By the Commandant of the Estonian Military Academy Directive No. 66 of 09 September 2019

AMENDED

By the Commandant of the Estonian Military Academy Directive No. 71 of 13 September 2019

ESTONIAN MILITARY ACADEMY RULES AND REGULATIONS FOR RESEARCH AND DEVELOPMENT ACTIVITIES

I. General Provisions

This document regulates the research and development activities (hereinafter referred to as "R&D activities") at the Estonian Military Academy (hereinafter referred to as "the EMA"). This document takes guidance from the Development Plan of the Estonian Ministry of Defence, the research and development policy of the Estonian Ministry of Defence, Rules and Regulations for Research and Development Activities in the Estonian Defence Forces (EDF), the Statutes of the Estonian Military Academy (EMA), and the EMA's Development Plan. This document takes guidance from national R&D documents, the Code of Ethics of Estonian Scientists, and on good academic practices.

II. Objective

This document aims to regulate the activities and responsibilities of EMA sub-divisions with regard to R&D activities. In addition, these rules and regulations lay down the principles for the planning, funding, implementation, and evaluation of EMA's R&D activities.

III. Terms and Abbreviations

- **Applied research** research conducted for the purposes of obtaining new knowledge with the primary goal of applying this newly acquired knowledge in a specific area within a relatively short period of time;
- Baseline studies original theoretical or empirical research aimed at generating new knowledge about the underlying causes of phenomena and events, without aiming for immediate application of gained knowledge;
- Capability a measurable ability of a structural or a military unit of the EDF to perform a given task under given conditions and in compliance with applicable standards;
- Capability carrier a structural or a military unit of the EDF responsible for maintaining and developing a specific capability;
- Capability gap qualitatively or quantitatively defined difference between the required and actual performance of a capability carrier, or non-existent/absence of capability due to deficiency of capability carrier;
- Contracting authority structural unit of the EDF, Estonian Defence League (EDL), national defence agency or any other government agency, educational and/or research institution, member company of the Estonian Defence Industry Association (EDIA) or an

educational and/or research institution from a partner country, that has submitted an application to the EDF for the purpose of conducting a R&D project;

- **General competence** understanding of core theories in a given area, and their scope of application, as well as being attuned to general trends in the domain. Defence-related R&D activities shall take guidance from the following general competences that have been deemed critical to the development of Estonia's national defence and military capabilities (in alphabetical order): (1) leadership; (2) military history; (3) national defence strategy; (4) operation analysis; (5) resource management; (6) security and defence policy; and (7) technology¹;
- NDAP National Defence Action Plan² (in Estonian Kaitseministeeriumi valitsemisala arengukava, KMAK);
- NDDP National Defence Development Plan³ (in Estonian *Riigikaitse arengukava*, RKAK);
- Process description set of activities approved by the Commandant of the EMA designating the responsibilities of the stakeholders of a given R&D project, as well as its monitoring principles;
- Project manager the person who is in charge of the project team and is responsible for achieving the project's objectives. The project manager is responsible for the project's planning, and implementation, i.e. coordination, observance of deadlines, team management, adhering to the project's objectives and budget, ensuring that resources are used for intended purposes, and also for the delivery, presentation and dissemination of the project's results/outcomes;
- Research and development activity (R&D activity) application of knowledge acquired via research and experience for the purposes of making new products or devices, and introducing processes, systems and services or significant upgrades thereto;
- Research and development project (R&D project) project launched for the purposes of generating new knowledge and finding science-based solutions to identify and solve relevant problems. R&D projects must have measurable objectives, and they entail the conduct of baseline studies or applied research and other development activities within a specified time-frame and specially allocated resources. All EMA R&D projects must be registered in the EDF document management system, and approved by the Commandant of the EMA;
- **R&D project report** interim and final reports that must be submitted for each R&D project. These reports are meant for monitoring and evaluating the progress and results of the R&D project in question. The specific requirements for these reports, and their submission deadlines, shall be specified in the project descriptions and relevant agreements. An integral part of these reports is the accrual-based financial statement providing an overview of eligible expenses made;
- Research focus narrower specialised area of research (e.g. infantry company tactics as part of the larger tactical scheme of the infantry);
- Research group group of people registered in the Estonian Research Information System ETIS – who are engaged in research in a specified area or in the framework of a R&D project;

https://www.kaitseministeerium.ee/en/objectives-activities/defence-planning/national-defence-action-plan-2019-2022

¹ General competencies are outlined in the Research and Development Policy of the Estonian Ministry of Defence for the period 2014-2022, p. 4.
² Estonian Ministry of Defence, National Defence Action Plan 2019-2022

³ Estonian Ministry of Defence, National Defence Development Plan 2017-2026

- Research results the results of research or a R&D project, incl. products, technologies, scientific/research publications, research conferences and seminars, presentations, as well as final reports that have been prepared in compliance with requirements for scientific publications, undergone peer review, and published, if possible;
- Research topic specified research object within a larger focus area (e.g. offensive activities of infantry companies)
- **Specialised competence** professional capability (related to a capability gap) to choose the most suitable theoretical framework for overcoming capability gaps, and the possession of relevant skills for its practical application.
- Specific competence an area of research falling under one of the general competencies, i.e. (in alphabetical order): (1) leadership; (2) military history; (3) national defence strategy; (4) operational analysis; (5) resource management; (6) security and defence policy; and (7) technology.

IV. Principles of R&D activities at the Estonian Military Academy

- 1. The main objective of EMA's R&D activities is to support the EDF's capability development, and academic activities at the EMA.
- 2. The EMA's R&D activities take guidance from the framework outlined in the National Defence Development Plan (NDDP). The underlying principles for EMA's R&D activities are specified in the EMA Development Plan.
- 3. The EMA's R&D activities are subject to the directives outlined in the R&D annex to the annual directive/order of the Commander of the EDF. The input for the R&D annex is primarily collected from stakeholders responsible for specific capability development programmes⁴. This input is, in turn, supplemented by the EMA's Department of Applied Research, Department of Academic Studies, and the Centre for War and Disaster Medicine, in accordance with the EMA's R&D principles and needs.
- 4. The EMA's Department of Applied Research shall be responsible for coordinating all R&D projects conducted with agencies both within and also outside the purview of the Ministry of Defence.
- 5. The EMA's R&D activities shall contribute to the EMA's academic studies, incl. final and master's theses, and the overall development of military studies in Estonia.
- 6. The EMA's R&D activities shall be primarily related to the following:
 - 6.1. the EMA's main area of activity, i.e. primarily academic studies;
 - 6.2. EDF's capability development;
 - 6.3. issues falling under the purview of the Ministry of Defence, primarily national defence;
 - 6.4. comprehensive approach to national defence.
- 7. For the purposes of supporting the academic and professional development of its students, the EMA shall be engage its students in R&D activities whenever possible.
- 8. In the framework of R&D activities, the EMA shall also engage with partners outside the Academy, incl. international partners.
- 9. All additional tasks related to R&D activities, and that are not included in the employee's job description, shall be remunerated from the budget of the R&D projects.

⁴ Directive No 418 of 28 October 2014 issued by the Minister of Defence.

10. The rules governing the organisation of R&D events are outlined in Annex 2 of this document.

V. Research Ethics and Personal Data Protection, Intellectual Property

- 11. The EMA's R&D activities take guidance form the principles outlined in the Estonian Code of Conduct for Research Integrity⁵, developed under the auspices of the Estonian Research Council.
- 12. When preparing process descriptions, all conflicts of interest between supervisors and subordinates, as well as between members of a research group, must be eliminated, taking into account the procedural restrictions specified in section 11 of the Anti-corruption Act.
- 13. The processing and protection of personal data shall be conducted in accordance with the Directive "Processing and Protection of Personal Data in the Estonian Defence Forces" issued by the Commander of the EDF (approved 26 February 2019).
- 14. If any personal data are processed in the framework of an R&D project, the responsible persons must prepare a guidelines document outlining the measures for protection of personal data.
- 15. The rules governing the protection of intellectual property are outlined in Annex 1 to this document.

VI. Responsibilities and Tasks of EMA Subdivisions

- 16. The EMA's Department of Applied Research shall be responsible for coordinating all EDF R&D activities (i.e. planning, implementation, monitoring, dissemination of results, and development of R&D competencies), and shall also be responsible for:
 - 16.1. providing input on R&D activities related to EDF's capability development for inclusion in the relevant development plans prepared by the Ministry of Defence (incl. NDDP, NDAP);
 - 16.2. preparing the EDF's R&D plan in collaboration with the Ministry of Defence and the Headquarters of Estonian Defence Forces;
 - 16.3. preparing the R&D Annex to the annual directive/order of the Commander of the EDF;
 - 16.4. R&D-related cooperation with partners from outside the EMA;
 - 16.5. representing the EMA in international defence-related R&D organisations (e.g. NATO Science and Technology Organization, STO; European Defence Agency, EDA) by taking part in their work to the extent possible and in the interests of the EDF;
 - 16.6. non-EMA staff taking part in the work of international defence-related R&D organisations (e.g. NATO STO, EDA) in compliance with the EDF's R&D regulations;
 - 16.7. the management of the EMA's R&D resources;

⁵ Estonian Code of Conduct for Research Integrity https://www.eetika.ee/en/ethics-estonia/estonian-code-conduct-research-integrity

- 16.8. the organisation of R&D events in its domain.
- 17. The EMA's Department of Academic Studies shall be responsible for:
 - 17.1. the undertaking of R&D projects in the EMA departments under its purview;
 - 17.2. linking R&D activities with academic studies at the EMA;
 - 17.3. the organisation of R&D events in its domain.
- 18. The EMA War and Disaster Medicine Centre (WDMC) shall be responsible for R&D events in its domain.
- 19. The EMA's subdivisions shall be responsible for overall development and research in the field of military studies, as well as for the following R&D activities under general competencies:
 - 19.1. Department of Academic Studies leadership;
 - 19.2. Department of Applied Research operation analysis, military technology, resource management, and military terminology;
 - 19.3. War and Disaster Medicine Centre war and disaster medicine.
- 20. In addition, the Department of Academic Studies shall support the Department of Applied Research in research related to operation analysis, security policy, military history, and military terminology; while the Department of Applied Research shall support the Department of Academic Studies in research related to leadership.
- 21. The EMA Commandant's Administration, the Department of Support Services, and other subdivisions of the EMA shall support the Academy's R&D activities in questions falling under their respective areas of responsibility (e.g. resources, etc.).

VII. Financing of EMA's R&D Activities

- 22. All R&D projects financed from the defence budget shall be outlined in the NDAP.
- 23. The EMA shall be responsible for planning the R&D budget for the upcoming year, and indicates the allocations based on the EDF budget cycle.
- 24. The R&D budget shall include:
 - 24.1. R&D related personnel costs (incl. training, business trips, additional remuneration, contracted work, etc.);
 - 24.2. operational costs (incl. outsourced services, travel expenses, day-to-day administrative costs, expenses related to events, etc.);
 - 24.3. procurement costs (incl. procurement and rental of resources), and grants.
- 25. The R&D resources shall be stipulated in the NDAP resource plan, and their allocation shall be specified on a year-to-year basis in the EMA's annual budget.

- 26. Generally, R&D resources are allocated from the EDF budget. Additional funding can be obtained on the basis of project-based funding either from the Ministry of Defence or from other sources outside the area of government under the Ministry of Defence (e.g. other national agencies, Estonian Defence Industry Association (EDIA), international programmes, etc.).
- 27. All additional or external funding acquired for EMA's R&D projects shall be accounted for separately. The project managers shall be responsible for ensuring that budgetary resources are only used for intended purposes.

VIII. Publication of EMA's R&D results

- 28. The results of R&D projects funded by the EMA shall be published by the EMA in:
 - 28.1. the **Estonian Journal of Military Studies** (In Estonian *Sõjateadlane*); ETIS classification 1.2 (peer-reviewed articles in international scientific journals)⁶;
 - 28.2. Occasional Papers of the Estonian Military Academy, ETIS classification either 1.2 (peer-reviewed articles), 2.1 (book/monograph), 2.3 (dissertation), 2.5 (published research report or study) or 3.2 (articles or chapters in a collection).
- 29. The EMA may also allocate funds for publication outside the EMA, subject to approval of the person overseeing the EMA budget.

IX. The Evaluation of the Organisation of R&D Activities at the EMA

- 30. Once per year, the EMA's Department of Applied Research, together with the Department of Academic Studies, and the Centre for War and Disaster Medicine, shall conduct an evaluation of the organisation of R&D activities at the EMA, and submit proposals for improvement to the EMA Governing Council. All changes to the organisation of R&D activities at the EMA are subject to approval by the Commandant of the EMA.
- 31. The EMA's regular and extraordinary institutional accreditation and evaluation constitutes an integral part of the assessment/evaluation of R&D activities.

X. The Evaluation of R&D Activities at the EMA

- 32. The evaluation of the implementation of R&D projects shall take guidance from the EDF's rules and regulations for R&D activities. If the use of independent experts in the evaluation of R&D projects is not possible, the EMA shall engage external evaluators to avoid conflicts of interest.
- 33. All reports (i.e. interim and/or final reports) related to EMA's R&D-projects must be submitted by the deadlines stipulated in relevant contracts or in the project description.
- 34. The EMA Governing Council shall be responsible for approving the EMA's annual R&D Quality Plan (i.e. who does what (incl. scope), and where it will be published) that is aimed at increasing the EMA's standing in the research domain. The draft plan shall be prepared by the EMA's Department of Applied Research and submitted for approval to the EMA Governing Council.

⁶ Estonian Research Information System: ETIS classifications => Publications https://www.etis.ee/Portal/Classifiers/Details/81e52bde-a1a1-490a-a9c4-2df9f3fc3a70

- 35. The implementation of the EMA's annual R&D Quality Plan shall be evaluated by a committee of external experts (incl. MoD's Research Adviser, representative from the Estonian Research Council) convened by the Commandant of the EMA.
- 36. All non-project-based R&D activities shall be evaluated on a case-by-case basis accounting(?) for the following criteria:
 - 36.1. the achievement of qualitative R&D objectives (e.g. ETIS classification and scientific impact) shall be monitored and assessed/evaluated by the heads of EMA subdivisions on the basis of the objectives of the activity or its outcome (e.g. publications, development work, etc.);
 - 36.2. the achievement of quantitative R&D objectives (e.g. participation in R&D projects, number and classification of publications, etc.) shall be assessed by a committee of external experts convened by the Commandant of the EMA in accordance with the EMA's annual R&D Quality Plan approved by the EMA Governing Council;
 - 36.3. the standard workload and quality requirements stipulated in the job description for the EMA's teaching staff, to be assessed/evaluated in the course of attestation.

XI. Remuneration and recognition

- 37. The remuneration for work performed in the framework of R&D projects is regulated by relevant personnel regulations of the EDF. Project-specific premiums may be granted for a maximum period of six months at once.
- 38. On the proposal of an employee's immediate supervisor, the Commandant of the EMA is entitled to award performance-based and other premiums for R&D work performed in the course of an academic year if it exceeds the standard workload or quality level specified in the job description for the EMA's teaching staff.
- 39. The EMA shall recognise outstanding results of R&D activities published during the calendar year (incl. research results, and defended student theses).

Annexes

Annex 1. The EMA Guidelines for R&D Projects

Annex 2. The EMA Guidelines for R&D Events

THE ESTONIAN MILITARY ACADEMY GUIDELINES FOR RESEARCH AND DEVELOPMENT PROJECTS

I. Overview

- 1. These Guidelines regulate the initiation and process of research and development projects (hereinafter projects) conducted in the Estonian Military Academy (EMA) to carry out basic and applied research and development activities.
- 2. These Guidelines are in compliance with the regulations of research and development activities⁷ as approved by the Commander of the Estonian Defence Forces.

II. General requirements for projects

- 3. All projects must be directly related with the general competencies, core competencies and specialised competencies of the research and development activities regarding national defence.
- 4. Each project must be at least partially related with academic activities, e.g. lectures, seminars, practical assignments or supervision of student theses. The contents and capacity of each project is agreed with the contracting authority of the project during its development phase.
- 5. Any information that is classified as a state secret or for official use only can be used in publications in accordance with restrictions on access and availability as laid down in relevant legislations.
- 6. If the information used for a publication does not have restrictions on access, the project results must be at least partially published and publicly usable.
- 7. The composition of the research group is laid down in the description of a research and development project; it will be approved by the Commandant of EMA and registered in the Estonian Research Information System (ETIS), except for when there are legal restrictions.

III. Formats for projects

- 8. The format for source tasks is available in sub-annex 1.
- 9. The format for a project description is available in sub-annex 2.
- 10. An example of the interim and final reports of a project are available in sub-annex3.

⁷ The Regulations for Research and Development Activities Conducted in the Estonian Defence Forces, approved with Directive No. 98 of the Commander of Estonian Defence Forces of 11 May 2018.

IV. Evaluating projects

- 11. All projects are evaluated by the deadlines laid down in the project in accordance with the EMA Rules and Regulations for Research and Development Projects.
- 12. In the reports, the project manager will reflect on the activities related with the project, the performance of (interim) objectives, compliance with plans, and resource management. If necessary, the executor will present written suggestions for amending the project.
- 13. As a result of the evaluation, the contracting authority will make a decision about whether or not the objectives of the projects can be achieved. If necessary, the contracting authority will present written suggestions for amending the project.
- 14. Research result with an ETIS classification of 1.1, 1.2, 2.1 or 3.1 are not subject to additional evaluation.

V. Monitoring projects, and supervision

- 15. The project manager presents the reports in accordance with the following principles.
 - 15.1. Each report is presented as an interim or final report by 30 January of the following year or the deadline laid down in the research and development project.
 - 15.2. The report must include the following information:
 - 1) Assessment on the current state of the project
 - 2) Current results
 - 3) Assessment on achieving all the objectives of the project
 - 4) Critical aspects that might hinder the performance of the objectives of the project
 - 5) Financial report and an assessment on the feasibility of the financial plan laid down for the project. In grant agreement requires an accrual based accounting extract with specified expense accounts.
- 16. If necessary, the Chief of the Department of Applied Research (DAR) will assign the project manager a deadline for eliminating any shortcomings of the project. If the shortcomings are not eliminated by the assigned deadline, the Chief of DAR will turn to the Commandant of EMA to suggest whether or not to continue, pause or end the project, or replace the project manager. If the project is ordered from outside of EMA, a respective suggestion is made to the Commandant of EMA by the contracting authority.
- 17. The Chief of DAR cannot be the project manager for projects financed with targeted financing. Any active serviceman that serves as the deputy for the Chief of DAR cannot approve the expense documents of the project for which they are in charge.

VI. Amending, extending, suspending, terminating and rebooting projects

- 18. Any amending, extending, suspending, terminating and rebooting of projects is subject to the decision of the Chief of DAR. This requires a written application to the Chief of DAR, submitted at least 30 days before the deadline laid down in the application. This application serves as the basis for the Chief of DAR to make a written suggestion to the Commandant of EMA.
- 19. Projects can be prematurely terminated with a suggestion by the Chief of DAR and the decision of the Commandant of EMA.
- 20. Projects can be prematurely terminated under the following circumstances:
 - 20.1. A request of the contracting authority, submitted at least 30 days before the deadline laid down in the project;
 - 20.2. The objectives laid down in the core assignments and project description are not achieved (decided based on interim results);
 - 20.3. The necessity for the project has ceased;
 - 20.4. Lack of resources:
 - 20.5. The people with the necessary qualification for performing the project have left or are absent;
 - 20.6. Upon the occurrence of other unforeseen circumstances that hinder the performance of the objectives of the project.

VII. Handing over and applying project results

- 21. Project results along with the final report are handed over to the contracting authority by the project manager.
- 22. The reports are registered in the EMA document management system as a separate series.

VIII. Protecting intellectual property

- 23. The project manager must guarantee that publishing the project results does not violate any rights to the protection of intellectual property or other legal rights.
- 24. The economic rights related with a project belong to the Estonian Defence Forces, and the moral rights belong to the authors who created the copyrighted work.
- 25. As a rule, the economic rights for the author's work created while working for the EMA are granted to the EDF through a non-exclusive license, unless otherwise agreed between parties.
- 26. In general, the members of the research group and the Estonian Defence Forces sign an agreement to transfer economic rights.

Sub-annexes

- Sub-annex 1. Source task of a research and development project
- Sub-annex 2. Description of a research and development project
- Sub-annex 3. Example of interim and final reports of a research and development project

Name

Rank

Commandant of the Estonian Military Academy

Source task of a research and development project

- 1. Initial title or headline of the project
- 2. Relation with a development unit of the National Defence Development Plan and the Ministry of Defence Development Plan
- 3. Formulation of the capability gap and core problem
- 4. Main objective, sub-objectives (including an improved capability)
- 5. Timeframes
- 6. (Interim) gauges of the project
- 7. Support received from a capability developer (expert assessment, materials for experiments, objects of experiments, etc.)
- 8. Output, benefit, potential use
- 9. Source data of the project (tactical, technical, relation with other capability developments, etc.)
- 10. Method and/or testing requirements
- 11. Restrictions and limitations
 - a. State secret
 - b. Resources
 - c. Other limitations
- 12. Results and outcomes (publications, reports, technical solution, etc.)
- 13. Potential participants
 - a. Representative(s) of a capability developer in the project team (names or positions)
 - b. Representative of a capability developer who evaluates and coordinates interim reports and the final report (position)

Source task compiled by:

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Name

Rank

Position

Contact information

Description of a research and development project

- 1. Project name in Estonian
- 2. Project name in English
- 3. Project team (specify the project manager, main executor, executors, consultants, cooperation partners)
- 4. Beginning and end of the project
- 5. Short description in Estonian (up to 1,500 characters)
- 6. Short description in English (up to 1,500 characters)
- 7. Contents of project
 - 7.1. Formulation of the capability gap and core problem
 - 7.2. Objectives of the project
 - 7.3. Method, stages, and timeline of the project, including method of research (experiment, questionnaire, etc.)
 - 7.4. Restrictions and limitations, including protection of state secret
 - 7.5. Source data of the project
 - 7.6. Expected outcome of the project
 - 7.6.1. Expected outcome and use in the Estonian Defence Forces
 - 7.6.2. Publications and conference presentations derived from the project
 - 7.6.3. Relation with academic activities
- 8. Budget

Juaget	Budget year	Budget year	Budget year
Personnel expenses			
1.1. Bonuses			
1.2. Contracts for services			
1.3. Business trips			
1.4.			
2. Resources			
2.1.			
Grant agreements			
3.1.			

8.1. Detailed overview of the expenses of the project in accordance with the budgetary articles of the Estonian Defence Forces.

For targeted financing (account 45), the preferred format for the overview is per expenses (e.g. personnel, means and devices, administrative expenses, etc.)

Project compiled by:

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Name Rank Position Structural unit Example of the interim report and final report of a research and development project

Name Rank

Chief of the Department of Applied Research

- 1. Project name
- 2. Project manager (responsible person), senior research staff, research staff, cooperation partners, consultants
- 3. Beginning and end of project (with the precision of a month)
- 4. Description of activities during the period
- 5. Assessment on achieving the objectives of the project (including compliance with the timeline and use of budgetary resources)
- 6. Overview of publications and other means of introducing the project results
- 7. Evaluation on the applicability of project results in the Estonian Defence Forces (only in the final report)
- 8. Annexes
 - a. Extract of accrual based accounting expenses related with the project per accounting period
 - b. Other materials describing the results and activities of the project deemed necessary by the project manager

Report submitted by:

/signed digitally/

Name Institution Position