

APPROVED

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APPROVED

Decision of the ENDC Council  
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**DEVELOPMENT PLAN OF THE ESTONIAN NATIONAL  
DEFENCE COLLEGE 2015–2022**

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## **Foreword**

The current development plan determines the development of the Estonian National Defence College (hereinafter: the ENDC) in the years 2015–2022.

The development plan provides an overview of the current situation of the ENDC, determines more important directives of education and research policies and defence policies, and states the mission, vision, objectives and principles of the domains of the ENDC. Furthermore it sets forth the strategy for achieving the objectives within the realm of the Ministry of Defence.

The development plan has a strategic role in the command of the ENDC. The development plan is the basis for determining the prioritized areas of development, the budget and work plans in compiling the commandant's annual directive. The commandant's annual directive and the development strategies of the domains play the part of the action plan of the development plan.

The development plan is the binding agreement of interested parties in the development and strategic objectives of the ENDC in the medium term development perspective. The development plan is enforced according to the Vocational Higher Education Institutions Act, Vocational Educational Institutions Act, Research and Development Organisation Act, and the Defence Minister 10.02.2014 regulation "Statutes of the ENDC". The development plan is based on the objectives of the regional development plans of the Ministry of Defence (Defence Minister 14.07.2014 directive No 271 "The Development Plan of the area of government of the Ministry of Defence 2014–2018" and the development plan of national defence 2013–2022) and the directives of the Ministry of Education and Research in the areas of education and research. According to the Vocational Higher Education Institutions Act and the Statutes of the ENDC the development plan is enforced by the Council of the ENDC.

## **SITUATION**

### **1. Current situation**

The ENDC is a professional higher education institution for national defence within the area of government of the Ministry of Defence under direct subordination to the Chief of Defence of the Estonian Defence Forces. According to the Defence Forces Organisation Act, the ENDC is a structural unit of the EDF as a unitary governing institution while also being an institution of higher education in the sense of the Vocational Higher Education Institutions Act. The areas of operation of the ENDC are as follows:

- Providing vocational education according to the vocational curriculum (non-commissioned officer education);
- Providing higher education according to the curriculum of vocational higher education and master's curriculum (officer education);
- Conducting in-service training for active-duty servicemen and reservist and senior non-commissioned officers' training in cooperation with our allies;
- Research and development activities in the field of military science (including applied research).

The leadership, organization of work, education and research activities, and study and research environment of the ENDC correspond to international requirements, which is proven by the fact that the Estonian Quality Agency for Higher and Vocational Education has accredited the ENDC until 2021.

## **2. Higher directives**

### **Directives concerning education and research policy**

In planning and conducting its study and instruction activities and research and development activities, the ENDC uses the Estonian Strategy of Lifelong Learning 2020, the Estonian strategy of research and development activities and innovation for 2014–2020 entitled “Knowledge-based Estonia”, and other strategic documents directing the development of the above-mentioned fields.

The directions and objectives of the research and development activities in the area of government have been presented in the document “Research and development policy 2014-2022 in the area of government of the Ministry of Defence”. From the point of view of the research and development activities of the ENDC, the document states the development goal of the ENDC to become the center of military science, the role of the ENDC in the command structure of research and development activities in the field of defence, the extent of its responsibility and the personnel policy for increasing general research capabilities (by creating the system of doctoral studies for active-duty servicemen). According to the general competencies determined in the research and development policy, the ENDC is responsible for developing and maintaining “Operational analysis”, “Leadership”, “Resource management” and “Military technology”.

The basis of study and instruction activities is the renewed learning approach, which supports the learner’s individual and social development. Through high quality and integrated study processes and a study environment that supports the student, the ENDC provides the Estonian Defence Forces with new generations of critically thinking, creative and efficient military leaders in good command of key competences.

The ENDC cooperates with internal and foreign partners and includes the Estonian Defence Forces in the degree studies and in-service training and research and development activities fulfilling the requirements of the EDF. Research and development activities are based on the applied research of a particular field and research projects.

In accordance with the principles of higher education and international cooperation in the realm of research and development activities, the ENDC cooperates with NATO and military academies in the EU and other partners in the field, thus providing for the officer corps’ readiness for international cooperation and a high and respectable level of research and development activities in the best interest of the Estonian Defence Forces.

### **Directives of defence policy**

As a structural unit of the Estonian Defence Forces, the ENDC’s activities are guided by the foundations of Estonian Security Policy, the Strategy of Estonian National Defence, the Development of National Defence 2022 and other source documents in the field. Estonian military defence capability is based on its primary defence capability and NATO collective defence. The basis of Estonian primary defence capability is the broad approach to national defence, in which the total resources of the country are pooled to national defence, if needed.

The Estonian Defence Forces are the practitioner of military national defence consisting of professional units, reserve units and units of the Defence League consisting of volunteers together with the added voluntary assisting organizations. Compulsory conscription is the basis of the reserve army, reserve units consist of graduates of conscription.

Study and instruction activities and research and development activities of the ENDC are mainly formed by the development plan of national defence 2022 that determines political and military directions of development, primary development areas for improving national defence capabilities, key requirements and resources.

The task of the ENDC in carrying out the development plan of the EDF and its comprehensive approach to national defence is in the preparation of non-commissioned officers and officers, thus providing new generations of competent military leaders for the Estonian Defence Forces and the country and support for the development of abilities through research and development activities in the field of national defence.

### **3. Mission of the ENDC**

**The mission of the ENDC is to prepare the management of the Estonian Defence Forces and to develop military science with the aim of guaranteeing the leadership sustainability of the Estonian Defence Forces.**

Military science is a field of research that deals with the development of defence capabilities and waging war against the aggressor. Military science researches ways to neutralize the resources of the enemy using optimum means and thus achieve more favourable conditions for one's country using both military and non-military means. Military scientific research means organizing and adding to the knowledge of the Estonian Defence Forces.

**The mission of the ENDC supports the military culture of the Estonian Defence Forces, the formation of the world view of active-duty servicemen and the defence readiness of society.**

The military culture of the Estonian Defence Forces is formed by the common behavioral patterns (tactics, operational art, strategy) of active-duty servicemen, reservists and members of the Defence League, that promote better understanding of the intentions of commanders, subordinates, and neighbours when planning operations. **Military culture consists of common terminology and attitudes, and the values and traditions that provide the basis for professional cooperation.**

World view is understood in the Estonian Defence Forces more broadly as military culture. In addition to knowledge, skills and attitudes, it also comprises an understanding of the surrounding environment that, among other things, provides a basis for ethical values outside professional activities. The world view of a serviceman manifests itself primarily in the readiness to sacrifice oneself and in the right to determine the fate of the citizens given at his/her disposal at the same time assigning military tasks and weighing the expected outcome and resources required (incl. people).

The need for this world view and its understanding manifests itself primarily in connection with the reserve force where the majority of the human resources have to follow the chain of command to achieve military objectives. The majority of military human resources do not consist of professional military personnel but of representatives of different fields where risk, self-sacrifice and primacy of the objective are not necessarily the main influencing factors. Active-duty serviceman must bear in mind that his or her ultimate objective is the readiness to destroy any kind of enemy while understanding the paradox that only the readiness to destroy makes it possible to prevent extermination and destruction. Then job of a serviceman is

(potentially) destructive and through creating destruction also the resources of the country are destroyed. The readiness to act destructively in the prevailing environment, while at the same time considering the values of the environment, requires clear principles, values, courses of action, the right to make decisions and a sense of responsibility. This collection of values and characteristics can be called the world view of an active-duty serviceman.

#### **4. Vision 2022 and objectives of domains**

**Vision 2022: the ENDC is an institution of education and research in national defence that possesses a central role in developing military leadership and military science, promoting military culture in the Estonian Defence Forces and communicating it to its allies.**

In order to carry out the vision and the mission three strategic objectives have been established.

**Command** creating conditions for achieving the objectives of study and instruction activities and research and development activities (p 5.1).

**Study and instruction activities** that prepare military leaders for the Estonian Defence Forces and the Defence League to correspond to the requirements of national defence and sharing common military culture and world view (p 5.2).

**Research and development activities** that support the development of key military capabilities and the formation of military scientific thought in the Estonian Defence Forces through coordinating and conducting research and development activities in the field of national defence (Clause 5.3).

## 5. Principles and strategy of domains

### 5.1 COMMAND

#### Principles

- **The ENDC is an organic part of the Estonian Defence Forces.** Command and governance of the ENDC belongs to the centralized command and resource management system of the Estonian Defence Forces. The objectives of study and instructional activities and the resource and development activities of the ENDC are based on the requirements of the Estonian Defence Forces.
- **Mission command and human centric leadership are implemented.** The organizational culture of the ENDC is based on the values of the Estonian Defence Forces and the ENDC. Including employees and students and the input and initiative of both employees and students direct the completion of set objectives and tasks.
- **Wartime command principles are implemented.** As a structural unit of the Estonian Defence Forces, employees' war time capabilities are developed in integration with peacetime leadership of the ENDC.
- **Active-duty servicemen in the ENDC operate in wartime units.** Servicemen in the ENDC are systematically included in the activities of wartime units in all fields. Activities in wartime units are commanded and planned to support the achievement of the objectives of study and instructional activities and the research and development activities of the ENDC.
- **Personnel policy helps to shape the reputation of the ENDC as a place for studies and service.** The ENDC recruits competent personnel whose view of educating military leaders and developing military science coincides with that of the objectives of the ENDC and the requirements of the Estonian Defence Forces. The rotation system of the Estonian Defence Forces allows competent servicemen, who possess the values of the ENDC, to serve on its academic staff.

#### Expected outcomes, activities and enablers together with indicators

	OUTCOME	ACTIVITY	ENABLER	INDICATOR
1.	<b>Functioning mission command and human centric leadership</b>	Objective centered tasking and monitoring measures are used.	<ul style="list-style-type: none"> <li>- Employees of the ENDC, primarily leaders of all levels</li> <li>- Concept of leadership principles</li> <li>- Integrated civilian and military leadership</li> </ul>	<ul style="list-style-type: none"> <li>- Satisfaction with leadership (≥3.0; 4 point scale)</li> <li>- Implementation of leadership principles (leadership audit once in 2 years)</li> </ul>
		Transparent rotation system is developed. The results of	<ul style="list-style-type: none"> <li>- Human resources of the Estonian Defence Forces</li> </ul>	<ul style="list-style-type: none"> <li>- Contribution to the rotation plan of the Estonian Defence Forces compiled by the Personnel department of the General Staff</li> </ul>

		<p>evaluation interviews are used to plan servicemen's rotation.</p>	<ul style="list-style-type: none"> <li>- Rotation system of the Estonian Defence Forces</li> <li>- Clear information concerning the requirements and possibilities of personnel</li> <li>- Principles of evaluation interviews</li> <li>- Leaders of all levels</li> <li>- Timely information concerning study and rotation opportunities</li> <li>- Administration Department</li> </ul>	<p>(J1) and requests for additional human resources (once a year, in December at the latest)</p> <ul style="list-style-type: none"> <li>- Plan for staffing the vacant positions or completion of the corresponding tasks (presented for the upcoming year)</li> <li>- Analysis of study possibilities of the General Staff of the EDF: degree studies and in-service training, possible doctoral studies (report once a year)</li> <li>- Competition to fill positions of servicemen</li> <li>- Results of evaluation interviews (<math>\geq 2.0</math>; 3 point scale)</li> </ul>
		<p>Wartime command principles are implemented to develop wartime competencies and increase opportunities to evaluate of servicemen.</p>	<ul style="list-style-type: none"> <li>- Chiefs of structural units</li> <li>- Standard orders to conduct activities</li> <li>- Clear instructions</li> <li>- Freedom of action in completing tasks</li> <li>- Clear command structure corresponding to the task</li> </ul>	<ul style="list-style-type: none"> <li>- Satisfaction with the implementation of wartime command principles (<math>\geq 3.0</math>; 4 point scale)</li> <li>- Creating common peace and wartime orders, plans and formulas</li> <li>- Implementation of wartime command principles (command audit once in 2 years)</li> </ul>
		<p>Wartime tasks connected with peacetime activities and objectives are carried out.</p>	<ul style="list-style-type: none"> <li>- Wartime tasks and activities with the main focus on the 2<sup>nd</sup> Infantry Brigade</li> </ul>	<ul style="list-style-type: none"> <li>- Servicemen in wartime positions (100% of servicemen)</li> <li>- Participation in preparation of wartime units (100%, once a year)</li> <li>- Taking the tasks of a wartime position into account during evaluation interviews (yes/no)</li> <li>- Participation of the students of degree studies in preparation of wartime units (100% of students once a year)</li> </ul>

		Quality system is implemented, including overall feedback, and administration system is made more efficient in the ENDC.	<ul style="list-style-type: none"> <li>- Quality group</li> <li>- Administrative Department</li> <li>- Chiefs of structural units</li> <li>- Development plan</li> <li>- Indicators and gauges (objectives) of annual directives</li> <li>- Department of internal audit</li> </ul>	<ul style="list-style-type: none"> <li>- Satisfaction with document management and dissemination of information (<math>\geq 3.0</math>; 4 point scale)</li> <li>- Completion of the feedback surveillance plan (80% per year)</li> <li>- Completion of the plan of development activities based on feedback results (<math>\geq 75\%</math>)</li> <li>- Efficient administration (audit of document management)</li> </ul>
2.	<b>Functioning internal and outside communication for independent development of one's field</b>	Formal communication is made more efficient, informal communication is valued.	<ul style="list-style-type: none"> <li>- Commanders</li> <li>- Administrative support</li> <li>- Functioning Internet connection</li> <li>- SharePoints</li> <li>- Necessary rooms and parade ground</li> <li>- Cafeteria, rest areas, smoking areas</li> <li>- Cadet casino</li> <li>- The ENDC's support of events</li> </ul>	<ul style="list-style-type: none"> <li>- Satisfaction with formal communication (<math>\geq 3.0</math>; 4 point scale)</li> <li>- Satisfaction with informal communication and events for all personnel (<math>\geq 3.0</math>; 4 point scale)</li> <li>- Participation in events for all personnel (<math>\geq 40\%</math> of personnel by units)</li> </ul>
		Personnel is systematically included in leadership according to target groups.	<ul style="list-style-type: none"> <li>- Objective centered leadership</li> <li>- Meetings</li> <li>- Development seminars</li> <li>- Councils, committees, working groups</li> <li>- Implementing feedback results</li> <li>- Evaluation interviews</li> </ul>	<ul style="list-style-type: none"> <li>- Satisfaction with being included in leadership according to target groups (<math>\geq 3.0</math>; 4 point scale)</li> <li>- Implementation of leadership principles (leadership audit once per 2 years)</li> </ul>
		External communication and direct marketing are enhanced.	<ul style="list-style-type: none"> <li>- Media and Marketing Group of the ENDC coordinating and arranging external communication</li> <li>- Employees and students of the ENDC as participants</li> <li>- Financial and technical resources of the ENDC and competent employees</li> <li>- Media training for employees and students</li> </ul>	<ul style="list-style-type: none"> <li>- Completion of the media and marketing plan and that of development activities (<math>\geq 70\%</math>, annual report)</li> <li>- Competition for degree studies student places (<math>\geq 2</math> applicants per student place)</li> </ul>



3.	<b>Efficient personnel management to ensure competent and motivated personnel</b>	Systematic recruitment activities to find civilian lecturers. The rotation system of the EDF is intertwined with the principles of filling academic positions with active-duty servicemen.	<ul style="list-style-type: none"> <li>- Administrative Department</li> <li>- Education Department</li> <li>- J1 of the General Staff of the EDF</li> <li>- Unit commanders</li> <li>- Active-duty servicemen</li> <li>- Reputation of the ENDC</li> <li>- Rotation plan of the ENDC</li> <li>- Approved education and career plan of active-duty servicemen</li> </ul>	<ul style="list-style-type: none"> <li>- Plan of filling positions (for the upcoming year)</li> <li>- Transfer of academic positions (1-2 months prior)</li> <li>- Filling academic positions (100%)</li> </ul>
		Mentoring system is implemented and applied throughout the personnel.	<ul style="list-style-type: none"> <li>- Clear objectives of study and research and development activities</li> <li>- Clear tasks of structural units</li> <li>- Mentoring principles of personnel</li> </ul>	<ul style="list-style-type: none"> <li>- Assigning a mentor to a new employee immediately after signing the contract (100% of employees)</li> <li>- Mentor training (once a year)</li> <li>- Satisfaction of new employees (<math>\geq 3.0</math>; 4 point scale)</li> </ul>
		The system of evaluation interviews is implemented as a whole in shaping the service.	<ul style="list-style-type: none"> <li>- Superiors and subordinates</li> <li>- Principles of evaluation interviews</li> </ul>	<ul style="list-style-type: none"> <li>- Satisfaction with the implementation of evaluation interviews (<math>\geq 3.0</math>; 4 point scale)</li> <li>- Review of training and rotation plans (once every 6 months, based on the results of evaluation interviews)</li> </ul>
		Conditions are created for international cooperation in study and research and development activities and personnel is developed in the given field	<ul style="list-style-type: none"> <li>- Budget funds</li> <li>- Development derived from completion of wartime tasks</li> <li>- Principles of international cooperation</li> <li>- "Erasmus+" program and the framework agreement of the EU young officer student mobility (Military Erasmus)</li> </ul>	<ul style="list-style-type: none"> <li>- Participation in projects supporting international cooperation (yes/no)</li> <li>- In-service courses supporting international cooperation (yes/no)</li> </ul>
		Personnel is motivated to efficiently complete their service related tasks.	<ul style="list-style-type: none"> <li>- Administrative Department</li> <li>- Chiefs of structural units</li> <li>- Budget funds</li> </ul>	<ul style="list-style-type: none"> <li>- Result-based and value-based efficiency of motivation (yearly analysis of the effect and efficiency of performance bonuses)</li> </ul>

				- Satisfaction with motivation ( $\geq 3.0$ ; 4 point scale)
4.	<b>Funds are compatible with the set objectives</b>	The budget of the ENDC is monitored as a whole	- Chief of the Administration Department - Finance section - Commandant of the ENDC	- Completion of the annual budget ( $-/+3\%$ ).
		Planning and completion of the budget of the ENDC is monitored according to operational expenditures	- Chief of the Administration Department and the Finance Section - Chiefs of structural units responsible for the use of budget account - Commandant of the ENDC	- Quarterly planning and completion of the budget according to the items of operational expenditures (analysis once a year)
		Budget funds to complete tasks and activities are analysed	- Chief of the Administration Department and the Finance Section	- Cost effectiveness according to items (quarterly analysis)
		Additional funding is applied to carry out activities outside the development plan of national defence	- Estonian Defence Industry Association - Projects - Funds	- Additional budget funds (yes/no)
5.	<b>Infrastructure is compatible with the set objectives</b>	Current capacity of the infrastructure of the ENDC is analysed	- Information about requirements	- Analysis of infrastructure requirements (once a year) - Assessment of the Development Committee concerning the analysis of infrastructural requirements (once a year)
		The ENDC contribution to the investment and small investment plan of the infrastructure of the EDF.	- Chiefs of structural units - Resources of the EDF - External resources	- Infrastructure development plan (presented once a year), small investments (firing range, ammunition depots, NLT 2020.) - Infrastructure (Centre for War and Disaster Medicine NLT 2020)

## 5.2 STUDY AND INSTRUCTION ACTIVITIES

### Principles

- **Degree studies and in-service training constitute a complete system.** In order to support the career planning and common world view of active-duty servicemen, the curricula of degree studies and in-service training at different levels are compiled and developed as an intertwined whole. If there is essential overlap of different study topics of degree studies and in-service training, then resources are shared.
- **Studies are student-centered.** Student-centered methods are used to create learning environments that move from distributing knowledge towards creating knowledge. Studies support the development of the students' key competences, transferrable and personal competences with the cognitive skills based on service related tasks being in the centre.
- **Studies are connected with instruction activities.** Studies are a part of students' everyday service as active-duty servicemen. Studies include cross-subject instruction activities that instill the values of the Estonian Defence Forces and the ENDC, and shape students' attitudes and behavior. Study and instruction activities constitute a coherent whole.
- **Subjects are integrated and connected with service tasks.** The subjects are integrated within the curricula and, when necessary, also across study levels in order to establish cross-subject and sectoral connections, a wider understanding of the acquired knowledge and the ability to use the acquired skills to complete future service-related tasks. At the same time, the starting point of the preparation of military leaders is the determination of the roles of degree studies and in-service training.
- **Cooperation with our allies is at the centre of international cooperation.** The ENDC cooperates with the military education institutions of its international allies. Student mobility has priority, in order to develop the skills necessary for joint operations with international units.

### Expected outcomes, activities and enablers together with indicators

	OUTCOME	ACTIVITY	ENABLER	INDICATORS
1.d	<b>Efficient study and instruction activities that have been integrated with the educational requirements</b>	Curricula are systematically developed.	<ul style="list-style-type: none"> <li>- Curriculum Development Advisor</li> <li>- Chiefs of Education Department, Officer School, NCO School, Centre for Continuing Education</li> <li>- Chiefs of Chairs</li> <li>- Responsible teachers</li> <li>- Statute of the Curriculum</li> <li>- Curriculum development seminars</li> </ul>	<ul style="list-style-type: none"> <li>- Correspondence with the current regulations (yes/no)</li> <li>- Feedback results are reflected in the curriculum development (amendments are made once a year)</li> <li>- Intra-curricular coherence matrix (once a year)</li> </ul>

<b>and the needs of the EDF</b>	The results of feedback and satisfaction surveys are used in developing study and instruction activities.	<ul style="list-style-type: none"> <li>- Quality group</li> <li>- Chiefs of Education Department, Officer School, NCO School, Centre for Continuing Education</li> <li>- Chiefs/Heads of Chairs</li> <li>- Lecturer in charge</li> <li>- Results of feedback and satisfaction surveys</li> </ul>	<ul style="list-style-type: none"> <li>- Implementation of the results of feedback and satisfaction surveys in study and instruction activities (analysis once a year)</li> </ul>
	Subjects are integrated with each other and service tasks.	<ul style="list-style-type: none"> <li>- Curriculum compilers</li> <li>- Education Department, NCO School, Chiefs of Centre for Continuing Education, Officer School</li> <li>- Chiefs/Heads of Chairs</li> <li>- Responsible teachers</li> <li>- Classroom observation</li> <li>- Cooperation with the employer and service positions after graduation</li> </ul>	<ul style="list-style-type: none"> <li>- Integration with other subjects as described in syllabi (in every syllabus)</li> <li>- Subject integration (including other lecturers; <math>\geq 2</math> inclusions within a field)</li> <li>- Visiting units in order to develop a subject (100% of academic staff, <math>\geq</math> once a year)</li> <li>- Satisfaction with the integration of subjects and connection with service related tasks (<math>\geq 3.0</math>; 4 point scale)</li> </ul>
	Research and development activities are connected with study and instruction activities.	<ul style="list-style-type: none"> <li>- Centre for Applied Research</li> <li>- Project leaders</li> <li>- Research fellows</li> <li>- Lecturers in charge</li> <li>- Journals <i>Kaitse Kodu!</i>, <i>Sõdur</i>, <i>Sõjateadlane</i></li> </ul>	<ul style="list-style-type: none"> <li>- The number of publications of the ENDC as study materials supporting studies (<math>\geq 2</math> in every syllabus)</li> <li>- Connections of the scientific research of the ENDC with subject(s) (report of a research project)</li> <li>- Connections of student papers with scientific research of the ENDC (<math>\geq 40\%</math>)</li> <li>- Connections of the teaching staff with scientific research of the ENDC (<math>\geq 75\%</math>)</li> </ul>
	The requirement of foreign language training is surveilled in the EDF and foreign language training is arranged according to needs.	<ul style="list-style-type: none"> <li>- Centre for Continuing Education (Foreign Language Training Section)</li> <li>- Visiting teaching staff</li> <li>- Additional salary funds</li> <li>- Annual analysis of the ENDC concerning the requirements of foreign language training</li> <li>- Commission of the EDF</li> </ul>	<ul style="list-style-type: none"> <li>- Requirements are clarified and foreign language training plan is compiled (once a year)</li> <li>- Language training groups are completed based on need and maximum numbers</li> <li>- Russian language courses (B1–B2 level for intelligence officers NLT September 2015)</li> </ul>

			- Additional resources	
		Lecturers' methodological skills are developed.	<ul style="list-style-type: none"> <li>- Student and employer feedback</li> <li>- Mentoring system</li> <li>- Seminars "Õppejõult õppejõule"</li> <li>- Classroom observation system</li> <li>- In-service training courses</li> </ul>	<ul style="list-style-type: none"> <li>- Internal and external methodology training courses based on reviewed study approach (participation ≥ 80% of the teaching staff)</li> <li>- Satisfaction with the methodological in-service training opportunities (≥ 3.0; 4 point scale)</li> <li>- Participation in methodological development activities in the ENDC (≥80% of the teaching staff)</li> <li>- Student satisfaction with the lecturers' methodological activities (≥ 3.0; 4 point scale)</li> </ul>
		Academic cooperation is developed with units and institutions of education and research.	<ul style="list-style-type: none"> <li>- Tartu University – technology, pedagogy, medicine</li> <li>- Tallinn University of Technology – technology</li> <li>- Estonian Academy of Security Sciences –comprehensive approach to national defence</li> <li>- Estonian University of Life Sciences – geography, technology</li> <li>- Estonian Aviation College – aviation</li> <li>- Tallinn University of Technology, Estonian Maritime Academy – maritime affairs</li> <li>- Health Care Colleges – medicine</li> <li>- Baltic Defence College –leadership and military fields</li> </ul>	<ul style="list-style-type: none"> <li>- Cooperation with partners (≥1 study development project per partner per academic year)</li> </ul>
2.	<b>The volume and content of student positions in degree studies</b>	Surveillance of the career requirements of officers and NCOs of the EDF is performed.	<ul style="list-style-type: none"> <li>- Information of J1 of the General Staff concerning personnel requirements</li> <li>- Information of the Training department (J7) of the General Staff concerning training requirements</li> </ul>	<ul style="list-style-type: none"> <li>- Determining personnel requirements (once a year in the Annual Directive of the EDF Commander)</li> <li>- Specialisation within the curricula of degree studies and established maximum numbers</li> </ul>

	<b>and in-service training are compatible with the national defence requirements</b>			(presented to students in the 1 <sup>st</sup> semester of their studies)
		Curricula are developed according to the requirements of the EDF	<ul style="list-style-type: none"> <li>- Education department, NCO School, Chiefs of Centre for Continuing Education, Officer School</li> <li>- Chairs</li> <li>- Units</li> <li>- Evaluation interviews</li> <li>- Exercises</li> <li>- Satisfaction indicators of employers and graduates</li> </ul>	<ul style="list-style-type: none"> <li>- Vision of new lecturers who are active-duty servicemen as to how to implement prior service experience in professional teaching activities (description of vision when appointing to a position)</li> <li>- Visits to units in order to develop teaching (100% teaching staff <math>\geq</math> once a year)</li> <li>- Satisfaction of graduates and employers with the implementation of the knowledge in service (<math>\geq</math> 3.0; 4 point scale)</li> </ul>
		Feedback results are implemented in developing subjects and extracurricular activities	<ul style="list-style-type: none"> <li>- Chiefs of Chairs</li> <li>- Lecturers</li> <li>- Employers</li> <li>- Graduates</li> <li>- Students, including in-service course students</li> <li>- Education Department and Officer School</li> <li>- Feedback system</li> <li>- SIS (including providing feedback on extracurricular activities)</li> </ul>	<ul style="list-style-type: none"> <li>- Student satisfaction with teaching (<math>\geq</math> 3.0; 4 point scale)</li> <li>- Effects and efficiency on implementing feedback results (analysis once per academic year)</li> </ul>
		Content and cost-effectiveness analysis is conducted when compiling curricula	<ul style="list-style-type: none"> <li>- Education Department, NCO School, Centre for Continuing Education</li> <li>- J1 information concerning requirements</li> <li>- Finance section</li> <li>- Resource management</li> <li>- Directive of the EDF Commander</li> </ul>	Foundations of curriculum compilation (explanatory report/side letter of curriculum compilation)
3.	<b>Efficient positioning and integration of degree</b>	Integral model of military education and training in compiled	<ul style="list-style-type: none"> <li>- Curriculum Development Advisor Education Department, NCO School, Centre for Continuing Education</li> <li>- Chiefs</li> </ul>	Compiled model ( NLT Feb 2015; reviewed once a year)

	<b>studies and in-service training courses</b>		<ul style="list-style-type: none"> <li>- Career system of active-duty servicemen</li> </ul>	
		Degree studies and in-service courses are integrated when compiling and developing curricula.	<ul style="list-style-type: none"> <li>- Curriculum Development Advisor Education Department, NCO School, Centre for Continuing Education</li> <li>- Chiefs, incl. Chiefs of Chairs.</li> <li>- Employer</li> <li>- Career system of active-duty servicemen</li> </ul>	<ul style="list-style-type: none"> <li>- Integration in curricula and syllabi (<math>\geq 30\%</math>, report once per year)</li> <li>- Integration of degree studies and in-service training courses (report once per year)</li> </ul>
		The curricula of the ENDC and the Defence League School are coordinated.	<ul style="list-style-type: none"> <li>- Education Department, NCO School, Centre for Continuing Education</li> <li>- Curriculum Development Advisor</li> <li>- the Defence League School</li> </ul>	<ul style="list-style-type: none"> <li>- The contribution of the ENDC to the descriptions of the officer and NCO education and career system competencies (NLT 2015)</li> <li>- Exchange of the teaching staff (20% of the teaching staff per year)</li> <li>- Coordination of curricula and syllabi (analysis once a year)</li> <li>- Number of joint exercises (starting from 2016, 5 exercises per year)</li> </ul>
4.	<b>Student has become a military leader with the help of study and instruction activities</b>	The responsibilities of course commanders in conducting teaching in classroom and assessing leadership qualities.	<ul style="list-style-type: none"> <li>- Commander of Officer School</li> <li>- Responsible teachers</li> <li>- Leadership qualities assessment system</li> <li>- Job descriptions</li> </ul>	<ul style="list-style-type: none"> <li>- Course commanders as responsible for a subject (<math>\geq 1</math> subject per academic year, reflected in syllabi)</li> <li>- Student has been evaluated and given feedback according to the Regulations of Evaluation Interviews (once a year).</li> <li>- Course commander overview of a student's leadership qualities (analysis once a year)</li> </ul>
		Students' leadership qualities are developed and assessed through subjects.	<ul style="list-style-type: none"> <li>- Lecturers in charge</li> <li>- Primarily subjects dealing with military leadership</li> <li>- Leadership qualities assessment system</li> </ul>	<ul style="list-style-type: none"> <li>- Leadership qualities are reflected in the syllabi of degree studies (100% of military subjects NLT Sept 2016)</li> <li>- Students' tactical decisions in military subjects (<math>\geq 3</math> times per 1 CP, NLT Sept 2016)</li> </ul>

		Extracurricular activities are connected with the subjects of degree studies (primarily with tactics, firing training, pedagogy, peacetime leadership)	<ul style="list-style-type: none"> <li>- Responsible teachers</li> <li>- Commander of Officer School and course commanders</li> <li>- Subjects</li> <li>- Days of firing training</li> <li>- High schools (national defence education)</li> <li>- Physical fitness</li> <li>- Defence League</li> </ul>	<ul style="list-style-type: none"> <li>- Integration of extracurricular activities and subjects of degree studies (analysis of the Officer School once a year)</li> </ul>
		The level of student responsibility is increased: more leadership tasks are assigned in everyday service.	<ul style="list-style-type: none"> <li>- Commander of Officer School</li> <li>- Legal Advisor</li> <li>- Course commanders</li> <li>- Traditions of the Officer School and the NCO School</li> <li>- Sports events</li> <li>- Meetings</li> <li>- Logistics Department</li> </ul>	<ul style="list-style-type: none"> <li>- Student involvement in writing orders for organizing extracurricular activities (yes/no)</li> <li>- Leadership tasks assigned to students (yes/no)</li> <li>- Evaluation takes into account the completion of leadership tasks (analysis once a year)</li> <li>- Students as military leaders are given their profile description (the end of their studies)</li> </ul>
		The form of degree studies is changed	<ul style="list-style-type: none"> <li>- Education Department and Chairs</li> <li>- NCO School</li> <li>- Centre for Continuing Education</li> </ul>	<ul style="list-style-type: none"> <li>- Statute of the Curriculum of the ENDC has been amended (NLT 2016)</li> <li>- The volume of independent studies in the timetable is increased (40%)</li> </ul>
5.	<b>Study and instruction activities have prepared personnel for cooperation with our allies</b>	In English language lessons, the focus is on military leadership	<ul style="list-style-type: none"> <li>- Centre for Continuing Education (Foreign Language Training Section)</li> <li>- Responsible teachers</li> <li>- STANAGs</li> <li>- Baltic Defence College</li> <li>- Chair of Tactics and other Chairs</li> <li>- Closest allies: Latvia, Lithuania, Poland</li> </ul>	<ul style="list-style-type: none"> <li>- English language lessons include military leadership topics (≥60% per subject)</li> <li>- Subjects in English coordinated with the allies (1 subject per Chair in curricula of higher education NLT September 2016)</li> <li>- Satisfaction with the English language and subjects taught in English (≥ 3.0; 4 point scale)</li> <li>- The level of English on NATO STANAG 6001 is level 2222 by graduation</li> </ul>
		In international cooperation, the focus is on military leadership	<ul style="list-style-type: none"> <li>- NCO School</li> <li>- Centre for Continuing Education</li> </ul>	<ul style="list-style-type: none"> <li>- Joint exercises and field training exercises at every level of degree studies (1 joint exercise/field training exercise per year)</li> </ul>



	(joint exercises and field training exercises)	<ul style="list-style-type: none"> <li>- Lecturers in charge in the Chair of Tactics</li> <li>- Tactical exercises</li> <li>- Military institutions in Latvia and Lithuania</li> <li>- Additional resources for business trips</li> <li>- Principles of international cooperation</li> </ul>	
	Mobility of academic personnel is encouraged when it supports the objectives of international cooperation	<ul style="list-style-type: none"> <li>- Chiefs of Chairs</li> <li>- Budget funds</li> <li>- Principles of international cooperation</li> </ul>	<ul style="list-style-type: none"> <li>- Study mobility of academic personnel is connected with international cooperation (analysis once a year)</li> <li>- Study mobility of civilian lecturers in allied countries</li> <li>- (≥35% of civilian lecturers)</li> <li>- Satisfaction of academic personnel with study mobility</li> <li>- (≥ 3.0; 4 point scale)</li> </ul>
	In curriculum development, cooperation with our allies functions on all study levels	<ul style="list-style-type: none"> <li>- Commandants' meetings</li> <li>- Visits for specific purposes</li> </ul>	<ul style="list-style-type: none"> <li>- Commandants' meetings and meetings on different working levels (&gt;once a year)</li> <li>- Comparative analysis of the ENDC courses with our allies' courses on the same level (&gt;once a year)</li> <li>- Curriculum development in cooperation with our allies (&gt;once a year)</li> </ul>
	Estonian military education and NATO standards are integrated	<ul style="list-style-type: none"> <li>- Lecturers in charge</li> <li>- STANAGs</li> <li>- Publications</li> <li>- Information from NATO working groups</li> </ul>	<ul style="list-style-type: none"> <li>- The presence of NATO standards in the syllabi of the curricula of degree studies and in-service courses (analysis once a year)</li> </ul>

### 5.3 RESEARCH AND DEVELOPMENT ACTIVITIES

#### Principles

- **Military science is the research focus in the ENDC.** Active-duty servicemen possessing professional knowledge and skills are included in the research projects of the ENDC to develop competences in military science in the fields researched and support the formation of scientific thinking in the Estonian Defence Forces as a whole.
- **Research and development activities support the objectives of the National Defence Development Plan.** When determining the directions of ENDC research and development activities and completing research projects, priority is given to capability development based on the National Defence Development Plan.
- **Research and development activities focus on the tactical level.** Based on the main focus of study activities and the need to optimize the use of resources, research activities are conducted primarily on the tactical level, including preparation of commanders on the tactical level. Research on a higher level is conducted when resources are available.
- **Research and development activities support the academic program.** In planning and carrying out research and development activities, the content of the academic program and the need to develop the academic program are taken into account. When possible, final papers and master's theses are a part of the research projects of the ENDC.
- **Popularising doctoral studies among active-duty servicemen.** The ENDC coordinates active-duty servicemen being systematically sent to doctoral studies and the support of doctoral studies. With doctoral studies becoming an integral part of officers' career plans the conditions are created for the common ground of actions for the active-duty servicemen as experts possessing an academic degree and developing military science.
- **Cooperation with research institutions and our allies is developed.** In order to create additional value and improve the quality of research and development activities, cooperation is conducted with research institutions in Estonia and abroad and with our allies.

**Expected outcomes, activities and enablers with indicators**

	<b>OUTCOME</b>	<b>ACTIVITIES</b>	<b>ENABLERS</b>	<b>INDICATORS</b>
1.	<b>Research and development activities are in correlation with the requirements of the Estonian Defence Forces</b>	When determining the directions of research and development activities and compiling projects, the capability development determined in the National Defence Development Plan is used as guidelines	<ul style="list-style-type: none"> <li>- Concepts of capability development</li> <li>- Contribution of the General Staff and the Ministry of Defence</li> <li>- Chiefs of projects</li> <li>- Projects of the ENDC</li> <li>- Research carried out based on the contracts of the Ministry of Defence</li> <li>- Procedures of research and development activities</li> </ul>	<ul style="list-style-type: none"> <li>- Research projects of the ENDC are connected with capability development (in the initial task of each project)</li> <li>- Relation of the capability development of research projects of the ENDC and the National Defence Development Plan (analysis once a year)</li> </ul>
		Active-duty servicemen are included in completion of research	<ul style="list-style-type: none"> <li>- Primarily the ENDC active-duty servicemen</li> </ul>	<ul style="list-style-type: none"> <li>- Participation of the ENDC active-duty servicemen in research projects funded by</li> </ul>

	and development projects	<ul style="list-style-type: none"> <li>- Strategy of research and development activities</li> <li>- Additional remunerations</li> <li>- Cooperation contracts</li> </ul>	<ul style="list-style-type: none"> <li>- the EDF (<math>\geq 1</math> ENDC active-duty serviceman per projects)</li> <li>- The ENDC active-duty servicemen in research projects (<math>\geq 75\%</math> of academic personnel)</li> </ul>
	Funding of research and development activities is connected with long-term resource planning in the EDF	<ul style="list-style-type: none"> <li>- Budget funds from the accounts of the General Staff and the Ministry of Defence</li> <li>- Academic personnel of the ENDC</li> <li>- Other resources</li> </ul>	<ul style="list-style-type: none"> <li>- Funding of research and development activities from the Ministry of Defence budget (NLT 2016)</li> <li>- Funds of research and development activities in the budget of the ENDC operational expenditure (items of expenditure of research and development activities)</li> </ul>
	Systematic doctoral studies for active-duty servicemen are arranged	<ul style="list-style-type: none"> <li>- Advanced Officer Training Course (master studies) graduates in active service</li> <li>- Potential staff officers of services and branches</li> <li>- Institutions of higher education: TÜ, TTÜ, EMÜ</li> <li>- Additional financing of studies and in the volume of current contracts</li> <li>- Military education and career model</li> </ul>	<ul style="list-style-type: none"> <li>- Number of active-duty servicemen commencing their doctoral studies (<math>\geq</math> one per year)</li> <li>- Total cost of planned doctoral studies in the budget of the ENDC operational expenditure (NLT starting from 2016)</li> <li>- Connection of doctoral studies with research projects and study and instruction activities (analysis once a year)</li> </ul>
	Estonian and foreign partners are included in research projects	<ul style="list-style-type: none"> <li>- Institutions of higher education and research: above all Tartu University, Tallinn University of Technology, Estonian Academy of Security Sciences, Estonian University of Life Sciences, health care colleges, Estonian Maritime Academy, Estonian Aviation College</li> <li>- Closest allied military academies: Latvia, Lithuania (Poland, Finland)</li> <li>- Cooperation agreements with partners in Estonia and abroad</li> </ul>	<ul style="list-style-type: none"> <li>- Research projects with partner participation (<math>\geq 1</math> research project per Chair)</li> <li>- Efficacy and efficiency of cooperation with partners abroad (analysis once a year)</li> </ul>

		Active-duty servicemen receive in-service training in the field of development activities	<ul style="list-style-type: none"> <li>- Academic personnel of the ENDC</li> <li>- Research Fellows of universities as supervisors</li> <li>- Research Fellows of universities as participants in projects</li> <li>- Capability developers</li> </ul>	<ul style="list-style-type: none"> <li>- Requirement for in-service training in the field of research and development activities (plan once a year)</li> <li>- In-service training courses for supervisors and project managers (<math>\geq</math> once a year)</li> <li>- Proportion of mentoring activities in research and development activities according to activities (analysis once a year)</li> </ul>
		Development activities' motivation system for active-duty servicemen is developed	<ul style="list-style-type: none"> <li>- Additional remuneration</li> <li>- Project funds</li> <li>- Rotation plan (acquiring a competence to develop one's career)</li> </ul>	<ul style="list-style-type: none"> <li>- Additional remuneration for research and development activities</li> <li>- Acknowledgement for research and development activities (trend 2% of personnel per year)</li> <li>- Satisfaction with motivation (<math>\geq</math> 3.0; 4 point scale)</li> </ul>
2.	<b>Research and development activities are connected with study and instruction activities</b>	Topics of final papers and supervision are intertwined with the directions and projects of research and development activities	<ul style="list-style-type: none"> <li>- Centre for Applied Research Chiefs/Heads of Chairs</li> <li>- Project managers</li> <li>- Students</li> </ul>	<ul style="list-style-type: none"> <li>- Connection of the topics of final papers with the directions and projects of the ENDC research and development activities (<math>\geq</math>75%)</li> </ul>
Research fellows of the ENDC are involved in study activities		<ul style="list-style-type: none"> <li>- Lecturers</li> <li>- Research Fellows</li> <li>- Students</li> <li>- Centre for Applied Research</li> <li>- Project descriptions</li> <li>- Education Department, NCO School, Centre for Continuing Education</li> </ul>	<ul style="list-style-type: none"> <li>- Connection of the ENDC research projects with final papers (in the initial task of every project)</li> <li>- Supervising final papers (100% of Research fellows)</li> <li>- Research fellows' participation in study activities according to activities (report once a year)</li> </ul>	
The results of research and development activities are published above all in military publications		<ul style="list-style-type: none"> <li>- ENDC Proceedings, Sõdur, Kaitse Kodu!</li> <li>- Military publications of allies</li> </ul>	<ul style="list-style-type: none"> <li>- Publications in the framework of research projects (<math>\geq</math>1 article per research project in a military publication)</li> </ul>	

3.	<b>Research and development activities of the ENDC are connected with the requirement of society</b>	Military science is defined as a separate area of science	<ul style="list-style-type: none"> <li>- Centre for Applied Research</li> <li>- Regulations in the administrative field of the Ministry of Defence, incl. Policy of Research and Development Activities of the Ministry of Defence</li> </ul>	<ul style="list-style-type: none"> <li>- Military science as a classification in Estonian Research Portal (NLT 2016)</li> <li>- Centre for Applied Research of the ENDC as the centre of defence research and development activities (NLT 2017)</li> </ul>
		Military science information environment is established	<ul style="list-style-type: none"> <li>- Research projects</li> <li>- Topics of final papers</li> <li>- Supervising-reviewing</li> <li>- Information system of the EDF</li> </ul>	<ul style="list-style-type: none"> <li>- Information environment for research and development activities (NLT 2016)</li> <li>- Satisfaction with the applicability of the information environment (<math>\geq 3.0</math>; 4 point scale)</li> </ul>
		Cooperation with internal partners is developed to determine the capability gaps in national defence and completion of research projects	<ul style="list-style-type: none"> <li>- Policy of research and development activities</li> <li>- Analysis and Planning Department of the General Staff (J5)</li> <li>- Persons responsible for capability development</li> <li>- Capability development plans of the EDF</li> <li>- Cooperation with the General Staff, units, the Defence League and the Ministry of Defence</li> <li>- Education Department of the ENDC, Centre for Applied Research, Advanced Officer Training Course</li> <li>- Experiment and observation environment of the EDF</li> <li>- Cooperation agreements: Tartu University, Tallinn University of Technology, Estonian Academy of Security Sciences, Estonian University of Life Sciences, health care colleges</li> </ul>	<ul style="list-style-type: none"> <li>- Efficacy and efficiency of cooperation with partners (analysis once a year)</li> <li>- Joint projects with the Estonian Academy of Security Sciences (<math>\geq 1</math> project per year)</li> <li>- Cooperation of the Centre for War and Disaster Medicine with Tartu University (1 cooperation projects per year)</li> <li>- Cooperation projects with the Estonian Defence Industry Association (<math>\geq 1</math> project per year, NLT 2017)</li> </ul>
4.	<b>Research and development activities support</b>	Research cooperation with allies is developed	<ul style="list-style-type: none"> <li>- Seminars</li> <li>- Conferences</li> <li>- Publications</li> <li>- Latvia, Lithuania, Poland, (Finland)</li> </ul>	<ul style="list-style-type: none"> <li>- Meeting related to research and development activities with the closest allies (<math>\geq</math>once a year)</li> </ul>

	<b>military cooperation with allies</b>			<ul style="list-style-type: none"> <li>- Development of research cooperation with the allies (&gt;once a year; analysis once a year)</li> </ul>
		Activities in NATO and EU research and development working groups are connected with the research projects in the ENDC	<ul style="list-style-type: none"> <li>- Centre for Applied Research</li> <li>- Area managers</li> <li>- NATO panels</li> <li>- Budget funds</li> <li>- Development plan of general and special competences</li> <li>- Strategy of research and development activities in the ENDC</li> </ul>	<ul style="list-style-type: none"> <li>- Representing the problems or view points of the ENDC in every NATO research and development activity working group with Estonian representation (in every working group; overview once a year)</li> <li>- Participation in NATO and EU research and development activity working groups (report once a year)</li> </ul>
		The experience of international training exercises, missions and foreign service is used in research and development activities	<ul style="list-style-type: none"> <li>- Training exercises</li> <li>- NATO Corps Northeast</li> <li>- Long-term plan concerning the implementation of international training exercises in research and development activities is forwarded to J7.</li> </ul>	<ul style="list-style-type: none"> <li>- Connection of research projects of the ENDC with international experience (in the initial task of each project)</li> </ul>