

# FUTURE SECURITY CHALLENGES AND CONTEMPORARY TRENDS IN PROFESSIONAL MILITARY EDUCATION

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**Abstract:** System of military education and training is a core entity which prepares military professionals for coping with ongoing and future challenges for national defence. Those challenges are complex, numerous and of various characters, with tendency to become even more complicated and diverse in the future. They are termed as hybrid, unrestricted, asymmetric, compound, ambiguous, multi-domain, etc. That place the basic questions: how to prepare, train and educate in order to effectively and efficiently respond to such challenges? Does it require some changes in educational system and concept, and what kind and scope of changes? Answers should be created in the wider context of compliance with civilian educational and accreditation standards, restrictive financing, organizational cutt-offs and harmonizations with the European Union. The goal of this paper is to analyse impact of contemporary and future security challenges on the long-term development of military educational system..

**Keywords:** security challenges, military education, hybrid warfare, long-term, strategy.

## INTRODUCTION

Consideration of preparations for future security challenges is an actual issue today (Last, Morris and Dececchi, 2019). Higher military education is a specific kind of education whose main mission is to create (graduate level) and develop (postgraduate levels) professional military officers. System of military education and training is a core entity in the national defence structure that prepares military professionals for facing with ongoing and future challenges to the national defence. The aim of the paper is to present a proposal of guidelines for future long-term development of the higher military education in the context of the current and future security challenges.

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Security and defence challenges and the system of military education have their own intensive and dynamic character and intersection with other aspects: politics, economy, technology, social issue, etc. At the moment, two actual phenomena dominate. Firstly, in the domain of national security and defence there is a widely considered and investigated phenomenon of the hybrid threats and warfare. Secondly, in the domain of higher military education, it is a challenge of a permanent fulfilment of the academic accreditation standards. For example, the last decade in the Serbian higher military education was very demanding because of transitions towards fulfilment of general standards prescribed for all higher educational institutions in the country, while at the same time there was a traditional imperative to satisfy specific expectations as an inherent part of the armed forces.

The following section presents in short the ongoing debate on the nature and character of contemporary conflicts and relevant vision on future security challenges for the case of Europe. Instead of wide discussion on particular aspects of contemporary conflicts where phenomenon of the hybrid threats and hybrid warfare is just the most popular at the moment, we offer a list of terms which were more or less present during few last decades. After that, what follows are the newest relevant visions of security threats related to Europe through the last Security Strategy of the European Union (European External Action Service, 2016). Last sections present some findings useful for future development of the higher military education, and a draft proposal of guidelines for long-term development of our higher military education.

## ON THE FUTURE SECURITY CHALLENGES

Contemporary challenges to the national security and defence are complex, numerous and of various characters with tendency to become even more complicated and diverse in the future. Many of those challenges are out of control of small states. Small countries have to be aware of that and able to recognize timely and clearly the mechanisms of power and threats projections (Dengg, 2014). In order to be identified and named in a better way, new faces of modern conflicts are sometimes marked as hybrid (D'Agostino, 2010), unrestricted (Liang & Xiangsui, 1999), asymmetric, or by other terms, Table 1.

That places the basic question to the defence and security experts and establishment: how to prepare, train and educate in order to effectively and efficiently respond to such challenges; does it require some changes in educational system and concept, and what kind and scope of changes? Besides this, there are other social, political and legal factors, such as the process of joining the European Union, a compliance with civilian educational and accreditation standards, restrictive financing, organizational cut-offs, new missions, etc.

Table 1: *Spectra of modern conflict concepts through adjective terms (kinds of wars, not finite)*

Ambiguous warfare	Fourth-generation warfare	Psychological warfare
Asymmetric warfare	Full-spectrum conflict	Religious war
Biological warfare	Grey wars	Regulations warfare
Chaoplexic warfare (chaotic+complex)	Humanitarian war	Smuggling warfare
Chemical warfare	Hybrid warfare	Special warfare
Cold war, Cold war 2.0	Ideological warfare	Space warfare
Compound warfare	Information warfare	Star wars
Conventional warfare	Intelligence warfare	Swarming
Cyber warfare	Irregular warfare	Terror warfare
Drug warfare	Media warfare	Total warfare
Diplomatic warfare	Multi-domain battle	Trade warfare
Economic warfare	Network-centric warfare	Unconventional warfare
Ecological warfare	Non-linear warfare	Unrestricted warfare
Electronic warfare	Nuclear warfare	War beyond rules
Financial warfare	Political warfare	War on terror

The main conclusion after recognizing wide spectra of security challenges which at the end may produce conflicts with some specific characteristics which usually leads to profiling some adequate term as it is presented in Table 1, is that future challenges for security and defence branch will be even more dynamic, unpredictable and numerous than ever in the past. Exhaustive list of terms presented in the Table 1, contains only those which were actual in last few decades and it is not a complete list of all possible kinds of warfare. If we expanded time perspective on a century, than a list would contain the following kinds of wars as well: colonial wars, guerrilla wars, liberation wars, revolutionary wars, etc. Consideration (Nikolic, 2017, 2018) of the every single “kind of warfare” which may characterize modern conflicts, outreach the scope of this paper and is more appropriate for some comprehensive research studies.

Perception of security threats may vary over time (Nikolic, 2015), because of changes in strategic environment and in economical, political, technological, demographical domains. This is particularly evident by comparing the novel security strategy of the European Union from 2016 and previous security strategy of the EU from 2003. The novel one is few times larger, more concrete, better structured, more pragmatic and action oriented. It is not strange if we remember the main events relating to direct and indirect security violation of the EU in the period after 2003: growing trend of oil prices which erupted in June 2008 (more than 140\$), global economic and financial crisis from 2007; “Olimpic war” Russia-Georgia in August 2008; the Arab spring; the rise of China; change in strategic

pivoting of the USA towards Asia; wars in the Middle East; migrant crisis (more years, multi-directional); the crisis in Ukraine; terrorist attacks in a number of the EU cities; the Western Balkans instability; Brexit; etc. It is interesting that the novel security strategy of the EU was officially presented on 28 June 2016, only a week after the Brexit referendum in the UK.

The last strategic document on the EU security recognizes main security challenges and threats, as well as a vision of respond to them through defining five priorities for external actions (foreign and defence policy). Table 2 presents main issues, for the context of this paper, distilled from the EU Global strategy for the foreign and security policy.

Table 2: *Security challenges – the EU view in 2003 and 2016*

Challenges and Threats to the EU Security, 2003 (European External Action Service, 2003)	Challenges and Threats to the EU Security, 2016 (European External Action Service, 2016)	
Terrorism Proliferation of weapons of mass destruction Regional conflicts State failure Organized crime	Terrorism Hybrid threats Cyber threats Economic volatility Climate change Energy insecurity Organized crime External border management	
<b>Strategic Objectives (3) (2003, EU Security Strategy):</b>	<b>Priorities of EU External Action (5): (2016, EU Security Strategy):</b>	
(1) Addressing the threats	(1) Security of EU	Security and Defence Counter-terrorism Cyber security Energy security Strategic communications
(2) Building security in the EU neighbourhood	(2) State and societal resilience to the EU East and South	Enlargement policy
		EU neighbours
		Resilience in the EU surrounding regions
		Effective migration policy
	(3) Integrated approach to conflicts and crises	Pre-emptive peace
	Security and stabilisation	
	Conflict settlement	
	Political economy and peace	

(3) An international order based on effective multilateralism	(4) Cooperative regional orders	The European security order
		Peaceful and prosperous Mediterranean, Middle East and Africa
		A closer Atlantic
		A connected Asia
		A cooperative Arctic
	(5) Global governance for the 21st century	Reforming
		Investing
		Implementing
		Deepening
		Widening
		Developing
		Partnering

Wide spectra of future security challenges generate needs for a wider set of competencies and intellectual resilience of the security and defence professionals. One of main providers of the competent security and defence professionals is University of Defence. This perception of the role and importance of military educational institutions for preparing adequate respond to the changing character of threats, conflicts and wars, is recognized at the global level (Yong-De, 2017) as well.

CONTEPORARY TRENDS IN MILITARY

EDUCATION DEVELOPMENT – AN EXAMPLE

The security and defence establishments are expected to respond adequately to almost all security challenges. To be succesfull, they must be prepared for that. And that is responsibility of the education and training institutions. In order to offer high quality and relevant education and training, the educational institutions have to be aware with the state-of-the-art of security challenges as well as to have a vision of the future challenges.

However, there is one more pillar for long-term development of the system of higher military education. That pillar consists of a number of national standards which regulates whole domain of higher education and rules for accreditation of faculties and universities. Due to both main pilars, the military education system needs periodical re-visioning and strategic guidance creation and adjustment for its long-term future development. Here, we will present an interesting approach to profiling long-term strategic guidance for the military education. Few years ago a “Long-Term Strategy 2015-2025” has been issued by the Armed Forces Academy of General Milan Rastislav Stefanik (2014), for their system of military education. This document is well structured as a strategy document should be, clear, concrete, very concise and short but at the same time sufficiently comprehensive. As

such, it could be used as a good model for similar documents production in cases of countries comparable to Slovakia.

The strategy highlights six sections which are parts of the whole system of military education as follows: higher education; life-long learning and training; research and development; human resources and working environment; cooperation; and administration and internal services. For each of this six sections, they define sets of goals, tools and measurable indicators. Due to a space limit, only two sections will be presented in this paper. First of them is the section for higher military education, and it is evaluated through goals, tools and measurable indicators as follows:

- Goals of higher military education: accreditation of study programmes; attractiveness for quality applicants; quality that will satisfy the needs of the Armed Forces; provide adequate level of language proficiency; enhance the teacher-student relationships.

- Tools for higher military education: knowledge of current and future needs of the Armed Forces; sustaining comparability with other universities and looking for possibilities of new study programmes; promoting moral aspect and patriotism as an inherent component of military education; stimulate teacher-student relationships as partnership; promote teamwork; develop responsibility and perspective of life-long learning; motivate learning of foreign languages; direct learning as a continual process.

- Measurable indicators for higher military education: the number of accredited study programmes; the number of interested applicants for Military Academy; the number of acceptable and accepted applicants; the number of interested students for particular study programmes; the number of graduates; the number of unsuccessful students; the number of subjects taught in English language; the number of students who achieved particular levels of English language proficiency; level of students' satisfaction with pedagogical and professional treatment and education process; and evaluation of graduates to perform their functions as military officers.

Next section is dedicated to the Human resources and working environment. To be accredited as a higher education institution, an organization has to have and sustain a required number of appropriate professors for each study programme. In order to obtain this, the following issues should be met:

- Goals: achieve and sustain the staff competence for accreditation of study programmes; obtain the staff competence for research and development; acquire appropriate supporting personnel; establish appropriate working conditions and environment, and ensure job satisfaction of the staff.

- Tools: support career development for the staff; obtain and educate appropriate young higher education lecturers; develop relationships based on competences and responsibilities; strengthen interpersonal relationships and

direct activities around the joint objectives; develop healthy and friendly working environment.

- Measurable indicators: professional structure of the staff; number of lecturers with adequate specialisations and titles; age structure; indicators of negative interpersonal relationships; assessment of competences and proficiency; number and structure of the staff; average wages per individual employee.

Declared goals and tools are clear and short, while measurable indicators are very concrete and unbiased. This approach seems to be very applicable in practice for development of long-term guidance for the system of the higher military education (HME) in countries like Serbia.

## PROPOSAL OF GUIDELINES FOR LONG-TERM DEVELOPMENT OF HME

Here, we will consider how to profile a draft proposal for defining guidance for Serbian military higher education. The structure of the proposal is as follows: declaration of main mission and vision of the system of higher military education; review of main organizational elements; objective review of current state-of-the-art (draft self-evaluation with emphasize on weakness and strenghts); declaration of guiding principles; declaration of the system sections (and their main missions) which will be monitored and developed in the long-term aspect; detailed presentation of the trinity: goals-tools-measurable indicators; and a sketch of the monitoring dynamics and corrective measures which will be undertaken.

**Declaration of main mission and vision of the system of higher military education.** The main mission of the military education system in Serbia is to create “the identity of a professional officer – a leader, honorable, loyal, trained and prepared for intellectual and ethical challenges of an officer’s vocation in service of the homeland” (Military Academy, 2009), while at the same time perform high quality higher education according to the national standards for higher education.

**Review of main organizational elements.** The latest organizational changes started during last year and some novelties assumed incorporation of the Strategic Research Institute into the structure of the University of Defence, and stronger integration of the Military Academy and the Medical Faculty of the Military-Medical Academy into the University structure. Furthermore, some military scientific journals and center for scientific information entered the University structure.

**Analysis of current state - Objective self-evaluation** (University of Defence in Belgrade, 2013) with emphasis on weakness and strenghts. This document briefly describes current state of affairs with emphasis on problems which where actual at that time. In order to get fresh description and ongoing problems it is needed to conduct new self-evaluation. Insight into actual problems would be a starting point for solving urgent problems, but also to define a long-term actions.



**Declaration of guiding principles.** Military education system in Serbia is obligated to fulfil all standards of higher education prescribed by the national Ministry for higher education and science. One of those general documents is the Strategy for education development in the Republic of Serbia up to 2020. This strategy defines long-term vision of academic education development taking in mind current state-of-the-art and future desired state. The Strategy (Ministry of Education and Science, 2012) defines several guiding principles which are marked as crucial characteristics for future successful development and those are as follows: quality, relevance, efficiency, internationalization, mobility, scope, and modernization. Being part of national strategic document, above listed principles should be respected as well in the case of military higher education. While principles of quality, relevance and efficiency are quite self-explanatory, we will discuss the implementation of a few other principles in more details.

**Internationalization and Mobility.** Strategic documents on education recognize importance and role of internationalization and academic mobility. Internationalization and mobility in education as well as in the research is part of overall national strategic orientation towards values and standards of the European Union. However, it must be noticed that beyond European orientation, there is almost unavoidable process of globalization. That phenomenon additionally strengthens importance and need of internationalization including domain of military education (Urban, 2015). Strategic documents also underline importance of academic mobility where it is seen as a tool for better learning and interoperability at the European level (Paile-Calvo, 2016). Mobility implies all sides: students, lecturers, administration staff, and researchers. University of Defence recently issued few documents as regards this topic: a Strategy of internationalization (University of Defence in Belgrade, 2018) and Strategy of mobility for students and academic staff (University of Defence in Belgrade, 2018). Both of them are expected to contribute to the following goals: improvement of academic curriculum, enlargement of academic mobility for students and academic staff (professors, researchers and instructors), and advancement of international cooperation with universities, research institutes and partner institutions (University of Defence, 2018).

**Scope.** Unlike civilian counterparts where different dynamics and priorities are present, higher military education and research are very specific. Scope of military education is dominantly rooted in strategic documents of national security and defence, as well as in doctrinal military documents and vision of long-term development of the military organization. In simple words, whatever the quality of military educational system and research capacities is and whatever the level of attractiveness for joining those institutions is, students and educational and research staff could not be enlarged unlimitedly.

**Organizational modernization.** Organizational modernization of higher military education is challenged permanently, mainly because of new requirements which arise from new and dynamic changes in the field of security and de-



fence. Strategic documents underline importance of involvement of the scientific research activities into the educational process particularly at the higher levels (master and doctoral studies). How to achieve that? Here we will point out one of connecting points between education and research. Research personnel should be involved much more in the education process at those levels but with expectations that they will apply and engage their (research) views and in that way bring the new quality and perspective in the educational process.

**Additional principles.** Due to specific characteristics of the military domain, a few additional principles for development of military education should be placed here as follows: resilience, flexibility and intellectual curiosity.

**Declaration of the system sections (and their main missions) which will be monitored and developed in a long-term aspect.** Functional distinguishing seems to be appropriate for declaration of main sections of interest in this context:

- Education (accredited study programmes). This function is primary in the higher military educational system. Once being accredited, study programmes should be monitored, sustained and further developed according to national accreditation standards.
- Research. Scientific research is the second most important function in the higher education in general, so it could be valid for the case of the military.
- Training (set of various courses). The function of military training is very important for all military academies. It is one of the cornerstones for the development of future military officers. Moreover, it is part of a life-long learning through military career. However, it is not mandatory nor necessary to fulfill academic standards in the sense of accreditation.
- Human resources (educational and research staff). All issues related to the educational staff, that is, professors who conduct study programmes, are well defined by accreditation standards and corresponding regulations which are a basis for selection, sustaining and development of educational staff. Similar statement is valid for research staff as well. Scientific research is a subject of detailed regulations relating to the accreditation standards.
- Support (administrative, financial and logistics support). Unlike civilian universities, elements for support function at University of Defence have much more work to do. Besides regular administration and students affairs, as well as material support to the educational process and quartermaster support for military cadets and participants of various training courses, they have to support all kinds of activities with regard to military training, including field exercises.

**Detailed presentation of the trinity: goals-tools-measurable indicators.** This part could be developed in the same way and with very similar content as it was done in the Slovak Long-Term Strategy for the system of military education. Appropriate changes and adjusted solutions for the case of national specific conditions are considered by default.

**Sketch of the monitoring dynamics and mechanism for corrective measures.** Defining and applying monitoring dynamic is essential for control of the whole process. The same importance concerns the efficient mechanism or procedure for application of corrective measures. Otherwise, even the best strategy guidance would exist only in theory and paper, but not in practice, in real life.

## CONCLUSION

Future security challenges will be complex and numerous. However, the form does not change the essence, and in the future we can expect such kinds of violations which for potential adversary think that it is his best choice in a given conditions and time. Because of wide scope of future security challenges, a wider set of competencies and intellectual resilience of the future security and defence professionals are needed.

Future defence and security personnel have to be intellectually superior and curious, able to “think unthinkable”, and be ready to create effective respond to the new security and defence challenges. The main providers of such professionals are higher education institutions in the fields of national defence and security. The University of Defence is one of them.

University of Defence is on its way towards consolidating higher military education and research function. It has recently started with organizational changes which strengthens relations between education and research function and organizations. This should bring a new quality into education as a primary function of University of Defence, while at the same time is expected to enhance research capacity. Both, education and research functions are under transformation in order to satisfy relevant needs of the military organization now and in the future. A new self-evaluation of the higher military education is needed as a tool for highlighting actual problems. This step should be a starting point for solving urgent problems but also for defining long-term actions.

In the paper, we proposed an approach for clarifying principles and guidance for a long-term vision of development and future work at University of Defence. In profiling the proposal, we found as very useful some novel foreign experiences, which will be continued. Future work will be oriented towards elaboration of operational details and information campaign for spreading, understanding and accepting long-term changes in the educational and research field.

## ACKNOWLEDGEMENT

This work is partially supported by the Ministry of Education and Science of the Republic of Serbia under interdisciplinary Project No.III-47029 (*Cost Effective Selection of New Technologies and Concepts of Defence through Social Reforms and Strategic Orientations of Serbia in 21st Century*).

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