Assessment Report

Quality Assessment of the Study Programme Group of National Defence

Estonian National Defence College

2017
Introduction

Quality assessment of a study programme group involves the assessment of the conformity of study programmes and the studies and development activities that take place on their basis to legislation, national and international standards and developmental directions with the purpose of providing recommendations to improve the quality of studies.

The goal of quality assessment of a study programme group is supporting the internal evaluation and self-development of the institution of higher education. Quality assessment of study programme groups is not followed by sanctions: expert assessments should be considered recommendations.

Quality assessment of a study programme group takes place at least once every 7 years based on the regulation approved by EKKA Quality Assessment Council for Higher Education Quality Assessment of Study Programme Groups in the First and Second Cycles of Higher Education.

The aim of the assessment team was the evaluation of the study programme group of National Defence at the Estonian National Defence College.

The team was asked to assess the conformity of the study programmes belonging to this study programme group and the instruction provided on the basis thereof to legislation and to national and international standards and/or recommendations, including the assessment of the level of the corresponding theoretical and practical instruction, the research and pedagogical qualification of the teaching staff and research staff, and the sufficiency of resources for the provision of instruction.

The following persons formed the assessment team:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Affiliation</th>
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<tbody>
<tr>
<td><strong>Prof. Dr. Frans Osinga</strong></td>
<td>Air Commodore, Chair in War Studies, Head of the Military Operational Art and Science Section at the Faculty of Military Sciences, the Netherlands Defence Academy (The Netherlands)</td>
</tr>
<tr>
<td><strong>MAJ Hardi Lämmergas</strong></td>
<td>Major, Air Force, Air Surveillance Wing Commander (Estonia)</td>
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<tr>
<td><strong>COL Igors Rajevs</strong></td>
<td>Colonel, Deputy Director of Centre for Strategic and Security Research of the National Defence Academy of Latvia (Latvia)</td>
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<tr>
<td><strong>COL Petteri Rokka</strong></td>
<td>Colonel G.S., Deputy Commandant on the Army Academy (Finland)</td>
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<tr>
<td><strong>Ms Liina Hirv</strong></td>
<td>Student member; University of Tartu (Estonia)</td>
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The assessment process was coordinated by Tiia Bach (EKKA).

After the preparation phase, the work of the assessment team in Estonia started on Monday, April 3, 2017, with an introduction to the higher education system as well as the assessment procedure by EKKA, the Estonian Quality assurance organization for higher and vocational education. The members of the team agreed the overall questions and areas to discuss with each group at the College. The distribution of tasks between the members of the assessment team was organised and the detailed schedule of the site visit agreed.

During the following two days, meetings were held with the representatives of the Estonian National Defence College (April 4-5). The schedule for discussion on site for each of the four study programmes only allowed for short time slots to be available for team members to exchange information, discuss conclusions and implications for further questions.

On request of the panel, additional information was made available by the College concerning teaching staff and thesis assessment criteria. In the interview room the panel was able to browse through a number of PHE and MA student theses. The panel visited the premises thus obtaining an impression of the accommodation, the library, lecture rooms, sports facilities, the shooting range, the recreation facilities as well as the simulation centre.

On Thursday, April 6, the team held an all-day meeting, during which both the structure of the final report was agreed and findings of team meetings were compiled in a first draft of the assessment report. This work was executed in a cooperative way and the members of the team intensively discussed their individual views on the relevant topics.

In the following sections, the assessment team summarises their general findings, conclusions and recommendations which are relevant across the study programme group. The team provides an external and objective perspective on the programmes and the contexts within which they are delivered. The intention is to provide constructive comment and critique which may form the basis upon which improvements in the quality of the programmes may be achieved.

All four existing study programmes at professional higher education (PHE) and Master level were reviewed:

<table>
<thead>
<tr>
<th>Study Programme</th>
<th>Level</th>
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<tbody>
<tr>
<td>Military Leadership for the Land Forces</td>
<td>Professional higher education</td>
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<tr>
<td>Military Leadership for the Land Forces</td>
<td>Master's programme</td>
</tr>
<tr>
<td>Military Leadership for the Navy</td>
<td>Professional higher education</td>
</tr>
<tr>
<td>Military Leadership for the Air Force</td>
<td>Professional higher education</td>
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## Statistical data about the Study programme group

<table>
<thead>
<tr>
<th>Name of curriculum</th>
<th>Academic year</th>
<th>No. of students (as of 01.09)</th>
<th>No. of students admitted</th>
<th>No. of graduates</th>
<th>No. of interruptions*</th>
<th>No. of student mobility (short-term)</th>
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<td>89</td>
<td>64</td>
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<tr>
<td></td>
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<td>120</td>
<td>57</td>
<td>27</td>
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<td></td>
<td>2015/16</td>
<td>118</td>
<td>55</td>
<td>29</td>
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<tr>
<td></td>
<td>2016/17</td>
<td>126</td>
<td>45</td>
<td>1</td>
<td>10</td>
<td>2</td>
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<tr>
<td>Military Leadership for Air Force (PHE)</td>
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<td>25</td>
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<td>9</td>
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<tr>
<td></td>
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<tr>
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<tr>
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<td>18</td>
<td>15</td>
<td>1</td>
<td>5</td>
<td></td>
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<tr>
<td>Military Leadership for Land Forces (MA)</td>
<td>2013/14</td>
<td>14</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>11</td>
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<tr>
<td></td>
<td>2014/15</td>
<td>18</td>
<td>10</td>
<td>5</td>
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<td></td>
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<td>24</td>
<td>14</td>
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<tr>
<td>Total No. of students by academic year in the SPG</td>
<td>2013/14</td>
<td>145</td>
<td>90</td>
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<tr>
<td></td>
<td>2014/15</td>
<td>188</td>
<td>82</td>
<td>38</td>
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<tr>
<td></td>
<td>2015/16</td>
<td>193</td>
<td>87</td>
<td>60</td>
<td>38</td>
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<tr>
<td></td>
<td><strong>2016/17</strong></td>
<td><strong>192</strong></td>
<td><strong>83</strong></td>
<td><strong>2</strong></td>
<td><strong>16</strong></td>
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*Source: Self-Evaluation Report of ENDC; HaridusSilm*
General findings and recommendations at the study programme group level

Models of officer education

One of the tasks of the panel is comparing the programmes of the Estonian Defence College (EDF) to national and international standards. As defence colleges are a rather unique sort of institutes of higher education, which are not always directly comparable to other educational institutions in a country, this assessment report commences with a brief general discussion of military education models in Europe.

Internationally there is a wide variety of officer training/education programmes and architectures. There is no agreed-upon standard or best practice. The design of most programmes are based on a strong sense of tradition. For efficiency reasons, services have increasingly merged their individual service oriented officer training programmes (specifically tailored to army, air force and navy requirements) into joint military academies.

Recruitment methods differ by country. In some countries officer-cadets are recruited directly out of university or out of high schools or recruited after their conscription period. In still other countries the first year at the defence colleges is considered to satisfy the requirements of serving as a conscript.

Countries also differ in the level of military training offered during their officer training at the defence college, the position of specialized military training and in the level of academic standards. Recruiting graduates with a university degree makes a lengthy military academic education period superfluous. In some countries cadets will only graduate after obtaining a MA degree at the military academy, after which they enter the specialized military training phase. In some countries university level BA programmes are an integral yet independent part of the officer training programme, but here academics are intertwined with a parallel and also independent military training programme. Such a set-up, which needs to accommodate the statutory 3 years assigned for BA level education, necessarily lengthens the officer training programme to four years. This is then followed by specialized training which may take up to 2 years for some specializations such as fighter pilots.

Common to all officer training models is the need to combine military skills and competencies, leadership skills, extra-curricular activities with the demands of academic study. Thus, constant effort must made to keep those demands in balance. Also the armed services desire to train the cadets efficiently and within relatively short amount of time must be taken into account. Underlying the choices for a particular architecture is an implicit perspective on the relative relevance of teaching academic courses versus training practical military skills. Traditionally officer training programmes displayed a dominant focus on practical military and technical skills and attitude/character building.
Over the past two decades western military academies have increasingly been introducing more rigorous academic programmes to complement the military component of officer training. Military academies also more and more adopt civilian standards to design academic programmes and courses, implement governance structures for academic education within the officer training programmes that mirror the practice of civilian institutions, expand their civilian faculty, and raise the level of academic standards.

This has had various reasons. First, it is a reflection of the changes in the operational environment in which western militaries are operating which put increasing demands on critical thinking skills, knowledge of ethical and legal issues surrounding the use of military force and awareness of the wider societal and political environment of military organization. Second, it is a reflection of the fact that military organizations are an integral element of their society, a society which is becoming more complex and in which the overall level of education is steadily increasing. Finally it is a response to the demands of the labour market; offering university level education as part of officer training can be a valuable incentive for aspiring students. These developments also allow more direct comparison of the military education with civilian academic education. While some programmes have adopted the European university level BA and MA structure, others have adopted a PHE orientation.

The EDF Defence College model

The EDF has adopted a model that is not uncommon in Europe: it is a joint programme that caters to the overall needs for the three armed services, albeit displaying a somewhat dominant army oriented character. It consists of a basic officer training programme with a dominant focus on practical skills to prepare cadets for their first assignments. It is condensed in a three year programme of which the final year consists largely of placement with military units. It benefits from the fact that all cadets have been conscripts.

As a result there is no need for a prolonged job specialty training after graduating from the academy. Students can quite quickly start operating in their first positions effectively. In many countries this requires an additional year (or more for some specialties such as pilot training) of training. Moreover, cadets are quite strongly motivated for, and well informed about military life. One inherent drawback of this architecture is that the recruitment pool is rather limited. The consequence of choosing this tight architecture also is that it only allows for a moderate academic programme.

Strengths

- The programmes have been developed specifically for the requirements of the Estonian armed forces and benefit from a very strong support and interaction with the Estonian Defence Headquarters and the three armed services.

- All four programmes have a strong focus on practical skills and military competencies that prepare students for responsibilities in the operational
units, which allows them to rapidly take on those job responsibilities after graduation.

- The programmes are coherent, in particular in the domain of military oriented courses.
- The college has created an open, informal and personal learning environment for students, which benefits from the favourable teacher-student ratio and the campus model.
- Staff is motivated and keen to be involved with students and to coach them through the programmes.
- The faculty consists of a valuable mix of academics and teachers with military experience.
- Students and alumni are satisfied with the way learning objectives are being achieved and the way the courses prepare them for their future assignment within the military units.
- The Estonian armed services are satisfied with the overall quality of the graduates they receive from the college.

Areas of improvement and recommendations

- The panel has concerns about the academic level of all four programmes and the coherence of the academic part of the programmes. Currently the programmes are very strong on practical skills and competencies, but the academic level of the courses in the programmes, both PHE and MA, often remain at a foundational level, which is insufficient. The panel recommends to re-assess the level of education in the academic component of all four programmes as there is room for increasing the intellectual challenge. These changes would make the PHE and MA programmes more compatible with equivalent level civilian programmes.
- The coherence of the academic part of the programmes needs strengthening and the relevance of courses for teaching critical thinking skills and officer education in general should be emphasized by all teaching staff.
- The panel recommends to develop a standard benchmark for calculating and assigning homework (for instance 8-10 pages per hour for Estonian language academic books/articles and 6-8 pages for English language texts).
- The panel recommends to re-assess whether assigned ECTS per course/thesis correctly reflect the real workload for that course/thesis.
- The courses are predominantly taught in Estonian and use Estonian language course material, which includes translations of English textbooks. It is recommended to increase the use of English language course material, and to emphasize English writing skills. Also dedicated remedial language teaching options should be created, which will most likely necessitate adding staff to the language department.
The programmes lack formal programme boards or committees that are integrally responsible for the quality and continuous evolution of the courses and programmes. It is recommended to create such programme boards, one for the combined PHE programmes and one for the MA programme.

Despite the presence of multiple course evaluation, complaints and student assessment processes, there seem to be no institutionalized dedicated bodies or specific persons responsible for these separate processes. It is recommended as a minimum to create an independent body for the complaints processes as well as for the course/programme evaluation processes. As the number of female students is foreseen to increase, a complaint and counselling system for female students should be introduced.

Connected to this issue is the need to re-assess the position of the informal yet highly relevant ‘student leaderboard’. If it is deemed important, it should be incorporated in the formal student assessment process.

Teaching capacity is adequate but leaves no room for significant course and programme development, personal professional development of staff or research activities. In the long term this will have negative consequences for the quality of teaching. It is recommended to add resources, including additional staff, the create capacity to participate in (international) conferences, to enable proper handover of responsibilities, to enable proper preparation for teaching courses, to enable personal professional development courses and to create time for conducting research.

The capacity for teaching maritime and air power related courses and skills is barely sufficient. This is in urgent need of solving.

The panel noticed that student feedback rates the teaching quality at the Aviation Academy as poor and the learning environment of the Academy is considered as unchallenging and unstimulating. The panel has also learned that there have recently been curriculum development talks between de ENDC and the EAA. The panel cannot, however, assess the results of programme and quality improvements. Based on the information obtained during the site visit, the panel recommends to monitor the quality of teaching subjects offered by the EAA and Maritime Academy critically.
**Strengths and areas for improvement of study programmes by assessment areas**

**Study programme development**

### Standards

- The launch or development of the study programme is based on the Standard of Higher Education and other legislation, development plans, analyses (including labour market and feasibility analyses), and professional standards; and the best quality is being sought.
- The structure and content of modules and courses in a study programme support achievement of the objectives and designed learning outcomes of the study programme.
- Different parts of the study programme form a coherent whole.
- The study programme includes practical training, the content and scope of which are based on the planned learning outcomes of the study programme.
- The study programme development takes into account feedback from students, employers, alumni and other stakeholders.

### General Comments

The academic courses, as far as content is concerned, are selected to be directly supportive of the military component of the programme. Assessing the programmes offered by the college inevitably needs to take into account the very specific context and objectives of the programmes vis a vis a regular civilian PHE programmes.

The PHE and MA programmes comprise a large number of relatively short courses covering a wide range of topics. Apart from academic courses, the programmes include a substantial amount of time dedicated to learning practical technical, leadership, pedagogical and military skills. The three leadership programmes prepare cadets for junior leadership positions. The MA programme, designed for the Estonian Army, focuses on battalion and brigade level tasks and skills.

All four programmes have been developed to cater to the requirements of the three Estonian armed services (the land forces, the navy and the air force). This focus came out strongly throughout the discussions with the leadership and programme management panels. The development and continuous evolution of the PHE programmes, as well as the MA programme, are the result of a strong involvement by, and cooperation with the services and the Estonian Defence Forces Headquarters. The three armed services explicitly acknowledged that they consider ensuring good quality education, including the provision of sufficient and
qualified officer teachers, a shared responsibility. This involvement starts with formulating learning objectives, and at least once a year the college actively confers with the services to invite suggestions for changes and evaluation results. This structural level of cooperation, institutionalized interaction and co-development also ensures that the curricula remain up to date with developments in the tactical units. This practice, combined with extended periods of ‘placement’ of students in tactical units, in turn, ensures that graduates are well prepared to take on responsibilities soon after joining their assigned units.

The development of the programmes also result from a continuous feedback and evaluation process. Under the supervision of the Quality Assurance Group, this evaluation process includes student and teacher feedback. Changes within courses and the programmes are documented in the Study Information System (SIS). All interviews confirmed that such evaluations take place on a structural basis. Students however were not always told to what extent their comments were taken into account.

The panel gained the impression that the evaluation process lacked central ‘ownership’; there was not one person with overall responsibility for the evaluations. Nor did the panel get the impression that the governance of the PHE and MA programmes was managed in a centralized manner. There are no programme boards or programme committees. Instead, programmes are organized (and changed) by the various Chairs that, on a regular and at least annual basis, convene to discuss the programme structure, changes and improvement to courses and their relative weight and position in the programme. The military chairs and in particular the Tactics Chair appear to play a dominant role in this process.

While programmes with such a diverse set of courses, combined with the need to develop leadership, tactical and military skills, risk losing coherence and academic depth, this appears not to be an issue. All four programmes are designed with the job requirements of the primary military units officers are being prepared for. For the PHE programme these are the platoon and company levels, for the MA these are the battalion and brigade levels.

Coherence is also maintained by virtue of the small scale of its faculty in the sense that an informal and cooperative environment exists in which faculty members – teachers, chairs and programme leaders – are keenly aware of the logic of the overall programme architecture, the position of individual courses and the interconnections between the various core and supporting courses. Moreover, there is very frequent, formal and informal contact between faculty members.

The informal and small scale learning environment also benefits the students. While students may not always be aware of the range of counselling and complaints options and official procedures as explained in the Self-Evaluation Report (SER), they are convinced of the accessibility of teachers, instructors and commandants and their willingness and professional commitment to offer coaching, personal assistance and remedial teaching.
The panel is satisfied with the level of coherence of the PHE and MA programmes. The panel could not, on the other hand, find evidence of an increase in the academic level of courses throughout the PHE programmes. Nor did it become evident that introductory courses were followed and built upon by advanced courses. A large number of courses throughout the three PHE programmes are taught at the foundational level. The short time available for academic courses does not allow more in depth treatment of topics. Interviews with alumni and students suggest that the second year is the most difficult year whereas the third year is not experienced as difficult as most of the time is spend in practical training.

The PHE programmes proclaim to value the critical thinking skills associated with academic education. The employers explicitly value the programmes also for this component of the officer education. This is entirely in line with the challenges of the operational environment, commanding well-educated conscripts and operating in a complex coalition environment. The strength of PHE programmes compared to regular Bachelor programmes resides in the practice orientation, and here the PHE programmes of the college certainly stand out as good examples.

On the other hand the panel was not convinced that all staff in the faculty and students shared the conviction that critical analytical skills, that commonly result only from academic level education, should also receive sufficient attention. Indeed, on several occasions the desire was communicated for increasing the time allocated for practical training. Students did not associate academic/civilian courses with the objective of developing critical thinking skills. Students on several occasions communicated that the location of academic courses within the programme seemed somewhat arbitrary to them. They understood that all courses were there to support the military component of the curriculum, but they also gained the impression that sometimes those courses were scheduled when it was convenient. As one said, those courses could be ‘splattered’ at any place in the programme. Some courses, despite the fact they are already short, were at times split up in two periods to allow for military training, which affected the coherence of that particular course. Similarly, some courses, for instance research methods, were taught well before the thesis writing period, with the result that most students had forgotten the content of the research methods course by the time they started to write the final papers/thesis.

The MA programme is designed for army officers and it is highly valued by alumni and students. The number of students is relatively low but sufficient to warrant offering this programme at the college. The air force and navy cannot supply a sufficient number of students and efficiency reasons undergird their policy to send their students to international MA programmes, in particular in US military education institutions that provide high quality MA programmes. Another factor is the tactical orientation of the army MA programme, which focuses on the battalion and brigade level. This is less relevant for navy and air force officers, who operate often at the operational and sometimes even strategic levels. For these services participating in such international MA programmes has the added benefit that it fosters common understanding and interoperability and that they
can develop international networks that are relevant for future positions. For army officers this will become relevant mostly in later phases in their career. Yet, some air force officers expressed that they certainly would like to join the army MA programme.

Currently, based on the interviews with teaching staff and students, the panel could not get confirmation that study workload for any programme was based on a common and explicitly articulated benchmark. The course descriptions list contact and self-study hours but the self-study hours bear no direct relationship with the length of reading material the students have to digest in preparation of lectures and training. This was confirmed during interviews with students. This also applies to the thesis workload.

The PHE programmes offer an English language course. English language skills are increasingly important for the Estonian military units that operate habitually within a NATO context. Familiarity with English military terms is important in light of the demands of interoperability in coalition operations. This applies in particular for the Air Force and Navy. However, the length of the PHE language training course is somewhat limited. There is also no structured remedial teaching option available due to staff capacity limitations, although remedial teaching is sometimes offered on an ad hoc and informal basis by individual teachers. Moreover, there is very little training in English writing. The panel observed that a large number of texts used in the programmes are in Estonian and often are Estonian translations of English texts. The student and alumni interviews all suggested they would favour more attention to language training, and also to use the original English language texts instead of using the Estonian translations.

The panel strongly approves the thesis process as the final step in the completion of the programme. It lauds the direct involvement of the services in identifying topics for students to examine. The SER includes comments that suggest that completion of the thesis sometimes has to occur while a student is on placement with a tactical unit. Such an environment is generally not considered conducive for proper research and timely completion.

During interviews and in the SER the panel noticed a large number of feedback, evaluation and assessment processes and fora. The panel however sometimes struggled to learn to what extent processes are institutionalized – who is really responsible for which process - and documented. This pertained for instance to the complaints procedures. The panel also learned, from interviews with students, of the existence of a so called student ‘leaderboard’. This is a list, open to staff and students, which ranks the students based on practical competencies and academic performance. Staff seemed to use the leaderboard for selecting placement positions. While students told the panel that it stimulated a competitive atmosphere, it was not clear to the panel what the formal status of the leaderboard is, and what the relevance is vis a vis other student evaluations. It is an open question whether such a publicly visible ranking is in line with legislation for civilian higher education institutions which tend to value protection of such private information.
The employer’s panel confirmed the observations in the SER in the sense that the services are satisfied with the overall quality, skills set and attitudes of the College graduates. They acknowledge that any shortfalls in the PHE programmes are directly related to the relative shortage of qualified personnel within the EDF combined with the equally pressing needs of the operational units.

**Strengths**

- The programmes benefit greatly from the intimate involvement of and cooperation with the army, navy and air force.
- The programmes have a strong practical focus.
- The students seemed well attuned to the challenges of maintaining a balance between the demands of academic study, military skills development and extra-curricular activities.
- The small scale of the college results in a student-friendly learning environment with a high level of personal attention for individual students.
- The panel acknowledges the effort that the ENDC has made in cooperation with the entire Estonian Defence Forces and the Estonian Defence League (EDL) to provide meaningful practical placements of students which became evident during the discussion with the alumni and MA students.
- The placement of students at tactical units allows them to apply and test knowledge obtained during courses and develop leadership, technical and tactical skills.
- The PHE programmes prepare well for the needs of the armed services and achieves the set learning objectives.
- The MA programme prepares well for the needs of the Estonian Defence Force.

**Areas of improvement and recommendations**

- The SER includes reference to a student-centered education philosophy. While the panel is convinced that the learning environment of the college certainly focuses on the students, none of the interviewees could explain what was actually meant with the concept. The panel recommends to make the intent and content of the concept explicit.
- The teaching of English language skills could benefit from more attention. Expansion of the course should be considered as well as formalizing remedial teaching options and the inclusion of English writing skills.
- It is recommended to make use of English textbooks instead of Estonian translations of this study material.
- The panel recommends to re-assess the level of academic education offered in course throughout the four programmes. Interviews with student and alumni of both the MA and PHE programmes strongly suggests that there is room for raising the academic level, the intellectual
challenge and the study workload. The panel recommends to ensure that the academic level is equivalent to civilian PHE/Ba and MA level education.

- The value of rigorous academic education for their future military command and staff positions should be communicated by all staff – civilian and military – to the students.

- The logic of the structure of the programmes - the reason why specific courses are required and the reason why they are scheduled at specific moments in the programmes - should become transparent and clearly communicated by faculty to the students.

- The panel recommends to develop a standard benchmark for calculating and assigning homework (for instance 8-10 pages per hour for Estonian language academic books/articles and 6-8 pages for English language texts).

- The panel recommends to re-assess whether assigned ECTS per course/thesis correctly reflect the real workload for that course/thesis.

- Based on the student feedback, the panel recommends to re-assess the process of thesis writing to ascertain that allocated time and timing is appropriate. The panel has recently learned that the final paper and thesis processes have been changed, allowing students more time to complete their work. As the panel has not spoken to students with experience in this new process, the panel cannot the effects of the changes but the panel considers those changes as positive measures to solve the observed issue.

- The panel also recommends to invite external civilian academic institutions (that provide PHE and MA programmes) to validate the quality of student thesis.

- The college is recommended to strengthen the teaching staff overall and in particular that of the air force and navy.

- The panel recommends to re-assess the value, position and also the appropriateness of the so called ‘leaderboard’. If it is to be retained, the panel recommends to include it in the official student assessment processes, and to make sure students have methods to voice complaints about their ranking and the associated placement decisions.

**Resources**

<table>
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<th>Standards</th>
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<tr>
<td>✓ Resources (teaching and learning environments, teaching materials, teaching aids and equipment, premises, financial resources) support the achievement of objectives in the study programme.</td>
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<td>✓ There is a sufficient supply of textbooks and other teaching aids and they</td>
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Assessment Report on National Defence

- Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).
- Resource development is sustainable.

General Comments

The ENDC is an institution of PHE funded by the state budget through the EDF covering salaries of teaching staff and students. Infrastructure maintenance costs, movable assets and study aids are procured through agreements for the EDF.

The teaching and learning environment benefits from the informal and personal atmosphere and the deep involvement and commitment of the individual faculty members.

The ENDC computer rooms, teaching facilities and accommodation for students are adequate in light of current number of students (total 192, the SER p.5-6). The lecture rooms are equipped with appropriate supporting materials. The sporting and recreation facilities are equally adequate. The library, while not a lavishly equipped facility, has a good collection of books and access to all relevant international academic journals.

Strengths

- The committee welcomes the trend of increasing resource allocation for the research and development which has 10-folded within the last 4 years (SER p. 23).

- Both faculty and students were pleased with adequate and sufficient study materials and supporting information systems (national and NATO classified systems, the SIS and information screens on the walls in the hallways). The SIS that the ENDC has acquired contains all the necessary features to plan, execute, monitor and give feedback for the students of their study progression.

- A close coordination with the EDF HQ allows detailed and sustainable planning of the resources, foresee resource-related trends and mitigate future risks (risks arising from changing numbers of students, obsolescence of teaching equipment, etc.).

Areas of improvement and recommendations

- The panel recommends that ENDC continues the funding of research and development activities in order to find new ways and methods to improve the national defence. It is important for the proficiency of the faculty to widen their horizon on teaching methods and new academic trends which sometimes can be obtained by visiting other PHE institutions or international seminars abroad.
• Thus, the committee recommends the increased resource allocation for the mobility of the faculty and professional development in general.

• It is recommended to provide additional support to the teaching staff for planning and attending international seminars. Also, additional funding is/may be required. It was brought out by the teaching staff (Teaching Staff panel with Land Forces faculty) that it is highly desired to have detailed timely planning and support by the personnel administration and other relevant branches to allow faculty to attend international seminars.

• The PHE programmes are generally taught in Estonian and use Estonian language literature, several of those being translated from English (reflection form meeting with study programme leaders and developers). Also, in the light of developments within Estonian society and (inter)national academic institutions, the programmes would be strengthened by the introduction of more authoritative English language academic textbooks and the original English language (also supported by the MA student panel) editions of tactical and doctrinal manuals published by the NATO and NATO members.

Teaching and learning

**Standards**

- The process of teaching and learning supports learners’ individual and social development.
- The process of teaching and learning is flexible, takes into account the specifics of the form of study and facilitates the achievement of planned learning outcomes.
- Teaching methods and tools used in teaching are modern, effective and support the development of digital culture.
- Practical and theoretical studies are interconnected.
- The organisation and the content of practical training support achievement of planned learning outcomes and meet the needs of the stakeholders.
- The process of teaching and learning supports learning mobility.
- Assessment of learning outcomes is appropriate, transparent and objective, and supports the development of learners.

**General Comments**

The process of teaching and learning supports students and the learning atmosphere is open and positive. Students and faculty forms good relationships and they are all working towards common coals. Studies are student-centric as description was stated in the SER and it was confirmed in interviews. The EDF is satisfied of outcomes of the studies. Higher command and stakeholders are involved in both planning and conducting studies.
Enthusiastic attitude towards new and modern teaching methods keeps the teaching process on track and it is developing constantly. Interview with the students indicated that they are satisfied about the teaching methods, but sometimes they feel that teachers are not so familiar with the (new) method they are using. Overall teaching quality generally was considered positively by students and alumni. Negative student and alumni comments were reserved in particular for those external institutions the college has contracted for air force and maritime oriented courses and topics. Students did not experience the same level of interaction and engagement as at the college and were critical of the teaching quality.

Students admit that they are reaching the learning objectives, but in some cases also admit they would not mind to be more intellectually challenged. The students and alumni of both PHE and MA programmes communicated that the workload was very manageable and that with proper time management, preparation time was quite sufficient. For a significant number of lectures no substantial reading was required and the workload was sometimes low to very low. Interviews with the students and alumni brought to light that it was possible to pass some courses without pre-lecture preparation and study of the assigned literature. For some courses it was not possible to prepare oneself for the final examination. This pertained in particular to leadership and tactical subjects and occurred in both the PHE and MA programmes. Both comments raise concern as to the quality and level of the education programmes as this practice is not common in civilian PHE and BA programmes and certainly not in MA programmes.

The feedback system as a part of the quality assurance system gives required data for the development and evaluating the possible changes to the studies. Both the SER and interviews show that student feedback influences the teaching and study process so that the students are more satisfied about the courses. On the other hand students were not always aware what the results of their feedback was.

It seems that both students and teaching faculty are oriented to the learning objectives. The interviews indicated that students (PHE) categorise studies as military and civilian subjects. They feel that practical and theoretical studies are connected, so that civilian studies are supporting military studies. They also feel that the combination of the main and supportive subjects supports the achievement of the learning objectives.

But whereas the military courses are coherent and build upon each other, this is not the case for supporting courses, which seemed to be scheduled somewhat random, at least from the student’s perspective. Some courses were sometimes split up due to military training schedules, which of course affects the content and coherence of a course. Finally, most courses remain at the foundational level. The condensed short programme combined with a focus on practical skills and competencies does not allow more in depth treatment of topics. Subsequently the panel learned from interviews that courses generally do not achieve an increasing academic level as is the case in civilian PHE and BA programmes. This is reason
of some concern. Also the MA programme seems to suffer from this problem, according to the interviews with students and alumni.

Practical placement supports the learning outcomes and it makes the stakeholders participate on planning and conducting studies. The interviews state that the students (PHE) are fond of the third year in studies, because of the practical setting. They feel that the first and second year gives them the theoretical bases they need. The second year is considered the most difficult one. The third year the easiest. This is rather unusual for PHE and BA programmes.

E-learning and simulators are used in the studies, but it seems there is a possibility to increase the use. Both students and faculty were aware of the possibilities. The simulation centre and means for e-learning are good.

The assessment of the studies supports students on reaching the learning objectives. This was indicated during the interview with students. Also the guidelines are clear (indicated in the SER). However, it seems that in practice the process, if a student is challenging the assessment, is not so clear. There could be an independent “assessment/examination board”.

**Strengths**

- Although none of the interviewees could explain what the concept entailed, the panel was convinced that studies in the ENDC are student-centred. This appears as an open study atmosphere where students are easy to reach learning objectives.

- Both the SER and the interviews indicate that the needs of the EDF are well covered. Studies are practical and outcome is satisfactory from the perspective of the Estonian Defence Forces.

- The training plan (SER p.30) provides a clear “study path” for students. The interviews indicate that the practical training supports studies and the overall learning outcomes.

- The panel gained the impression that the teachers have an enthusiastic attitude towards new and modern teaching methods.

- For improvement of the studies, it seems (SER p36/interviews) that student feedback influences the teaching and study process so that the students are more satisfied on studies.

**Areas of improvement and recommendations**

- The panel recommends increasing simulation and e-learning in the studies programmes. When the panel was visiting the Simulation Centre, it found out that the ENDC has good opportunities to use the simulation centre in various studies, not only in tactics, but also for example in war history. To increase e-learning, which belongs in modern teaching methods, teachers have to implement it in their teaching methods. This could be a good topic to the Teacher-to-Teacher seminars.
The panel recommends challenging students more in their studies by raising the academic level of courses. The interviews indicated that students are aware of the learning objectives and they assessed that these can generally be reached easily (some exceptions, like tactics).

The panel recommends viewing the data that the Quality Assurance System is producing. In the SER was stated the QA system (fig 19), but interviews indicated that feedback mostly consists of giving input to system. It is recommended to use the whole variety of the means to get data in order to identify areas of improvement.

It is recommended to establish dedicated programme committees (or boards, depending on applicable Estonian higher education regulations) and examination boards for the PHE and MA programmes.

**Teaching staff**

**Standards**

- There is teaching staff with adequate qualifications to achieve the objectives and planned learning outcomes of the study programme, and to ensure quality and sustainability of the teaching and learning.
- Overall student assessment on teaching skills of the teaching staff is positive.
- The teaching staff collaborate in the fields of teaching and research within the higher education institution and with partners outside of the higher education institution (practitioners in their fields, employers, and staff members at other Estonian or foreign higher education institutions).
- Recognised foreign and visiting members of the teaching staff and practitioners participate in teaching the study programme.
- The teaching staff is routinely engaged in professional and teaching-skills development.
- Assessment of the work by members of the teaching staff (including staff evaluation) takes into account the quality of their teaching as well as of their research, development and creative work, including development of their teaching skills, and their international mobility.

**General Comments**

The current manning level of the faculty is adequate to conduct the current set of programmes. While PHE programmes do not set high standards concerning academic qualifications of the faculty, the college faculty has a high number of MA degrees and in some cases a PhD degree. That is to be commended just like the fact that the services are quite willing to post very qualified officers in teaching positions.

The College, as explained in the SER, offers a variety of options to military staff to increase their teaching skills. Teaching quality is monitored through various planned and structural feedback methods. This includes peer reviews, programme leaders reviews, informal feedback as well as student evaluation.
Students are generally positive about the quality of teachers and the individual attention the College environment offers.

While the services consider it their obligation and responsibility to send qualified and motivated teachers/instructors to the college. However, common to most military academies, the College often suffers from the frequent rotation of military staff, their short posting periods with the college and the problem of ensuring a proper hand-over of responsibilities of a teacher to his successor. It takes about 6 months before an officer is sufficiently familiar with the education system and has achieved expert status in the area they are expected to teach. The ENDC recognizes the need for additional preparation of the military teachers before placing them as fully operational members of the faculty. Some preparation courses and on-the-job supporting activities are in-place, however they are not covering all the needs of new faculty members and further improvement of such activities is encouraged.

Currently there are very few teachers for the Air Force and Navy programmes. The available teachers subsequently need to perform multiple mutually excluding tasks that include courses administration activities, counselling and mentoring of the students and actually teaching of service specific subjects. Single persons cannot cope with all those tasks equally well and placement of additional Air and Naval personnel to the college would improve running of those courses.

The panel has taken note of the document which details the job description of the teaching staff which stipulates the expected hours spent per week on teaching, research etc.. Discussions with teaching staff suggest that not all teachers are able to stick to the formally assigned hours for the various activities due to shortfalls in teaching capacity. Current manning levels are sufficient but do not allow for additional programme development or adding new programmes. Visiting lecturers from a select number of other national institutions are regularly involved in teaching courses. While workload varies among staff, most faculty teach at both PHE and MA programmes and interviews suggest teaching staff experience a significant workload.

Teachers valued the mentoring, peer-to-peer and other feedback and evaluation processes, thereby confirming the SER observations. It became also apparent that staff capacity at the college, while overall adequate for current teaching workload, was insufficient for topics focusing on the air force and navy. Teaching capacity currently limits the possibility for most teachers to engage in international conferences and conduct research. There is only limited time for individual professional development.

Most teaching staff experienced workload that is making it difficult to conduct research, publish scholarly articles and participate in national and international conferences. While the SER lists overall publications of the teaching staff and research department, and aware that faculty assessment includes individual research output, the panel was unable to assess the (quality of) research output of teaching staff.
Academic performance of the faculty members is assessed every 3-year in accordance with Estonian regulations. While such practice seems appropriate for the civilian academics, which stay at the college for longer periods of time, it does not properly reflect academic performance and development of military faculty members. Since their placement time at the college varies from 3 to 5 years, it would be appropriate to conduct annual review of the academic performance of military members of teaching staff.

Research plays important role in the development of every educational institution. Roughly half of the ENDC faculty, predominantly civilian academics, is conducting research projects that are related to their teaching activities. However, intensity of research activities among military academics is at a considerably lower level. The ENDC might consider expanding its research activities and organize larger involvement of military personnel in teaching-related research activities.

The ENDC, to a limited extent, is organizing international cooperation with other education institutions. Almost all interviewed panels expressed the necessity to enhance internationalization of the college and the programmes. That may include invitation of foreign academics/instructors for teaching specific education topics, lecturers and students mobility, participation in international conferences and seminars and other activities.

Teaching quality at the contracted institutions varies significantly and overall seems to compare negatively to the quality of teaching at the College. During the interviews alumni and students were raised concerns over the quality of classes, in both substance and teaching methods, at the Aviation Academy. It seems that the teaching environment there is drastically different to the positive and informal working atmosphere at the ENDC. In addition to that, the ENDC doesn't have sufficient influence on the teaching processes at the Aviation academy and is not able directly influence faculty of the Aviation academy.

**Strengths**

- Apart from the significant numbers of MA and PhD graduates among the teaching staff, the strength of the faculty lies in the strong ties to the services which ensure motivated military instructors, up to date lectures and a practice orientation.

- The ENDC faculty created a positive, informal and trustful working atmosphere that enables fruitful and mutually beneficial learning process and establishes good working relationship between the students and faculty members.

- The individual teaching approach is very positive and indicated the “student-centred” education environment. That is especially well practiced by Language school instructors of the ENDC.
Areas of improvement and recommendations

- The panel recommends to facilitate teaching staff to conduct research, participate in international conferences and work on continuous personal professionalization.

- Fully aware of the constraints of the personnel situation within the Estonian Defence Force, but also in light of the concerns voiced by the teaching staff, the panel recommends to increase the number of teaching staff. In the short term in particular the language department is in need of expansion in light of the recommendations concerning language skills.

- The panel recommends increasing resources to enable inviting visiting faculty from national and international academic institutions. This is, in particular in the short term, an efficient and feasible method to address the faculty capacity issue.

- Teaching quality at the contracted institutions varies significantly and overall seems to compare negatively to the quality of teaching at the college. The college is recommended to reassess its relationship with those external institutions.

- The panel suggests placement of additional Air and Naval military personnel to the College to improve running and administration of the Air and Naval courses. At the same time, such additional personnel will improve teaching capacity of service specific subjects at the college and simultaneously reduce burden on requirement for external visiting Air and Naval specialists.

- The panel recommends reviewing the placement procedure of military teaching staff to allow a proper hand-over of responsibilities of a teacher to his successor.

- The panel recommends to further improve preparation activities/courses conducted for new faculty members. The ENDC may evaluate the possibility to establish formal preparation period for incoming faculty members that will ensure their proper preparation for academic duties.

- The panel recommends to considering the introduction of internal annual assessment of members of military faculty in addition to the regular 3-year period for assessment of academic performance. It is important to conduct academic performance assessment separately from annual military evaluation process to ensure independent academic evaluation that will facilitate academic growth of uniformed members of the faculty.

- It is recommended to review details of the cooperation agreement between the ENDC and the Aviation academy. That will ensure proper quality of instructions and teaching methods that in turn will allow students to reach maximum of their potential while studying the Aviation academy.
Students

Standards

- Student places are filled with motivated and capable students.
- The dropout rate is low; the proportion of students graduating within the standard period of study is large.
- Students are motivated to learn and their satisfaction with the content, form and methods of their studies is high.
- As part of their studies, students attend other Estonian and/or foreign higher education institutions as visiting or international students.
- Employment rate of alumni is high.
- Alumni and their employers are pleased with their professional preparation and social competencies.

General Comments

In general, the employers are very satisfied with the graduates of the ENDC. All graduates of the ENDC are assured of a service position within the Estonian Defence Force or Defence League in accordance with their level of studies.

Over the last three years, the number of entrance applications has been between 166 and 209 and ENDC considers this the maximum recruitment potential, as only 5% of conscripts are determined to continue their service as professional active-duty service members (see p 42 of the SER). Considering those 5% as the target group is perhaps rather limited and ENDC could, as an alternative, consider all of the conscripts as their target group and potential future students and thus make efforts (in cooperation with employers) to promote the occupations and studies in the ENDC among all the conscripts. Alternative models can be explored such as recruiting graduates straight from high school or after graduating from civilian BA or PHE programmes, who could enrol in a one year officer training programme, followed by the specialized training phase. As is the practice in some other countries, this category of officers is generally expected to serve within the military for a limited duration of about 6-8 years after graduating as an officer. One option that is being considered by the EDF is enhancing the number of female cadets. However, few females join conscription and based on national experience of the panel members, combined with the comments in the interviews, the panel suggests some caution in expecting too much improvement can be achieved in this way.

In professional higher education programmes there is competition and most of the student places are filled. The applicants sometimes lack the proper information about their chosen profession, which leads to renouncing their studies (indicated in the interview with management). More than half of the official drop-out decide to renounce their studies during or after this synchronization course (as there is no compensation requirement in the event of interruption of studies during the course), as brought out in the SER. Ex-
matriculation due to social or economic reasons rarely occurs, as the students are paid salary and afforded with free housing.

In the SER, it is brought out that an increase of the number of female students is expected. As the College has been rather male-centred, it should be considered what challenges expanding the number of female students might involve. In the past, there have been occasions where female students encountered a reluctant – instead of a stimulating - attitude towards them by some of the staff. Based on the interview with alumni it seems there is some way to go in terms of gender equality in military education and training.

There is a division for the counselling (to whom a student should turn to with whatever sort of problem) and as ENDC is relatively small in number, it is easy to find the right person or body to turn to. Yet, the counselling system does not seem to be very institutionalized. In case of study-related questions and common issues, the students find help easily (as indicated the interview with students), yet there is no certainty where to turn to when there are more personal issues. This is also related to the matter of female students, as the increase of female students may also bring the need for separate counselling in case of gender-issues (or discrimination).

In many occasions, it appeared, that there are some communication gaps and lack of common understanding. For example, the teaching staff indicated that there is an introductory week, which includes introduction to study-methods and databases, yet the students could only recall one seminar (“Learning Skills in a Higher Education Institution”, also mentioned in the SER). Furthermore, the students could not recall the counselling opportunities nor appealing opportunities. This indicates that there is a lack of shared understanding about the objectives and terms used. However, this could be resolved by increasing the explanations, institutionalising the processes and also systemizing communication (using the same terms, explaining terms).

As also brought out in the SER, students stressed the need to get more information regarding the impact of student feedback. The implementation of the SIS will in the near future enable students to see what changes have been made to courses based on their feedback.

It is presented in the SER that students have the right to contest their academic results on three levels: firstly the person, unit or committee having made the decision; secondly, they may appeal to the Head of Education Department; and finally, an appeal can be made to the Disputes Committee of the ENDC. However, there is little knowledge about this possibility. Mostly, all kinds of disputes are resolved on the first level. Among the students, there seems to be little knowledge about what to do when the first level does not give a satisfying result.

The structure of the complaints processes also raised some concerns within the panel. The Disputes Committee is compiled by the Commandant of the ENDC, the members of the Committee are Legal Advisor, Education and Research Advisor; Commander of the Officer School; Head of the Centre for Applied Studies; Head
of the Centre for Continuing Education; Staff Officer of the Planning Branch of the Education Department. Thus, the Committee is very strongly related with the ENDC management and also, there is no student member in the committee, which makes the independence and transparency of the Committee questionable.

In general, the students studying in the ENDC are motivated and appreciate the organisation of the programmes, quality of teaching and availability of materials. Yet, there are some improvement areas. Firstly, the students feel a strong need for increasing the use of English in their studies, as the English level of the students varies and in their future occupations, sufficient English skills are needed due to cooperation with the allies and NATO. Also, even though the variety of teaching skills are appreciated, students have indicated that in some cases the methods are not used correctly. For example, if a discussion is used as a teaching-method, it is not very effectively led and thus the focus is lost, which can be adjusted with adequate preparation of the teaching staff.

Overall, the subjects’ capacities in ECTS are in accordance with the real amount of work that needs to be done. Yet, in some cases, the amount of time that is spent on a subject, is remarkably higher than expected based on the ECTS. The students pointed out some military subjects and master thesis to be such cases.

The PHE students do not necessarily see the value of academic part of the studies and the priority seems to be only gaining an occupation (interview with students). As the PHE involves higher education, the students should also see (should be helped to understand) the value of the academic part of the studies, especially when taking into account the feedback from the employers, who highlighted the added value of critical thinking and analytical approach inherent to academic approach.

In the SER, it was mentioned that extra-curricular activities were also considered a hindrance to studies. The interviews in general did not confirm this, but as it is stressed in the feedback, it should be taken under consideration.

**Strengths**

- The overall satisfaction with the studies and the choice of profession (SER). Student are highly motivated and they are provided with sufficient materials, facilities. (interview with students)

- The employers are very satisfied with the graduates of the ENDC. (SER, interview with the employers)

- The student body (Cadet Core) is working consistently and is involved in the higher decision making bodies (Council of the ENDC, Study Council) and the input of the student representatives is taken into account. (interview with students)

- The students are enabled to give feedback both anonymously and in face-to-face discussions and the rate of students giving feedback is high. (interview with students)
The students are treated as equals and there is no rank-based attitude. (interview with students, teaching staff)

The alumni value the skills and competences gained from both the studies and extra-curricular activities. (interview with alumni)

Areas of improvement and recommendations

- As the number of applicants is not too high, it should be considered to define the target group more widely and put more effort on promoting the professions and studies offered in the ENDC (in cooperation with partners and employers).

- The counselling system should be more institutionalized and introduced to students as a counselling system as such. Furthermore, creating separate counselling bodies or positions for dealing with personal problems and also for dealing with gender-related issues should be considered. For example, in some European armed forces, there is an ombudsman for gender-related complaints.

- The grounds for compiling the Dispute Committee should be revised from the perspective of independency and transparency. The system for contesting the results of examination or final papers is currently tightly related to the school management and teaching staff. It should be considered, whether the members of the committee could be named by different bodies/groups of the college – military instructors, civil subjects lecturers, management and students name their representative into the committee. Certainly, students representative should be included in the committee.

- The possibility to appeal the grades should be communicated to students more clearly. The objectives of different processes and activities, including study process as a whole, should be communicated more clearly and explicitly.