

COORDINATED

By letter of the Minister of Defence No 10.1-1/23/1306 of 06.04.2023.

ACCEPTED

Decision of the Council of the Military Academy 08.05.2023

**Development Plan of the Estonian Military Academy  
2023-2029**

**Tartu 2023**

## **FOREWORD**

The Estonian Military Academy (hereafter EMA, or the Academy) proposes the following comprehensive set of strategic agreements and development activities defining the Academy's objectives and development directions for 2023-2029. The development plan provides an overview of the Academy's current situation, formulates a vision for 2029 and maps out the development directions based on EMA's core mission.

The development plan is established based on the Higher Education Act, the Vocational Training Institutions Act, the Research and Development Organisation Act and the Statute of the Military Academy. The development plan has been drawn up based on the development plans of the Ministry of Defence (Ministry of Defence Development Plan 2023-2026, National Defence Development Plan 2022-2031) and related policies (Research and Innovation Policy, Estonian Defence Industrial Policy). The development plan also includes the Ministry of Education and Research's guidelines in education and research (Education Development Plan 2021-2035, Estonian Research and Development, Innovation and Entrepreneurship Development Plan 2021-2035). Pursuant to the Higher Education Act and the Statutes of the Academy, the development plan is approved by the EMA Council.

The development plan plays a central role in the long-term organisation of the Academy's activities and in ensuring the its continuous, high-quality, and sustainable operation. Achievement of the targets set in the development plan will be facilitated by the implementation plan and the annual orders of the Academy's Head.

## THE CURRENT SITUATION

EMA is Estonia's only national defence university of applied sciences. Under the Defence Forces Organisation Act, the Higher Education Act and the Statute of the Defence Forces, the Academy is a structural unit of the Defence Forces under the Ministry of Defence, which directly reports to the Chief of the Defence Forces. The Ministry of Education and Research oversees the Academy's teaching, research, and development activities per the procedure laid down in the Higher Education Act and the Vocational Training Institutions Act. The Academy provides military education and training and promotes research and development in military science and related fields. In addition to meeting the needs of a secure employer, the Academy trains military leaders at various levels of the Defence Forces. It performs national defence functions alongside its university functions. At the same time, the training-level participants are active members of the armed forces and, depending on their level of education, students, or pupils.

The structure of the Academy was reformed in 2018-2019 in accordance with the 2015-2022 EMA development plan. The institution's structural tree and the sub-unit tasks were reorganised to improve the logical, systematic, and transparent implementation of EMA activities. The new structure created the organisational conditions for students to become more self-directed. To ensure a more meaningful coherence of the activities, level, scope, and identification of the Academy, it was renamed the Estonian Military Academy as a part of these reforms.

The development of the Academy's learning activities focused on developing transferable competencies for learners and enhancing the integration at all levels of learning. From 2016 onwards, academy-wide exercises have been organised, and academic research events have been integrated into teaching. Attention has been given to initiating systematic internationalisation, including academic staff and students. Maintaining and developing the pedagogical competencies of the teaching staff has been a key focus in order to ensure that the Academy's curricula are based on a modern approach to teaching. The most significant development of the previous development plan was the renewal of higher education curricula. The renewed Master's degree programme allows for specialisation in air and naval fields in addition to ground forces. Per the decision of the Government of the Republic of Estonia in 2021, the Academy has begun to develop and implement teaching and research competencies in electronic warfare (EW).

Since 2018, the academy has been organising additional admissions for conscripts in the field of applied higher education. Consequently, the student body of the Academy is the largest it has been since the restoration of Estonian independence.

There has been a significant increase in the volume of continuing training in the field of war and disaster medicine, where the training system in war and disaster medicine has been harmonised in recent years. Continuous training in war and disaster medicine is open to students of healthcare. The Academy has acquired the right to teach several internationally licensed medical courses. The most important courses are "Advanced Trauma Life Support", "Definitive Surgical Trauma Care", "Advanced Surgical Skills in Exposure for Trauma", "Military Major Incident Medical Management and Support" and "Tactical Combat Casualty Care". In 2020, the Defence Medical Field Training Centre was merged with the Academy, adding the task of teaching paramedics and conducting pre-mission medical training to the Academy. In addition, it has been actively involved in the development of field medical equipment. The container infrastructure for the Role 2 field hospital of the medical company has been completed, supporting the Saaremaa hospital during the COVID-19 outbreak, and

from 2022, has supported the Ukrainian army. A working prototype has also been completed for the Role 1 mobile communication point for mechanised units.

The Academy’s research and development activities have consciously increased their coherence with the needs of the Ministry of Defence, as a result of which the number of the Academy’s research projects has increased 4.2 times since 2015. In support of the capability development of the Defence Forces, a primary capability level has been achieved in the areas of operational analysis and human defence assets. The Academy leads Estonia's participation in six NATO STO panels and 24 working groups. Significant deficiencies reported by the 2015 National Audit Office have been corrected. Procedures for the research and development activities of the Defence Forces and the EMA and guidelines for permanent research have been established. External researchers have been brought in to improve research and development performance, and a doctoral programme for operational staff will continue to train the next generation. The Academy publishes a high-level, peer-reviewed scientific journal, the Estonian Journal of Military Studies, and chairs the Working Group on Military Terminology. In addition, the EMA publishes the EMA Occasional Papers, a journal of military science, and Academia Militaris, a magazine covering the affairs of the Academy. As of 2018, the Academy has at least two externally funded (European Union and Estonian Research Council) research projects on a permanent basis and supports an average of 6-8 defence product development projects per year.

Three external evaluations were carried out during the previous development plan period. In 2017, the Academy passed the quality assessment of the first and second higher education levels of the National Defence curriculum group organised by the Estonian Quality Agency for Higher and Vocational Education. In order to assess the level of research and development, an international evaluation (evaluation period 2013-2017) was carried out in 2018, which could not be passed due to insufficient research impact indicators. In 2021, the academy underwent institutional accreditation and a quality assessment of vocational education and training, which assessed international requirements compliance of the management, organisation of work, teaching and research activities, teaching and research environment, as well as all of the degree programmes of the academy and related activities. Based on the Estonian Higher and Vocational Education and Training Quality Agency's Evaluation Council decision in 2021, the EMA was successfully awarded institutional accreditation until 2028.

Based on the EMA institutional accreditation self-assessment and as of the end of 2022, the main strengths, threats, areas for improvement and opportunities for the Academy at the beginning of the 2023-2029 development plan period are as follows.

<b>Strengths</b>	<b>Opportunities</b>
<ul style="list-style-type: none"> <li>✓ The Academy has the support of the Ministry of Defence and the Defence Forces leadership to achieve its vision.</li> <li>✓ The Academy has strong links with stakeholders. Targeted and needs-based cooperation with regional and national institutions is ensured.</li> <li>✓ The curricula of the EMA are designed in partnership with employers, and the</li> </ul>	<ul style="list-style-type: none"> <li>✓ Internationalisation of activities contributes to improving the quality of core activities, reduces the risks of staff shortages and strengthens alliances.</li> <li>✓ Stronger links between doctoral studies and military science will support more sustainable research and teaching and create a favourable environment for the next generation.</li> <li>✓ Involvement in NATO's and the European Union's innovation</li> </ul>

<p>skills of graduates meet employers' expectations.</p>	<p>programmes will improve teaching research and development quality and effectiveness.</p> <ul style="list-style-type: none"> <li>✓ Finding and applying for external funding to support the Academy's activities in critical areas (infrastructure, salaries).</li> </ul>
<p><b>Improvement areas</b></p> <ul style="list-style-type: none"> <li>✓ Monitoring and continued implementation of the 2019 structural reform.</li> <li>✓ Establishment and implementation of monitoring of the actions and indicators set out in the development plan and more effective communication of results.</li> <li>✓ Balancing peacetime and wartime tasks within the limits of the mission statement.</li> <li>✓ Creating and expanding flexible learning opportunities in basic and further training for both active and reserve members.</li> <li>✓ Developing the didactic competences of operational staff and creating additional opportunities for the use of digital working environments.</li> </ul>	<p><b>Risks</b></p> <ul style="list-style-type: none"> <li>✓ The lack of sufficient academic staff and a state-of-the-art learning and research environment is an obstacle to the qualitative fulfilment of the Academy's tasks.</li> <li>✓ Salaries for academic staff lagging behind the national average and the average for higher education institutions are not conducive to recruiting motivated and highly skilled staff and contribute to fast turnover of staff.</li> <li>✓ Merging the academy with another institution of higher education will disrupt and marginalise the quality of the military's teaching, development and research structures and priorities.</li> </ul>

## HIGHER INSTRUCTIONS

### *Education and research policy guidelines*

The EMA is based on a modern approach to learning that empowers all learners and supports their individual and social development. The EMA will ensure that the Defence Forces, the Defence League and society at large have a succession of critically minded, creative, effective, transferable and future-ready military leaders through high-quality and integrated learning and a learner-supportive learning environment. At the heart of the learning is the self-directed learner, who possesses a readiness for lifelong learning and the competencies and values to act both as a professional member of the Defence Forces, and as an individual and citizen in a rapidly changing society and environment, as well as in situations that are difficult to predict.

EMA's research and development are based on knowledge-based and innovative solutions that are high-quality and impactful and contribute to the wider vitality of Estonian society, language, and culture. Within the Ministry of Defence, the Academy plays a vital role as a centre of national military science in Estonia, which conducts - and coordinates within the Defence Forces - national defence (applied) research and research projects. At the same time, it supports the development of the Defence Forces in the areas of human resources, force generation and strategy, contributes to the post-doctoral training of personnel with research

potential through a doctoral programme in cooperation with universities, and promotes Estonian-language military terminology.

The EMA cooperates nationally and internationally and involves the Defence Forces in needs-based training, additional professional training, research, and development. Research and development activities are based on applied sectoral study and research projects linked to teaching. The EMA's cooperation with NATO and EU military educational institutions and other educational and research institutions (NATO STO, European Defence Fund, European Defence Agency) is based on the principles of internationalisation of higher education and research and development. This will help to ensure the readiness of the officer corps for international cooperation and an advanced, internationally recognised level of research and development based on the needs of the Defence Forces.

### **Defence policy guidelines**

Estonia's military defence capability is based on the country's independent primary defence capability and NATO collective defence. Estonia's defence capability is based on a broad concept of national defence, where all the resources at the disposal of the state are used to defend the state. The Defence Forces provide the military Defence, which comprises professional units, reserve units and volunteer regiments of the Defence League, together with volunteer auxiliary organisations. The reserve army is based on compulsory military service, from which graduates are recruited into reserve units. In the implementation of the National Defence Development Plan and the broad concept of national defence on which it is based, the EMA's mission is to train non-commissioned officers and officers, ensuring the growth of competent military leaders and supporting the Defence Forces' capability development through defence research and development.

### **Links between higher strategic objectives and the Academy's activities**

The Academy is an institution that operates under both the Ministry of Defence and the Ministry of Education and Research. It supports the implementation of the strategic objectives outlined in the policy documents of both ministries. As it is under the Ministry of Defence, the Academy follows the strategic objectives of the Ministry of Defence, and the strategic objectives of the Ministry of Education and Research are included within this framework.

<p><b>Deterrence</b></p> <p>Influencing an adversary in such a way that, in any scenario that exacerbates international security, the adversary would not attack Estonia.</p>	<p>The most effective weapon of deterrence is an educated, competent, resourceful citizen who respects democratic values and can cope with changing circumstances. The EMA supports deterrence through the training of military leaders with a high work ethic and commitment to duty, and through research and development aimed at finding innovative and novel solutions.</p>
<p><b>Human resources</b></p>	<p>The EMA supports the Defence Forces' capacity development and the educational and career planning of active armed forces members by offering a wide range of</p>

<p>A reserve force based on military service is on a par with NATO's (professional) standby units.</p>	<p>optional learning opportunities for different target groups (including reservists). The curricula are forward-looking, keep pace with the development of the Defence Forces and adapt quickly and flexibly to the professional training needs of the Defence Forces personnel. A learner-centred approach to learning fosters the training of self-directed active military personnel who value lifelong learning. It focuses on the development of transferable and future-oriented competencies and leadership skills, which will also ensure the competitiveness of EMA graduates in the civilian sector.</p> <p>Within the framework of comprehensive national defence, the EMA trains Estonia's health care professionals and the reserve health care personnel of the Defence Forces.</p> <p>Research underpins the government's human capital management decisions and improvement planning, thereby enhancing society's coherence and contributing to its wider well-being.</p>
<p><b>Investments</b></p> <p>Reasoned and prudent financing decisions, so that every euro invested in national defence produces as much defence capability as possible.</p>	<p>EMA contributes to the funding decisions of the Ministry of Defence's capability development and other activities by providing research and development analyses, peer reviews, and cost modelling and validation of capability development projects. As an educational institution, the EMA's focus is on the development of entrepreneurial, inventive and innovative competences. The EMA's cooperation with the Estonian Defence and Aerospace Industries Association (EDAEA) helps to foster a favourable business environment for the creation of higher value-added products and services and stimulates technology and development-intensive investments.</p>
<p><b>Will to defend</b></p> <p>An unquestionable part of civic identity, underpinned by the idea that contributing to the defence of the country is a matter of honour.</p>	<p>The competences of graduates from all levels of education in the EMA are part of the development of defence attitudes among conscripts and future reservists, and thus strengthen the cohesion of society. Graduates' competences as national defence teachers create the prerequisites for</p>

	<p>generating and nurturing national defence awareness in general education schools and in society at large. The academy's integrated studies on human defence resources (including conscription), the forgetfulness curve of reservists, changing threats, etc., support the identification of the level of preparedness and the design of possible steps for improvement.</p>
<p><b>Defence readiness</b></p> <p>Estonia will reach combat (readiness) in 2026 twice as fast as in comparison to its 2021 capabilities.</p>	<p>The staff of the EMA serve in national defence posts. They are assigned to the Defence Forces' wartime units and contribute to NATO defence cooperation. It supports collective training and maintains combat readiness. Competences and experience gained in wartime tasks will be applied to the training and development of the EMA. The EMA's defence strategy and homeland security research support the development of new defence development plans, and its research supports better situational awareness, faster decision-making by military leaders and the enforcement of decisions. Developments in information systems (e.g. development of fire control systems) and the digitisation of the results of staff work in the framework of research activities speed up these processes. The EMA cooperates with and promotes cooperation with internal security institutions in the field of education and research. With the support of the Ministry of Social Affairs and the Health Board, EMA contributes to the establishment of a system of war and disaster medicine education in Estonia.</p>
<p><b>Allies</b></p> <p>The support of key allies and regional partners for Estonia's defences is backed up by long-term, troop-led plans and defence agreements.</p>	<p>The internationalisation of the EMA's learning activities (including mobility, the involvement of guest lecturers from abroad) supports the readiness of co-operative military leaders for service in both NATO and the European Union. Cooperation with education and research institutions abroad strengthens the teaching and research skills of the academic staff, boosts knowledge transfer and supports high-quality teaching and research. Participation in the activities of the NATO STO and the European Defence Fund, as well as the use of various research</p>



	<p>accelerators, will help to stimulate research and development.</p> <p>With the participation of the Multinational Medical Coordination Centre/European Medical Command, international war and disaster medicine courses and exercises are conducted to develop military medical cooperation capabilities with allies.</p>
<p><b>Force generation</b></p> <p>Transparent, resource-conscious, and cost-effective development of the Defence Forces.</p>	<p>The EMA supports the achievement of force generation objectives by providing timely and relevant training for non-commissioned officers and officers and ensuring the sustainability of military defence. The EMA also contributes to the development of the Defence Forces and a more effective army through (military) research. Research projects on future trends and warfare reflect the broader challenges of small states, while the EMA supports the experimental programme on new technologies by developing an evaluation methodology.</p>
<p><b>Reconnaissance</b></p> <p>Effective use of intelligence to provide the earliest possible warning of external threats to Estonia and the other Baltic States.</p>	<p>The EMA contributes to the initial product development to address operational shortcomings identified in the development of map application programs, in the framework of the research, development and innovation projects of the Ministry of Defence (e.g. information systems, embedded systems, electromagnetic radiation direction finders), in the validation of collaborative environments based on new technologies, in the development of artificial intelligence-based computing and in the development of map application programs.</p>

## VISION AND MAIN TASK

**In 2029, the Academy will be an internationally accredited higher defence education institution and an evaluated research institution with a central role in the promotion of military leadership and military science in cooperation with domestic and foreign partners.**

The Academy's main mission is to prepare military leaders at different levels and to develop military science<sup>1</sup> to ensure the sustainability and development of military defence leadership.

The Academy's core areas of activity are:

- higher education and vocational training,
- providing continuing training,
- defence-related research and development.

## TRANSFORMATIONAL DIRECTIONS

This vision will be implemented through three development strands: governance, learning and research and development. For each of these, the development plan sets out an objective, an operational framework, key actions, metrics, and performance indicators (see Annex 1).

### Governance

Goal: To create the conditions for achieving the objectives of learning and value creation, research and development and innovation in the best possible way and at the best possible level through effective governance and meaningful and targeted resource management.

### Operational framework

- **The EMA is an integral part of the Defence Forces.** The management and administration of the EMA is part of the Defence Forces' centralised command and resource management system. The EMA's learning and values of education and research and development are based on the needs of the Defence Forces.
- **Task- and people-centred management is applied.** The organisational culture of the EMA is based on the core values of the Defence Forces and the values of the EMA. Awareness and involvement of staff and learners, and the freedom to shape their performance, are the management tools for achieving objectives and tasks.
- **EMA active members are assigned to wartime positions in the Defence Forces.** EMA active members are systematically involved in the activities of wartime units. Activities in the wartime units are managed and planned to support the EMA's objectives of education, training, appreciation and research and development.
- **Selecting and retaining human resources supports the EMA's reputation as a place of learning and service.** The EMA recruits competent personnel whose understanding of military leadership training and the development of military science is aligned with the EMA's objectives and the needs of the Defence Forces. The rotation system of the Defence Forces supports the service of active members who carry the values of the EMA and are competent in the EMA as academic staff. The Defence Forces values their service in the EMA. The EMA promotes the development of professional and didactic competencies of academic staff. Working conditions support the performance of duties, and pay is competitive.

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<sup>1</sup>Military science is an interdisciplinary field that studies the use of military force in all domains of warfare across the spectrum of conflict.

See: <https://sonaveeb.ee/search/unif/dlall/mil/s%C3%B5jateadus/1>.

## Key activities

- Ensuring a modern and attractive learning and research environment.
- Upgrading the staff rotation system to consider the interests of the EMA, including the development of learning and recruitment and filling of new posts (naval and air force lecturers, researchers) necessary for the enhancement and development of teaching and research.
- Increasing the proportion of reservists with long-term service experience in academic institutions in academic staff posts ensures that the experience base is transferred to teaching and research.
- Increasing the number of academic staff with Doctoral degrees.
- Paying competitive salaries to academic staff and support staff.
- Updating and implementing the quality insurance system and raising staff awareness of quality insurance requirements, procedures and results.
- Analysing and streamlining processes and management of support services.
- Establishment of the Academy's supply table and provision of equipment and resources for the sustainable and smooth running of the core activities of the EMA.

## Educational activities

Objective: to train competent military leaders with shared values and attitudes based on learner-centred and educationally innovative learning principles.

## Operational framework

- **Level and continuous training form a complete system.** The curricula for the different levels of basic and further training are designed and developed as a coherent set of interlinked curricula, which support flexible learning and contribute to the career planning of the Defence Forces.
- **Teaching is evidence- and research-based.** Learning and teaching are based on tested and effective theories and methods for the development and application of subject-specific research.
- **Learning is learner-centred, focusing on transferable and future competencies.** It uses learner-centred methods, moving from knowledge sharing to knowledge creation. It supports the development of transferable, personal, and future competencies and the development of self-directed individuals. There will be increased focus on digital competencies, innovative thinking, and action.
- **Teaching is underpinned by consistent and systematic value education.** Value education, based on cross-cutting, mentoring, and military service organisations, reinforces the Defence Forces and the EMA's values and the attitudes and behaviours required of a military leader. Learning and values education form a coherent whole.
- **The integrated subjects prepare students for coping with future service tasks.** It is characterised by integration towards the final objective. In order to establish cross-curricular and cross-disciplinary links, to develop a broad understanding of the knowledge acquired and to use the skills in the future service, subjects are integrated within the curriculum and, where appropriate, between levels of study. Cross-utilisation of resources will be implemented where there is a substantive overlap between level and continuing education.
- **At the heart of internationalisation is the ability to work with allies.** The EMA cooperates internationally with military training institutes in allied countries. Priority activities related to teaching are student mobility, teaching mobility of staff, and

research cooperation. The main cooperation partners are the Baltic Sea countries and Estonia's strategic allies in NATO.

#### Key activities

- Ensuring the comparability of military training with the European Union's sectoral qualification framework and the establishment and implementation of micro-credentials and qualifications.
- Upgrading the level of in-service training curricula based on the training needs of the Defence Forces' capability development personnel.
- Developing innovation and future competencies and cross-cutting areas and disciplines enhancing integration (including integrated subject and language learning) in post-curricular learning.
- Enhancing students' leadership skills through learning activities and mentoring.
- Increasing the share of visiting lecturers from abroad in teaching activities and faculty members and increasing the number of English-language subjects taught in Academy degree programmes.
- Increasing the number of e-learning and e-supported subjects, in order to achieve resilience in the delivery of learning, in line with wartime missions.
- Increasing the number of e-learning and e-supported subjects, in order to achieve resilience in the delivery of learning, in line with wartime missions.
- Developing the didactic competencies of military lecturers.
- Systematic development and implementation of learning resources in teaching activities.
- Integrating electronic warfare into teaching and research.
- Increasing the number of licensed courses in war and disaster medicine.

#### Research and development

Purpose: to support, first and foremost, the development of Estonian military capabilities and the consistent and systematic development of military thinking in the Defence Forces.

#### Operational framework

- **Military science is at the heart of EMA's research.** EMA's research projects involve active military personnel with specialist knowledge and skills to develop military scientific competence in the field of research and support the promotion of scientific thinking in the Defence Forces.
- **Research, development, and innovation activities support the objectives of the National Defence Development Plan.** In research, development, and innovation strands and research projects of the EMA research and development activities, priority is given to capability developments in line with the National Defence Development Plan.
- **Research, development and innovation activities support teaching and focus on ensuring military education, Defence Forces capability development and up-to-date Estonian military thinking.** Research and innovation activities are designed and implemented with the substantive needs of teaching in mind. Where possible, student research will be integrated into EMA research projects. The Academy's research focus will be tactical, but in order to keep pace with pivotal events in the field of warfare and the resulting global changes, research will be conducted in the following areas strategic developments in military science, warfare and technology.

- **Popularising doctoral studies among active military personnel.** Systematically orienting and supporting active members of the armed forces in doctoral studies. By making doctoral studies a natural part of the officer career system, the preconditions are created for the development of a coherent school of experts with a degree in military science and the development of military science.
- **The Academy is developing together with Estonian and allied research institutions.** The EMA cooperates with domestic and foreign partners to add value to research and development activities and improve the quality and impact of research outputs.

#### Key activities

- Preparing for and successfully completing the Academy evaluation.
- High-quality scientific publications and increased scientific impact.
- Research projects will cover the following areas: strategy, human resources, military leadership, and military management. pedagogy, military decision-making, information operations, EW, disruptive technologies, including techno-sociology.
- In-depth treatment of unmanned systems and artificial intelligence in research, development and experimentation.
- The development of military terminology will continue on a project basis.
- The EMA coordinates Estonia's participation in NATO STO research activities, maintaining its position among the top three contributors (participating researchers as a percentage of defence expenditure).
- The EMA publishes the peer-reviewed scientific journal, the Estonian Journal of Military Studies, and its special issues, in which at least half of the articles are in English.
- The EMA will continue to provide doctoral training for active members of the Defence Forces in accordance with the needs of the Defence Forces, giving preference to cooperation with foreign military academies.
- Increasing external funding for research and development.
- Successful application for NATO certification for the Centre of Excellence in EW.

#### **MONITORING AND UPDATING THE DEVELOPMENT PLAN**

The implementation of the development plan is the responsibility of the Academy's Rector and the Rectorate, whose task is to initiate activities, manage processes and monitor the implementation of the development plan in their respective areas of responsibility. An implementation plan is created to put the development plan into action. This plan includes the activities and performance indicators needed to carry out the development plan. Once a year, during a regular session of the EMA council, the implementation of the development plan and its action plan are evaluated and, if needed, updated. Any changes made are recorded in a protocol decision made by the academy council.

## **Used Abbreviations**

CWDM - Centre for War and Disaster Medicine

DAR - Department of Applied Research

ECDI - The Estonian Center for Defense Investments

ED- Education Department

EDF – Estonian Defence Forces

EMA – Estonian Military Academy

EW – Electronic Warfare

NATO STO – NATO Science and Technology Organisation

HVE – Higher Vocational Education

VE – Vocational Eductaion

MA – Master of Arts

## Action Plan of the Development Plan: Measures and Performance Indicators by Activities

Action	Measure	Performance indicator	Baseline 2023	Reference phase 2026	Target level 2029
<b>Leadership</b>	Modern learning and research infrastructure	Creating the infrastructure	EMA infrastructure maintained	ED study building and Centre for War and Disaster Medicine building built in Tartu  Electronic Warfare Competence Centre infrastructure built	EMA infrastructure renovated
	Academic staff turnover (civil servants)	Percentage per year in academic units (ED, DAR, CWDM)	30	25	15
	Filling posts in academic units	Percentage of occupied posts in academic units	85	Not under 90	
	Doctoral academic staff	Percentage of total number of academic posts	10	15	20
	Active members of the reserve with long service experience	Total number of academic units	4	8	12
	Research impact in the research area being evaluated	Effectiveness variable (h-index)	2	+3	+3
	Discontinued vocational education and training at their own request	Percentage per academic year	Not more than 15		
	Improving the efficiency of support services	Evaluation, organisation, implementation	Evaluated processes	Processes revamped and management chain streamlined	Processes updated as needed
	EMA equipment table	Needs-based supply table prepared and updated	Ensuring provisioning in the cost model	Equipment acquired	Equipment and resources guaranteed

<b>Educational activities</b>	System of micro-qualifications/degrees established and implemented	System design and implementation	Solutions identified and foundations laid	System piloted	System applied
	Upgrading of level training curricula in line with the needs of capability development of the Defence Forces	Curricula prepared; studies open	Prepared for the opening of a specialisation in defence aviation at the HVE curriculum  Upgrading of the open MA curriculum with Division level learning outcomes	Divisional learning implemented at the MA curriculum level  Specialised training in the Air Force and the Estonian Navy MA curriculum systematically implemented  VE curriculum updated and implemented  Analysis of the opening of specialised training based on the needs of the Defence Forces completed.	Specialised training tailored to the needs of the Defence Forces, prepared and open-ended
	Use of digital tools in vocational education and training	Versatile and cost-effective use of digital tools for learning (assessment, teaching, evaluation)	Identified across curricula	General guidelines and implementation principles drawn up and piloted	Targeted, up-to-date and cost-effective use of digital tools for learning.
	The use of problem-based and project-based learning methods in learning	Share of degree programmes	Identifying the current situation and goal setting	According to the specified level	According to the specified level
	Visiting foreign lecturers in higher education (at least 4 academic hours per academic year)	Number of guest lecturers	3	8	12
	Teaching placements abroad/in an international environment for EMA lecturers (minimum 4 academic hours per academic year)	Average number of teaching staff in the department per academic year	6	10	12



	Conducting English language courses in the EMA	Number per higher education programme	HVE – 1 MA – 0	HVE - 2 MA - 1	HVE - 2 MA - 2
	Experience of students' participation in English language learning/international cooperation experience	Percentage of participation by level of study and by course (VE, HVE, MA)	30	50	100
	E-learning or e-learning-supported subjects in degree courses	Percentage per curriculum	20	40	70
	The link between research and degree-level studies	Percentage of research related to research and development projects per course  Percentage of EMA research and development projects used in EMA teaching activities	10  40	HVE – 30 MA – 40  60	HVE – 40 MA – 50  80
	Design and use of teaching resources	Learning resources are developed in a systematic way and support the thematic curriculum of the subject(s) and/or provide a harmonised basis for the delivery of learning	Learning resources to support teaching identified and development plan drawn up	The teaching material is linked to the thematic curriculum(s) of the subject(s), is directly related to what is being taught and/or provides a harmonised basis for learning	
	EW electives in curricula and integrated into core curricula	Elective subjects developed and implemented, electronic warfare topics integrated into core curriculum	Electives developed and validated in the curriculum, integration of electronic warfare into basic training started.	Electives completed, EW integrated into core curriculum	EW learning conducted in both core and elective subjects
	Developing courses in war and disaster medicine	Licensed amount of CWDM courses	1	3	4



<b>Research and development</b>	Implementing the doctoral programme in cooperation with universities	Number of Doctoral Students per year	6	8	8
	Successful completion of doctoral studies	Cumulative number of Doctoral studies defended	4	7	10
	EMA permanent survey reports	Number (DAR, ED, CWDM)	6 (5/1/0)	9 (6/2/1)	10 (7/2/1)
	EMA successfully completed research projects	Cumulative number	14	19	25
	EMA ongoing research projects	Number	9	8	8
	EMA participation in research teams	Number	12	10	10
	Patents applied for and registered utility models	Cumulative number	1	2	5
	New solutions for force generation application	Number per year	2	2	3
	Field tests (experiments)	Number per year	9	10	10
	Development of scientific journals	Analysis report and roadmap	-	Progress report and roadmap	-
	Publishing top-tier academic papers (1.1, 1.2, 2.1, 3.1).	Number per year	52	55	60
	NATO STO, European Union Study Group Reports	Number per year	4	5	5