at the discretion of the institution of higher education. Proposals for further developments will not affect the final decision of the Council.

Educational institution must undergo institutional accreditation at least once every seven years based on the regulation *Guidelines for Institutional Accreditation* approved by HAKA Quality Assessment Council for Higher Education as of 7.01.2022.

The institutional accreditation of *Estonian Aviation Academy* took place in October 2023. The Estonian Quality Agency for Education (**HAKA**) composed an international expert panel, which was approved by the higher education institution. The composition of the panel was thereafter approved by the order of HAKA director.

The composition of the expert panel was as follows:

Austė Kiškienė (Chair)	Entrepreneur, higher education consultant, former Rector of Kazimieras Simonavičius University (Lithuania)
Matthew Kitching (Secretary)	PhD Student, Lancaster University; MBA Student, Edinburgh Business School at Heriot-Watt (UK)
Eurico Pimenta de Brito	Instituto Superior de Educao e Ciencias (ISEC Lisboa), Head of Aviation Department & MSc Executive Coordinator, Specialist Professor (Portugal)
Jaroslav Juračka	Director of Institute of Aerospace Engineering, Associate Professor, Brno University of Technology (Czech Republic)
Kristo Vallimäe	R&D Project Manager, Foundation CR14 (Estonia)
Martti Kiisa	Vice-Rector for Academic Affairs, Professor, TTK University of Applied Sciences (Estonia)

Assessment process

The assessment process was coordinated by HAKA staff – Dr Liia Lauri and Ms Karin Laansoo.

After an initial preparation phase where the distribution of tasks between the members of the assessment panel was determined, the work of the assessment panel in Estonia started on October 15. Members of the panel agreed the overall questions and areas to discuss with each group during the site visit and to a detailed schedule for the site visit.

During the following three days, from Monday 16th to Wednesday 18th of October 2023, meetings were held with representatives of Estonian Aviation Academy as well as external stakeholders.

On October 18, the panel held a meeting, during which the findings of the panel were discussed in detail and the structure of the final report was agreed. Findings of the panel were compiled in a first draft of the assessment report and evaluation of the 12 accreditation standards.

In finalising the assessment report, the panel took into consideration comments made by the institution. The panel submitted the final report to HAKA on December 29.

The current report is a public document and made available on HAKA website after HAKA Council has made an accreditation decision.

Information about Estonian Aviation Academy

The Estonian Aviation Academy (EAA) is a professional higher education institution, founded in 1993, which acts within the governance area of the Ministry of Education and Research (MoER). The EAA provides formal aviation education, including undergraduate education, continuing education, and vocational studies in aircraft maintenance, as well as carrying out research and development (R&D) activities. The EAA does not directly compete with any other higher education institutions in Estonia, whether in specialist studies or in research and development. Three certified aviation training organisations (TOs) have been integrated into the structure of the EAA as a higher education institution: an air traffic controller's training organisation (ATSTO), a pilot training organisation (ATO), and an aircraft maintenance technician's training organisation (MTO), each of which have training rights under certificates issued by the Estonian Transport Administration (ETA). In their

activities, the training organisations follow the European Commission implementing rules, the European Union Aviation Safety Agency (EASA) guidelines, and the manuals approved by the ETA.

Structurally, the Academy is led by the Rector with the support of 3 Vice Rectors for: Development, Education and Administration. At the time of the visit the Vice Rector for Education was not in post and their responsibilities were being assumed by the Vice Rector for Development. Beneath this in the structure, the institution has 2 academic departments, for Aeronautical Engineering and Aviation Services respectively. In addition, the Academy has several support directorates, ranging from Marketing and Communications to Academic Affairs.

Since the previous accreditation the institution has rationalised its programme portfolio and, following a HAKA recommendation, introduced 2 English language programmes. The Academy currently delivers:

- Aeronautical Engineering (CNS/TECH) (4 years)
- Aviation Management (AM) (3 years)
- Air Traffic Services (ATS) (3 years)
- Aircraft Piloting (PIL) (4 years)
- Commercial Aviation Management (CAM) - English programme (3 years)
- Commercial Air Transport Pilot (CATP) - English programme (3 years)
- Aircraft Maintenance Technician (2 years, vocational education)

Between 2018 to 2022, the Academy benefitted from relatively stable student numbers. Total enrolments were 63 in 2018 and 58 in 2022. Over the same period the number of dropouts was subject to minor fluctuation, with a low of 19 in academic year 2019/20 and a high of 33 in 2020/21; an academic year impacted by the COVID-19 pandemic. The English language programmes introduced in 2023 both attracted viable cohorts.

A Strategic Plan is in place to cover the period 2021-2025, the suitability and effectiveness of which is addressed by the panel in the following report. Since achieving its most recent accreditation from HAKA in 2020, the Academy has secured a number of further achievements, including, in 2020, attainment of IATA Accredited Training Centre status, opening of the two English language study programmes in Commercial Aviation Management (CAM) and Commercial Air Transport Pilot (CATP) in 2022 and, in the remainder of 2023, the Academy is on course to finalise the establishment of the Remote Pilot Training Organisation and Unmanned Aerial Systems (UAS) Operations Organisation.

Main impressions of the self-evaluation report and the visit

The panel found that the Academy's preparations for the accreditation process were consummate and well organised. The panel observed that the Academy's staff (around 1/3) were very involved in production of the Self-Evaluation Report (SER) for HAKA accreditation. The SER was clear, detailed and instructive in allowing the panel to organise its work and develop associated lines of enquiry. Hospitality during the visit itself was generous and professionally coordinated. Requests, whether for further information or in relation to practicalities, were responded to fully and expediently throughout. For all of this, the panel would like to extend its thanks to the institution.

Main changes on the basis of recommendations of the previous institutional accreditation

Generally, and as will be elaborated on in the report, the panel found that the Academy had made sound progress in addressing the majority of recommendations from the previous accreditation. Specifically, when it comes to internationalisation, the introduction of English language programmes has enhanced potential for the Academy to attract a wider pool of students, international faculty

and, in time, grow its engagement in international R&D projects. There is also a stronger sense that the institution is developing an approach to RDC that capitalises on staff expertise and the needs of industry. Though, as Standard 11 will detail, there is more work to be done in developing this strand of the institution's activities. The detailed progress recorded against the recommendations of the previous institutional accreditation are addressed under the respective standards in the following report.

Summary of the institutional accreditation findings

General Findings

Overall, the panel was impressed by the progress that the Academy has made since the previous HAKA accreditation and also with the overall management, culture and strong sense of collegiality in the way staff and students interact with each other. This consultative and collegiate approach to leadership in the Academy is palpable and so is the positive impact that it has on the institution's organisational culture. The panel considered that the Academy was clearly playing a significant role in a nationally important sector, in a way that no other institution is able to or has the necessary skills and expertise to fulfil the same function as the EAA. Consequently, the Academy's service to society is impressive and the institution 'punches above its weight' in this respect. In particular, the panel recognises the demonstrable strides taken by the Academy since the time of the last HAKA visit, in particular the credible work towards internationalising the Academy through:

- o   the development of English language programmes

- o   enhancing the English capability of staff

- o   attracting visiting lectures

- o   expanding the institution's partnerships and presence in international networks

The Academy has also made positive progress with respect to R&D, which the panel views as critical for the institution's sustained progress. The Academy itself recognises the importance of contributing to emerging issues within the Aviation sector, such as in the areas of unmanned aviation and with respect to green and sustainable agendas, and is working to establish itself as a key player in national and international conversations related to these themes.

The institution also has an impressive, modern built environment, and excellent facilities and resources for students, as well as benefiting from a sound financial position at present. In addition, student involvement in the Academy's decision-making processes is strong and there is a genuine ethos of partnership within the institution. The organisation has also strengthened the calibre of students that it attracts in recent years, in relation to academic performance and, in most programme areas, students perform better than the national average with respect to retention.

Notwithstanding these positive findings the panel also considered there were a number of areas where further work needs to be done. Including in relation to internationalisation and research and development where, despite the progress highlighted above the Academy still has room to strengthen the approach further by, among other things, developing more ambitious targets and key performance indicators and recruiting lecturers and researchers with high level qualifications and expertise. These and other salient issues are discussed in more detail under the relevant standards.

In addition, the panel considered the institution must give more consideration to the support it provides for students with disabilities. Although this maybe reflective of national support measures, there is a relative lack of understanding and specific support measures available for students with learning disabilities and the panel considered that the Academy's arrangements in this area lag substantially behind European best practice.

The panel also reflected on staff workload, where it advises the institution to keep arrangements under close scrutiny. The Academy is seeking to do much work on many different fronts, with a relatively modest staff contingent. It must therefore ensure that it is able to meet these wide-ranging objectives without placing undue burden on staff and faculty.

Further to this, the panel observed that while the Academy's current financial position is stable the organisation is vulnerable to changing political winds and the panel therefore encourages the institution to further diversify income streams, including through research and consultancy services, linked to discipline expertise and focus areas for RDC.

The panel will make further suggestions and recommendations throughout the report, including about resource upgrades, stabilising timetables and seeking better transport links between the institution and the city. Overall however, the panel were suitably impressed with the Academy, which it found to conform to requirements under all standards.

Commendations
- The collegiate leadership style in operation across the Academy and its impact on organisational culture
- The Academy's considered and comprehensive approach to addressing recommendations of previous HAKA accreditation
- The coherent, systematic and inclusive strategic planning process, culminating in the 2021-2025 Strategic Plan
- The progress made with internationalising the institution and its study programmes
- The extensive range high-quality resources available for students
- Established quality assurance procedures that help maintain compliance with industry standards
- The extensive and effective regulatory framework governing academic ethics
- The Academy's integrated approach to engaging with the international aviation community
- The competent and specialist teaching staff, including appropriate use of industry experts for practical training
- Low average rates of disruption that demonstrate the institution performs better than the national average
- The comprehensive student support system and its impact on student outcomes

Areas of concern and recommendations
- Some of the KPIs appear lacking in ambition, particularly in the field of Research and Development (R&D). While internationalisation is clearly a focus area, it does not have a dedicated Strategy Map. The panel therefore **recommends** that the Academy reviews and refines the approach to ensure all areas of focus benefit from strategy maps and appropriate KPIs are in place to meet the institution's ambitious strategic objectives.
- Some of the Academy's priorities, such as its role in serving society, are underrepresented in the Strategic Plan and strategy maps. In addition, while there is evidence of a shift towards prioritizing innovation, the current goals and activities do not seem to sufficiently emphasize innovation and creativity. The panel therefore **recommends** that the Academy refines its strategy to include an explicit focus on all strategic priorities and, in particular, service to society, innovation and creativity.
- The institution suffers from low response rates to its feedback surveys, which form critical data in the review and monitoring of academic programmes. The panel therefore **recommends**

that the institution develop effective strategies for increasing the response rate to student and alumni surveys.

- Another noticeable gap in the strategic documents is the lack of emphasis on international Research and Development (R&D) activities. The strategic goals do not sufficiently highlight participation in international R&D funding programmes. In addition, there are no clear KPIs for international R&D projects, international research staff, or publications with international co-authors. The panel therefore **recommends** that the institution establish explicit strategic goals and KPIs for its international research and development activities.

- The Academy faces a clear challenge in recruiting qualified staff, willing to work in Estonia who possess the necessary expertise, knowledge and experience. The panel therefore **recommends** that the institution continue to develop effective strategies for recruiting the calibre of staff it requires to meet its strategic objectives, this should include consideration of the number of staff who hold a doctorate.

- The Academy currently has no clear support arrangements to assist students with learning disabilities. The panel therefore **recommends** that the institution develop a comprehensive and effective system of support for students with learning disabilities.

- The Academy has established its focus area and made significant progress in relation to RDC. However, the institution has the potential to increase revenue, industry engagement and make a greater contribution to society through this aspect of its work. The panel therefore **recommends** that the Academy targets an increase in the proportion of the demand-based applied research that it conducts and reviews the ambition of its KPIs in this area.

- The panel considers that despite improvements to the staff profile the institution has not yet appointed the volume of staff with the necessary R&D capabilities to meet its objectives. The panel therefore **recommends** that the Academy recruit additional staff who are capable of making a valuable contribution to R&D work across the institution.

	conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
Strategic management	☒	☐	☐	☐
Resources	☒	☐	☐	☐
Quality culture	☒	☐	☐	☐
Academic ethics	☒	☐	☐	☐
Internationalisation	☒	☐	☐	☐
Teaching staff	☒	☐	☐	☐
Study programme	☒	☐	☐	☐
Learning and teaching	☒	☐	☐	☐
Student assessment	☒	☐	☐	☐
Learning support systems	☒	☐	☐	☐
Research, development and/or other creative activity	☒	☐	☐	☐
Service to society	☒	☐	☐	☐

Key to evidence

E: interviews with employers and other external stakeholders

M: interviews with management staff

S: interviews with students

A: interviews with alumni

T: interviews with teaching staff

R: inspection of resources (e.g. library, laboratories)

SER: Self-Evaluation Report

1. Strategic management

Standard

Development planning at the higher education institution is purposeful and systematic, involving various stakeholders.

The higher education institution regularly evaluates the achievement of its stated objectives and the impact of its activities.

Guidelines

The HEI has formulated the objectives and key results for its core activities – learning and teaching; research, development and creative activities, and service to society – taking into account national priorities and the needs of society, focusing on its strengths and reducing unnecessary duplication both within the HEI and throughout higher education in Estonia.

The HEI is managed in accordance with its mission, vision and core values, as well as objectives set out on the basis of those principles. Responsibility for implementation of the goals and action plans of the development plan are clearly specified. Achievement of the objectives and effects of the activities are evaluated regularly.

Sustainable development, creativity and innovation are supported and given value in both core and support activities.

The HEI is mindful of the opportunities provided by digital technologies in planning for development activities.

Membership of the HEI (including students), as well as external stakeholders, is involved in developing and implementing the HEI's development plan and action plans. The HEI members share the core values that serve as a basis for the institution's development plan.

Indicators

• The rate of achieving the objectives set in the development/action plan (key results)

• Other indicators depending on the HEI

Evidence and analysis

The EAA has made notable improvements in its strategic planning, specifically in defining strategic goals and Key Performance Indicators (KPIs). It is apparent that the recommendations from the previous institutional accreditation committee were taken into consideration when developing the current EAA strategy, especially:

1) reorganisation of the internal structure; 2) creation of a focal area; 3) creation of two international programmes; 4) internal and external efforts to find more strategic partners and create an environment conducive to development in the recommended areas.

The process of initiating, creating, discussing, and approving the EAA's strategic plan for 2021-2025 aligns with inclusive governance standards. Based on the information provided in the SER and during the discussions with the Rector, employees and stakeholders, it is evident, that multiple stakeholders, including the academic community and social and business partners, were engaged in discussions, and provided input.

The strategic planning process was systematic and followed a clear model, as evident in the final document. The strategy is accessible to the academic community at the EAA, and a summary is published on the institution's website.

The strategy is concise and centres on three primary strategic goals:

1. EAA is a sustainable university of applied sciences offering quality education.
2. EAA's education, research and development services are diverse and future-proof.
3. There is an active international partnership in teaching, research and development.

These strategic goals encompass the main areas of EAA's activities and align with the institution's vision, namely that: "The EAA is an internationally acclaimed aviation training and development partner."

It is worth noting that the strategic planning and monitoring process is complex, and while the responsibility for implementing the Strategic Plan is clear, the management process can be intricate for a smaller organisation. The strategy outlines three strategic goals and KPIs, along with Vision KPIs. In addition to the primary strategy, there are nine strategy maps that delineate strategic goals for targeted fields of EAA activities. Furthermore, there are annual action plans, unit work plans, cross-organisational and area-based change plans. All of this raises questions about the effectiveness of the KPI monitoring system and the functionality of the reporting system. The Academy uses an information system that aids its planning activities, which is good practice in monitoring the KPIs as well as facilitating annual planning activities. While the Strategic Plan mentions amendments and annual reports, there are no specific examples of amendments that were addressed and included in the strategy during the reporting period.

The definitions of KPIs lack conciseness. While KPIs defined in the Strategic Plan have clear target values, it is more difficult to see what the target values in Strategy Maps are. It is advisable to simplify the planning documents that would leave less room for interpretation of the KPIs and overall goals of the institution.

Some areas of EAA, such as its role in serving society, are underrepresented in the Strategic Plan and strategy maps, though the institution's actions show its commitment to the social goals. While there is evidence of a shift towards prioritising innovation, the current goals and activities do not seem to sufficiently emphasise innovation and creativity. These aspects need to be more comprehensively addressed with clear goals and KPIs to align with actual organisational changes, for example the panel identified that with respect to service to society, the institution is doing more than is currently stated in its KPIs. Additionally, these horizontal areas are critical for research and development and internationalisation efforts.

The panel commends the Academy for its efforts to incorporate digitalisation into its strategic goals and activities. The institution demonstrates a strong focus on digitalising the aviation field and enhancing the student experience through digital technologies. It is evident in its research focus on digital aviation as well as on digitalisation of organisational planning and study processes.

However, some of the KPIs appear lacking in ambition, particularly in the field of Research and Development (R&D). While internationalisation is clearly a focus area, it does not have a dedicated strategy map. International activities and internationalisation KPIs are horizontal and integrated into plans for other areas. The panel considered it might be helpful for the Academy to identify a dedicated senior post holder for its internationalisation efforts, along with establishing a clear action plan.

Conclusions

In summary, the higher education institution has shown commendable progress in strategic planning, effectively aligning with its vision to be a leading aviation training partner. The panel's scrutiny during the process affirmed the institution's success in setting clear, relevant goals, particularly in governance and stakeholder engagement. While there is room to enhance Key Performance Indicators in Research and Development, the overall trajectory is positive, with promising potential for further advancements in internationalisation and other areas. Based on the analysis the panel draws the conclusion that this standard conforms to the requirements.

Strengths

- Notable improvements in the Academy's strategic planning processes, specifically in defining strategic goals and Key Performance Indicators (KPIs). It is apparent that the recommendations from the previous institutional accreditation committee were taken into consideration when developing the current EAA strategy.
- Coherent, systematic and well-developed arrangements for initiating, creating, discussing, and approving the Academy's Strategic Plan for 2021-2025. These arrangements align with inclusive governance standards and involved multiple stakeholders, including the academic community and social and business partners.
- Accessibility of the Academy's strategy and the clarity with which it communicates the benefits and shared values of the institution, including on its website.

Areas of concern and recommendations

- Some of the KPIs appear lacking in ambition, particularly in the field of Research and Development (R&D). While internationalisation is clearly a focus area, it does not have a dedicated Strategy Map. The panel therefore recommends that the Academy reviews and refines approach to ensure all areas of focus benefit from strategy maps and appropriate KPIs are in place to meet the institution's ambitious strategic objectives.

- Some of the Academy's priorities, such as its role in serving society, are underrepresented in the Strategic Plan and strategy maps. In addition, while there is evidence of a shift towards prioritising innovation, the current goals and activities do not seem to sufficiently emphasise innovation and creativity. The panel therefore recommends that the Academy refines its strategy to include an explicit focus on all strategic priorities and, in particular, service to society, innovation and creativity.

2. Resources

Evidence and analysis

The EAA, according to the previous assessment, has benefitted from sound management of human, material and financial resources and has the necessary critical infrastructure, and equipment in place. These resources allow the Academy to expand its business in such a way as to balance the size of the structure against the scale of its activity, ranging from academic programmes to RDC. The

panel notes that as the institution increases productivity resourcing levels will need to be considered in line with this growth.

With respect to human resources and, as stated in the Academy's self-evaluation report, the EAA has a human resource management vision to be an effectively collaborative organisation. Based on the Academy's strategy 2021-2025, the human resource activities focus on developing employees' knowledge, skills and competencies, training support and development activities and innovation.

The Academy has been able to involve high-level specialists and practitioners from Estonia and abroad in teaching and development activities. Although this remains challenging for the institution due to its size, budget and limited course portfolio, making it difficult to provide a full workload for lecturers. Here the panel identifies somewhat of a tension. In that, if the institution had more courses, students, RDC projects then it could employ a larger permanent staff base to service those various objectives. As it is, they have a small cohort of staff in part because of the specialised nature of the Academy and the use made of industry professionals (on fractional contracts) for the delivery of similarly specialised modules and training elements within their programmes. This is both a positive in that students are receiving truly expert tuition but also a challenge because the institution cannot require staff on fractional contracts to undertake more responsibility, which means staff on permanent contracts risk high workloads in conducting the general business of the institution.

Notwithstanding these challenges, the panel notes that the Academy has been able to increase the proportion of the academic staff since the previous accreditation visit and this is a positive development. Over this period, there has been an improvement in the student-to-teacher ratio (the number of students per full-time academic employee) at the institution. Previously, the average ratio was between 15.3 and 18.6 students per teacher, but it has now improved to an average of 9.6 students per teacher.

The institution has suitable recruitment procedures in place and vacancies are filled through a combination of internal and public, international competitions. Opportunities are promoted using a wide variety of communication channels.

New employees' integration to the Academy is supported by their direct supervisor and by the Head of Human Resources. The Academy has two dedicated support specialists to assist academic staff. While 13 mentors have been trained, the system is not widely in use yet. However, it has been identified that line managers and immediate colleagues are already supporting the new staff as they commence their roles.

Information concerning employees' training activities is collected via the assessment and development discussions, which are optimally conducted every year between line managers and team members. Future training activities are based on the perceived needs of staff and an assessment of the current competencies held by faculty and staff. The panel noted that every employee has been allocated a fixed amount for the training, of approximately €1500-2000, and considered this was a positive initiative. Staff are able to pursue higher degrees and the Academy actively supports staff to attain Master's and PhDs. In addition, regular training sessions and seminars are organised and the focus on employees' mental health is kept central via various training self-development seminars and events. Psychological counselling is also available for staff if required.

The Rector informed the panel a Research and Development Council was formed in 2020 as, at that stage, there was no competent body in the Academy that could make decisions concerning what type of research and development is conducted and what resources should be allocated to projects.

This Council is led by the unmanned aerial systems team lead and the Council itself consists of mostly managerial level personnel in the Academy. The panel confirmed that the Council ensures resources are allocated in line with the Academy's strategy and areas of priority.

The panel also considered the Academy's motivation system and employee satisfaction. Since 2022, all Academy staff, both support and academic, benefit from the same remuneration rules. Per annum the average increase in the salary budget is between 5 to 10%. The institution's self-evaluation report stated that employees receive additional remuneration for carrying out teaching and continuing education courses, publishing scientific papers, and for participation in projects and development activities, where this work exceeds the normal staff workload. This mechanism provides much needed resources for the Academy's R&D activities as it increases the staff motivation to participate and initiate R&D projects as well as supports the development of additional programmes, which the panel determined are closely monitored from a workload perspective. The Academy also gives due consideration to staff reward and recognition, through awards for 'Outstanding Colleagues'.

Employee satisfaction surveys are carried out every second year. The survey is normally conducted in November and as such the last available survey for the panel to view was from 2021. The response rate for this latest survey was 77% and the results were very good showing just nominal changes in the level of satisfaction. After every survey the results are shared with all employees and actions and activities are agreed upon collectively to better overall satisfaction. The panel noted that this was in keeping with the collegiate and collaborative approach to work that was evident across the institution.

The panel also considered the Academy's approach to internal and external communication, where the creation of a new brand and use of contemporary communication channels has provided new opportunities to enhance international visibility. The Academy's Department of Marketing and Communication is responsible for these internal and external communication channels. In the panel's view, these developments demonstrate investment, dynamism and a clear emphasis on increasing student recruitment across all programmes. The panel has referenced the sharper focus on internationalisation elsewhere in this report and the same is true in relation to its marketing and communication work, which is helping to build up the Academy's reputation as the regional centre of competence for the discipline and promote cooperation with different partners and industry stakeholders. The department has been provided with more employees to handle the internationalisation elements of the Academy's plans and a new Head of Marketing has been brought in from the private sector to build these international campaigns.

The Academy's budget has been increasing in recent years. The budget is directly linked to the objectives of the Strategic Plan and the panel found the Academy's overall level of financial resource is sufficient to enable it to function properly. As the new international study programmes are introduced, additional revenue is foreseen, and the panel found this prospect credible. The Estonian State has also decided to increase the funding by 15% to educational activities during the next 4 years and, additionally, as of 2023, has started yearly financing of R&D by an amount equal to 5% of operational support costs. This shall provide even further opportunities for the Academy to develop additional international curricula, their R&D field and strengthen their staff expertise through international hiring campaigns.

The panel found the Academy's premises are excellent. The availability of simulators for air traffic control practical training and pilot training (both fixed wing and rotary) are helping to produce industry ready graduates. There is a range of suitable lab equipment available and appropriate

monitoring systems are in place to enable staff to ensure that these resources are being used as they are intended.

The Academy has also been focusing on green and sustainable initiatives, by attempting to decrease adverse ecological effects and promote an environmentally sustainable mindset among the institution's community. A good example of this is the geothermal heating installed in autumn 2023. Some facilities processes have also been automated, such as waste treatment, power and water consumption, and the heating system.

The EAA has strong IT support in place, which is accessible for staff and students. Students can also borrow laptops if required and confirmed to the panel that they can find the information they require for their programmes in the different databases and scientific journals to which the Academy subscribes.

Industry representatives stated that Academy facilities and labs (e.g. the avionics lab and maintenance and construction hangar) are quality facilities for helping students to study what is required in a practical setting. Industrial interviewees also informed the team that they consider it a challenge to finance the updating and modernisation required for simulators and other expensive physical resources. The Vice Rector for Administration assured the panel that discussions regarding long-term investment needs are actively being held. The panel consider the updating of simulators, specifically, to be an opportunity for development in the medium term rather than an essential short-term requirement.

Conclusions

The panel found the Academy has suitable physical and human resources in place. With respect to human resourcing there are clear and explicit procedures in place for the recruitment, induction and ongoing support of its teaching staff. The institution recruits specialist lecturers with relevant skills and experience, including making effective use of industry professionals in delivering practical training. Staff are able to access an extensive range of support and senior managers encourage teaching staff to engage in professional development opportunities. Internationalising the curriculum and expanding into English language programmes has also enhanced the Academy's ability to recruit internationally. The Academy has a wide range of high-quality physical resources available for staff and students, that allows students to learn and train under industry standards and conditions. The panel therefore considers that Standard 2 conforms to requirements.

Strengths

- The extensive range of high-quality physical resources, including well-equipped classrooms, technical hangar, specialist workshops and simulators.
- EAA has put effort to make the buildings more automated and efficient installing for example new geothermal heating. In addition, additional storage capacity has been installed for solar energy.
- The suitable investment in human resource that has helped to establish a knowledgeable and motivated faculty, focused on the institution's objectives.

Opportunities for further improvement

- To maintain a sustainable and manageable workload for staff, it's important to regularly review the staff workload model. Although there are numerous opportunities for staff to undertake additional responsibilities, such as research and development (R&D) activities and extra teaching roles, it is crucial to monitor these to ensure that everyone's workload

remains manageable. If necessary, consider hiring additional staff instead of excessively increasing the working hours of current employees.

- Consider upgrading the aircraft simulator to ensure that the Academy's facilities provide for cutting-edge training.

3. Quality Culture

Standard

The higher education institution has defined the quality of its core and support processes, and the principles of quality assurance.

In the higher education institution, internal evaluation supports strategic management and is conducted regularly at different levels (institution, units, study programmes).

The findings of internal and external evaluations are analysed and quality improvement activities implemented.

Guidelines

Members of the HEI have agreed upon definitions for the quality of their core and support processes and are guided by them in their daily work. The HEI has established its policies and procedures for internal quality assurance (internal evaluation). The regular internal quality assurance both at the institutional and study programme level takes into account, inter alia, the standards set out in these Guidelines. All members of the HEI, including students and external stakeholders, participate in internal evaluations.

Internal evaluation of study programmes results in feedback from experts within the HEI and/or from outside it. Regular reviews and enhancements of study programmes ensure their relevance, including their compliance with international trends. In the course of internal evaluations, peer learning, comparisons with other HEIs regarding their results and means for achievement, as well as a sharing of best practices take place, among other things.

Internal evaluation is based on the following key questions in quality management: What do you want to achieve, and why? How do you want to do it? How do you know that the activities are effective and will have the desired impact? Is there an

equilibrium between the desired outcomes and the resources used for their

achievement (including technological solutions)? How do you manage the quality improvement activities?

Indicators

• Improvement activities implemented based on the analyses of internal evaluations in the   HEI's core and support processes (examples from different areas)

• Other indicators depending on the HEI

Evidence and analysis

The institution's quality assurance policy and procedures are set out in the Management Manual, approved in October 2022. The Management Manual includes details on the responsibilities for quality assurance. The Quality Manager of Certified Training Organisations and Flight Simulation Training Devices is responsible for compliance with aviation standards. Whereas, the Lawyer-Quality

Manager is responsible for development and maintenance of the Academy's management system as it relates to higher education quality assurance, as expected under the European Standards and Guidelines (ESG). The Vice Rector for Administration is responsible for ensuring the safety of the learning and working environment.

The Manual provides an overview of the Management System of the Academy, including arrangements for assuring quality, compliance management and internal audit. It also contains a detailed series (15) of quality assurance principles, including adherence to legislation, improving the organisation of studies, prudent use of resources and developing curricula that meets the needs of stakeholders. In addition, it addresses issues such as background checks, safety management, academic ethics and misconduct and behaviour. The majority of processes contained in the Manual benefit from detailed guidance [e.g. follow-up checks]. However, this is not the case for every process and the panel considered that it would be advisable for the Academy to ensure that the Manual contains a detailed instruction guide to each quality process. This will help to ensure that staff, students and interested stakeholders can understand how key tenets of the quality assurance systems are operationalised.

Overall, the panel found the EAA Management Manual demonstrates that the institution places a significant emphasis on quality assurance. There is a clear attempt to link quality processes to the Academy's strategy and this is underpinned by explicit values, which the panel found were well understood by staff. The manual makes references to a wide range of quality processes and beyond the Management Manual, the Academy has a broad series of further manuals in place that relate to compliance with aviation standards within the Department of Aviation Services

Under its quality assurance policy, the institution deploys a PDCA cycle, involving planning, doing, checking and acting, which takes place in accordance with the Academy's values: cooperation, trust, innovation and flexibility. Various systems and processes are used within the Academy's approach, ranging from updating internal regulations, training personnel, internal audits and follow-up checks. A detailed table (in the Management Manual) outlines the different surveys used across the institution, including the time they are deployed, target group and responsible persons. The institution informed the panel that students' and alumni survey participation rate has been lower than expected (in some cases lower than 20%) and the Academy acknowledged that the survey device needs to be reviewed in light of the response rate. The panel agrees that the Academy should find effective strategies for increasing the response rates given the significant emphasis placed on student and alumni feedback in the Academy's quality assurance system.

In addition to student feedback, the Academy makes use of peer observation of teaching staff and staff appraisal as tenets of its quality assurance system. The panel viewed completed peer observation forms and records of appraisal, which confirmed these systems are operationalised and inform staff development and quality improvements. The panel also identified that peer observation currently focuses on positive practice and that appraisals are carried out periodically. Given the positive contribution it already makes, the panel considered that a wider scope for observations, to also focus on areas of improvement, rather than simply positive re-enforcement may further bolster quality assurance. In addition, the panel encourages the institution to consider the implementation of consistent annual performance reviews, which staff informed the panel were conducted somewhat inconsistently at present, in addition to periodic appraisal, as a means of identifying training needs and other issues more expeditiously; again, supporting quality.

Finally, the panel identified that while central services clearly support current organisational KPIs, not all service functions have their own performance indicators. The panel identified that establishing dedicated KPIs for these functions could serve to further drive performance.

Conclusions

The Panel found that the institution is subject to scrupulous external quality assurance as carried out by industry regulators. The Academy has staff dedicated to the management of quality assurance and there are clear lines of division between those responsible for compliance with industry quality assurance and those responsible for quality assurance as it pertains to higher education and the European Standards and Guidelines. There are also codified regulations in place. With respect to higher education quality assurance, the panel found there to be a significant emphasis on student feedback through surveys, and that the Academy needs to improve the response rate. The panel also included that other established and effective quality assurance mechanisms such as peer observation and performance monitoring could potentially benefit from a wider focus and/or more regular implementation. Overall, the panel concluded that due to the range of codified quality assurance processes in place and rigorous quality assurance systems for industry that interrelate with higher education requirements, Standard 1.3 conforms to requirements.

Strengths

- Established and detailed quality assurance procedures demonstrating compliance with industry regulations.

Areas of concern and recommendations

- The institution suffers from low response rates to its feedback surveys, which form critical data in the review and monitoring of academic programmes. The panel therefore recommends that the institution develop effective strategies for increasing the response rate to student and alumni surveys.

Opportunities for further improvement

- Expand the focus of peer observation to include areas for development.

- Ensure that annual reviews with staff, designed to support continuing professional development, are conducted consistently and in addition to periodic appraisals every 5 years.

- Establish dedicated Key Performance Indicators for support services.

4. Academic ethics

Standard

The higher education institution has defined its principles for academic ethics, has a system for disseminating them among its members, and has a code of conduct including guidelines for any cases of non-compliance with these principles.

The higher education institution has a functioning system for handling complaints.

Guidelines

The HEI values its members and ensures that all its employees and students are treated according to the principle of equal treatment.

Employees and students of the HEI are guided by the agreed principles of academic ethics in all their activities.

The HEI respects fundamental values and policies of research set out in the document, 'Research Integrity', issued jointly by Estonian research institutions, the Estonian Academy of Sciences, the Estonian Research Council and the Estonian Ministry of Education and Research.

The HEI supports its students and teaching staff in their understanding and responding to ethical issues. Teaching staff and students do not tolerate academic fraud, including cheating and plagiarism, and they will act immediately upon any such occurrence. Attention is paid to the application of principles of academic ethics in the digital environment: avoidance of creative theft, the protection of intellectual property rights etc.

Management of complaints from HEI members (including discrimination cases) is transparent and objective, ensuring fair treatment of all parties.

Indicators

• The percentage of student papers checked by plagiarism detection systems and the   percentage of detected plagiarisms

• Other indicators depending on the HEI, for example statistics about complaints (total number, the proportion of decisions taken in favour of the applicant)

Evidence and analysis

The last institutional accreditation determined that the Academy complied with the requirements of Standard 4 but made several recommendations. These referenced the need for the Academy to establish more robust systems for recording minor academic misconduct and incorporating these into monitoring data. They also referenced the need for the institution to improve dissemination of the rules of academic ethics to students.

The SER and interviews during the site visit demonstrate that EAA has progressed in the field of academic ethics. The EAA has defined its principles in a Code of Conduct, with associated guidelines, and has a system for disseminating the guidelines. The panel consider that EAA now has a regulatory system that is more extensive and in-depth than is common in institutions of a similar nature. This system is made up of interacting principles, norms and procedures, the aim of which is to create an ethical culture in the organisation and to prevent and repress acts and situations considered

contrary to good honest conduct and practice in the various areas of academic life. The institution's regulations define the principles, procedures, and guidelines for creating and sustaining an ethical culture across the institution. The EAA holds regular briefings with students and employees and has "OURIGINAL" software for detecting plagiarism. Specifically, in relation to the recommendation of the previous accreditation and the need to record misconduct, there is now routine use of this detection software across the Academy and staff and students were able to clearly articulate their responsibilities as they relate to academic ethics. The panel agreed that the system effectively promotes the means for correct behaviour and action by all members of the EAA community and provides the tools to be used in instances of possible academic misconduct.

The Academy's website has a section entirely dedicated to ethics. Students can access the "Good Practices of Learning and Teaching" where all the relevant concepts can be found and where recommendations for maintaining proper academic ethical conduct are posted. The Code of Conduct sets out the Academy's principle of equal treatment and its expectations in relation to situations of conflict of interest, corruption, plagiarism and other dishonest practices. The panel considered that these arrangements are fit-for-purpose and in accordance with European best practice and expectations.

Technological development, the growth of the institution, new access to artificial intelligence software and increased digitalisation, all pose challenges for the Academy in the prevention and identification of academic misconduct. While the panel concurred that the current regulations are broadly fit-for-purpose and consistently applied, they also considered further refinement of these regulations, to take account of these new challenges, will be needed in due course.

The Academy has a complaint system in place that allows students to raise issues of concern and provide suggestions for further improvement. The internal document system (EKIS) has a form for complaints and monitoring procedures. Students were aware of the process and felt able to raise concerns; should they hold any.

Conclusions

The EAA has an established and appropriate Code of Conduct that stresses the boundaries of accepted practice and organisational measures for monitoring compliance and addressing infringements. The panel found that throughout the visit students, faculty and management were aware of policies and procedures in this area and demonstrated a thorough understanding of their own responsibilities. Collectively, these procedures and systems, together with an ethos of trust and cooperation that is led from the Academy's senior managers, promote a culture of ethical practice across the institution. Based on this, the panel therefore concludes that EAA conforms to requirements under Standard 4.

Strengths

- The construction and implementation of a more extensive regulatory system for monitoring adherence to academic ethics

Opportunities for further improvement

- Review and amend ethical regulations to address the challenges posed by the increased role of Artificial Intelligence

5. Internationalisation

Standard

The higher education institution has set objectives for internationalisation and assesses the attainment of these objectives regularly.

The higher education institution has created an environment that encourages international mobility of students and teaching staff, supporting the development of learning, teaching and RDC activities, as well as the cultural openness of its members and Estonian society in general.

Guidelines

The HEI creates opportunities for international student exchanges by offering study programmes and/or modules taught in English. The learning environment at the HEI supports internationalisation and cultural openness.

Recognition of qualifications and recognition of prior learning and work experiences for student admission and programme completion are in accordance with the quality requirements set by the HEI, are systemic and consistent with the expected learning outcomes and support international student mobility. The organisation of studies at the HEI facilitates student participation in international (including virtual) mobility (e.g., study programmes enable mobility windows). The HEI has agreements with foreign higher education institutions and, through international exchange, sends its students abroad to study and undertake internship, providing comprehensive support for this. Members of the teaching staff encourage students to participate in international mobility.

International lecturers participate in the process of teaching, including supervision of doctoral theses.

The HEI supports and recognises the participation of its teaching staff in international teaching, research or creative projects, as well as their teaching, research or creative work and personal development which are performed at HEIs abroad.

Indicators

• Teaching staff mobility (in-out)

• Student mobility (in-out)

• Other indicators depending on the HEI, for example:

- Number of English-taught study programmes by main units and levels of study

- Percentage of foreign students (by study programmes, levels of study, in total in the HEI)

- Percentage of study programmes that include English-taught subjects (of at least 15 ECTS)

- Number of ECTS acquired through external mobility

Evidence and analysis

Based on the EAA's strategy and the Self-Evaluation Report, it is evident that internationalisation is a cross-cutting goal that encompasses all aspects of the institution's activities. This commitment to internationalization is reflected in the institution's mission statement: "EAA is an internationally acclaimed aviation training and development partner." One of the strategic goals explicitly focuses on internationalisation as well: "There is an active international partnership in teaching, research, and development." This commitment is further supported by numerous strategic Key Performance Indicators (KPIs), including:

-        "Share of staff who have participated in study mobility"
-        "Number of teaching staff with an international background contributing to teaching, research, and development"
-        "Share of employees contributing to international cooperation"
-        "Number of international students"

Despite the institution's comprehensive approach to internationalisation, the panel considered it would be advisable to establish a dedicated senior position, such as a person responsible at the managerial level and an explicit strategy map. This approach is important because internationalisation was identified as a significant area for improvement by the previous institutional accreditation panel. Systematic, coordinated efforts are crucial to making progress with aspect of the Academy's work, especially considering that the SER indicates a focus on cross-institutional networking and institutional cooperation. To foster international partnerships more effectively, there is a need for clearer and more detailed action planning.

Another noticeable gap in the strategic documents is the lack of emphasis on international Research and Development (R&D) activities. The strategic goals do not sufficiently highlight participation in international R&D funding programmes, and there are no clear-cut KPIs for international R&D projects, international research staff or publications with international co-authors. Instead, there are aggregated KPIs such as the "number of ongoing national and international cooperation projects" and the "number of teaching staff with an international background contributing to teaching, research, and development."

While the R&D strategy map mentions the goal of active international partnerships in R&D, there are no dedicated KPIs associated with this goal. International cooperation and the capacity to secure international funding are mentioned among "Strategic focus" and "Decisive challenges," but these need to be translated into quantitative KPIs. For example, the existing KPI "Volume of external funding (volume of project grants)" could be more precise if it indicated the number of international funding grants received.

It's worth commending the EAA for its efforts to integrate into the broader international aviation community through participation in start-up accelerators, international R&D platforms, and sectoral associations such as the Air Transport and Aeronautics Education and Research Association (ATAERA).

Furthermore, and as mentioned elsewhere in the report, the EAA has made significant strides in internationalising its academic provision by introducing two English-language study programmes: Commercial Aviation Management (CAM) and Commercial Air Transport Pilot (CATP), with the enrolment of 23 international students.

The commitment to facilitating international student mobility is evident through continuous improvements in mobility conditions, the incorporation of a "mobility window" into curricula, enhancements in the administration of ECTS recognition and transfer processes, and the provision of both academic and non-academic support for mobility participants.

The percentage of students at the EAA participating in learning mobility is greater than at other Estonian higher education institutions. In addition to traditional study methods, the Academy incorporates virtual mobility opportunities into its curriculum. A notable example is the introduction of a "mobility window" in the PIL, CNS/TECH, AM, and CAM programs. This inclusion is a commendable step, reflecting the Academy's increasing acknowledgement of the value of international experiences for its students. It must be noted, that increased digitalisation, along with the pandemic, has broadened the opportunities for distance working and students' willingness to participate in digital learning.

The EAA has also demonstrated a dedication to fostering cultural openness throughout the institution. Considering these efforts, it is important to focus international staff mobility on teaching, as it presents a valuable opportunity for promoting inter-institutional cooperation, an aspect acknowledged by the EAA in the SER. It is advisable to design incentives for teaching staff that will encourage them to explore Erasmus teaching visits, with the aim to increase the number of outgoing teachers. Additionally, it's important to motivate staff to undertake teaching visits to foreign higher education institutions that are significant for the EAA in its current and future international projects and initiatives. Such mobility of teaching staff can serve as an effective means for international networking on behalf of the EAA.

Conclusions

Evaluation of the institution's internationalisation initiatives reveals impressive progress, especially in the implementation of English-language study programmes and active engagement in global aviation networks. This demonstrates the institution's strong commitment to internationalisation. The panel also considered the Academy had successfully integrated the theme it into its strategic framework. While the analysis suggests the potential for further development in international Research and Development activities and teaching staff mobility, these areas present opportunities for growth, positioning the institution to strengthen its international collaborations. Based on the evidence the panel agrees that the Academy conforms to the standard requirements.

Strengths

- The authentic commitment to, and embedded nature of, internationalisation across the Academy's strategy.
- The Academy's integrated approach to engaging with the international aviation community, including through participation in accelerators, R&D projects, and sector associations, such as the Air Transport and Aeronautics Education and Research Association (ATAERA).
- The significant progress made by the Academy in internationalising its study programmes, including by introducing two English-language study programs; the Commercial Aviation Management (CAM) and Commercial Air Transport Pilot (CATP)

Areas of concern and recommendations

- A noticeable gap in the strategic documents is the lack of emphasis on international Research and Development (R&D) activities. The strategic goals do not sufficiently highlight

participation in international R&D funding programmes. In addition, there are no clear KPIs for international R&D projects, international research staff, or publications with international co-authors. The panel therefore recommends that the institution establish explicit strategic goals and KPIs for its international research and development activities.

Opportunities for further improvement

- Develop effective strategies to increase international staff mobility in order to develop staff and promote inter-institutional cooperation.

6. Teaching staff

Standard

Teaching is conducted by a sufficient number of professionally competent members of the teaching staff who support the development of learners and value their own continuous self-development.

Guidelines

Distribution of teaching staff by age and the percentage of young members of the teaching staff ensure the sustainability of studies. The career model of academic staff motivates capable young people to start an academic career and creates opportunities for their advancement.

The HEI supports systematically the development of its teaching staff. Members of the teaching staff engage in development of their professional, teaching and digital competences, improve their supervision competence, and share best practices with one another. IT and educational technological support (including trainings) are available to teaching staff.

Teaching staff's participation in research, development and/or creative activities supports the teaching process and ensures competence for the supervision of students' theses (including doctoral theses).

Members of the teaching staff collaborate in fields of teaching, research and/or creative work within the HEI and with partners outside the HEI, e.g. with field practitioners, public sector organisations, companies, other research and development institutions, and lecturers from other Estonian or foreign higher education institutions. Qualified visiting lecturers and practitioners participate in the teaching process.

When assessing the work of teaching staff (including their periodical evaluations), the effectiveness of their teaching as well as their research, development and creative work is taken into account, including student feedback, the effectiveness of their student supervision, development of their teaching; supervisory and digital competences, their international mobility, and their entrepreneurial experience or other work experience in their fields of speciality outside the HEI.

Indicators

• Competition for elected academic positions

• Number of students per teaching staff member in full-time equivalent (FTE)

• Percentage of teaching staff holding a PhD degree

• The results of the students' feedback about the teaching staff

• Teaching staff participating in continuing training or other forms of teaching and digital competences and professional development

• Other indicators depending on the HEI

Evidence and analysis

There have been significant advances in the quality and management of the teaching staff since the previous HAKA accreditation, as shown by the evidence contained in the SER and subsequently confirmed through interviews and documentation. Specifically, the EAA's teaching staff, acting under the Higher Education, Civil Aviation and European systems, are following appropriate strategies and

regulations, including for the European civil aviation certification, licensing, and qualification procedures, under EASA regulations. The panel found that teaching staff have the competences for a research career and also have the requisite knowledge and experience to be operating effectively in an aeronautical and airspace environment, and for collaboration with the industry.

The above-mentioned progress has taken place under the positive evolution of the academic management of the Academy and of the attitude of the teaching staff, towards the adopting a culture of internal and external cooperation. This includes growing and sustained participation in applied research, publications, funded projects, training and the progressive acquisition of academic and aeronautical skills and qualifications. In addition to teaching, the academic staff act as supervisors for end-of-course theses, for which they must have skills in scientific methodology and in the specific areas of the work to be supervised.

The EAA has managed the process of developing its teaching staff in a gradual and sustained manner, adapting to the sector's own constraints. This includes the lack of qualified professionals in certain key areas, which the Academy has combatted, in part, by making itself more appealing on the international market through its move to English language provision. This change has made it possible for a wider range of international teaching staff to consider part-time, visiting roles and mobility opportunities. The Academy has also successfully expanded its internal teacher training activities.

The number of teaching staff has increased from 16 in 2019 to 21 in 2022, with a decrease in visiting lecturers from 44 to 29 across the same period [SER 1.1.5 table 2]. In this timespan, the institution also brought about a substantial increase in training hours for staff involved in teaching. As far as the acquisition of academic degrees is concerned, the number of career teachers with doctorates increased from 3 to 6. In this period, the age of employees [SER Figure 11] shows an average drop of 14%, with the majority being under 40. According to a survey carried out in September 2022, teaching staff were "highly satisfied with the environment and support systems" [SER].

Student and alumni feedback on the quality of teachers and teaching is consistently above 4 on the institution's scale of 0 to 5 [SER 3.6.4, table 13, 3.8.3 fig 13, 3.8.4, fig 14 and 15]. This feedback is collected periodically at the end of each semester. The Academy evaluates teaching through an appraisal that takes place every 5 years, valuing the most relevant aspects of their activity, which include teaching effectiveness, training, research, thesis supervision, mobility, publications, and involvement in projects. Experience in industry activities is also valued [SER 3.6.5].

The focussed nature of the selection and recruitment process has been helping to solve difficulties caused by the lack of qualified staff on the market following the pandemic. The EAA has increased the number of applications from 1 in 2019 and 2 in 2020 to 12 in 2022, and the number of applicants has risen from 5 in 2020 to 7.6 in 2022 [SER 3.6.2, Table 12]. The ratio of students to teachers is in the region of 10 students [SER 3.6.2 Table 11]. This provides good conditions for communication and support between teachers and students, and students confirmed this to be working to their advantage.

The panel found that significant progress has been made in the development and motivation of the teaching staff [SER 3.6.3] since the last accreditation, supported by the progress made in the areas of Internationalization, R&D and Service to Society [SER 3.5, 3.11.2 and 3.12]. The increase in remuneration [SER 3.2.2] was complemented by systems of recognition and support for teaching and research activity, such as the possibility of flexible working hours for advanced training and the awarding of prizes, reimbursement of travel expenses and health support [SER 3.6.3]. The creation

of a focal area in the field of UAV/UAS and new digitalisation technologies has led to greater integration of teaching staff in research positions and projects, and the provision of services to the community, with links to industry. The increased possibility of interaction with IATA, Eurocontrol and other international organisations provides teachers with unique opportunities for professional development. The international mobility (placements abroad) of teachers in 2022 was higher than in 2019, 11 to 13. In 2021 this figure was 4 [SER 3.5.3, Table 9].

Students confirmed to the panel that they are largely satisfied with teaching staff and the climate of cooperation between students and staff **[S]**. They praised the range of teaching and learning methods employed by lecturers and commented positively on the established links with industry and the range of internships and mobility opportunities available.

Students also expressed satisfaction with the quality and balance of theoretical and practical teaching and spoke favourably about the extent to which practical training replicates 'real life' scenarios and industry practice [S]. In addition, stakeholders referred to the good quality of the pilots trained at the Academy, which reflects the quality of the teaching structure and teaching staff [E]. Alumni mentioned the importance of classes being delivered in English, considering this is the dominant language in the aviation sector and also referred to the importance of an increase in teachers from 2017 to the present [A].

Some teachers reported difficulties engaging with external mobility due to the difficulty of leaving the country, often due to workload and family commitments. The panel recognise these challenges but also stress the need to attract internationally qualified staff in order to continue to realise the Academy's strategic objectives. The panel therefore considers this should remain an area of focus for the Academy.

Conclusions

Significant progress has been made with respect to teaching staff since the previous accreditation. The Academy has slightly increased the proportion of staff with a doctorate, continued to develop continuing professional development opportunities for staff and strengthened the link between staff research activity and the institution's research priorities. In the panel's view the EAA has enough teaching staff of proven quality to meet current teaching demands and provides these staff with the necessary support to develop their teaching and research careers. The panel also found that teaching staff are committed to the Academy's values and to supporting the development of the students. The teachers' attitude towards collaboration, student satisfaction and their shared objectives with the organisation's governing structure suggest that the process of teaching staff development is stable, sustained and effective. Based on this analysis, the panel concludes that EAA conforms to requirements.

Strengths

- The competent, motivated staff who are clearly focused on the institution's strategic priorities.

Areas of concern and recommendations

- The Academy faces a clear challenge in recruiting qualified staff, willing to work in Estonia who possess the necessary expertise, knowledge and experience. The panel therefore recommends that the institution continue to develop effective strategies for recruiting the calibre of staff it requires to meet its strategic objectives, this should include consideration of the number of staff who hold a doctorate.

Opportunities for further improvement

- Expand the use of specialists and visiting professors, both national and international, who, in parallel with a smooth expansion of the full-time teaching staff, can take charge of more specialised areas, including the increased focus on unmanned aviation.
- Continue to support staff to acquire Master's degrees and PHDs

7. Study programme

Standard

Study programmes are designed and developed while taking into account the expectations of stakeholders, higher education and professional standards, and trends in the relevant fields.

The objectives of study programmes, modules and courses and their planned learning outcomes are specific and coherent.

The study programmes support creativity, entrepreneurship and development of other general competencies.

Guidelines

In planning and developing study programmes (incl. programmes conducted in a foreign language), the HEI is guided by its objectives, its competence areas and the needs of the labour market, and takes into account national strategies and the expectations of society. The study programmes are based on up-to-date sectoral know-how and research.

The planned learning outcomes are in accord with the requirements for the corresponding level of the Estonian Qualifications Framework, and in planning them the HEI has taken into account the future needs, among other things. In developing study programmes, the HEI has conducted a comparative analysis of similar programmes in leading foreign higher education institutions.

The objectives of the study programme and its modules, the planned learning outcomes, theoretical and practical learning, the proportion of independent work and internship, and the assessment of the achieved learning outcomes form a coherent whole.

The development of general competences (incl. creativity and entrepreneurship)

and speciality-related digital competences as well as support for the development

of a self-directed learner is a natural part of the study programme, and these are

integrated with speciality studies.

Expected student workloads defined in the study programmes are realistic and consistent with the calculation that, on average, 1 ECTS credit equals 26 student learning hours. The study programme offers sufficient challenge for learners with different levels of knowledge and skills.

Indicators

• Number of students per study programme

• Other indicators depending on the HEI

Evidence and analysis

The Academy currently delivers 6 cognate academic programmes across two study programme groups: transport services and engineering, manufacturing and technology. Programmes are only approved where they align to the field and strategic focus of the institution. The programmes are as follows:

- Aeronautical Engineering (CNS/TECH) (4 years)
- Aviation Management (AM) (3 years)
- Air Traffic Services (ATS) (3 years)
- Aircraft Piloting (PIL) (4 years)
- Commercial Aviation Management (CAM) - English programme (3 years)
- Commercial Air Transport Pilot (CATP) - English programme (3 years)
- Aircraft Maintenance Technician (2 years, vocational education)

The panel found clear evidence, through meetings with external stakeholders, that programmes are developed, delivered and reviewed in close collaboration with industry. Scrutiny of syllabi, learning outcomes and assessment demonstrated to the panel that the Academy's programmes are coherent and mapped to industry standards.

Through extensive use of practical activities, adoption of technology in teaching and learning sessions and varied range of assessment the Academy also supports the development of transferable skills in students, mainly in the following domains:

· Safety culture and responsibility
· Communicative competencies
· Entrepreneurship
· Digital competence
· Teamwork, creativity and innovation

Students confirmed to the panel that they consider this highly beneficial and recognise they are acquiring important skills. **[S]**

The Academy has made positive progress in addressing recommendations from the previous HAKA accreditation. These recommendations included, increasing the number of modules taught in English, embedding aviation examples into maths and physics modules for aviation students, greater adoption of the standard 3+2 Bologna format used across European institutions and the creation of Master's programmes.

Meetings with teaching staff and students confirmed to the panel that subjects such as Mathematics and Physics are contextualised within modules, using suitable aviation examples within teaching and learning sessions. Similarly, tours of the Academy's workshops evidenced the fact that the Aeronautical Engineering programme embeds IT, digitisation and automation specialisms within contextualised, practical teaching activities. More generally, the EAA is focusing itself, and increasingly its academic provision, on the addition of specialisations in communication and navigation systems, with the expansion and increased use of modern IT technology across the aviation sector.

As noted elsewhere in the report, there has been a clear and important shift towards the creation of English language provision. This is attested to by the launch of 2 new programmes; curricula - Commercial Aviation Management (CAM) and Commercial Air Transport Pilot (CATP). The panel considered that the development of these programmes confirms the effort to conceive and deliver studies with an international impact that will secure improved employability outcomes for graduates, a fact that was also identified by students and external stakeholders.

The panel also noted positively that the academy is considering the potential to develop and deliver master's degree programmes. As noted above, this was a recommendation made by the previous accreditation panel that is yet to be implemented. The panel reiterates the value Level 7 provision could produce by for an institution that is seeking to develop applied research with industry and academia alongside its study programmes. The introduction of higher-level qualifications will help the Academy to involve students, teaching staff and members of industry in this endeavour.

As part of the accreditation, HAKA selected 2 sample programmes as audit trails, Aircraft Piloting (PIL) and Aviation Management (AM), and in particular met with staff and students from these programmes as well as conducting close scrutiny of documentation. The PIL study programme includes the integrated courses of airline transport pilot license (ATP(A)) and helicopter commercial pilot license (CPL(H)). The programme contains 240 credits, which is in line with the usual range of 180-240 (according to Section 5 of the Higher Education Act) and it is close to the upper ECTS limit. The panel concluded that individual subjects are divided into logical modules and gradually distributed over four years of study. The practical training part of the course itself represents 48 credits (21.6%), which again corresponds to 15-20% of the course content. The study is normally concluded with a final thesis. The study load for the thesis is 9 credits, which corresponds to the scope of the 6-12 ECTS requirement. The panel determined that all areas of theoretical training required under the EASA aviation regulations for the training of aviation personnel (Part FCL), are met and the Academy observes the required minimum number of teaching hours. The content, amount of study hours and quality is also under the control of the Estonian Transport Administration (ETA). It is clear that the study programme responds to changes in regulations and requirements, which is evidenced, for example, by the new introduction of the subject 100 KSA (Knowledge, Skills and Attitudes).

The Aviation Management (AM) study programme was also considered. The entire programme represents 180 credits, which is the minimum of the recommended range but represents 60 ECTS per year, which is the standard for a three-year study programme. The programme includes 6 modules, including a practical training module that represents 27 ECTS. The final thesis module represents 9 credits, which fully meets national standards (according to Section 5 of the Higher Education Act). Students can complete a Flight Operations Officers (FOO) experience (in accordance with the requirements of ICAO Doc 10106) and continuing airworthiness management organisation (CAMO) officer.

The panel identified some risks to the quality of student learning opportunities on the PIL programme. Specifically, weather can cause delay and cancellation to flight training. However, the panel also recognised that the Academy manages this as prudently as possible, short of a substantial change to the programme that included mobility opportunities in a more stable climate in other geographical reasons. The panel also identified that, due to the reliance on industry professionals to deliver training, there is some volatility in student timetables owing to the work commitments of part-time staff. The panel recognises the challenge here in that the Academy relies on a small contingent of qualified national experts to provide its high-quality provision. Nevertheless, changes to timetables can negatively impact students and the panel advises the institution to keep this under review, improving stability wherever possible.

The panel also reflected on the Academy's overall review and rationalising of its programme portfolio. In addition to launching the English language programmes, the Academy has recently closed or is closing provision. The panel considered that there may be some potential benefits (e.g. promotion and recruitment and administration) to considering the establishment of core

programmes with specialist pathways. The panel also acknowledges there are challenges to this approach but encourages the Academy to consider it as part of its strategic reflection.

Finally, the EAA are actively looking to extend their education provision in new and prospective specialist areas, such as UAVs and their operation and integration into real Air Traffic (U-space activity). The panel suggests that the institution ensures it is maintaining a balance between this prospective extension in its activity with the human and physical resource parameters of the Academy.

Conclusions

The EAA has developed clearly defined, professional study programmes, which correspond to national standards for Bachelor's degrees. At the same time, these programmes meet the requirements of the European Aeronautic Safety Agency (EASA), as the relevant aviation authority overseeing the training of industry specialists. Compared to the previous accreditation, there is a clear shift towards European standards, for example in the transition to 3-year study programmes, although this work is still evolving. In addition, the objectives of the study programme and its modules, including the planned learning outcomes, theoretical and practical learning are aligned to the expected competences of graduate. The Academy's most recent programmes in English will also help to increase the employability of graduates on the labour market and to internationalise the Academy's study programmes. Consequently, the panel considers that Standard 7 conforms to requirements.

Strengths

- The flexible response to emerging market needs and requirements of the supervisory authority resulting in their incorporation into study programmes.
- The opening of two English professional bachelor's programmes, as a response to the need for internationalisation, which enhances the offer for prospective students and also serves to expand the Academy's income.

Opportunities for further improvement

- Despite the challenges of using external teaching staff, work to stabilise the timetable for students.
- Consider the use of common core programmes and specialism pathways as a means of growing student numbers and the attractiveness of programmes in the future as well as increasing efficiency.

8. Learning and teaching

Standard

Admission requirements and procedure ensure fair access to higher education and the formation of a motivated student body.

The higher education institution systemically implements a student-centred approach that guides students to take responsibility for their studies and career planning and supports creativity and innovation.

Graduates of the higher education institution, with their professional knowledge and social skills, are competitive both nationally and internationally.

Guidelines

Admission requirements and procedure are fair and impartial. In the admission process, student's ability for academic progress on the chosen programme is assessed.

The academic recognition of foreign qualifications is based on international conventions, agreements between countries, and the Estonian legislation.

Learning and teaching process takes into account students' individual abilities and needs and supports their development. Learning offers sufficient challenge for students at different levels. Students participate in planning and implementation of the learning process. Organisation of independent work and face-to-face teaching motivates students to take responsibility for their studies.

Teaching methods and learning aids used in the learning and teaching process are

modern, appropriate and effective and support the development of digital culture,

contributing – among other things – towards the development of a self- directed

learner, creativity, innovation and the development of digital and other general

competencies. The HEI has a Code of Good Learning and Teaching (including online)

and it is applied in practice.

The internship is integrated with speciality studies, the requirements for the internship are defined and the student's supervision ensured.

Students are motivated to learn and contribute to improving the quality of their studies by providing meaningful feedback on both the learning and teaching process and the organisation of studies.

Doctoral students plan their studies, as well as their research and development activities, in collaboration with their supervisor(s), setting specific objectives for each year and assuming responsibility for achieving those objectives.

Indicators

- Student satisfaction with the content and organisation of studies

- Alumni satisfaction with the quality of studies

- Employer satisfaction with the preparation of the graduates

- Other indicators depending on the HEI

Evidence and analysis

The Academy is always present during the main, national educational fairs and career days. Student shadowing is one of the means of popularising the aviation field and this has become more in demand among learners. The Academy's first ever career day was held in spring 2023. Significant partners from across the Estonian Aviation industry were present and delivered presentations, providing all the necessary information to students.

The EAA has codified Admission Rules that describe entry and other requirements in sufficient detail. Comprehensive information is accessible for every applicant, including online, and it is made clear to prospective students what the Academy demands from applicants and the basis on which the EAA will reject or revoke an application or admission decision. Recognition of foreign qualifications is based on procedures set by the Academic Recognition Information Centre of the Education and Youth Board.

There are specific demands for each curriculum, and these are assessed as part of the admission process. The constitution of the ranking list is transparent and there is also a possibility to dispute an admission decision. The admission procedure includes, among other things, tests and an interview which helps to identify a candidate's motivation, capability and suitability for a given programme. The drop-out rate of first-year students is 1.5 times lower in recent years than Estonia's national average and it supports the panel's assessment that the selection of candidates is conducted effectively. The application-to-admission ratio has been high, but it is only one of the indicators to show that curricula are sustainable. Candidates can give applications to every university and this means applicant choice is a complex issue nationally.

The panel found a lot of supporting evidence that demonstrated the Academy's commitment to learner-centred activities. According to the SER as well as statements in the interviews, the EAA's approach to teaching is based on a learner-centred study process, which is well organised. It includes problem-based and project-based learning in cooperation with partners, flipped classroom, group-work and lab work supported by independent work. Lecturers have clear guidelines and they have freedom to choose their teaching and learning methods according to the focus of the course they teach and the suitability of pedagogy to the subject matter. Good practice in learning and teaching is clearly defined within the Academy and well known amongst students as well as teaching staff.

Practical training has an important role in the study process, it is well organised and carried out in wide cooperation with aviation industry partners. The Academy has paid extra attention to this in recent years by arranging four training sessions to improve and develop the supervision of practical training. Content of practical training and supervision are at a good level based on students' satisfaction as demonstrated through feedback.

Small study groups provide an opportunity to take into account students' individual capabilities and interests. Some of the elective courses have quite small student groups which may be effective from the perspective of the study process but is not necessarily efficient economically from the institution's perspective. Students confirmed in the interviews that personal development was strongly taken into consideration in their studies [S]. The students are pleased with individual counselling and supervision. The EAA pays attention to developing students' self-competency from the beginning of their studies. Among others the competencies, as referenced elsewhere in the report, include communication, collaboration, time management and independent work. The Academy uses modern online tools to support independent learning, supervision, checking and giving feedback. The Academy also has a fit-for-purpose learning environment (simulators, labs,

virtual learning environment etc.) and students rate it highly. Both students and teaching staff use this environment skilfully and effectively [T, S].

The EAA supports students to participate in student projects, competitions and research activities, offering them additional opportunities to develop in their field of study. Students are also encouraged and supported to develop themselves to act as self-directed learners.

Students are provided with the opportunity to express their opinion and wishes, although engagement with these feedback processes is variable [M, SER]. Students have a voice in decision-taking bodies of the institution, as equal members, and they confirmed that their ideas have been taken seriously and that their voice was heard by the institution.

Alumni and employers' satisfaction surveys are carried out regularly. The results of these surveys indicate that EAA prepares graduates well for their professional careers. Interviews with alumni and employers reflected that graduates are competitive both nationally and internationally [A, E]. According to the Estonian database Haridussilm the salary of the EAA's graduates has been in many years 1.3-1.4 times higher than the national average for university graduates.

Conclusions

All the procedures and activities of Standard 8 are clearly regulated and documented. Processes are continuously improved based on analysis and feedback surveys. Admission requirements and procedures are clear, fair and transparent. Students are well supervised, supported and motivated to take responsibility for their studies. Students have the opportunity to express their opinion and have a voice in decision-taking bodies of the institution. The Academy has a modern learning environment, which is skilfully used by teaching staff and students. A wide range of strategic partners are involved in the teaching and learning process and EAA prepares graduates well for their professional careers. The team therefore considered that Standard 8 complies with requirements.

Strengths

- The highly relevant practical training that engages a wide range of cooperation partners.

Opportunities for further improvement

- Ensure student preferences for elective modules are balanced against institutional efficiency where student cohorts are small.
- Develop additional performance indicators, beyond the application-to-admission ratio, to assess the effectiveness of the Academy's recruitment and admissions.

9. Student assessment

Evidence and analysis

The EAA regulations on student assessment are thorough, clear and comprehensive. Regulations governing student assessment are set out in the Study Regulations (Chapters 4.11, 5.4 and 8.10) and provide the conditions and procedures for: organising activities related to graduation theses and final exams; the approval of minimum requirements for e-courses and on the committee for assessing e-courses; the Accreditation of Prior and Experiential Learning (APEL); and, contesting decisions relating to the organisation of studies. These regulations are sufficient and well formed to support the processes of study organisation and ensure objectivity and reliability of student assessment at the EAA.

The Study Regulations, Chapter 4.11. describe the assessment of learning outcomes in professional higher education. Within the regulation, the Academy defines a summative assessment as being either differentiated or undifferentiated (undivided). In this model differentiated refers to graded assessment, whereas undifferentiated describes assessment that is considered as either 'pass' or 'fail. The Academy's summative assessment uses a standard positive rating of A to E or for undifferentiated S (Passed), and a negative summative rating of F (Failed) or MS or MI (did not attend). In determining the overall award, the Academy uses the weighted average grade. The Study Regulations permit students to repeat an exam once. In the case of practical training (Chapter 5.4), undifferentiated summative and formative (usually oral) assessment is used. In this case, the student can be evaluated a maximum of three times.

The assessment results are typically entered into the Student Information System within ten days. However, the panel suggests that marking should be completed more quickly, aligning with the best practice of recording results within an average of five working days. Prolonged assessment periods can negatively affect students' mental health and may also reflect inefficiencies in the Academy's administrative procedures. Undifferentiated assessment is also applied for special pilot modules where multiple-choice tests are used with a requirement to achieve 75% in the assessment. This enables students to prepare for the theoretical exam at Estonian Transport Administration; the standardised procedure across Europe as defined by European Union Aviation Safety Agency (EASA).

In the event a student wishes to contest an assessment result, the student must first seek informal resolution by the person who issued the decision, and in the case they remain dissatisfied, they may appeal to the Vice-Rector within one month. These arrangements are set out in Chapter 8.10 of the Study Regulations and students confirmed to the panel that they were familiar with the process.

The panel's meetings with both national and international student representatives showed that students are aware of and satisfied with the assessment processes and feedback provided by faculty during and after courses. They are informed in a timely manner about the structure and evaluation methods of each module. At the start of the module, students are given the module plan, which includes assessment criteria, and they receive verbal guidance from their teaching staff in the first lecture.

Furthermore, the balance between summative and formative assessment methods contributes to a diverse range of learning and teaching approaches. This balance fosters a more inclusive learning environment that encourages students to direct their own learning. It is commendable that the Academy introduced formative assessment into the Knowledge, Skills and Attitudes (KSA) module. This inclusion demonstrates a commitment to enhancing students' learning experiences and adopting the best possible assessment practices that improve understanding and retention.

The panel considered the EAA has an adequate document (Rules for Organising Activities Related to Graduation Theses and Final Exams) describing the process for students' final theses. The rules allow for exams to be conducted in Estonian or English. The evaluation of the final thesis (Chapter 8) has an A-F scale within each category to be awarded by each member of the defence committee with the result determining the weighted average of grade points. In practice, the final thesis defence committee adheres to guidelines for evaluating various aspects of the thesis, including the quality of research, research methods, and the practical application of the findings. It is commendable that the defence committee includes representatives from other higher education institutions. This practice contributes to maintaining objective assessment principles.

In addition, the panel considered the Procedure for the Accreditation of Prior and Experiential Learning (APEL), created pursuant to Section 15 of the Higher Education Act. This procedure ensures Prior Education Results (Chapter 3) are assessed by an appropriate Committee, which evaluates the individual criteria or, where this proves difficult, the applicant is asked to sit a re-examination. Where the students have been subject to the same evaluation system, the previous result is accepted in its entirety, where students have been subject to another system, an undifferentiated assessment is used.

Conclusions

Students are generally familiar with the assessment rules within the applicable regulations. In individual subjects, they are always introduced to the assessment method at the beginning of the semester. The assessment of specific subjects, such as the Professional Practical Training Module of the PIL programme, is non-differentiated in order to sensibly prepare students for exams conducted by the Estonian Transport Administration. Practical training takes place with external partners and its evaluation is guaranteed by the close connection between the external company and the EAA coordinator. The panel considered that the process for evaluation of students' final thesis is sufficiently objective and transparent. The system for Accreditation Prior Learning or Prior Experiential Learning (APL/APEL) is similarly well described. The panel therefore concluded that the Academy conforms to requirements in respect of Standard 9.

Strengths

- Student satisfaction with the range and quality of the Academy's assessment and feedback, including the strong balance between summative and formative methods of student assessment.
- Well-established assessment systems that take into account recognition of prior and experiential learning.

Opportunities for further improvement

- Assessment results are typically recorded in the Student Information System within ten days, a duration the panel finds excessively long. The panel recommends that the assessment process be expedited, adhering to best practice by recording results within 5 working days.

10.   Learning support systems

Standard

The higher education institution ensures that all students have access to academic, career and psychological counselling.

Students' individual development and academic progress are monitored and supported.

Guidelines

The HEI assists the student in developing an individual study programme based on the student's special needs as well as educational abilities and preferences.

The HEI advises its students (including students with special needs and international students) on finding internship places as well as jobs. Students are aware of where to get support in the case of psychological problems.

The HEI has a functioning system to support and advise international students (including psychological and career counselling) which, inter alia, helps them integrate smoothly into the membership of the HEI and Estonian society. The HEI analyses the reasons students withdraw from studies or drop out, and takes steps to increase the effectiveness of the studies.

In order to carry out studies and research, development and creative activities, the availability of up-to-date study and research literature, other study materials and tools (including those for independent work) and access to research databases is ensured. Study literature, materials and other teaching aids are of equally high quality.

To support study activities, timely and relevant information and communication technology solutions have been planned, including the study information system, document management, online learning environments, analytical tools for teaching and learning. Support for online learning and IT is available to students. The HEI supports student participation in extra-curricular activities and civil society initiatives. The HEI monitors student satisfaction with the counselling services, the online learning and IT support provided and makes changes as needed.

Indicators

• The average duration of the study by levels of study

• Dropout/withdrawal rate (during the first year and the whole study period)

• Students` satisfaction with the support services

• Other indicators depending on the HEI

Evidence and analysis

The institution has a wide range of learning support systems in place including academic counselling, career counselling and psychological counselling. Academic counselling is provided by Coordinators of the Office of Academic Affairs. The aim of this team is to help students find solutions when planning their studies and to resolve problems relating to the organisation of studies. Previously, coordinators were located in separate departments across the institution, however this activity has recently been centralised.

Career counselling is provided by Heads of Training, Heads of Departments, and the academic staff within certain subject specialisms. The service helps students find solutions to problems relating to finding a job or selecting a career specialism; preparing for job interviews; combining studies and work; planning studies to align with the intended future career; and completing practical training. The service also organises career days in conjunction with industry.

Psychological counselling is provided to students by an external partner under a cooperation agreement. Since the 2022/2023 spring semester, each student may now access five sessions of psychological counselling per academic year. Counselling is anonymous and is not recorded in the national health records.

Information on counselling services is provided to students at the information session for first-year students, and subsequently through memos in information letters. Information on counselling is also available on the Academy's website. Students informed the panel that counselling in all forms was clear, accessible and helped to support students throughout their studies. However, compared to the other forms of counselling, students were less likely to have accessed academic counselling. This appeared to be because students were accessing support directly from the staff delivering particular modules. However, the team considered that increased use of academic counselling had the potential to benefit retention and student achievement across the Academy, especially in programmes with higher rates of dropout or deferral, such as the Aeronautical Engineering (AE) programme.

While the AE programme has been subject to particular interventions and support from the institution, the panel considered the Academy should maintain an emphasis on developing effective strategies to ensure these students received an equitable experience and the institution continues to bolder continuation rates. An example of action taken to date is the closer attention paid to motivation among AE applicants, in order that they understand the challenging nature of the programme and specialism and have a serious commitment to undertake such studies. The panel found this compelling given that compared to the national average, the institution benefits from a lower average rate of disruption across the full range of its programmes and the Aeronautical Engineering programme is therefore an outlier.

The institution also has a Coordinator of International Students in place who assists with academic and co-curricular matters, including accommodation, insurance and visas. The Academy deliver courses in the Estonian language (3ECTS) and there are a range of social opportunities in place for international students. These opportunities range from museum trips to sporting activities and the panel considered these were suitable and proportionate given the scale of the international student body. International students who met the team confirmed they were satisfied with the support they had received although viewed travel to and from campus as a barrier to full integration in the local community.

One area of particular concern to the panel was the lack of support arrangements in place for students with disabilities. While the physical environment is accessible and certain programmes, because of their professional requirements are less likely to admit students with disabilities, there was a general lack of awareness and focus on the issue. This was especially the case for students with learning disabilities, where there is no routine process for enabling students to declare a disability or to receive additional support. The panel considered that the Academy needed to address this at the earliest opportunity, while recognising that this is a national challenge.

Conclusions

The panel found that the Academy has an extensive range of counselling available to students, high levels of student satisfaction with the support they receive and sector leading outcomes in relation to continuation. There is also evidence of taking action with respect to deficiencies in student support and good communication of support services and awareness among staff and students. Therefore, notwithstanding the issue regarding support for students with disabilities, the panel found the Academy complies with the requirements of Standard 10.

Strengths

- The lower average rate of disruption compared to the national average.

Areas of concern and recommendations

- The Academy currently has no clear support arrangements to assist students with learning disabilities. The panel therefore recommends that the institution develop a comprehensive and effective system of support for students with disabilities.

Opportunities for further improvement

- Increase student engagement with academic counselling as providing a broader range of support, in addition to that provided by course tutors, can help to improve students' academic outcomes.
- Devise effective strategies to address discontinuation on the Aeronautical Engineering programme.

11.   Research, development and/or other creative activity

Standard

The higher education institution has defined its objectives and focus in the fields of RDC based on its mission, as well as on the expectations and future needs of society, and assesses their implementation and the societal impact of its RDC activities. RDC supports the process of teaching and learning at the higher education institution. Support services for RDC are purposeful and support implementation of the objectives of the core process.

Guidelines

The HEI places a high value on the role and responsibilities of the field of RDC in society and evaluates the results of its RDC activities, their international visibility and societal impact.

The HEI responds flexibly to the current needs of society and the labour market in terms of its research and plans its research in collaboration with enterprises, public sector institutions and organisations of the third sector.

Members of teaching staff introduce students to their research results as well as the latest scientific achievements in their areas of specialisation, and involve students in their R&D projects where possible.

The organisation and management of RDC take into account the profile and the mission of the HEI.

The HEI applies digital tools for the administration and re-use of research data.

Indicators depend on the specificities of the HEI

• Numerical data:

  - (1) scientific publications by classifiers;

  - (2) public presentations of creative work; recognition from international competitions; reviews in professional publications, etc.;

  - (3) patent applications, patents;

  - (4) textbooks, study aids of various formats, etc.;

  - (5) system development solutions; product development solutions; environmental applications solutions;

  - (6) contracts concluded with enterprises;

  - (7) spin-off companies, etc., in line with the profile and priorities of the HEI; etc.

• Number of scientific publications / creative works per member of academic staff and per employee with the requirement to do research (FTE, by areas)

• Number and volume of externally funded projects of RDC activities

• Proportion of projects with a positive financing decision out of the submitted project applications.

• Other indicators depending on the HEI

Evidence and analysis

In recent years the EAA has worked to establish and implement many regulations targeted on research and development activities (Strategic Plan, Action Plan, Procedure for Research and Development Activities, Procedure for Registering Spin-off Enterprises, Procedure for Disposal and Use of Intellectual Property). These documents define clear targets, indicators, action and steps to complete these institutional goals. RDC activities are coordinated by the Vice Rector for Development and the Council for Research and Development, which the panel considered was proportionate taking into account the size of the Academy.

There are 6 KPIs described in Strategic Plan and more detail targets have been defined in an explicit Action Plan. The panel considered that some of the KPI targets for 2025 could be reviewed to be more ambitious in next Action Plan, especially the targets for volume of sales and for development services. Taking into account that the Academy is seeking to make it RDC activities more prominent within the sector it is advisable to add at least one more indicator that focuses non-scientific publications; for example, the total amount of publications.

It is commendable that the EAA has focused its main attention on publishing scientific articles in journals and proceedings (KPI and motivation system). The number of high-level scientific publications increased from 2 in 2020 to 5 in 2022. Simultaneously, there was an increase in the percentage of staff engaged in research and development (R&D) activities. In 2020, 18% of the staff were involved in R&D, and this number grew to 44% by 2022. However, at the same time, it is interesting that the number of scientific publications is higher than those of non-scientific publications. As already mentioned above, the Academy has set a strategic objective to secure greater awareness and recognition of its activities and services. The panel considers that increasing output in non-scientific publications will support the institution to achieve that goal. Based on interviews and the Estonian Research Information System the Academy's current staff are certainly capable of achieving this in addition to their scientific work.

The Academy has chosen an important focal area, which is future technologies in unmanned aviation. The panel considered this to be highly suitable due to the Academy's expertise in this field. The panel recognises it is a rapidly developing and future-oriented technology, and there are plenty of opportunities for industry and academic collaboration. Many new partners (including universities and professional higher education institutions) have already been identified and collaboration is underway.

Academic staff are also free to select their own research area and topics, as well as the Academy encouraging RDC activities in its focal area. A motivation system has been developed, which includes, among other things, a publishing reward. There is an extra budget available to EAA employees and students to support internal RDC activities. The panel consider it very important that the workload plan for academic employees includes time for RDC activities. At the present time, when there is additional state funding for RDC, the Academy could consider hiring additional dedicated researchers (not only teaching staff with research expertise) focusing on RDC. It is extremely important and necessary to assemble a team of teaching staff and researchers who are regularly engaged in scientific activities.

Students are mainly involved in RDC through their graduation theses but the Academy also supports the launch of student projects. The panel recommend that the Academy seek to involve more capable students in the institution's projects by hiring them. This has a dual benefit as it will also boost their motivation and sense of responsibility, as well as helping the Academy to assemble a

team for conducting specific applied research, given the limited number of researchers currently available.

The panel sees it as very positive that EAA has actively been involved in writing projects to secure additional funding. The number of national and international projects at the Academy grew from 6 in 2020 to 9 in 2022. Throughout 2022 and 2023, a total of seventeen applications were submitted, out of which 7 were approved. As of July 2023, decisions on funding for 4 applications are still pending. This information indicates a positive trend in the growth of national and international cooperation, as well as R&D activities at the Academy.

The scope of research and development activities should be as broad as possible. One of the most important among these is demand-based applied research and the panel considered the proportion of this could be increased. During the period under review, the Academy's own revenue, including project funding, saw an increase of 70,000 Eur, rising from 518,728 Eur in 2020 to 587,047 Eur in 2022. This suggests potential for further growth, particularly in the area of research and development (R&D) services. Although there was a decrease in R&D services revenue from the 2020 baseline of 102,000 Eur to 70,000 Eur in 2023, this figure still surpasses the Academy's KPI of 50,000 Eur. The Academy has prepared a good foundation for conducting applied research, but the marketing of its expertise could be much more effective. There is a clear need for a powerful international communication plan that would facilitate the connection between clients and the academy.

Conclusions

In recent years the EAA has devised and implemented many regulations targeted to RDC activities. The work on RDC is in line with the institutional Strategic Plan and Action Plan. The Academy has identified its focal area, found new collaboration partners and has joined several project consortiums. The Academy is also actively encouraging teachers to increase the proportion of RDC it carries out, especially in its focal area, and a motivation system has been developed and deployed. The panel ultimately concluded that lot of beneficial actions have been started (for examples finding new research active faculty), though not necessarily completed. In the view of the panel, the proportion of the demand-based applied research could and should be increased and the Academy will benefit from the creation of a powerful science communication plan. The panel view the biggest challenge as being to assemble a team of professors and researchers who are regularly engaged in RDC activities. Nevertheless, the panel considered that the Academy is already a leading regional player in its discipline, within bolder international ambitions and a clear institutional commitment to meeting that challenge, as evidenced by demonstrable advancements that have already occurred. The panel therefore determined that the Academy conforms to requirements of Standard 11.

Strengths

- Clear and established focus on RDC that is aligned to staff expertise, detailed in a workload plan and subject to explicit Key Performance Indicators.
- The comprehensive regulations and effective motivation system in place to support RDC activities.

Areas of concern and recommendations

- The Academy has established its focus area and made significant progress in relation to RDC. However, the institution has the potential to increase revenue, industry engagement and

make a greater contribution to society through this aspect of its work. The panel therefore recommends that the Academy targets an increase the proportion of the demand-based applied research that it conducts and review the ambition of its KPIS in this area.

- The panel consider that despite improvements to the staff profile the institution has not yet appointed the volume of staff with the necessary R&D capabilities to meet its objectives. The panel therefore recommends that the Academy recruit additional staff who are capable of making a valuable contribution to R&D work across the institution.

Opportunities for further improvement

- In order to release the Academy's objective to secure greater awareness and recognition of its contribution to the sector the panel suggest the institution reflect on targets for the number of non-scientific publications produced by faculty

- Consider the possibility to increase the hiring and deployment of students on specific RDC projects in order to increase their motivation and sense of responsibility.

- Consider using additional state funding to hire additional staff dedicated to research

- The panel identified that the institution could strengthen the promotion of its range of RDC services and therefore considers that the institution might benefit from developing a powerful science communication plan.

12. Service to society

Standard

The higher education institution initiates and implements development activities, which enhance prosperity in the community and disseminate recent know-how in the areas of the institution's competence.

The higher education institution, as a learning-oriented organisation, promotes lifelong learning in society and creates high-quality opportunities for that.

Guidelines

The HEI contributes to the development of the community's well-being by sharing its resources (library, museums, sports facilities, etc.), by providing consulting and advisory services, participating in the development of non-profit sector and charitable activities, and by organising concerts, exhibitions, shows, conferences, fairs and other events.

The HEI involves alumni in activities aimed at the development of the HEI and the knowledge society.

Employees of the HEI participate in the work of professional associations and in other community councils and decision-making bodies as experts, directing society's development processes as opinion leaders. The impact academic employees have on society is taken into account when evaluating their work.

The HEI has clearly defined the objectives for in-service training, measures their implementation and plans improvement activities. The HEI plans in-service training based on the present and future needs of the labour market target groups. Evidence-based learning supports the learning and self-development of adult learners.

The HEI takes advantage of digital means in order to provide trainings and services

to the public at large.

Indicators

• Number of people in continuing training and other privately financed open forms of study (by responsibility areas or structural units)

• Other indicators depending on the HEI

Evidence and analysis

The Academy has become a strong and united team that benefits from clear strategic direction provided by the institution's senior managers. Under the current leadership, the academy has grown stronger internationally and become more connected to industry and academic networks that are essential for the Academy to be a part of if it wishes to make an important and lasting contribution. The institution informed the panel that it considers that the focus for Academy's strategic developments are based on the needs of society as represented through its various stakeholder groups, students, alumni, other academic institutions and of course, critically, industry. The Academy also informed the panel that the EAA considers it can be the centre of new developments

in the aviation sector and therefore seeks to create new knowledge and programmes to support society.

The Academy premises are also used by society as the library and cafeteria are open for use by the public. In addition, rooms are rented out for different activities (e.g. national dance group training) and the well-equipped conference rooms for different meetings and events. Donor days are organized in the premises by student council not only for the institution's staff and students, but also for local residents. In other innovate development, the EAA has initiated podcasts with aviation personnel called "Lennurada 03" and public lectures from the aviation sector professionals.

The Academy has introduced different courses to secondary school students in order to expose them to the field of aviation. During the panel meeting with industry partners and employers it was stated by the Tallinn Airport Ltd representative that, due to large variety of roles needed in airports, the Academy provides training and additional programmes to staff at the airport, which it considers helpful given the pace of regulatory change and the need for refresher courses among airport personnel. This deeper cooperation has been ongoing since at least 2019. The Vice-Rector for Development explained, as well, that within recent years the Academy has developed a more nuanced appreciation of the services it can offer and has begun to package these possibilities towards society. The EAA provides different opportunities for continuing education:

- Micro degree programmes: Flight Operation Officer FOO / Flight Dispatcher and CAMO / MCC Officer;
- IATA authorized courses;
- Simulator flights;
- MOOC: Introduction to Aircraft.
- Training packages tailored for partners' needs: for example, courses for telecommunication providers.

As of 2022, the number of courses offered reached a peak of 42. The enrolment figures have fluctuated around 600 people per year, with an increase up to 900 in 2021. The enrolment data suggests that the Academy's continuing education services hold the potential to not only enhance the institution's impact on society but also to generate additional revenue.

The EAA publishes a quarterly newsletter and, via Estonian Aviation Cluster, news about Academy is shared beyond the institution. A Facebook group for alumni has been created, which already has around 50% of the alumni population subscribed. Every year a well-known aviation seminar is held that attracts a large number of alumni to the academy to maintain social and professional networks and learn about contemporary issues in the aviation industry. There is also an email list for the alumni that enables the Academy to provide information about industry job offers, events and questionnaires etc. In addition, alumni are involved in the study programme groups to provide feedback on curricula based on their experience, typically from the field itself. The Academy Advisory Board consists of alumni, industry employers and cooperating partners.

Conclusions

The Academy provides industry with top-level graduates raising the knowledge bar of the aviation steadily in Estonia and, increasingly, beyond. The EAA has a variety of options for industry and for the future students to engage with different training and events. Close cooperation with industry, alumni and employers is maintained at all levels, from central management to study programmes. The premises are open to the society and being used for different community events. The Academy

participates in the student fairs and career days and also holds the biggest local industry seminar each year. For these reasons, the panel concludes that the Academy conforms to the requirements of Standard 12.

Strengths

- Cooperation and development activities are organised in close collaboration with the main industry partners.
- The Academy's annual aviation seminar and labour market day which helps build a beneficial network, including to support student employability, with the aviation industry and alumni
- The Academy's innovation in introducing several courses for public benefit and for the aviation industry, including ATSEP qualification training and the MOOC on Introduction to Aircraft.

Annex 1. Schedule of the Assessment Visit

<table>
<tr><td colspan="3">MONDAY, October 16
Estonian Aviation Academy, Lennu 40, Tartumaa</td></tr>
<tr><td>Time</td><td>Activity</td><td>Representatives of Academy
Names of the interviewees and their positions</td></tr>
<tr><td>9.00 – 9.45</td><td>Introductory meeting with the self-evaluation team</td><td>
1. Koit Kaskel, Rector
2. Maiken Kull, Vice Rector for Development, Acting Vice Rector for Education
3. Priit Mootse, Vice Rector for Administration
4. Nele Tootsi, Head of Academic Affairs
5. Alice Ellamik, Head of Human Resources
6. Jaanika Mölter, Quality Manager of Certified Training Organizations and Flight Simulation Training Devices
7. Martin Pedosk, Lawyer-Quality Manager
8. Helen Kalberg, Head of Department of Marketing and Communication
9. Anu Vare - Coordinator of IA process in EAVA, ATSTO Head of Training
</td></tr>
<tr><td></td><td>Break</td><td></td></tr>
<tr><td>10.00 – 11.15</td><td>Meeting with students of Aircraft Piloting study programme and Aviation Management study programme</td><td>
1. Ralf Nicholas Nöör - PIL first academic year
2. Rauno Rauniste – PIL first year
3. Daisy Toim – PIL fourth academic year, Student Council, Erasmus+
4. Raul Paju – PIL third academic year
5. Katharine Anite Pällo - AM first academic year
1. Andra Piirits – AM second academic year
2. Steffi Sikmann – AM second academic year
3. Ivan Oleinik - third AM academic year
4. Karl-Erik Villems – AM third academic year, Student Council
</td></tr>
<tr><td>11.15 -11.30</td><td>Break. Panel reflection.</td><td></td></tr>
<tr><td>11.30 – 12.15</td><td>Meeting with international students and international alumni</td><td>Darina Gluzd – CAM second academic year
David Biro – CAM first academis year
Jevgenijs Kulikovs – CATP first academic year, participates online</td></tr>
<tr><td>12.15 – 13.15</td><td>Lunch break</td><td></td></tr>
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Time	Activity	Representatives
13.15 – 14.15	**Meeting with cooperation partners and employers** of Aircraft Piloting and Aviation Management study programmes	1. Anneli Lille – Tallinn Airport, Head of People and Culture, EAVA Counsil, participates online 2. Tiit Kepp - Diamond Sky, Commercial Director, participates online 3. Liina Kalm - Estonian Transport Administration, Senior Inspector on Training Organisations, participates online 4. Aleksei Kulakovski - Fort Aero, Accountable manager 5. *Anton Õnnik - Xfly, Chief Commercial Officer,* EAVA Counsil, Study *Program Counsil, alumnus.* 6. *Anneli Kajamaa - Lt. Col (Ret)* Senior Lecturer of the Air Force, Estonian National Defence College
	Break. Panel reflection.	
14.30 – 15.30	**Meeting with alumni** of Aircraft Piloting (PIL) and Aviation Management (AM) study programmes	1. Inga Tarto - AM three-year study programme 2023 2. Anette Lille Põlluste - AM four-year study programme 2023 3. Karl Vaabel – AM four-year study programme 2022, Erasmus+ , participates online 4. Rasmus Orasmäe - PIL 2021, visiting lecturer 5. Raido Vint – PIL 2020, participates online 6. Jürgen Kiik – PIL 2021, participated in the admission committee, participates online
15.30 – 16.30	**Tour at the facilities**	Priit Mootse, Vice Rector for Administration
16.30 -17.15	*Panel meeting: summing up the Monday meetings*	

TUESDAY, October 17 Estonian Aviation Academy, Lennu 40, Tartumaa		
Time	**Activity**	**Representatives of Academy** *Names of the interviewees and their positions*
9.00 – 10.00	Meeting with the **Rector and representative(s) of the** Advisory Board	Koit Kaskel - Rector Priit Rifk - Chairman of Advisory Board, AM alumni, Estonian Transport Administration, Head of Unmanned Aviation Derpartment

	Break. Panel reflection.	
10.15 – 11.15	Meeting with the **members of the academic staff** of Aircraft Piloting and Aviation Management study programmes	1. Alisa Lepik – AM alumna 2007, 2012-2021 visiting lecturer, since 2021 permanent academic staff 2. Iluta Savicka – international, permanent academic staff since 2023 3. Jaan Susi – visiting lecturer since 1995, permanent academic staff since 2012 4. Kaimar Lomp – PIL alumnus 2010, visting lecture 5. Jules Yimga – visiting professor, Embry-Riddle Aeronautical University (Fulbright program) 6. Heliise Unt – AM alumna 2010, EAVA staff member engaged in teaching activities
	Break. Panel reflection.	
11.30 – 12.30	Meeting with the **Heads of the Departments and Heads of the Study Programmes: Study programme development, Academic staff, Resources etc.**	1. Kristjan Roosipõld, Head of Department of Aviation Services, Head of the Study programme (AM, CATP, CAM) 2. Leho Roots, Aircraft Systems Associate Lecturer, Head of the Study programme (PIL) 3. Jaan Annus, Head of Theoretical Training, former Head of the Study programme (PIL) 4. Karl-Eerik Unt, Head of Department, Head of the Study Programme (CNS-IKT/TECH) 5. Anu Vare, ATSTO Head of Training, Head of the Study programme (ATS)
12.30 – 13.30	*Lunch break*	
13.30 – 14.30	Topics: **Study related topics, Support services** (for both students and academic staff), **Quality management, etc** *Translator*	1. Nele Tootsi, Head of Academic Affairs 2. Svetlana Ganina, Academic Developer 3. Anu Roio, Educational Technologist 4. Inna Bentsalo, Coordinator of International Studies 5. Jaanika Mölter, Quality Manager of Certified Training Organizations and Flight Simulation Training Devices 6. Martin Pedosk, Lawyer-Quality Manager
	Break. Panel reflection.	
14.45 – 15.30	Topics: **Financial management (Resources), HR, marketing and communication**	1. Priit Mootse, Vice Rector for Administration 2. Ele Talu, Head of Finance 3. Eelika Tootsi, Head of Communication 4. Alice Ellamik, Head of Human Resources 5. Urmet Külaots, Chief Information Officer

	Translator	
	Break. Panel reflection.	
15.45 – 16.30	Topics: **Service to Society and Research and Development**	1. Maiken Kull, Vice Rector for Development 2. Virge Prank-Vijard, Lifelong Learning Project Manager 3. Maria Tamm, R&D Council Chairwoman, Unmanned Aerial Systems Team Lead 4. Helen Kalberg, Head of of Marketing and Communication 5. Marek Alliksoo, Skycorp, CEO - R&D cooperation projects
16.30 – 17.15	*Panel meeting: summing up the Tuesday meetings.*	

WEDNESDAY, October 18 Estonian Aviation Academy, Lennu 40, Tartumaa	
Time	**Activity**
9.00 – 10.30	• **Inquiry of documents** (in case we have discovered during the visit that we need some more evidence) • **"Open doors"** – opportunity for those from the Institute who want to come to discuss various topics related to institutional accreditation with the experts (please register by sending e-mail to the coordinator by October 17; time limit is 5 minutes per person) • **ad hoc interviews** (in case we have discovered during the visit that we need to talk (again) with someone)
10.30 – 12.30	*Panel meeting: conclusion of the visit, preliminary messages to the Academy, next steps.*
12.30 – 13.30	*Lunch*
13.30 – 14.00	**Closing of the visit. Preliminary messages to the Academy.**