NATIONAL UNIVERSITY OF PUBLIC SERVICE Doctoral School of Military Sciences

THESIS BOOKLET

for the Doctoral (PhD) dissertation of

Attila Csóka

Modernising CBRN defence support and the deployment of CBRN defence sub-units in the light of 21st century challenges

Supervisor: Dr. habil. Tamás Berek colonel

Budapest, 2023

Table of Contents

Formulating the research problem	3
Hypotheses	4
Research objectives	5
Research methods	5
Stucture of the thesis and applied research methods	8
Overall conclusions	9
New scientific results	13
Recommendations, practical applicability of scientific results	13
Publication list	14
Curruculum Vitae	15

Formulating the research problem

In the last 5-10 years, security conditions have changed compared to the end of the 20th century, and the challenges facing CBRN defence in the first half of the 21st century need to be analysed.

The changed security environment requires new capabilities, and the new areas will inevitably trigger temporary capability gaps both within the NATO system and at national level. The implementation of CBRN support to special operations and, in particular, the provision of a CBRN defence sub-unit capable of conducting special operations is not common across the Allies.

The equipment of the Hungarian Defence Forces' specialized CBRN defence units has been constantly changing since the early 2000s,¹ but the regulations and publications defining their professional activities have not followed this change. The supported sub-units have changed, so it is necessary to investigate the way in which enhanced CBRN capabilities assigned to the sub-units of combat troops can be used, and it is necessary to determine the optimal way of using the specialized CBRN defence capabilities in support of a mission critical unit, in this case a mechanized infantry brigade, and the optimal use of these capabilities in the execution of special CBRN defence tasks.

The Zrínyi 2026 National Defence and Armed Forces Development Program affected the military reserve system, and voluntary territorial reserve units were established. As the existing CBRN defence regulations do not provide any guidelines for the use of reserve sub-units, it is necessary to examine the optimal potential to be exploited and to answer the question of what CBRN defence tasks the volunteer territorial reservist units/sub-units could have. When planning the tasks of these sub-units, it is a limitation that they can only be deployed in their area of responsibility.

The Automatic Measuring and Data Transmission Stations installed for the HDF CBRN Warning and Reporting System (CBRN W&R System) provide data on the radiation situation. If

¹ Bognár Máté (2007): *Fejlesztések a honvédelem egyik büszkeségénél*. Honvedelem.hu webpage, 14.11.2007. Online: <u>https://honvedelem.hu/hirek/fejlesztesek-a-honvedseg-egyik-buszkesegenel.html</u> Downloaded: 09.05.2023., Demeter Ferenc (2010): *Egyedülálló fejlesztések a vegyivédelmiseknél*. Honvedelem.hu webpage, 27.04.2010. Online: <u>https://honvedelem.hu/hirek/egyedulallo-berendezesek-a-vegyivedelmiseknel.html</u> Downloaded: 09.05.2023.

the stations of the National Directorate General for Disaster Management and other non-military organizations are taken into account, the system cannot be called nationally covered with 132² stations, so a geographically evenly distributed new source level data element has to be included in the system.

In summary: the current CBRN defence regulations of the Hungarian Defence Forces do not cover the application of specialized and enhanced CBRN defence sub-units, the special CBRN support tasks, the possibilities of using voluntary territorial reservist sub-units for CBRN support, and the supplementation of the HDF CBRN W&R source level is also timely, so the research and examination of the problems is justified.

Hypotheses

The following research hypotheses were formulated:

- Hungarian national regulations do not discuss the possible tasks of specialized and enhanced CBRN defence sub-units supporting a mechanized infantry brigade, which greatly affects the applicability and sustainability of capabilities. It is assumed that the specialized and enhanced CBRN defence sub-units perform their tasks in separate, non-identical areas, which may extend both the diversification of tasks that can be performed and the sustainability of capabilities.
- Special CBRN defence tasks such as CBRN rescue and extraction and special operations support cannot be done by conventional CBRN reconnaissance and decontamination subunits. There is a capability gap in the overlapping area of CBRN defence and special operations tasks.
- 3. In the light of the current threats, emerging and disruptive technologies, conventional and hybrid warfare, the production, use, rail and road transport of Toxic Industrial Materials, the territorial coverage of HDF CBRN W&R System, which also serves the Militrary Sectoral

² Országos Sugárfigyelő, Jelző és Ellenőrző Rendszer (2023) MoI National Directorate General for Disaster Management website. Online: <u>https://www.katasztrofavedelem.hu/92/orszagos-sugarfigyelo-jelzo-es-ellenorzo-rendszer</u> Downloaded: 06.05.2023.

Disaster Management System, is not complete and its expansion is justified. The risk factors specific to the districts of Hungary are not analysed in relation to the training of the Volunteer Territorial Reservist Companies, i.e. there is no analysis of training requirements. I assume that in the framework of the force development reform, the Voluntary Territorial Reservist companies of the districts will be able to carry out their tasks more effectively with the appropriate training for the expected deployment, and, if adequately equipped and trained, could be integrated into the HDF CBRN W&R System, thus increasing the number of source elements.

Research objectives

I set the following research objectives:

- To define the minimum tasks and structure of a CBRN defence sub-unit capable of supporting a mechanized infantry brigade, and the deployment of enhanced CBRN reconnaissance sub-units.
- a. To develop the basis for the CBRN support to special operations and the concept for the development of a CBRN Multirole Exploitation and Reconnaissance Team (CBRN MERT) capable of performing CBRN support and counter-proliferation tasks.
 - b. Development of CBRN decontamination tasks of CBRN Search and Extraction.
- a. Identification of the possible CBRN defence tasks of the Volunteer Territorial Reservist sub-units and the elaboration of the way of their involvement in the HDF CBRN W&R System.

b. Prove the need for specialized training of Voluntary Territorial Reservist sub-units to prepare them for territorially relevant CBRN incidents and disaster management events.

Research methods

In this thesis the following research methods were used:

 Starting from CBRN defence procedures, I used a deductive approach to define the application of CBRN defence sub-units and to develop the concept of CBRN MERT capability development.

- Modelling the CBRN threat of an CBRN defence-relevant area of Hungary.
- Conducting face-to-face interviews with current and former personnel of the former HDF Görgei Artúr CBRN Area Control Centre and the MH 6th Sipos Gyula Territorial Defence Regiment.

As a deductive (analytical) strategy research method, I chose to isolate facts, make generalizations and then formulate relationships, as well as to conduct an analytical review of the technological background. Subsequently, in collaboration with the management of the supporting and supported units, I chose the exploratory research method as an inductive strategy to develop the procedures, in which the relationship between the tasks of the supporting and supported organizational elements were analyzed in order to explore their interrelationship.

As stated in the research methods section of my thesis, the main source documents and empirical basis of my research were:

1. NATO publications on future warfare and security challenges.

2. Manuals, doctoral theses, and publications in the library of the National University of Public Service.

3. Scientific literature related to the research topic.

4. In force and cancelled/superseded regulations and field manuals in the Hungarian Defence Forces.

5. Experience gained from my assignments

The 12 years of serving as a commander of CBRN defence sub-units have provided the opportunity and experience to learn about CBRN defence procedures in Hungary and abroad.
 I was responsible for and conducted CBRN defence training/exercises using live chemical warfare agents on several occasions, and as a commander of the CBRN troops, I participated

in the consequence management tasks after the red sludge disaster in Ajka, which experience allowed me to evaluate the effectiveness of the procedures used by CBRN defence sub-units.

- As an exercise planner in the G3/7, senior CBRN officer at the Joint Forces Command of the Hungarian Defence Forces, and later as a senior officer for CBRN defence in Land Forces Inspectorate, I had the opportunity to perform planning tasks related to CBRN defence at management level, and to meet the challenges of planning CBRN defence operations, exercises and cooperation with non-military authorities.
- Of particular importance for the development of my professional competences was my longterm assignment (2019-2023) to the Joint CBRN Defence Centre of Excellence in the Czech Republic, during which I had the opportunity to learn first-hand about the conceptual designs of NATO's Allied Command Transformation, I represented the CBRN defence domain in the development of various concepts (Multidomain Operations in Urban Environment Concept, Layered Resilience Concept), led several CBRN defence projects that sought new directions and followed the development of revised doctrines, procedures and related publications based on the concepts.
- In NATO validation exercises, as a liaison officer and as a Higher Control player, I had the opportunity to observe CBRN defence procedures in a multinational environment.

6. The following courses were particularly outstanding in developing my skills:

- Chemical Officer Basic Course, US Army Chemical School, Fort Leonard Wood, Missouri, USA (2002)
- CBRN Exercise Planning Course, NATO School, Oberammergau, Germany (2010)

7. Doctoral dissertations, scientific publications, and articles on the Internet. My research has been supported by the following study trips, online and real conferences and projects:

- Search and extraction discovery experiment, JCBRN Defence COE, Vyskov, Czech Republic (2019)
- ACT annual International Concept Development and Experimentation Conference (between 2019-2022)

- NATO Warfighting Capstone Concept online experiment (2020)
- Validation of AJP-3.8 Comprehensive Joint CBRN Defence Doctrine in exercise STEADFAST JUPITER – JACKAL 2020 (2020)
- Implementation of comprehensive civil military CBRN capabilities discovery experiment,
 JCBRN Defence COE, Vyskov, Czech Republic (2020-21)
- Terrorism Expert Conference, Centre of Excellence Defence Against Terrorism, online (2021)
- Layered Resilience Initial Concept writing, The Hague, The Netherlands (2021)
- NATO 2030 Conference, Prague, Czech Republic (2021)
- CBRNe Summit Europe, Brno, Czech Republic (2021)
- Resilience Symposium, Warsaw, Poland (2022)
- Resilience Seminar, Bucharest, Romania (2022)
- Resilience Symposium, Riga, Latvia (2023)

Stucture of the thesis and applied research methods

Following the analysis of the global and NATO security challenges in the areas of CBRN defence, I examine the responses of NATO and then the Hungarian Defence Forces, and within these CBRN defence tasks are analyzed.

In the *Introduction* I justify the timeliness of the chosen topic. I outline the research objectives and describe the methods used in the research. My research hypotheses are formulated, and the main basis of my research are presented. I also present the relevant scientific literature.

The Thesis consists of 7 chapters.

In the 1stChapter (21st century challenges for CBRN defence, new types of threats) I analyse new types of global security challenges for CBRN defence. The interlinkages are exposed between the risks and threats posed by security challenges, and I propose military capabilities to mitigate these risks.

In the 2nd Chapter (Compelling challenges for reforming CBRN defence, NATO responses, identifying areas for improvement) I present the doctrinal background of NATO's CBRN defence and examine its adaptation to the doctrinal system of the Hungarian Defence Forces. I analyze NATO's efforts to develop forward-looking capabilities and its responses to security challenges in the context of CBRN defence.

In the 3rd Chapter (CBRN defence areas of the Hungarian Defence Forces in need of development) based on the previous chapters, I examine the areas where CBRN defence of HDF needs to be improved and make brief proposals for improvement.

In Chapter 4. (The Hungarian Defence Forces' response to the 21st century CBRN defence challenges) I analyze the elements of a proposed CBRN defence system of activities, including the optimal application of specialized CBRN capabilities, and determine the optimal application of enhanced CBRN capabilities. I also examine the CBRN defence tasks of the volunteer territorial reservist sub-units, demonstrate the need for their specialized training, and reveal the potential for enhancing the source-level elements of the HDF CBRN W&R system. In the second half of the chapter, I define the structure of a CBRN defence company capable of supporting a mechanized infantry brigade and the conceptual basis for the development of the CBRN MERT capability.

In Chapter 6, 7 and 7 I sum up the research, draw conclusions, summarize scientific findings and make recommendations.

Following the above chapters, I list the sources used, the list of figures, illustrations, tables, abbreviations, the list of authors' publications and acknowledge those who supported me during my work.

Overall conclusions

In the second half of the 20th century, until the dissolution of the Warsaw Pact, the global security situation was relatively simple to describe. The bipolar world order determined the threats, the threats imposed adequate requirements, and the fulfilment of these requirements entailed the development of well-defined, standardized chemical defence capabilities and procedures, which were geared towards the most likely CBRN tasks, i.e., detection, surveillance, and the decontamination of personnel, equipment and technical assets for a general military sub-unit.

The dissolution of the Soviet Union coincided with the rise of nationalist aspirations, which had been suppressed until then, as the Balkan war reminded us, and the emergence of missions led by the Organization for Security and Co-Operation in Europe and NATO, in addition to the UN missions that had been in place previously. Moving into the 21st century, the fight against terrorism, against an opponent who is outnumbered and outfought in terms of technology, has become the focus of peacekeeping tasks.

New types of global security challenges, such as overpopulation, resource pressures, migration, globalization, urbanization, organized crime, terrorism and the proliferation of weapons of mass destruction have catalyzed a transformation of warfare, and hybrid warfare has become prominent alongside asymmetric warfare, typically against non-state actors.

The key for primary success in the old wars was 'destroy-conquer-break' and it was replaced in asymmetric operations by 'exhaust-break-blood out', and in hybrid operations by 'break-disableconquer' principles and rules.³

As the above characteristics have defined the security environment, some Nations have responded to these challenges by adapting their armed forces to deviate in numbers, capabilities, and procedures from those required by conventional warfare. In this context, the Hungarian Defence Forces disbanded the 93rd Petőfi Sándor CBRN Defence Regiment, creating the 93rd Petőfi Sándor CBRN Defence Battalion, which was able to perform its national defence tasks following the plans, but in practice was more focused on providing international commitments and preparing for disaster management tasks. This trend was interrupted by the annexation of Crimea and the destabilization of Ukraine's eastern regions.

To avoid a further strategic shock similar to the one caused by the annexation of Crimea, NATO has stepped up its efforts to look ahead and to build future capabilities and preserve the technological advantage it currently has, NATO launched a long-term project (NWCC) in the early 2020s.

NATO's European member states have shifted the paradigm by re-focusing on conventional warfare capabilities and have begun to invest in and develop new capabilities to fill capability gaps and replace obsolete equipment. NATO has reviewed and modified its crisis management system, redeployed forces to the Alliance's north-eastern borders and prepared and practiced the Reception, Staging, Onward Movement and Integration (*RSOM-I*) of incoming Allied troops during annual exercises.

The possibility of conventional war, however, does not mean that the post-Cold War security challenges can be ignored, and this is the complexity of the security environment of our time. In addition to the conventional threat, the threat posed by non-state actors remains, and NATO's role

³ Resperger István (2017): *Az asszimetrikus hadviselésre adható válaszok*. Hungarian Defence Review, Volume 145. Issue: 2017/1, 38. HM Zrínyi Ltd., Budapest, 2017.

in the fight against terrorism, as outlined in the communiqué from the Brussels Summit,⁴ contributes to all three of the Alliance's core tasks and is an integral part of the Alliance's 360-degree deterrence and protection policy. The third component is the defence against hybrid warfare, which challenges both NATO forces and national resilience, entailing the need for multidimensional operations and the ability to defend against them.

National resilience as national responsibility requires increased cooperation between military and civilian capabilities.

In Hungary, the launching of the Zrínyi 2026 National Defence and Armed Forces Development Program expressed the intention to close the identified capability gaps and to modernize and replace obsolete equipment.

In the course of the Zrínyi Programme, logically, the capabilities and technical means of the forces providing CBRN support are to be reviewed after the finalization of the organization of the supported forces, but as of the writing of these lines (May 2023) no forward-looking changes have been made. Despite the fact that the Specialists have repeatedly and clearly expressed their dissenting opinion, the two CBRN defence military organizations of the Hungarian Defence Forces have been merged into a single regiment, within which the number of squadrons of the CBRN Defence Battalion has been reduced.

The review of CBRN defence capabilities should take into account the triple security challenge (conventional, asymmetric, hybrid), the changed number of sub-units/units supported and the increased need for civil-military cooperation. It has to be accepted that the capability of a platoon providing CBRN support to a battalion prepared for the challenges of the 21st century is not sufficient for a multidimensional fight against a nuclear power.

In addition to their classic support role, CBRN defence must also have small, specialized capabilities available. CBRN support to special operations units is a specialized capability, as is the CBRN MERT, or the CBRN EOD in CBRN tasks. Emerging and disruptive technologies will bring new procedures to the fore, with a greater emphasis on drones in both CBRN reconnaissance and CBRN drone protection. These CBRN defence tasks requiring special knowledge, procedures and equipment cannot be conducted by conventional CBRN defence forces.

⁴ Brussels Summit Communiqué. NATO Press Release, Communique PR (2021) 086. 14. 06. 2021. Online: <u>https://www.nato.int/cps/en/natohq/news_185000.htm</u> Downloaded: 27.07.2021.

Enhanced CBRN squads and non-specialized company CBRN NCOs are integral parts of a unit's CBRN defence system.

In response to security challenges, a diversified CBRN defence tasks requires coordinated planning and organization, which can be achieved by establishing an CBRN defence directorate at joint level command.

Standardization of specialized expertise is a major challenge. A common level of knowledge from planning to execution is essential for the interoperability of the capabilities provided by the Alliance's different nations.

One of the recommendations of NATO 2030 Report⁵ is the establishment of a NATO University to attract young talents outside NATO. Should such a university be established, the possibility of postgraduate training in CBRN defence should be created, not in competition with existing facilities offering one or two-week CBRN defence courses (NATO School Oberammergau, JCBRN Defence COE, CBRN School Rieti), but by involving them in the curricula.

The territorial dispersion of the volunteer territorial reservist sub-units makes these sub-units inevitable to be excluded from the CBRN Warning and Reporting System of the Hungarian Defence Forces. These companies must have equipped and trained non-specialized, but enhanced CBRN reconnaissance squads, with properly trained personnel in the staff for receiving, preparing, and sending CBRN reports.

Given that the planning of the deployment of the territorial defence sub-units is limited by the well-defined area of responsibility, the expected tasks can be deduced. The characteristics of each area are different (national borders, rivers at risk of flooding, industrial sites, etc.), so that the tasks to be performed are not the same, i.e. different training is required, which implies the need for different training programmes adapted to the specific characteristics of each area.

In my thesis, I have identified the security challenges of our time and analyzed them from the point of view of NATO and CBRN defence. I have highlighted NATO's efforts in terms of strategic foresight and the response of NATO, including Hungary, to Russia's aggression. I

⁵NATO (2020): *NATO 2030: United for a new era – Analysis and recommendations of the Reflection Group appointed by the NATO Secretary General*. Brussels, 25. 10. 2020., 63. Online: https://www.nato.int/nato_static_fl2014/assets/pdf/2020/12/pdf/201201-Reflection-Group-Final-Report-Uni.pdf

https://www.nato.int/nato_static_fl2014/assets/pdf/2020/12/pdf/201201-Reflection-Group-Final-Report-Uni.pd Downloaded: 16.02.2021.

identified areas of the Hungarian Defence Forces that could be developed in the field of CBRN defence.

I have defined the principles of CBRN defence of a mechanized infantry brigade, the organizational structure of a minimum sufficient CBRN defence company to support the brigade, the optimal tasks of CBRN defence units, and I have developed the deployment of enhanced CBRN defence sub-units. I have defined the possible CBRN defence tasks of the volunteer territorial reservist sub-units and demonstrated the need for their specialized training.

New scientific results

1. I have proved that in order to preserve CBRN support capabilities, it is necessary for specialized and enhanced CBRN defence sub-units to perform their tasks separately, in different areas. I have first developed a method of deployment for enhanced CBRN defence sub-units and have also developed the design of a modular CBRN support sub-unit with a minimum of modules to support a mechanized infantry brigade. The method of application of the enhanced CBRN support sub-units I developed was adapted by the HDF 102nd CBRN Regiment in its training.

2. I have proved that CBRN support for special operations cannot be provided by classical CBRN reconnaissance and decontamination sub-units. I have developed the basis for the feasibility of CBRN support of special operations in the short term and the concept for the development of the CBRN MERT capability in the long term, including the characteristics of its equipment, at the base of the HDF 102nd CBRN Regiment, in cooperation with the Hungarian Defence Forces 1st Special Operations Group.

3. I have developed ways to include the Volunteer Territorial Reservist sub-units in the HDF CBRN W&R System. I conducted an analyzis in a district threatend by a TIC site, after which I concluded that the specialised training of Volunteer Territorial Reservist units for the territorially relevant CBRN incidents enhances the effectiveness of protection and consequence management efforts. I proved the need for specialised training of Volunteer Territorial Reservist companies.

Recommendations, practical applicability of scientific results

The results of my research in the thesis can provide a basis for the revision of traditional CBRN defence procedures, the development of special CBRN defence procedures and the development of a regionally based specialized training concept for volunteer territorial reservist subunits.

Some parts of my thesis, in particular the optimal way of using enhanced CBRN reconnaissance squads and non-specialized CBRN defence NCOs, have been used in the training of soldiers already after the publication of the related essay, and I consider it to be a good practice to follow in the future.

The scientific results achieved can be used in the training of CBRN officers at the National University of Public Service, Faculty of Military Science and Defence Training, and provide an opportunity to revise CBRN defence specific curricula.

Publication list

- The challenges of CBRN defence in the first half of the 21st century. (Hungarian) Seregszemle, Volume XVI. Issue 2. ,2018., Székesfehérvár, 80–92. ISSN: 2060-3924, Online: <u>https://honvedelem.hu/files/files/115177/seregszemle_2018_2.pdf</u>
- CBRN support possibilities of Special Operations Forces (Hungarian) Military Engineer (Hadmérnök), Volume XIV. Issue 2. June 2019. Budapest, 123–136. ISSN: 1788-1919, DOI: 10.32567/hm.2019.2.10 Online: <u>http://real.mtak.hu/132179/1/192-10-csoka.pdf</u>
- Possibilities for the deployment of non-specialized CBRN defence non-commissioned officers and enhanced CBRN reconnaissance squads (Hungarian) Hungarian Defence Review (Honvédségi Szemle), Volume 148. Issue 2020/1., 2020 Budapest, 78–90. ISSN: 2060-1506, DOI: 10.35926/HSZ.2020.1.6 Online: http://real.mtak.hu/125539/1/HSZ_2020_148_1_Csoka_Attila.pdf
- CBRN decontamination tasks supporting rescue and extraction missions in CBRN environment (English)
 Military Engineer (Hadmérnök). Volume 15. (2020) Issue 2., 2020 Budapest, 31–42. ISSN: 1788-1919, DOI: 10.32567/hm.2020.2.3 Online: http://real.mtak.hu/124763/1/HM_2020_2_03_Csoka.pdf
- 5. CBRN defence tasks of volunteer territorial reserve units (Hungarian)

Hungarian Defence Review (Honvédségi Szemle), Volume 148. Issue: 2020/6. 2020. Budapest, 58–66. ISSN: 2060-1506, DOI: 10.35926/HSZ.2020.6.5 Online: http://real.mtak.hu/125827/1/HSZ_2020_148_6_Csoka_Attila.pdf

- Analysis of new types of security challenges for CBRN defence (Hungarian)
 Szakmai Szemle, Volume XVIII Issue:2, Budapest, 2020. 96–107. HU ISSN 1785-1181
- CBRN Terrorism (Hungarian)
 Szakmai Szemle, Volume XVIII Issue: 3, Budapest, 2020. 68–79. HU ISSN 1785-1181
- Reducing the outflow of CBRN soldiers from the point of view of motivation (English) Academic and Applied Research in Military and Public Management Science, Volume 20 issue 1, Budapest. 5–19. ISSN: 2786-0744 (online), 2498-5392 (printed) DOI: 10.32565/aarms.2021.1.1 Online: https://folyoirat.ludovika.hu/index.php/aarms/article/view/507/4605
- 9. NATO Strategic Foresight. (Hungarian)
 In: Krajncz Zoltán (edit.): Actual Questions of Military Science 2021. Ludovika University
 Publisher, Budapest, 2023, 189–200. ISBN 978-963-531-950-3 (electronical pdf), ISBN 978-963-531-951-0 (ePub)

Curruculum Vitae

Lieutenant Colonel Attila Csóka graduated from the Chemical Technical School in Tiszaújváros, Hungary, then in 1999 he graduated from the Bolyai János Military Technical College in Budapest with a degree in CBRN defence - Chemical Engineering.

As a second lieutenant, his first position was CRN Platoon Leader of the 88th Quick Reaction Battalion of the Hungarian Defence Forces in Szolnok, then he held the positions of Platoon Leader, Deputy Company Commander and Company Commander of the 93rd Petőfi Sándor CBRN Battalion in Székesfehérvár for ten years until 2010.

During this period, he completed a master's degree in Defence Administration at the Zrínyi Miklós University of National Defence, specialising in disaster management, and served two armed foreign service tours: in 2004 he was the CBRN Officer of the HDF Transportation Battalion in Iraq for six months, and in 2006 he was a Land Desk Officer at the KFOR Joint Operations Centre for six months. The red sludge disaster in Ajka occurred during Lt. Col. Csóka's sub-unit commander period, and he, as a captain, took part in the consequence management of the disaster as the commander of the CBRN soldiers for several months, working in daily shifts.

From 2011, he served for a year as an exercise planning officer at the HDF Joint Forces Command, and then returned to the CBRN Battalion as Operations Section Chief for five years.

In 2017, he served in the MH Joint Forces Command, and after structural changes, in the Hungarian Defence Forces Command as Senior CBRN Officer, during which he participated in several validation exercises of NATO-offered forces, evaluating the CBRN area, and participated in several times in the comprehensive evaluation of the HDF tactical level military organizations.

In 2018, he started his studies at the Doctoral School of Military Science, where he obtained his absolutorium in 2022.

From 2019, Lt Col. Csóka served for four years in the NATO CBRN Defence Centre of Excellence in the Czech Republic, where he was responsible for concept development, experimentation, analysis and lessons learned, and liaising with NATO's Allied Command Transformation in these areas. Following the end of his non-armed mission in the Czech Republic he has been serving as senior CBRN defence officer since 16 July 2023 in the Force Planning Directorate of the General Staff.

In order to perform his duties at a high level, Lt. Col. Csóka has completed a number of courses, including the Chemical Officer Basic Course at the US Army Chemical School, the CBRN Exercise Planning Course at the NATO School Oberammergau and the Mission Command Training-MDMP course by the Joint Multinational Simulation Center.

He has held the rank of Lieutenant Colonel since 15 April 2017. During his service he has been decorated 19 times. He has STANAG 3.3.3. and C1 level in English and B1 in Spanish. He is married and has three children.