



Volume 16 (2023)  
Issue 2

ISSN 2559-8651 (electronic)

# NATION AND SECURITY

## SECURITY POLICY REVIEW

(Nemzet és Biztonság)



# Impressum

## Nation and Security (Nemzet és Biztonság)

Security Policy Review

The peer-reviewed security policy journal of  
the Ludovika University of Public Service

Nation and Security (Nemzet és Biztonság)  
is also published in Hungarian, 4 times a year

Editor-in-Chief:  
Péter Tálás

Editorial Assistant:  
Béla Háda

Editor:  
Tamás Csiki Varga

Editorial Board:  
István Balogh, PhD, Tamás Csiki Varga,  
PhD, Balázs Forgács, PhD, Professor Ferenc  
Gazdag, Béla Háda, PhD, Ferenc Kaiser,  
PhD, Viktor Marsai, PhD, Gergely Németh,  
PhD, (President), András Rác, PhD,  
Professor Erzsébet N. Rózsa, Péter Siklósi,  
PhD, Antal Szöllösi, Professor Zoltán Szenes

Published by the Ludovika University Press

Responsible for publishing:  
Gergely Deli Rector

Technical Editor:  
Angéla Fehér

Proofreader:  
Zsuzsanna Gergely

Editorial Office:  
9–11, Hungária körút, 1101 Budapest,  
Hungary  
Phone number: +36 (1) 432 9092  
Fax: +36 (1) 432 9058  
E-mail: nemzetesbiztonsag@uni-nke.hu  
<https://folyoirat.ludovika.hu/index.php/neb>

ISSN 2559-8651 (electronic)

# Contents

## Comment

- Tamás Csiki Varga  
**The Transformation of the European Security  
Architecture as an Outcome of the Russian  
Aggression against Ukraine . . . . . 2**

## Security Policy

- José Lorenzo-Penalva Lucas  
**Conceptual Model for Intentional Change  
in Violent Extremist Jihadist Organisations. . . . . 4**  
Gábor András Papp  
**China's Militarisation and the Indian Ocean . . . . 20**  
Réka Szolga  
**The Role of the Currently Applicable Water  
Treaties in Conflict Resolution . . . . . 41**

## Defence Policy

- Tamás Csiki Varga  
**Enabling Factors of Deepening the Visegrád 4  
Defence Cooperation . . . . . 55**  
Péter Balog  
**Geospatial Crisis Index – Developing Geospatial  
Analysis System to Support the Hungarian  
Defence Forces . . . . . 78**  
Elena-Alexandra Mazilu (Alexandrescu)  
**The Necessity of the Process of Modernisation of  
the Human Resources of the Military System . . . 90**

## In the Spotlight

- Anna Urbanovics  
**Cybersecurity Strategies in the Visegrád  
Countries – A Cross-Country Analysis. . . . . 100**

## Outlook

- Krisztián Bene  
**Changes in the Composition, Equipment and Tactics  
of the 1<sup>st</sup> Foreign Cavalry Regiment of the French  
Foreign Legion during the Indochina War. . . . . 114**  
Dániel Solymári – Ráhel Czirják  
**Most Current Issues and Perspectives  
of the Urban Slum Problem in Kenya. . . . . 126**  
Kazi Mohammad Mahbobor Rahman  
**Economic Development under the Authoritarian  
Military Rule in Thailand and Myanmar: A Survey  
of Literature . . . . . 144**

Tamás Csiki Varga<sup>1</sup>

# The Transformation of the European Security Architecture as an Outcome of the Russian Aggression against Ukraine

In the post-Cold War era European security rested on the foundations of cooperative security along the principles of the Helsinki Final Act. This setup did not only provide indivisible security for all but was also underpinned by several arms control as well as confidence and security building measures that served sustaining stability well. On the one hand a politically and economically victorious Western alliance, centred predominantly around NATO and the European Union began to fill the strategic vacuum in Central and Eastern Europe, while on the other hand the former Soviet empire and Eastern block fell apart, leaving a politically vulnerable and economically weak Russian Federation behind. The Cold War, characterised by a high-risk but stable military confrontation was succeeded by a low-risk, but less stable security environment, gradually giving way to a reorganisation of the European security architecture that eventually lasted until 2022, when it has irreparably been degraded by the resurgent Russian quest to restore its lost great power status.

No one should have been surprised that the ‘siloviki’ elite of Russia under Vladimir Putin did not welcome these changes and did not embrace the loss of the Russian sphere of influence that many in Europe hoped belonged to the past. By 2007 the latest, when Putin, speaking at the Munich Security Conference, expressed his concerns and challenged the expansion of Euro-Atlantic institutions in Europe, it should have been clear that a resurgent Russia could pose a serious military challenge to this new order. Meanwhile, both arms control regimes between the United States and Russia, as well as bi- and multilateral confidence and security building measures – the ABM, INF, CFE, Open Skies treaties for example – were rendered dysfunctional by the parties for various reasons.

Georgia’s and Ukraine’s drifting towards NATO and the EU by 2008 meant the milestone where Russian political and economic power proved ineffective in keeping these countries anchored to Moscow, therefore Russia relied on the use of military power, first against Georgia in 2008, then against Ukraine in 2014. However, most European countries seemed to hope that the changing nature of the status quo can be denied, and Russia will be satisfied with its gains at the detriment of the sovereignty and territorial integrity of Georgia and Ukraine. But the lack of European agility coupled with Russian assertiveness led to risk-miscalculations: European countries underestimated Russia’s sustained willingness to use military force to pursue its strategic goals, while Russia underestimated

---

<sup>1</sup> Senior Research Fellow, University of Public Service, Institute for Strategic and Defense Studies. E-mail: [csiki.tamas@uni-nke.hu](mailto:csiki.tamas@uni-nke.hu)

Ukraine's ability to resist armed aggression, as well as the West's willingness to take costs for preserving Ukraine's sovereignty, what is also often seen as a guardian of European security.

Russia's 2022 escalation of its aggression against Ukraine, however, was not only a military miscalculation, but led to the irreparable degradation of the existing security architecture. Central and Eastern European countries are now building 'a new military Iron Curtain' – a military deterrent that now includes formerly non-aligned Sweden and Finland as well. European countries in the 2020s do not define their security together with Russia – but against Russia.

José Lorenzo-Penalva Lucas<sup>1</sup>

# Conceptual Model for Intentional Change in Violent Extremist Jihadist Organisations<sup>2</sup>

*This paper explores a new approach to violent extremism through complex adaptive systems and system of systems analysis. Within both disciplines, the paper will show the simplified model developed about how violent extremist jihadist organisations learn, adapt, innovate or change in an intentional way. Because of its weakness, terrorists always look for the relative advantage and they reach it, among others, via learning, adaptation, innovation, ultimately, through intentional change. Understanding their dynamics intentional change will facilitate disrupting terrorist organisations.*

**Keywords:** terrorism, extremism, conflict, security, defence

## Introduction

### Object of study

In the wake of the quantifiable disaster of the Afghan campaign,<sup>3</sup> this paper focuses on the need to address violent extremism, terrorism and insurgency in a new way. Although violent extremism, terrorism or insurgency are three different phenomena, they have a common denominator that they belong to the same category of problem.

To achieve its end, the paper delves into the need to address these problems through complex adaptive systems and system of systems analysis, ending with a conceptual model of how violent extremist jihadist organisations introduce intentional changes in the organisation in order to learn, innovate or adapt.

In accordance to system theory, terrorism can be divided into several subsystems. By identifying critical vulnerabilities in one, or several of the subsystems, the whole organisation can be nullified or rendered ineffective.

Historically, terrorism has been faced trying to attack the different subsystems, for example, by killing or imprisoning their leaders, persecuting their finances, prohibiting or countering propaganda, preventing arms trafficking, etc.<sup>4</sup> However, little has been

---

<sup>1</sup> PhD Student, Pablo de Olavide University, Spain. E-mail: [jlurluc@alu.upo.es](mailto:jlurluc@alu.upo.es)

<sup>2</sup> The present publication was presented in an oral form on the *II Military Science and Military Art International Conference* at the Ludovika University of Public Service, Budapest, Hungary, on 14 October 2022.

<sup>3</sup> The cost of the Afghan campaign has shown us that current approach to terrorism, insurgency and violent extremism is not effective. See e.g. Helman, Christopher – Tucker, Hank: [The War in Afghanistan Cost America \\$300 Million Per Day for 20 Years, with Big Bills yet to Come](#). [online], Forbes, 16.08.2021. Source: [forbes.com](https://www.forbes.com) [25.04.2023].

<sup>4</sup> See e.g. Torres-Soriano, Manuel Ricardo (2020): *Democracia vs. desinformación: Propuestas para la protección de las sociedades abiertas. Colección Actualidad, Centro de Estudios Andaluces*, (87), 1–18.

exploited in the field of how terrorists learn, adapt and introduce changes in their organisation.

The reasons why the subsystem of intentional change has been chosen to be targeted is quadruple. First, because the previous approaches have failed. Second, this subsystem is crucial to a terrorist organisation, a violent organisation or an insurgency to survive or to be effective causing terror.<sup>5</sup> Third, introducing changes in their procedures terrorists make the counterterrorism effort inefficient. Forth, because the intentional change is a common factor in many other subsystems of the terrorist organisation, so targeting it, synergy can be achieved.

Therefore, if we were able to understand the dynamics of learning, adaptation and intentional change of the violent extremist organisations, it would be easier to disrupt these organisations. A better understanding would favour our access to their centre of gravity (render ineffective our countermeasures). With a holistic comprehension, the protection of our centre of gravity (our strength, e.g. combat power, precision, etc.), would be favoured too, resulting in more efficient actions.

### ***Importance of the subject***

Insurgency and terrorism studies are a field of knowledge of political, legal, economic, security, military and academic significance. This part of the Social Sciences focuses on how to prevent an actor from achieving political or other goals through the use of force or terror instead of using the channels established by democracy or other forms of government.

States governed by the rule of law legislate, allocate resources, pursue, counter, prevent and try to create resilient mechanisms to avoid the effects of terrorism and insurgency. Likewise, from the academic point of view, there is an ecosystem where scholars of the subject try to advance in the generation of knowledge to clarify and determine all the measures and actions mentioned above. This community is made up of personnel from military, security forces and bodies and a part of the academia that we could call “unofficial strategic community”<sup>6</sup> or “strategic studies community”<sup>7</sup>.

In terms of political, legal and military relevance, terrorism has been a major issue. For example, after the attacks on U.S. soil on 11 September 2001, President George Washington Bush dragged more than forty countries into what he defined on 16 September 2001 as the “war against terrorism”.<sup>8</sup> Other aspects that show the importance of this phenomenon are: the considerable effort made in terms of budget and human lives in the Afghanistan campaign, or the fact that the United Nations and the European Union, among others,

---

<sup>5</sup> Extremist organisations are always learning from their adversaries and adapting their tactics, technics and procedures to avoid being captured, killed or dismantled, also to maintain the efficiency of their actions to continue causing terror.

<sup>6</sup> Gray, Colin S. (1982): *Strategic Studies and Public Policy. The American Experience*. Lexington: University Press of Kentucky. 2.

<sup>7</sup> Freedman, Lawrence (2002): Conclusion: The Future of Strategic Studies. In Baylis, John – Wirtz, James J. – Gray, Colin S. (eds.): *Strategy in the Contemporary World. An Introduction to Strategic Studies*. Oxford: Oxford University Press. 357.

<sup>8</sup> Later the name was changed to “war on terror” and then to “global war on terror”.

have developed strategies against terrorism and violent radicalisation.<sup>9</sup> The creation of an illegal detention centre like the one in Guantanamo, or the comprehensive reorganisation of the security agencies in the United States of America and many other countries after the terrorist attacks of 2001 are two more examples of the relevance of the subject.

From an academic point of view, the subject is also very relevant. The governments of many countries have been releasing appropriations to promote research in this field, joint work agreements have been established with numerous universities, too. The agreement reached between the U.S. Department of Homeland Security and the University of Maryland to maintain the Global Terrorism Database; or the common practice of intelligence services to incorporate civilian personnel from academia in their intelligence centres exemplify the aforementioned.

The outlook of the impact of terrorism in economy cannot be ignored or underestimated.<sup>10</sup> Terrorism destroys infrastructure and industrial fabric, by creating insecurity it causes market prices to oscillate and be uncertain, discourages capital investment, harms tourism and trade among other factors. 2014 was, according to the 2019 Global Terrorism Index, the year with the highest economic impact of terrorism on the world economy in the last 20 years, reaching a record US\$ 111 billion.

### ***Methodology and analytical strategy***

This research is part of a much larger project which is the validation via quantitative testing of a complex computable model based on complex adaptive systems theory to provide predictions and metrics for counterterrorism and counterinsurgency policies and strategies.

Being the initial part of the abovementioned project, the methods employed have mostly been qualitative. As a result of the research question, why are we not as good as we should be in countering violent extremism, terrorism or insurgency? First, a study of the specialised literature has been done. Second, interviews with NATO constituent nations' experts on the subject has been held. Third, after having found that a new approach is needed, a process of analysis, synthesis, comparison, induction, deduction and new interviews with experts has been done to obtain the conceptual model that could explain the intentional change in the violent extremist organisations.

At the beginning of the research, a systematic bibliographic search was carried out according to the criteria of quality, reproducibility, completeness and depth. For this purpose, multidisciplinary and disciplinary scientific databases were used, as well as other databases and search engines.<sup>11</sup>

---

<sup>9</sup> See e.g. the United Nations Global Counter-Terrorism Strategy, the National Counter-Terrorism Strategy of the Government of Spain or the EU Counter Terrorism Strategy.

<sup>10</sup> Much of the impact of terrorism can be gleaned from the Global Terrorism Index issued in March 2022 by the Institute for Economics and Peace.

<sup>11</sup> As for the main ones: ProQuest, Scopus, Criminal Justice Database, National Criminal Justice Reference Service among others. As secondary ones, e.g. Eureka database from Pablo de Olavide University and Google Academics.

The experts interviewed belong to four main areas: the Spanish academia, the Spanish intelligence community, European academia and other experts of NATO intelligence community. For reasons of operational security, the name of the experts will remain stored with the proper information security measures; need to know and security clearance will be two prerequisites for access to that list.

The conceptual model presented in this paper has been the starting point for the quantitative–qualitative research. First, developing the complex adaptive model and then testing this model with the data available from the Global Terrorism Database of the Maryland University and with other databases the ownership of which belongs to the NATO nations.

## **Of the need to approach the problem of terrorism in a new way**

The method of planning, decision-making and problem-solving adopted by NATO is fundamentally based on causality and is designed to deal with simple or complicated- linear problems,<sup>12</sup> that are the ones which require observation, categorisation and response and observation, analysis and response cycles respectively.

NATO's approach to planning, decision-making and problem-solving works very well when faced with simple and complicated problems such as conventional combat. However, terrorism, insurgency or violent extremism fall into the category of so-called interactively complex nonlinear problems.

The boundaries between simple and complicated, and complicated and complex system titles are sometimes blurred,<sup>13</sup> as it can be seen in Figure 1. Although the difference between one type of problem and the other may seem a minor issue, it is not. On the contrary, it is one of the causes of the failure of the Iraq and Afghanistan campaigns, and one of the causes that policies and strategies fail to address terrorism and insurgency.

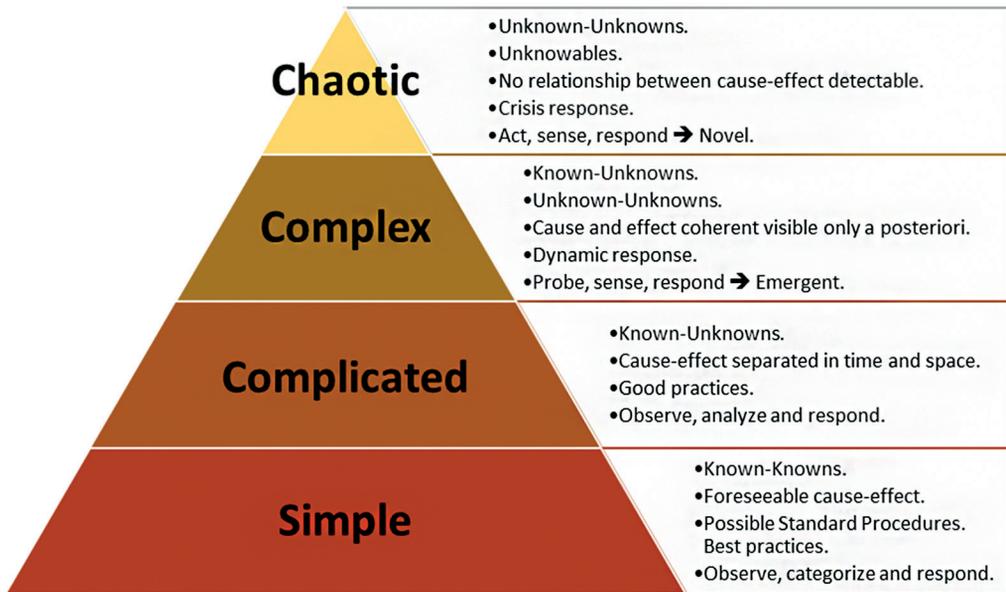
The epistemological and gnoseological problem behind this taxonomy has its origins in the inability of Physics and Mathematics to explain complex problems such as the “three-body problem” enunciated by Isaac Newton in his famous *Principia*.<sup>14</sup> If even today there is still a part of the academic world that does not fully understand these problems, strategic and security studies are also still at an early stage.

---

<sup>12</sup> In order to delve into the subject, see or analyse the NATO Comprehensive Operational Planning Directive, COPD; the Allied Joint Doctrine for Planning Operations, AJP-5; and the Allied Tactical Planning for Land Operations, APP-28.

<sup>13</sup> Klir, George J. – Yuan, Bo eds. (1996): *Fuzzy Sets, Fuzzy Logic, and Fuzzy Systems. Selected Papers by Lotfi A. Zadeh*. Singapore: World Scientific.

<sup>14</sup> Newton, Isaac (1687): *Philosophiae Naturalis Principia Mathematica*. London: Knight and Compton.



**Figure 1: Categories and types of systems**

*Note: The figure shows causality, disorder, type of information available or lack thereof, as well as the preferred/proposed sequence of action in each of the four environments or type of problems.*

*Source: Compiled by the author based on Dave Snowden’s Cynefin model.*

As a nonlinear problem, the object of study presents some extraordinary challenges, such as, for example, the requirement of an appropriate measurement instrument for the independent variables. The *non-linearity* of the problem lies in the fact that violent extremist organisations are made up of individuals and, especially those who constitute these organisations, make many of their decisions in a non-rational, i.e. emotional way (such as, for example: acts of faith, tastes, moods, etc.).<sup>15</sup>

When the non-linearity lies in the fact that the decisions are emotional, the conventional rules of problem-solving, such as the scientific method or the military method of problem-solving, which are normally designed to deal with problems based on causality, are affected. Nonlinear problem-solving is arduous and, in these cases, directly undermines one of the pillars of the scientific method, replicability. In fact, there is currently a growing trend in the field of security and defence operations that argues that the scientific method is not applicable to the resolution of this type of problem.<sup>16</sup>

The problem of non-linearity (and, therefore, of the impossibility of replicability) cannot be solved *per se*, it is, in a way, like Heisenberg’s indeterminacy problem. But, the aforementioned does not imply impossibility of predictability, which means the need to employ Bayesian theories. The problem of non-linearity is overcome by making use of

<sup>15</sup> Other types of non-linear problems are, for example, some aspects of economics, weather forecasting or ecosystems.  
<sup>16</sup> Guided discussions, 2018–2020 at the Marines University; Escuela de Infantería de Marina “General Albacete y Fuster”; or at the Centro Superior de Estudios de la Defensa (CESEDEN), in Spain.

probability and the Pareto principle. Unlike cause–effect relationships, it must be understood that any solution to a nonlinear problem may not happen again immediately, these outcomes are probability centric. It is not possible to be certain that the relationships discovered in the investigation will be fulfilled in one hundred percent of the cases; but, if the model and the variables that conform it are correct, this will occur in a very high percentage of events.

### ***New methodology to solve the “operational military problem” of terrorism, insurgency and violent extremism***

Considering the way we think and how human beings make decisions in the worst possible situations is a task that the military institution takes very seriously. The “operational military problem-solving process” is a term widely used in NATO doctrine and in most of the national doctrine of the most advanced countries<sup>17</sup> that refers to a set of actions and steps followed in order to reach the best possible solution, among all the possible ones, in a given situation.

Saving the nuclear strategy that employed game theory since the construction of the atomic weapon, first unconsciously and then deliberately, U.S. civilian academics working in defence think tanks were the first to notice the need to address insurgency and terrorism as an interactively complex and nonlinear system. Particularly noteworthy in this regard is Van Ripper’s 1997 contribution<sup>18</sup> criticising the American mindset that relied on simple scientific solutions to complex problems of human relations.

In the aftermath of the 9/11 attacks, Smith (2001 and 2002)<sup>19</sup> pointed to the need for a new methodology using system dynamics to model the fight against terrorism. Smith proposed a system that would be able to support the relationships of the constituent parts of a terrorist organisation, such as the command element, operational cells, policies, communications, cultural aspects, etc.

In the specific field of terrorism, Deffuant et al. (2002)<sup>20</sup> were also among the first to use system dynamics. On the other hand, Raczynski (2004),<sup>21</sup> besides non-linearity, included among the variables of his models the possibility of the use of kinetic actions, such as, the destruction of a part of the terrorist organisation’s system. Raczynski’s model, however, was built in the theoretical framework, without undergoing validation with empirical data.

<sup>17</sup> See NATO (2012): *Allied Command Operations Comprehensive Operations Planning Directive COPD V.2: 4–32*; U.S. Army (2014): *FM6-0 Commander and Staff Organization and Operations: D-1*.

<sup>18</sup> Van Ripper, Paul – Scales, Robert H. Jr. (1997): Preparing for War in the 21<sup>st</sup> Century. *The US Army War College Quarterly: Parameters*, 27(3).

<sup>19</sup> Smith, Roger: *Modeling and Simulation Adds Insight on Terrorism*. [online], Signal Magazine, 01.12.2001. Source: afcea.org [01.11.2022]; Smith, Roger (2002): Counter Terrorism Simulation: A New Breed of Federation. *Simulation Interoperability Workshop*, Spring 2002.

<sup>20</sup> Deffuant, Guillaume et al. (2002): How Can Extremism Prevail? A Study Based on the Relative Agreement Interaction Model. *Journal of Artificial Societies and Social Simulation*, 5(4).

<sup>21</sup> Raczynski, Stanislaw (2004): Simulation of the Dynamic Interactions between Terror and Anti-Terror Organizational Structures. *Journal of Artificial Societies and Social Simulation*, 7(2).

Dombroski (2002),<sup>22</sup> Carley (2004)<sup>23</sup> and Anderson (2006)<sup>24</sup> complemented their predecessors using agent-based models or employing system dynamics techniques to model other particular aspects of terrorism.

Kaminskiy and Ayyub (2006)<sup>25</sup> developed simple models for calculating the cost-efficiency of terrorist policies, based on the cost per disabled terrorist cell as a function of time. When combined with a certain level of acceptable risk in relation to terrorist actions, the parameter was intended to make a timely decision on the need to revise the policies employed.

Leweling and Sieber<sup>26</sup> explored in January 2007 the dynamics of systems for dealing with violent non-state actors. Specifically, the authors presented a model built with stock and flow diagrams in such a way that future researchers could take advantage of automated information systems to empirically ground and refine the model, using particular case studies and phenomena of interest.

The inflexion point was reached with Chamberlain also in 2007,<sup>27</sup> who presented a set of six models, based on system dynamics, demonstrating that it was possible to model and make predictions, with an acceptable degree of success, on terrorism. Almost in parallel,<sup>28</sup> U.S. academics and the strategy and tactics departments of military schools were engaged in a heated debate about the adequacy of the current decision-making, problem-solving and planning processes for dealing with complex problems. Europe was, in this subject, far behind of U.S. community.

In any case, at that time the military establishment was not ready to abandon a system that had been proven in combat and that for complicated and linear problems had worked exceptionally well. The Iraq and Afghanistan campaigns tried to change the ways and means of their strategies by sending more force to theatres of operations and a false improvement was achieved. Despite the above, the debate in the academies and military and security schools did not cease. The level of dispute and disagreement among experts' idea on how to deal with complex problems was paradigmatically reflected in the highest military doctrine, which is historically significant:

---

<sup>22</sup> Dombroski, Matthew J. – Carley, Kathleen M. (2002): NETEST: Estimating a Terrorist Network's Structure – Graduate student best paper award, CASOS 2002 Conference. *Computational & Mathematical Organization Theory*, 8(3), 235–241.

<sup>23</sup> Carley, Kathleen M. (2004): *Estimating Vulnerabilities in Large Covert Networks*. Carnegie Mellon University Pittsburgh, PA, Institute for Software Research International.

<sup>24</sup> Anderson, Edward G. Jr. (2006): *A Preliminary System Dynamics Model of Insurgency Management: The Anglo-Irish War of 1916–21 as a Case Study*. University of Texas.

<sup>25</sup> Kaminskiy, Mark P. – Ayyub, Bilal M. (2006): Terrorist population dynamics model. *Risk Analysis*, 26(3), 747–752.

<sup>26</sup> Leweling, Tara – Sieber, Otto: *Using Systems Dynamics to Explore Effects of Counterterrorism Policy*. [online], 40<sup>th</sup> Annual Hawaii International Conference on System Sciences (HICSS'07), 2007. Source: [ieeexplore.ieee.org](http://ieeexplore.ieee.org) [04.12.2022].

<sup>27</sup> Chamberlain, Todd (2007): Systems Dynamics Model of al-Qa'ida and United States "Competition". *Journal of Homeland Security and Emergency Management*, 4(3).

<sup>28</sup> See Van Riper, Paul (2009): *An Introduction to System Theory and Decision-Making*. E(C) 2510 ANX A. U.S. Marine Corps University. See also Franke, Volker (2011): Decision-Making under Uncertainty: Using Case Studies for Teaching Strategy in Complex Environments. *Journal of Military and Strategic Studies*, 13(2).

*“Ill-structured” are complex, nonlinear, and dynamic; making them the most difficult to understand and solve. Unlike well- or medium-structured problems, leaders disagree about how to solve ill-structured problems, what the end state should be, and whether the desired end state is even achievable.*<sup>29</sup>

The fiasco of the Afghanistan campaign highlighted the need for a definitive change in approach. After 20 years of violent conflict involving more than 40 nationalities, hundreds of thousands displaced, tens of thousands killed and wounded and trillions of dollars spent, the U.S. and NATO have left Afghanistan in worse conditions than at the beginning of the conflict.

Currently, all U.S. military schools of thought and some of the combatant commands such as the U.S. Special Operations Command (SOCOM) are working on incorporating into their decision-making, problem-solving and planning processes the approach that considers terrorism, insurgency or violent extremism as nonlinear complex interactive problems. In Europe, progress on this point is still much slower, for example, in Spain the only service that is working on adapting this approach is the Marine Corps School General Albacete y Fuster.

In this way, many of the ones who fight terrorism, insurgency or violent extremism are beginning to realise that the tools they need to handle such phenomena must take into account that these problems have many non-homogeneous parts. These parts are interrelated and it is not possible to act on one without influencing the others. Besides, they must be capable to deal with multi-causal polemology, which does not follow the cause–effect relationship always and at all times, meaning that the same stimulus can have very different reactions in an actor or system of actors. Thus, a transdisciplinary<sup>30</sup> and multilevel approach is necessary to address these three problems properly.

The multidisciplinary approach to the problem is not sufficient and this is an aspect that has not yet been fully internalised or operationalised either in NATO or in Europe.<sup>31</sup> The intricacies of the situation are that in interactively complex nonlinear environments, what each of the disciplines contributes cannot be treated in isolation from what the rest of the others disciplines contribute, because the constituent parts are interrelated and when one of them is acted upon, the rest of the parts are affected or destabilised. Consensus is needed in decision-making, problem-solving and planning processes.

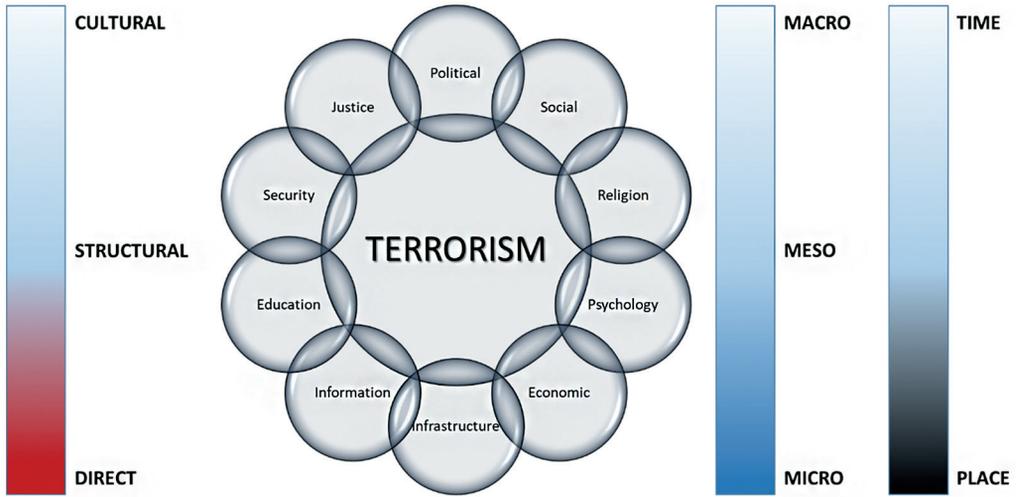
The number of possibilities that arise from the combination of all the variables that affect the subject of terrorism is enormous, as it can be seen in the figure below. The circumstance that these factors are interrelated and cannot be addressed separately is what makes the multidisciplinary approach necessary.

---

<sup>29</sup> U.S. Army 2014: 4-1.

<sup>30</sup> Transdisciplinarity is understood as when several disciplines work in a coordinated and subsidiary manner to provide a holistic solution, as opposed to multidisciplinary, which simply means that there are several disciplines working together.

<sup>31</sup> Regardless of whether or not European foreign policy has a real vocation for intervention. See e.g. Gil, Luis V. Pérez (2021): La Unión Política Europea y las grandes potencias en un sistema internacional complejo e inestable. *bie3: Boletín IIEE*, (22), 895–912.



**Figure 2: Interrelations of the disciplines, levels and dimension that directly affect terrorism**

*Note: The figure does not intent to be exhaustive in the number of elements that affect terrorism, insurgency or violent extremism. There are millions of combinations of these elements.*

*Source: Compiled by the author.*

General system theory includes, among others, system dynamics, game theory and complex adaptive systems. Complex adaptive systems have been used in engineering, medicine, biology and other disciplines; not very well known in Security Studies is still one of the most suitable tools for approaching terrorism, insurgency or violent extremism.

Human ability to deal with complex systems is limited. We need specific training and help when dealing with complex systems. Human beings generally tend to oversimplify its analyses of complex systems and models. We have a habit of using intuition instead of the right models and verifiable data, and we tend to apply reductionism, often assigning single causes for any unwanted outputs.

The essence of complex adaptive systems is interdisciplinary and falls on the fact that it is capable of managing a sufficiently large number of elements with rich interactions, linear and nonlinear; besides any of the interactions can feedback and not exclusively with immediate neighbours. Complex adaptive systems are not limited to the definition of the system boundaries and are also able to manage responses to physical stimuli when they happen locally. In addition, complex adaptive systems are disposed to evolution and can operate under far from equilibrium conditions. Finally, this approach takes into account that the overall behaviour of the system is not predicted by the behaviour of the individual elements.

The term complex adaptive systems (CAS) was introduced by the Santa Fe Interdisciplinary Institute, notably by John H. Holland and Murray Gell-Mann at the

beginning of the 1990s.<sup>32</sup> Curiously, instead of being Political Science, International Relations or Security Studies it is the branches of engineering, modelling and mathematics the ones who took the initiative of linking CAS with security, terrorism, insurgency and violent extremism. Nowadays, it is becoming more and more established and there is less and less modesty in talking about this type of approach in the academic world.

Ahmed et al. (2005),<sup>33</sup> from the Egyptian academia, somewhat unknown and underestimated in the view of many occidentals, but coming from a country with a long tradition in the fight against terrorism, developed a very interesting document, ahead of its time, which concluded the need and appropriateness of using complex adaptive systems to deal with terrorism.

Yin Shan and Yang (2008)<sup>34</sup> published a research document on CAS applications to counter terrorism. Also, in 2008 LeBaron<sup>35</sup> pointed the relationship between CAS and terrorism. The approach of hybrid warfare in urban environments by Moffat et al. (2011) stands out. The doctoral thesis by Harwood (2017) reach the conclusion that some NATO SOPs should be changed because they are not suitable for nonlinear interactively complex problems. Finally, one of the most recent research publications is about how resilience, security and CAS are interrelated in Cameroon.<sup>36</sup>

To conclude this point, it should be noted that complex adaptive systems involve mathematical algorithms, artificial intelligences and modelling. There are two types of models; the first one is a simplification of reality that is made to better understand the dynamics of a complicated or complex system; the second one is a comprehensive model that allows you to quantify dynamics of the relationships by reducing it to mathematical equations that can be computed and thus predictions obtained. The first model is the one that will be presented at the end of this paper and validated or refuted in a further quantitative research paper.

## **Systems-of-systems-based simplified model of intentional change in violent extremist jihadist organisations**

NATO and Western nations have traditionally employed systems of systems in targeting. Sometimes, it is not necessary to destroy an entire system, just disrupting a critical constituent part is enough to disable it.

<sup>32</sup> Holland, John H. (1992): Complex Adaptive Systems. *Daedalus*, 121(1), 17–30; Gell-Mann, Murray (1994): Complex Adaptive Systems. In Cowan, George A. – Pines, David – Meltzer, David (eds.): *Complexity. Metaphors, Models and Reality*. Mexico: Addison-Wesley. 17–45.

<sup>33</sup> Ahmed, E. M. E. Sayed E. – Elgazzar, Ahmed S. – Hegazi, Ahmed Sadek (2005): On Complex Adaptive Systems and Terrorism. *Physics Letters A*, 337(1–2), 127–129.

<sup>34</sup> Shan, Yin – Yang, Ang eds. (2008): *Applications of Complex Adaptive Systems*. Hershey: IGI Global.

<sup>35</sup> LeBaron, Blake (2008): Review of *Complex Adaptive Systems: An Introduction to Computational Models of Social Life* by John H. Miller and Scott E. Page. *Journal of Economic Literature*, 46(2), 427–429.

<sup>36</sup> Lekunze, Manu (2019): *Complex Adaptive Systems, Resilience and Security in Cameroon*. London – New York: Routledge.

Terrorism can be divided into several subsystems. Historically, terrorism has been faced trying to attack the different subsystems, however, little has been exploited about the effects caused by a more rapid cycle of learning, adapting and introducing changes in an organisation in the competition of countering terrorism, insurgency or violent extremism.

The source of power (centre of gravity) of terrorist organisations is their ability to make irrelevant the strength and power of their adversaries which is precisely the centre of gravity of the counterterrorism forces. Because terrorist organisations are weak, when they receive a setback, they need to adapt and change in order to avoid being annihilated but also, they need to adapt and change to maintain their leverage through coercion and terror when a nation protects itself.

The qualitative approach to the causes that provoke innovation, adaptation and change in violent extremist organisations has been the most widely used. Quantitative means is much less widespread,<sup>37</sup> due to the difficulty of collecting data on tactics, techniques and procedures of this type of organisations. The complexity of accessing extremist subjects who are willing to explain the real motivations or intentions behind their actions is another factor explaining the scarcity of quantitative methods. In addition, some of the most popular databases for quantitative studies have serious drawbacks that make it necessary to use them with caution if the results of the research are to be valid. This is the case of the Global Terrorism Database, a database of the University of Maryland<sup>38</sup> used by numerous researchers and governmental and non-governmental institutions.

In Europe, the research produced by the International Centre for Counter-Terrorism in The Hague is noteworthy. This centre has worked in close coordination with NATO as well as with several UN agencies such as, for example, the Counter-Terrorism Executive Directorate (CTED) and the Counter-Terrorism Implementation Task Force (CTITF). In relation to the subject of study, Schmid's (2013)<sup>39</sup> review of specialised literature on radicalisation, de-radicalisation and violent extremism is particularly remarkable. The Nordic countries also have a prolix production, although many of them have kept it classified for several years.<sup>40</sup>

On the one hand, Jordan's established model for innovation in the military<sup>41</sup> has been the starting point for the adaptation of the model proposed in this paper. On the other hand, in the American academia, Horowitz maintains a prominent role, which has been taken into account, in his contribution to innovation and diffusion of knowledge in terrorist organisations.

---

<sup>37</sup> See Silke, Andrew (2001): *The Devil You Know: Continuing Problems with Research on Terrorism. Terrorism and Political Violence*, 13(4), 1–14.

<sup>38</sup> Although there are multiple factors, consider, for example, the number of unclaimed attacks in certain countries such as Iraq, or the difficulty of differentiating what is insurgency from terrorism in numerous events in the periods 2003 to 2011 also in Iraq or in Afghanistan.

<sup>39</sup> Schmid, Alex P. (2013): *Radicalisation, De-Radicalisation, Counter-Radicalisation: A Conceptual Discussion and Literature Review. ICCT Research Paper*, March 2013, 22.

<sup>40</sup> E.g. the report of the Norwegian Defence Research Establishment (FFI, for its acronym in Norwegian) by Brynjar, Lia – Skjølberg, Katja: *Why Terrorism Occurs: A Survey of Theories and Hypotheses on the Causes of Terrorism*. [online], Norwegian Defence Research Establishment, 2000. Source: ffi.no [01.11.2022].

<sup>41</sup> Jordán, Javier (2017): *Un modelo explicativo de los procesos de cambio en las organizaciones militares: la respuesta de estados unidos después del 11-s como caso de estudio. Revista de ciencia política (Santiago)*, 37(1), 203–226.

Organisational learning is another aspect developed extensively by U.S. academia. It is an important element in the processes of adaptation, innovation and intentional change. Farrell<sup>42</sup> was one of the first to bring organisational learning to terrorism in his study of violent organisations operating in the United Kingdom. Fiol and Lyles<sup>43</sup> further elaborated on the distinction between organisational learning and organisational adaptation, demonstrating that change did not necessarily involve learning. Fiol and Lyles also established levels of learning, each of which has a different impact on the strategic management of the firm, which is possible and useful to transpose to violent extremist organisations to understand or predict their strategies. Hedberg and Jönsson<sup>44</sup> contributed knowledge on stabilising and destabilising factors of organisations in relation to the environment, which promotes or slows down adaptation, learning or intentional change, an important issue when assessing and implementing counterterrorism policies and strategies. Finally, Shrivastava's<sup>45</sup> contribution to the formulation of a typology of organisational learning must be noted.

Among the most recent quantitative studies where organisational learning and terrorism are interrelated are those of Jackson et al. (2005)<sup>46</sup> where case studies were conducted for five organisations considered at the time as terrorist. These studies and the research findings were aimed at improving the fight against terrorism according to the Detect–Anticipate–Act formula. Nevertheless, Jackson et al. case studies have been conducted on violent extremist organisations that are not jihadist, which would require a contextualisation and it is precisely where this paper finds its place by proposing a simplified model specific for jihadist organisations that will be validated or refuted in future research with case studies.

In order for the literature review of the subject to be holistic, it is also necessary to talk about the process of violent radicalisation and extremism. In this field it is necessary to cite Moghaddam (2005)<sup>47</sup> for his contribution that the process of radicalisation is incremental. Doosje et al. (2016)<sup>48</sup> explicitly introduced reversibility in the model of the process and the macro, meso and micro dimensions in the psychosocial aspects of the process. In the Spanish academia Peco (2016)<sup>49</sup> detailed the psychological process by which beliefs

<sup>42</sup> Farrell, Theo (1996): Figuring out Fighting Organisations: The New Organisational Analysis in Strategic Studies. *The Journal of Strategic Studies*, 19(1), 122–135.

<sup>43</sup> Fiol, C. Marlene – Lyles, Marjorie A. (1985): Organizational Learning. *The Academy of Management Review*, 10(4), 803–813.

<sup>44</sup> See e.g. Hedberg, Bo – Jönsson, Sten (1978): Designing Semi-Confusing Information Systems for Organizations in Changing Environments. In Emmanuel, Clive – Otley, David – Merchant, Kenneth (eds.): *Readings in Accounting for Management Control*. Boston: Springer. 149–173.

<sup>45</sup> Shrivastava, Paul (1983): A Typology of Organizational Learning Systems. *Journal of Management Studies*, 20(1), 7–28.

<sup>46</sup> Jackson, Brian A. et al. (2005): *Aptitude for Destruction. Volume 2: Case Studies of Organizational Learning in Five Terrorist Groups*. Santa Monica: Rand Corporation.

<sup>47</sup> Moghaddam, Fathali M. (2005). The Staircase to Terrorism: A Psychological Exploration. *American Psychologist*, 60(2), 161.

<sup>48</sup> Doosje, Bertjan et al. (2016): Terrorism, Radicalization and De-Radicalization. *Current Opinion in Psychology*, 11, 79–84.

<sup>49</sup> Peco, Miguel (2016): A Functional Approach to Violent Radicalization. Building a Systemic Model Based on a Real Case. *Revista de Estudios en Seguridad Internacional*, 2(1), 63–76.

are accommodated and violent radicalisation is achieved. Lorenzo (2018)<sup>50</sup> proposed two models, one of which permits to be computed and adapts to the approach of adaptive complex systems and mechanics of nonlinear systems.

Summing up, after studying the specialised literature, 17 possible causes of intentional change in violent extremist jihadist organisations were detected, as depicted in Table 1. After a process of analysis, synthesis, comparison, induction, deduction and interviews with experts, it was determined that three independent variables could explain the intentional change: efficiency, survival and emulation.

- The efficiency variable is the amount of terror that the organisation can produce, based on causing damage to people or infrastructure. This variable allows the violent extremist organisation achieve their objectives through terror or simply by eliminating their opponents.
- The survival variable refers to the actions that the organisation takes to protect itself from the actions of its adversaries, mainly armed forces and police but also other competing organisations or actors.
- Emulation, a variable that does not follow logic, refers to intentional changes motivated by feelings, emotions or aesthetics, such as contagion theory or mass phenomena.

**Table 1: Summary of specialised literature and final decision of the independent variables of the model after applying qualitative methods**

Dependent variable	Specialised literature possible causes	Independent variables	Remarks
<b>Intentional Change</b>  (Adaptation, innovation, learning)	Reaction to the adversary	<b>Efficiency</b>	Many of the causes in the specialised literature will remain intervening causes.
	Organisational flexibility/rigidity		
	Survival of the organisation		
	Reach the level of violence		
	Competition between VEO		
	Opportunity		
	Deliberate learning	<b>Survival</b>	
	Time available		
	Anticipation		
	Leader of the organisation	<b>Emulation</b>	
	Strategic or tactical changes		
	New technologies or inventions available		
	Collaboration between VEO		
	Alteration of identity traits VEO		
	Social contagion		
	Narcissism		
	Emulation		
Unintentional change		Not applicable (outside the study).	

Source: Compiled by the author.

<sup>50</sup> Lorenzo-Penalva, Lucas José: *Situational Understanding on Violent Radicalization that Results in Terrorism. Two Graphic Models that Provide Clarity on the Topic*. [online], Grupo de Estudios en Seguridad Internacional, 02.07.2018. Source: seguridadinternacional.es [12.10.2022].

## Conclusions

As a final result it can be said that until proven otherwise, intentional change in violent extremist organisations can be explained in terms of three variables which are efficiency, survival and emulation.

To validate the model, mixed methods should be used. Since the model is the first step of a broader investigation the validation has already been done but the research paper of the validation is pending publication. To try to refute or validate the model more than 20 case studies accompanied by qualitative analysis and interviews with experts have been done.

The model, presented in this paper as simplified, is being developed into a model suitable for complex adaptive systems, which will allow decision-makers to obtain metrics and predictions for the lines of effort for counterterrorism strategies and policies.

Treating terrorism, insurgency or violent extremism as a system of systems and using the right tools and holistic, interdisciplinary approaches will help to gain efficiency in dealing with such phenomena, leading to save lives and resources and to reduce unnecessary suffering.

## REFERENCES

- Ahmed, E. M. E. Sayed E. – Elgazzar, Ahmed S. – Hegazi, Ahmed Sadek (2005): On Complex Adaptive Systems and Terrorism. *Physics Letters A*, 337(1–2), 127–129. Online: <https://doi.org/10.1016/j.physleta.2005.01.059>
- Anderson, Edward G. Jr. (2006): *A Preliminary System Dynamics Model of Insurgency Management: The Anglo–Irish War of 1916–21 as a Case Study*. University of Texas.
- Brynjar, Lia – Skjølberg, Katja: *Why Terrorism Occurs: A Survey of Theories and Hypotheses on the Causes of Terrorism*. [online], Norwegian Defence Research Establishment, 2000. Source: ffi.no [01.11.2022].
- Carley, Kathleen M. (2004): *Estimating Vulnerabilities in Large Covert Networks*. Carnegie Mellon University Pittsburgh, PA, Institute for Software Research International.
- Chamberlain, Todd (2007): Systems Dynamics Model of al-Qa’ida and United States “Competition”. *Journal of Homeland Security and Emergency Management*, 4(3). Online: <https://doi.org/10.2202/1547-7355.1225>
- Deffuant, Guillaume – Amblard, Frédéric – Weisbuch, Gérard – Faure, Thierry (2002): How Can Extremism Prevail? A Study Based on the Relative Agreement Interaction Model. *Journal of Artificial Societies and Social Simulation*, 5(4). Online: <https://www.jasss.org/5/4/1.html>
- Dombroski, Matthew J. – Carley, Kathleen M. (2002): NETEST: Estimating a Terrorist Network’s Structure – Graduate student best paper award, CASOS 2002 Conference. *Computational & Mathematical Organization Theory*, 8(3), 235–241. Online: <https://doi.org/10.1023/A:1020723730930>
- Doosje, Bertjan – Moghaddam, Fathali M. – Kruglanski, Arie W. – de Wolf, Arjan – Mann, Liesbeth – Feddes, Allard R. (2016): Terrorism, Radicalization and De-Radicalization. *Current Opinion in Psychology*, 11, 79–84. Online: <https://doi.org/10.1016/j.copsyc.2016.06.008>
- Farrell, Theo (1996): Figuring out Fighting Organisations: The New Organisational Analysis in Strategic Studies. *The Journal of Strategic Studies*, 19(1), 122–135. Online: <https://doi.org/10.1080/01402399608437629>
- Fiol, C. Marlene – Lyles, Marjorie A. (1985): Organizational Learning. *The Academy of Management Review*, 10(4), 803–813. Online: <https://doi.org/10.2307/258048>
- Franke, Volker (2011): Decision-Making under Uncertainty: Using Case Studies for Teaching Strategy in Complex Environments. *Journal of Military and Strategic Studies*, 13(2). Online: <https://digitalcommons.kennesaw.edu/cgi/viewcontent.cgi?article=4036&context=facpubs>

- Freedman, Lawrence (2002): Conclusion: The Future of Strategic Studies. In Baylis, John – Wirtz, James J. – Gray, Colin S. (eds.): *Strategy in the Contemporary World. An Introduction to Strategic Studies*. Oxford: Oxford University Press. 356–369.
- Gell-Mann, Murray (1994): Complex Adaptive Systems. In Cowan, George A. – Pines, David – Meltzer, David (eds.): *Complexity. Metaphors, Models and Reality*. Mexico: Addison-Wesley. 17–45.
- Gil, Luis V. Pérez (2021): La Unión Política Europea y las grandes potencias en un sistema internacional complejo e inestable. *bie3: Boletín IEEE*, (22), 895–912. Online: [https://www.ieee.es/contenido/noticias/2021/06/DIEEEO80\\_2021\\_LUISPER\\_Union.html](https://www.ieee.es/contenido/noticias/2021/06/DIEEEO80_2021_LUISPER_Union.html)
- Gray, Colin S. (1982): *Strategic Studies and Public Policy. The American Experience*. Lexington: University Press of Kentucky.
- Hedberg, Bo – Jönsson, Sten (1978): Designing Semi-Confusing Information Systems for Organizations in Changing Environments. In Emmanuel, Clive – Otle, David – Merchant, Kenneth (eds.): *Readings in Accounting for Management Control*. Boston: Springer. 149–173. Online: [https://doi.org/10.1007/978-1-4899-7138-8\\_8](https://doi.org/10.1007/978-1-4899-7138-8_8)
- Helman, Christopher – Tucker, Hank: *The War in Afghanistan Cost America \$300 Million Per Day for 20 Years, with Big Bills yet to Come*. [online], Forbes, 16.08.2021. Source: forbes.com [25.04.2023]
- Holland, John H. (1992): Complex Adaptive Systems. *Daedalus*, 121(1), 17–30. Online: <https://www.ecbproject.org/system/files/content/resource/files/main/Holland%201992.pdf>
- Jackson, Brian A. – Baker, John C. – Chalk, Peter – Cragin, Kim – Parachini, John V. – Trujillo, Horacio R. (2005): *Aptitude for Destruction. Volume 2: Case Studies of Organizational Learning in Five Terrorist Groups*. Santa Monica: Rand Corporation. Online: <https://doi.org/10.7249/MG332>
- Jordán, Javier (2017): Un modelo explicativo de los procesos de cambio en las organizaciones militares: la respuesta de estados unidos después del 11-s como caso de estudio. *Revista de ciencia política (Santiago)*, 37(1), 203–226. Online: <https://doi.org/10.4067/S0718-090X2017000100009>
- Kaminskiy, Mark P. – Ayyub, Bilal M. (2006): Terrorist Population Dynamics Model. *Risk Analysis*, 26(3), 747–752. Online: <https://doi.org/10.1111/j.1539-6924.2006.00780.x>
- Klir, George J. – Yuan, Bo eds. (1996): *Fuzzy Sets, Fuzzy Logic, and Fuzzy Systems. Selected Papers by Lotfi A. Zadeh*. Singapore: World Scientific. Online: <https://doi.org/10.1142/2895>
- LeBaron, Blake (2008): Review of *Complex Adaptive Systems: An Introduction to Computational Models of Social Life* by John H. Miller and Scott E. Page. *Journal of Economic Literature*, 46(2), 427–429. Online: <http://www.jstor.org/stable/27647002>
- Lekunze, Manu (2019): *Complex Adaptive Systems, Resilience and Security in Cameroon*. London – New York: Routledge. Online: <https://doi.org/10.4324/9780429273445>
- Leweling, Tara – Sieber, Otto: *Using Systems Dynamics to Explore Effects of Counterterrorism Policy*. [online], 40<sup>th</sup> Annual Hawaii International Conference on System Sciences (HICSS'07), 2007. Source: [ieeexplore.ieee.org](http://ieeexplore.ieee.org) [04.12.2022] Online: <https://doi.org/10.1109/HICSS.2007.597>
- Lorenzo-Penalva, Lucas J.: *Situational Understanding on Violent Radicalization that Results in Terrorism. Two Graphic Models that Provide Clarity on the Topic*. [online], Grupo de Estudios en Seguridad Internacional, 02.07.2018. Source: [seguridadinternacional.es](http://seguridadinternacional.es) [12.10.2022]
- Moghaddam, Fathali M. (2005): The Staircase to Terrorism: A Psychological Exploration. *American Psychologist*, 60(2), 161–169. Online: <https://doi.org/10.1037/0003-066X.60.2.161>
- NATO (2012): *Allied Command Operations Comprehensive Operations Planning Directive COPD V.2*.
- NATO (2018): *Allied Tactical Planning for Land Operations, APP-28 Ed. A. V.1*.
- NATO (2019): *Allied Joint Doctrine for Planning Operations, AJP-5 Ed. A. V.1*.
- Newton, Isaac (1687): *Philosophiae Naturalis Principia Mathematica*. London: Knight and Compton. Online: <https://doi.org/10.5479/sil.52126.39088015628399>
- Peco, Miguel (2016): A Functional Approach to Violent Radicalization. Building a Systemic Model Based on a Real Case. *Revista de Estudios en Seguridad Internacional*, 2(1), 63–76. Online: <https://doi.org/10.18847/1.3.4>
- Raczynski, Stanislaw (2004): Simulation of the Dynamic Interactions between Terror and Anti-Terror Organizational Structures. *Journal of Artificial Societies and Social Simulation*, 7(2). Online: <https://www.jasss.org/7/2/8.html>

- Schmid, Alex P. (2013): Radicalisation, De-Radicalisation, Counter-Radicalisation: A Conceptual Discussion and Literature Review. *ICCT Research Paper*, March 2013. Online: <http://dx.doi.org/10.19165/2013.1.02>
- Smith, Roger: *Modeling and Simulation Adds Insight on Terrorism*. [online], Signal Magazine, 01.12.2001. Source: afcea.org [01.11.2022]
- Smith, Roger (2002): Counter Terrorism Simulation: A New Breed of Federation. *Simulation Interoperability Workshop*, Spring 2002. Online: <http://www.simulationfirst.com/papers/02S-SIW-004.pdf>
- Shrivastava, Paul (1983): A Typology of Organizational Learning Systems. *Journal of Management Studies*, 20(1), 7–28. Online: <https://doi.org/10.1111/j.1467-6486.1983.tb00195.x>
- Silke, Andrew (2001): The Devil You Know: Continuing Problems with Research on Terrorism. *Terrorism and Political Violence*, 13(4), 1–14. Online: <https://doi.org/10.1080/09546550109609697>
- Shan, Yin – Yang, Ang eds. (2008): *Applications of Complex Adaptive Systems*. Hershey: IGI Global. Online: <https://doi.org/10.4018/978-1-59904-962-5>
- Torres-Soriano, Manuel Ricardo (2020): Democracia vs. desinformación: Propuestas para la protección de las sociedades abiertas. *Colección Actualidad, Centro de Estudios Andaluces*, (87), 1–18. Online: <https://doi.org/10.54790/actualidad.0010>
- U.S. Army (2014): *FM6-0 Commander and Staff Organization and Operations. P. D-1*.
- Van Riper, Paul (2009): *An Introduction to System Theory and Decision-Making*. E(C) 2510 ANX A. U.S. Marine Corps University.
- Van Riper, Paul – Scales, Robert H. Jr. (1997): Preparing for War in the 21<sup>st</sup> Century. *The US Army War College Quarterly: Parameters*, 27(3). Online: <https://doi.org/10.55540/0031-1723.1845>

Gábor András Papp<sup>1</sup>

# China's Militarisation and the Indian Ocean

## An Assessment of China's Military Modernisation, Footprint in the Indian Ocean and the Future of the Quad

*What is behind Beijing's increased assertiveness towards its regional neighbours? Many use the theory of transition of power: that China is becoming a superpower and it challenges the status quo, mostly the United States, and attempts to replace it globally.<sup>2</sup> Others tend to believe that China's real desire is to become a regional hegemon by establishing a China-centred sphere in Asia. Some believe that their only aim is to just simply overcome the "century of humiliation" from its recent past by continuing their economic boom. This paper presents a view that China is trying to reconstruct the status quo, and in order to do that the country needs to establish a China-centred Asia and most importantly a China-centred Indo-Pacific region. In its first section, this paper takes a look at the country's incredible military modernisation by examining those events and leaders that pushed this development. Then, the section also points out how China plans to reconstruct the regional status quo with the help of its economic power. The second part aims to present the Indian Ocean region's current status as a "battlefield" between China and India and why does it matter in the first place. Finally, in the third part the paper argues that the Quadrilateral Security Dialogue is the best tool to deter Beijing in the future and it must be strengthened properly by, among other things, a deepened U.S.–India defence cooperation.*

**Keywords:** People's Republic of China, Indian Ocean, Quadrilateral Security Dialogue, India, United States of America, militarisation

## The shift in China's "Grand Strategy" from Mao Zedong to Xi Jinping

In this section the paper discusses how China's military changed since the founding of the People's Republic of China in 1949. In order to do that the paper introduces this development through the leaders in its history, Mao Zedong, Deng Xiaoping, Jiang Zemin, Hu Jintao and Xi Jinping. Before doing so, the paper also discusses the meaning of "grand strategy" to give the reader a clear understanding of how China sees itself and how it defines decision-making regarding foreign policy. Finally, the paper presents the latest, and no doubt, the most ambitious project of China's foreign policy, the Belt and Road Initiative.

---

<sup>1</sup> Political scientist. Former intern of the Institute for Strategic and Defense Studies. E-mail: [papp.gabor9808@gmail.com](mailto:papp.gabor9808@gmail.com)

<sup>2</sup> Kim, Woosang – Gates, Scott (2015): Power Transition Theory and the Rise of China. *International Area Studies Review*, 18(3), 219–226.

## ***Defining “Grand Strategy”***

When it comes to foreign policy one thing is for sure, it can change pretty fast. While a grand strategy is more or less solid and fixed. It is also vital to understand that grand strategy is often not written but can be understood from assessing policies and historical analysis. As Lieutenant Colonel Tony K. Cho explains:<sup>3</sup> “Grand strategy is the direction projected in peacetime and wartime at the national-level utilizing all resources of the security community to achieve the nation’s objectives.” So, what does China want to achieve? What kind of national destiny does China want to fulfil? How does the country see itself? The answer goes by many names: “The Great Rejuvenation of the Chinese Nation”, “Chinese Dream” and “The New China”. All these names have the same root in their core, which is the “One Hundred Years of National Humiliation”.

China has a historical quest to overcome the shame which was brought onto her by the West, during the “Century of Humiliation”, a period between 1839 and 1949 when under a series of unequal treaties China lost control over a great portion of its own territory after being defeated by militarily superior nations.<sup>4</sup> Although the People’s Republic of China (PRC) states that the Century of Humiliation has ended when the Chinese Communist Party (CCP) won the Chinese civil war, there are several conflicts, legacies of this period, which must be solved by 2049 and then China’s recovery will be considered complete. Most notably the return of Hong Kong and Taiwan to the mainland.<sup>5</sup> Even though the aim of this grand strategy never changed, the method, which includes both conventional and unconventional warfare, evolved in the last forty years a lot.

## ***Chinese strategic foreign policy from Mao Zedong to Hu Jintao***

When Mao Zedong died in 1976, he left behind a country ravaged by his doctrine of continuous revolution from the Great Leap Forward in 1958–1962 which killed around fifty-five million people, to the Cultural Revolution of 1966–1976 which killed another two to three million people while destroying the economy.<sup>6</sup> With these massive waves of political killings, he also beheaded the People’s Liberation Army (PLA), by eliminating its most experienced officers thus pushing it back significantly. After Mao’s death, the arrest of his successors – the extremely Maoist Gang of Four – and the short rule of Hua Guofeng the reformist Deng Xiaoping became the head of the party in 1978. He inherited a territorial defence centric army which was meant to wage a large-scale, low-tech, protracted warfare and at the same time had secondary functions like nation building

<sup>3</sup> Cho, Tony K.: *Mao’s War of Resistance: Framework for China’s Grand Strategy*. [online], United States Army War College, 17.03.2011. Source: apps.dtic.mil [07.12.2020].

<sup>4</sup> Harper, Tom: *How the Century of Humiliation Influences China’s Ambitions Today*. [online], Imperial & Global Forum, 11.07.2019. Source: imperialglobalexeter.com [07.12.2020].

<sup>5</sup> Kaufman, Alison A.: *The “Century of Humiliation” and China’s National Narratives*. [online], U.S.–China Economic and Security Review Commission, 11.03.2011. Source: uscc.gov [07.12.2020].

<sup>6</sup> Phillips, Tom: *The Cultural Revolution: All You Need to Know about China’s Political Convulsion*. [online], The Guardian, 11.05.2016. Source: theguardian.com [07.12.2020].

and internal security.<sup>7</sup> After all, the PLA was originally a guerrilla army. Deng shortly introduced the *Four Modernisations* in agriculture, industry, science and technology and defence, even though there were many sceptic Maoists in the PLA slowing the changes down. Thus, the Sino–Vietnamese border war in 1979 was necessary for Deng to highlight the technological deficiencies of the PLA so he can make way for further modernisation in the army. After all the PLA still relied on “human waves” of soldiers, unfortunately untrained and under-equipped, which resulted in a heavy toll in terms of both casualties and economic loss and also revealed the grave weaknesses in operational planning, tactics, command and control.<sup>8</sup> Still, during this phase of reforms in the late 1970s and throughout the 1980s, China’s military was the least important among the “four modernisations”, because in order to have modernised weapons first a country needs a stable economy, an educated workforce and a developed industry.<sup>9</sup> As Zenel Garcia highlighted, the increasingly important role of the military began as a result of two tipping points, under the rule of Jiang Zemin who succeeded Deng in 1993, both occurred in the 1990s and meant the beginning of a series of modernisations in the PLA. Firstly the Gulf War in 1991 and secondly the Taiwan Strait Crisis in 1996.

*The Gulf War* in 1991 was a clear wake-up call for both Russia and China that the U.S. has an enormous advantage in conventional warfare and also provided lessons for the PLA regarding the lethality of mobility, precision-strike capabilities, space-based surveillance and reconnaissance.<sup>10</sup> So, Beijing altered the military doctrine of the PLA, turning its focus on limited “local wars under high-technological conditions” in 1994 which resulted in a smaller and more professionalised army, which meant new more mobile formations, training of special troops and increased emphasis on naval and air capabilities. This was also the beginning of the PLA’s historical strategic concept of “active defence”, using long-range, precision-guided munitions to keep the enemy as far from the economically developed coastal area as possible by “noncontact fighting”.<sup>11</sup>

The second turning point was the *Third Taiwan Strait Crisis* in March 1996. Just as Taiwan was about to hold its first democratic election, the PRC wanted to dissuade the people from voting by intimidation. The PLA’s Second Artillery Corps (PLASAC) began firing short-range ballistic missiles (SRBM) near two important harbours, Keelung and Kaohsiung. As a result, the U.S. sent two aircraft carrier groups (CSG-5, USS *Nimitz* and CSG-7, USS *Independence*) and an amphibious ready group based on the amphibious assault ship USS *Belleau Wood* to the vicinity, defying the People’s Liberation Army Navy (PLAN) and the People’s Liberation Army Rocket Force (PLARF) naval and missile

<sup>7</sup> Until the Tiananmen Square Massacre in 1989 which resulted in great resentment among both PLA soldiers and officers who were called in because the People’s Armed Police (PAP) was not enough to cope with the protesters. After this, the PAP went through a series of reforms and it became the primary source of internal security.

<sup>8</sup> Quang, Nguyen Minh: *The Bitter Legacy of the 1979 China–Vietnam War*. [online], *The Diplomat*, 23.02.2017. Source: thediplomat.com [07.12.2020].

<sup>9</sup> Garcia, Zenel (2019): *China’s Military Modernization, Japan’s Normalization and the South China Sea Territorial Disputes*. Cham: Palgrave Pivot. 45–59.

<sup>10</sup> Ward, Jonathan D. T. (2019): *China’s Vision of Victory*. Atlas Publishing and Media Company. 18.

<sup>11</sup> Defense Intelligence Agency: *China Military Power*. [online], Defense Intelligence Agency, 03.01.2019. Source: dia.mil [07.12.2020].

threats. This humiliation from a “foreign intervention” convinced Beijing of the need for further modernisation which was the beginning of heavy investments, foreign weapon acquisitions from Russia and Ukraine, a complete overhaul and modernisation of its indigenous military industry, and last but not least the embrace of an anti-access/area-denial (A2/AD) strategy as core principle which means to deter, delay or deny any enemy from entering the theatre of operations in Asia, but most notably in Taiwan's case.<sup>12</sup>

Both Deng Xiaoping's and his successor Jiang Zemin's period (from 1978 to 2002) can be described with “hide your brightness, bide your time”, which meant to combine tight political control with increased market-based economic freedom, while at the same time accepting the U.S.-led world order so the country can profit from its economic success. In the field of the armed forces it meant a slow but steady evolution of the PLA, and especially after the Belgrade embassy bombing in 1999 and the 2001 Hanoi incident. As David Kilcullen also notes, the peacetime evolution ended and started a wartime one where the PLAN began to copy and evolve towards its adversary, the U.S. Navy with increased belief in the “zero-sum game” in regard of the U.S.–China competition.<sup>13</sup>

By the time Hu Jintao came to power in 2002 China had become much stronger in both economic and military terms. His job was to take care of the period known as “the period of strategic opportunity”, the first twenty years of the new millennium, while at the same time continue Deng's non-confrontational approach in foreign policy to ensure further development for the country. So how China started to fight without weapons? Hu's era aimed to prepare and alter the battlefield for China's advantage by giving a new kick to political warfare by broadening the concept of war. Most notably by the introduction of “Three Warfares” in 2003 – public opinion warfare, psychological warfare and legal warfare. This meant to shape public opinion both domestically and internationally – “peaceful rise of China”, Confucius Institutes, influence foreign decision-makers regarding China and build the legal justification for Beijing's actions.<sup>14</sup> In 2004 Hu Jintao outlined for the PLA the “Historic Missions of the Armed Forces in the New Period of the New Century”, as a manifestation of his “scientific development” concept in military and a much broader revision on strategy, to develop the PLA's role as a military and diplomatic instrument and as a warden of China's global interest.<sup>15</sup> This direction also meant to build an informatised military by focusing on C4ISR (Command, Control, Communication, Computers, Intelligence, Surveillance and Reconnaissance) technology – “win local wars under informationised conditions” – and at the same time complete infrastructure for defence operations, to construct operational capabilities better than those of Taiwan and to be capable of defending the first island chain. In a nutshell, the PLA's strategic foundation has continued to be the principles of People's War, Active Defence and its subset naval component Offshore Defence, but they have been modified to fit in the 21<sup>st</sup>

<sup>12</sup> Cole, J. Michael: *The Third Taiwan Strait Crisis: The Forgotten Showdown Between China and America*. [online], The National Interest, 10.03.2017. Source: nationalinterest.org [07.12.2020].

<sup>13</sup> Kilcullen, David (2020): *The Dragons and the Snakes. How the Rest Learned to Fight the West*. London: Hurst. 194.

<sup>14</sup> Mattis, Peter: *China's 'Three Warfares' in Perspective*. [online], War on the Rocks, 30.01.2018. Source: warontherocks.com [07.12.2020].

<sup>15</sup> Mulvenon, James: *Chairman Hu and the PLA's 'New Historic Missions'*. [online], China Leadership Monitor, 2008. Source: fnvaworld.org [07.12.2020].

century.<sup>16</sup> The 2013 Defence of Japan gives a clear picture of how much effort Beijing took to modernise its military under Hu Jintao. China's announced national defence budget was approximately 720.2 billion yuan compared to the one in 2003, about 150 billion yuan, which means that it has quadrupled in size over the ten years and has grown more than 33-fold over the past 25 years as of 2013.<sup>17</sup> Another interesting fact is the amount of money they spent on foreign weapon acquisitions from Russia. According to a paper from the Center for Strategic and International Studies, China has spent almost 25 billion US\$ on Russian arms export between 2000 and 2012.<sup>18</sup>

## *Xi Jinping the Eternal*

When Vice President Joe Biden met Xi Jinping in 2011, the American visitors were surprised by the way Xi talked about his father and Mao Zedong, and overall by his openness about his personal life. At the same time, writes McGregor, Biden and his staff left China with the impression that dealing with Xi will be nothing like dealing with Hu or previous leaders as he was more ambitious regarding his country and more assertive about prosecuting its interest.<sup>19</sup> Looking back from 2020, they were certainly right, and what is more, they have underestimated him as well. Under his eight years, so far, Xi has strictly suppressed internal party dissent, started an enormous anti-corruption campaign which helped him to get rid of any political opponents or potential rivals, adopted a very much expensive and dangerous foreign policy that has directly challenged the U.S., and on the top of all this he managed to remove term limits so he can remain president for life while at the same time being the head of the party, military and state.<sup>20</sup>

Back in 2012, Xi specified the deadlines of his “Two Centennial Goals”. First, China must have a “moderately prosperous society” by doubling its 2010 per capita GDP to \$10,000 by 2021, when it celebrates the 100<sup>th</sup> anniversary of the Chinese Communist Party. Second, it shall become a “fully developed, rich and powerful” nation by the 100<sup>th</sup> anniversary of the People's Republic in 2049.<sup>21</sup> Even back then when he was elected he described this era as the “Great Rejuvenation of the Chinese Nation”, although the “period of strategic opportunity” was still on, which could have been a hint that he had already planned for more years than he legally had. So how Xi Jinping has helped to pave China's path back to the “Middle Kingdom” from a strategic perspective? Because of limited space this paper only discusses the most important structural military reforms, and the most

---

<sup>16</sup> Kamphausen, Roy et al. (eds.): *Assessing the People's Liberation Army in the Hu Jintao Era*. [online], Homeland Security Digital Library, 04.2014, III, 83–86. Source: hsdll.org [07.12.2020].

<sup>17</sup> *Defense of Japan 2013*. [online], Japan Ministry of Defense, 2013. Part 1, Chapter 1, Section 3, 33. Source: mod.go.jp [07.12.2020].

<sup>18</sup> Cordesman, Anthony H. et al.: *Chinese Military Modernization and Force Development*. [online], Wikileaks, 09.2013, 119. Source: cryptome.wikileaks.org [07.12.2020].

<sup>19</sup> McGregor, Richard: *Party Man Xi Jinping's Quest to Dominate China*. [online], Foreign Affairs, 08.2019. Source: foreignaffairs.com [07.12.2020].

<sup>20</sup> Dreyer, June Teufel: *Xi Jinping's Second Coronation – And What It (May) Mean for China and the Rest of Us*. [online], Foreign Policy Research Institute, 20.03.2018. Source: fpri.org [07.12.2020].

<sup>21</sup> Graham, Allison: *What Xi Jinping Wants*. [online], The Atlantic, 31.05.2017. Source: theatlantic.com [07.12.2020].

significant developments in the PLARF and the PLAN as of 2020 which is the core of China's regional military power projection.

In 2015, Xi introduced the first wave of the most substantial PLA reforms in the last 30 years to build a “world-class force” with increased naval capabilities, that can dominate the Asia-Pacific and “fight and win informatised local wars” by 2035 and global wars by 2049.<sup>22</sup> The *structural changes* meant to strengthen CCP authority over the armed forces and reorganise it as well, so it becomes more effective in conducting joint operations – the creation of Joint Theatre Commands means to ensure this. Some of the most important of these changes are the dismantle of the four General Departments by subsuming their work within fifteen new functional bodies under the direct control of the Central Military Commission (CMC), and the dismantle of seven Military Regions with five Joint Theatre Commands (Eastern Theatre Command, headquartered in Nanjing, Western Theatre Command, headquartered in Chengdu, Southern Theatre Command, headquartered in Guangzhou, Northern Theatre Command, headquartered in Shenyang, Central Theatre Command, headquartered in Beijing). The reforms also elevated the Second Artillery Force to a full-service branch and renamed PLA Rocket Force (PLARF), and established a new service branch, the PLA Strategic Support Force (PLASSF) which is in control of electronic warfare (EW), cyber warfare, aerospace satellite, ISR, media warfare, physiological warfare and legal warfare.<sup>23</sup> China's national defence budget for FY2020 was approximately 1,268 billion yuan which means a staggering 2.4-fold budget growth in 10 years from FY2010.<sup>24</sup>

In 2019 October, China unveiled its new military capabilities at the parade marking the 70<sup>th</sup> anniversary of the PRC. The lessons were clear: the PLA Rocket Force's continuing expansion is enormous and more lethal than ever before. The *DF-41* (CH-SS-20) road-mobile intercontinental ballistic missile (ICBM), can carry either multiple warheads or single warhead and multiple jammers, penetration aids and decoy. Although, the new *DF-17* medium-range ballistic missile and hypersonic glide vehicle, which have both nuclear and conventional payload variants, and the *CJ-100* cruise missile clearly shows the PLARF's approach to the future, which is additional capacity and higher speed for nuclear and conventional systems.<sup>25</sup> In general, China has approximately 2,200 regional missiles by the highest estimates – 1,500 SRBM (up to 1,000 km), 450 MRBM (up to 3,000 km) and 160 IRBM (up to 5,500 km) – and has several Intercontinental Ballistic Missiles (ICBMs) most notably the *DF-41* (up to 15,000 km) and the *DF-5* (up to 13,000 km), and made significant advances in ISR and manoeuvring re-entry vehicles which is capable of attacking moving naval vessels.<sup>26</sup> Another drastic development in the

<sup>22</sup> Tiezzi, Shannon: [China's Plan for a New, Improved Military](#). [online], The Diplomat, 01.12.2015. Source: thediplomat.com [07.12.2020].

<sup>23</sup> Gill, Bates – Adam, Ni (2019): China's Sweeping Military Reforms: Implications for Australia. *Security Challenges*, 15(1), 33–46.

<sup>24</sup> [Defense of Japan 2020](#). [online], Japan Ministry of Defense, 2020. Part 1, Chapter 2, Section 2, 60. Source: mod.go.jp [07.12.2020].

<sup>25</sup> The Military Balance (2018): Chapter Six: Asia. *The Military Balance*, 118(1), 219–314.

<sup>26</sup> Missile Defense Project: [Missiles of China](#). [online], Missile Threat, Center for Strategic and International Studies, 14.06.2018. Source: missilethreat.csis.org [07.12.2020].

PLA's missile capabilities is the successful test of the Long March-11, it has similar solid propellant technology as the DF-21 or the DF-26, which was launched off a merchant vessel. This raises the prospect that China's merchant fleet could be used to fire ballistic missiles during wartime.<sup>27</sup>

The PLA Navy, which went through a rapid modernisation and now is more numerous than the U.S. Navy, consists of three fleets: North Sea Fleet, East Sea Fleet and South Sea Fleet. During the Xi Jinping era, the PLA Navy promoted the mass production of its indigenous *Yuan*-class submarines, with enhanced stealth, air defence and anti-ship attack capabilities, and now China has approximately 70 submarines. In January they commissioned the first *Renhai*-class destroyer, which is said to have a vertical launch system (VLS) capable of firing long-range land-attack cruise missiles and YJ-18 anti-ship cruise missiles with supersonic terminal attack capabilities, and has 112 launch cells – twice the number of what the new *Luyang* III-class destroyer has. The country has two aircraft carriers – the *Liaoning* (2012) and the indigenous *Shandong* (2017), 750 major surface combatants and 88 destroyers and frigates.<sup>28</sup> China has also built more naval vessels domestically than the U.S. in the 2013–2018 period.<sup>29</sup> The numbers are great, but these vessels are definitely lighter because Beijing wants to secure its sphere of influence in close territories like the South China Sea and East China Sea, so China does not need a heavy blue-water navy just yet even though the transition is well underway.

After all, the CCP's most important strategic objective is to secure the waters within the *first island chain* – contains islands, reefs, rocks disputed by six nations (China, Taiwan, Vietnam, Brunei, Malaysia and the Philippines) – and it has everything to do that, submarines, missiles of both land- and sea-based, and last but not least nuclear submarines.<sup>30</sup> Since 2014, China has expanded its ability to monitor and project power throughout the South China Sea by constructing “unsinkable aircraft carriers” – islands with dual civil–military bases in the Spratly and Paracel Islands – equipped with airstrip and hangars for aircrafts (J-11 fighters and H-6 bombers), new radar and communication arrays and capable missile systems.<sup>31</sup> In 2018, the PLAN deployed Jin-class (Type 094) SSBNs armed with JL-2 submarine-launched ballistic missiles (SLBMs) which constitutes China's first credible sea-based nuclear deterrent.<sup>32</sup> As David Kilcullen notes, China has a hard time hiding its submarines from surveillance flights, and the expanding A2/AD bubbles with missiles, patrolling ships and aircrafts, radars and sensors aim to deter any keen eyes thus offering a chance for a second-strike capability in case of a nuclear war.<sup>33</sup>

<sup>27</sup> Davis, Malcolm – Lyons Jones, Charlie: [China's Military Watch](#). [online], ASPI The Strategist, 02.10.2020. Source: [aspistrategist.org](#) [07.12.2020].

<sup>28</sup> Defense of Japan 2020: 64–66.

<sup>29</sup> The Military Balance 2018: 235.

<sup>30</sup> Rahn, Wesley: [China Has the World's Largest Navy – What Now?](#) [online], DW, 21.10.2020. Source: [dw.com](#) [07.12.2020].

<sup>31</sup> [Chinese Power Projection Capabilities in the South China Sea](#). [online], Asia Maritime Transparency Initiative, s. a. Source: [amti.csis.org](#) [07.12.2020].

<sup>32</sup> Ni, Adam: [The Future of China's Nuclear-Powered Ballistic Missile Submarine Force](#). [online], ASPI The Strategist, 08.05.2020. Source: [aspistrategist.org](#) [07.12.2020].

<sup>33</sup> Kilcullen 2020: 200.

## ***Beijing's Horizontal Manoeuvring and the BRI***

Escalation can take many different forms. There is the *vertical*, which involves an increase in the intensity of armed conflict or confrontation, such as employing types of weapons not previously used in the conflict or attacking new categories of target. The *horizontal*, which describes the expanding geographic scope of conflict, and the *political escalation* which collects everything that do not fit into the first two types.<sup>34</sup> As noted by Kilcullen:

“Beijing’s horizontal manoeuvring aims to pose a wide range of challenges by expanding the spectrum of competition beyond the rival’s capacity to cope, creating a dozen of simultaneous minor challenges that hamper the rival’s ability to respond effectively to any challenge, or to think about the whole situation as warlike at all.”<sup>35</sup>

This is exactly how China wants to undermine other regional and global powers, besides increased military modernisation, with the “New Silk Road”, “Globalisation 2.0”, “One Belt One Road”, “Belt and Road Initiative” (BRI), it has many names, Chinese President Xi Jinping’s way of reaching the “New China” dream.

According to Oriana Skylar Mastro, China does not want to replace the United States as the leader of the global order, it only wants to have a complete regional hegemony in the Indo-Pacific region by trying to displace the United States. He argues that a U.S. type of global position would only “constrain its own behaviour, or spread its system of government abroad”. Although China wants to be powerful enough to counter the United States whenever it is needed. He adds that for those regional aims, (Taiwan, the South China Sea, etc.), the country wants to build up its own empire, without directly challenging the United States on a battlefield, and for that it is using its economic power very innovatively.<sup>36</sup> These efforts were put in the form of the Belt and Road Initiative, to lay the groundwork for a Sinocentric Asian – and ultimately maybe a global – order.

Given the rapid expansion of China’s overseas interests and its dependence on imports of energy and raw materials through strategically vulnerable sea lines of communication (SLOC) the PLA’s military evolution is completely understandable. That is why the PLAN’s transition into a dual “near seas defence and far seas protection” is definitely an objective for the party. As former State Councillor Yang Jiechi highlighted: “A tree cannot grow tall or bear fruit in a barren land torn apart by the flames of war” – there is no development without security – which points out Beijing’s goal to create a stronger BRI security system to protect China’s overseas interests, personnel and investments.<sup>37</sup> For the protection of these businesses, the Chinese Government is using the security of the host country in the first place, but secondarily they rely on a growing number of private Chinese paramilitary security firms, which employ retired PLA personnel and have many connections to the PLA. Most notably the Hua Xin Zhong An (15,000+ employees) and the China Overseas

<sup>34</sup> Morgan, Forrest E. et al.: *Dangerous Thresholds, Managing Escalation in the 21st Century*. [online], RAND, 2008. 18. Source: rand.org [07.12.2021].

<sup>35</sup> Kilcullen 2020: 176.

<sup>36</sup> Mastro, Oriana Skylar: *The Stealth Superpower: How China Hid Its Global Ambitions*. [online], Foreign Affairs, 11.12.2019. Source: foreignaffairs.com [07.12.2020].

<sup>37</sup> Russel, Daniel R. – Berger, Blake H.: *Weaponizing the Belt and Road Initiative*. [online], Asia Society Policy Institute, 09.2020. 14. Source: asiasociety.org [07.12.2020].

Security Group (20,000+ employees).<sup>38</sup> Combating terrorism as a national priority and the growing drive for Beijing to secure BRI projects with the help of the PLA in ravaged regions can actually stabilise many of these countries. Another interesting part of the BRI is the way China wants to “set foot” and “grow roots” in foreign countries, using its “debt-trap diplomacy” so they can acquire strategically important positions. The fact is that even though they did acquire great locations from a security point of view through this method in Djibouti, Kyrgyzstan, Laos, Mongolia, Montenegro, the Maldives, Pakistan and Tajikistan, it is a card Beijing seldom plays and they want to improve these lending practices especially after the effects of the coronavirus.<sup>39</sup>

## China and the Indian Ocean

In this section the paper points out the significance of the Indian Ocean to Beijing as the Achilles heel of its peaceful rise. Then it notes their most important ally in the region, as a tool of regional power projection, especially in the case of India. Finally, the paper illustrates the certain strategic counter steps India has made in the recent years to prevent an ever-expanding Chinese foreign policy in the IOR.

### *The strategic importance of the Indian Ocean*

In the previous section I already discussed that China's first and foremost priority is to secure the trade routes and its many investments in the region, so it can continue the “peaceful rise” without any disruption in the economy and society. To be frank this trade route is not just important, but it is China's life line, especially when we speak about the Strait of Malacca. Between 2000 and 2016 grain and seed exports to China have increased by 563% while soybeans have increased 705% which is an enormous growth. And the passageway has become the key player, after all one-quarter of all soybean and one-fifth of all rice exports pass through the Strait of Malacca.<sup>40</sup> Another factor is China's increased energy consumption which fuels the country's exponential industrial expansion and this exact dependence on foreign oil created “The Malacca Dilemma” back in 2003. As highlighted by the *Oxford Institute for Energy Studies*, while China's oil import dependency was about 50% a decade ago it is currently around 70% and it arrives almost exclusively, about 80% of it, by seaborne tankers through Malacca. It is also worth to mention that even though Beijing failed to decrease this dependence on imports, with the Eastern Siberia–Pacific Ocean Pipeline (ESPO) they managed to reduce China's seaborne dependency with Russian oil imports which represented 11.3% of the country's total oil import in 2018.<sup>41</sup> It is clear that the country's enormous economic machine is in a constant need for

---

<sup>38</sup> Russel–Berger 2020: 17.

<sup>39</sup> Glosserman, Brad: ‘Debt trap’ Diplomacy Is a Card China Seldom Plays in Belt and Road Initiative. [online], The Japan Times, 01.09.2020. Source: [japantimes.co.jp](http://japantimes.co.jp) [07.12.2020].

<sup>40</sup> Bjerga, Alan et al.: *Choking on Our Harvest: Threats Loom over Global Food Trade*. [online], Bloomberg, 18.05.2018. Source: [bloomberg.com](http://bloomberg.com) [07.12.2020].

<sup>41</sup> O'Sullivan, Stephen: *China: Growing Import Volumes of LNG Highlight China's Rising Energy Import Dependency*. [online], The Oxford Institute for Energy Studies, 06.2019. 3. Source: [oxfordenergy.org](http://oxfordenergy.org) [07.12.2020].

energy, and with the passageway located between the Indonesian island of Sumatra – it is vital to note here that Singapore is a major U.S. ally – and the Malay Peninsula, the Strait of Malacca becomes a natural strategic chokepoint.<sup>42</sup> It would be a false message though, that China is the only country to whom this trade route is vital. After all the Indian Ocean borders many other countries like Australia, India, Somalia, the United Arab Emirates, Japan, South Korea and Taiwan – just to name some. So, Beijing had to find an answer to this geopolitical threat, and they did. Through adaptation, by the Kazakhstan–China Pipeline or the Myanmar–Yunnan Pipelines and last but definitely not least the Gwadar–Xinjiang Pipeline which enables China to bypass the Malacca Strait altogether.

### *An eccentric ally*

For decades the ties between Beijing and Islamabad have been a stable ground for regional cooperation. For China, above everything, Pakistan serves as a barrier against India, stopping it from gaining too much power in South Asia. Furthermore, the two countries have mutual diplomatic support for certain disputed territories in question. China supports Pakistan's claim on Jammu and Kashmir – to keep the status quo against India – while Pakistan supports China's authority over Tibet and Taiwan. In fact, Pakistan was the first Muslim country to recognise the new government – the CCP – and then break diplomatic ties with the one in Taiwan. The country also serves as a link between China and other Muslim countries, which is the reason the paper uses the term “eccentric” when it defines their alliance. After all, nations – most notably Turkey, Pakistan, Syria, Egypt, Iran, Saudi Arabia or the UAE that claim to be the “great defenders of Muslim faith” and are always more than willing to blame the West for its cartoons and laws that aim to help integration or stop terrorism – failed to protest and stayed silent over China's serious abuse of its Muslim minority, the Uighurs, in exchange for more investments and money.<sup>43</sup> So how does this cooperation between the two countries help Beijing's power projection in the region?

The China–Pakistan Economic Corridor, later on just CPEC, is a part of the BRI and started as a \$46bn investment in 2015 for a line – made of highways, railway and pipelines – between the two countries connecting Gwadar and Karachi with Kashgar. Before moving to its deep-water ports, it is worth noting that this economic corridor which has been opposed by New Delhi since the beginning for being a “game-changer in the regional status quo” has failed to deliver this so far. As noted by Shams, the CPEC is slowing, because of the Pakistani elite's bad relations with their neighbours for supporting cross-border terrorists and not solving border and territorial issues. Not to mention that jihadists increasingly identify CPEC projects and other Chinese BRI investments as targets.<sup>44</sup>

<sup>42</sup> Khan, Abdullah: *The Malacca Dilemma: A Hindrance to Chinese Ambitions in the 21st Century*. [online], Berkeley Political Review, 26.08.2019. Source: bpr.berkeley.edu [07.12.2020].

<sup>43</sup> Cohen, Nick: *Why Do Muslim States Stay Silent over China's Abuse of the Uighurs?* [online], The Guardian, 04.07.2020. Source: theguardian.com [07.12.2020].

<sup>44</sup> Shams, Shamil: *Has China–Pakistan Economic Corridor Lived Up to the Hype?* [online], DW, 30.09.2019. Source: dw.com [07.12.2020].

The military cooperation between Islamabad and Beijing has a long history. And Pakistan's ports, three big and four smaller one – all under rapid development by the CPEC – play a major role in China's security vision. These are Gwadar Port (only 400 km from the Strait of Hormuz, a deep-sea port), Karachi Port (also a deep-sea port) and Port Qasim (deepest sea port, second port of Karachi only 28 nautical miles from it).<sup>45</sup> Since the beginning of the CPEC not only serious infrastructural developments have been taking place but China also wants to make sure that Islamabad is ready to defend the investments. As noted by Tim Marshall, Beijing struck a deal at the end of 2015 for a territory of 1,300 hectares for forty years to establish a “special economic zone” with an international airport and a security force of twenty-five thousand personnel.<sup>46</sup> Similarly they also made sure that their assets are not only safe from land-based threats but Islamabad has the necessary means to defend it on the sea. From the early 2010s, China has supplied heavy weapon systems to Pakistan, most notably JF-17 Thunder/FC-1 (88) and JF-17 Block-3 (50) FGA aircrafts, Type-041/Yuan submarines (8), anti-ship missiles, coast defence systems, air search radars, combat helicopters and many more.<sup>47</sup> They also struck a deal back in 2018 for four state-of-the-art Type-054A/Jiangkai-2 frigates by 2021. These multi-role frigates equipped with modern sensors and air defence systems are considered the backbone of the PLAN.<sup>48</sup> Finally in late December 2020 Beijing sold 50 Wing Loong II armed drones to Pakistan which might prove to be a decisive force against India in high-altitude areas.<sup>49</sup> The two “iron brothers” had their sixth bilateral naval exercise this year, entitled Sea Guardians–2020 and aimed to enhance the capabilities to jointly address issues such as maritime terrorism and crime. For this occasion, China deployed five major ships, including the guided-missile destroyer Yinchuan, the guided-missile frigate Yuncheng, the comprehensive supply ship Weishanhu, and the submarine rescue ship Liugongdao, whereas Pakistan sent two Zulfiqar-class F22P/F21 frigates, two fast attack craft, one fixed-wing anti-submarine patrol aircraft, two ship-borne helicopters and about 60 special operations soldiers.<sup>50</sup> China sees Pakistan as its own “Israel”, and just as the United States it is also helping it to grow accordingly. As former Australian defence attaché to Islamabad Brian Cloughley pointed out about China's strategic aim in the Indian Ocean:

<sup>45</sup> Bhatti, Baber Ali: [Ports and Their Importance for Pakistan](#). [online], Maritime Study Forum, 22.03.2020. Source: maritimestudyforum.org [07.12.2020].

<sup>46</sup> Marshall, Timothy (2018): *A Földrajz Fogságában. Tíz térkép, amely mindent elmond arról, amit tudni érdemes a globális politikai folyamatokról*. Budapest: Park Könyvkiadó. 224.

<sup>47</sup> [Transfers of Major Weapons: Deals with Deliveries or Orders Made for 2010 to 2019](#). [online], Stockholm International Peace Research Institute, 07.12.2020. Source: armstrade.sipri.org [07.12.2020].

<sup>48</sup> [China Delivers the Biggest-Ever, Most Advanced Naval Warship to Pakistan](#). [online], The EurAsian Times, 24.08.2020. Source: eurasiatimes.com [07.12.2020].

<sup>49</sup> Shishir, Gupta: [China Sells 50 Armed Drones to Pakistan, Begins Psyops. It's a Reminder](#). [online], Hindustan Times, 26.12.2020. Source: hindustantimes.com [04.01.2021].

<sup>50</sup> Rajagopalan, Rajeswari Pillai: [China–Pakistan Naval Drills: More than just Symbolism](#). [online], The Diplomat, 10.01.2020. Source: thediplomat.com [07.12.2020].

“Beijing thinks long term, and having Pakistan as an ally in the Indian Ocean is a big plus in its plans to secure trade routes and increase its regional influence. The [Pakistan Navy] is an important part of its overall strategy, and it can be expected that there will be further exercises, probably developing in size and scope”(cited by Ansari).<sup>51</sup>

## *The eye of the tiger*

In the last two decades China has stretched far beyond its own borders and deep into the Indian Ocean as a result of its strategic imperative in the region, which is the protection of both sea lines of communication (SLOC) and a range of BRI maritime infrastructures from state and non-state actors. So far China has established a strategic presence at a few locations, with different levels of intensity. These are Colombo, Sri Lanka; Mahe, Seychelles; Male, Maldives; Hambantota, Sri Lanka; Gwadar, Pakistan and Doraleh, Djibouti (Gulf of Aden). Even though these ports present a threat – most notably Gwadar and Doraleh which is China's first foreign military base from 2017 – but it is still manageable.<sup>52</sup> Not to mention the many Chinese submarines in the Eastern Indian Ocean and a dozen of its research and survey vessels which swarm the IOR.<sup>53</sup> As highlighted by David Brewster, the geography of the Indian Ocean region gives India major advantages and to China serious disadvantages. For instance, the need to deploy its naval forces through narrow chokepoints or the existence of limited and uncertain logistical support in the region.<sup>54</sup> Finally, China's SLOC is extremely long, and protecting it in a war surrounded by no real major regional allies, only a dysfunctional Pakistan, gives it little prospect or none at all. More about that in the next section.

Another key thing to remember is that though India does have a clear advantage in the region, New Delhi has invested a lot to ensure it stays that way. The country addresses her security concerns of the IOR through four tracks: The first track is that India realised its naval, coast guard and air capabilities need serious upgrading in order to project power farther from the mainland. The second part is the creation of a platform which aims to boost regional cooperation through the Information Fusion Centre for the Indian Ocean Region, or IFC-IOR. The centre was launched in 2018, functions as a common operating ground and it processes radar and sensor data then redistributes it between the member states of the Indian Ocean Rim Association. The third line of effort is the expenditure of military ties with other major regional actors in the Indo-Pacific. Finally, India started its own investments in important ports and airports as a counter step against China's heavy

<sup>51</sup> Ansari, Usman: [Pakistan and China Launch Joint Naval Drills. Should India Be Concerned?](#) [online], Defense News, 08.01.2020. Source: [defensenews.com](#) [07.12.2020].

<sup>52</sup> Stanzel, Angela: [China Trends #2 – China's String of Ports in the Indian Ocean.](#) [online], Institut Montaigne, 25.06.2019. Source: [institutmontaigne.org](#) [07.12.2020].

<sup>53</sup> Singh, Abhijit: [India Has a Bigger Worry than LAC. China Now Expanding Military Footprint in Indian Ocean.](#) [online], The Print, 12.06.2020. Source: [theprint.in](#) [07.12.2020].

<sup>54</sup> Brewster, David: (2016): India and China at Sea: A Contest of Status and Legitimacy in the Indian Ocean. *Asia Policy*, (22), 4–10.

influence through the BRI.<sup>55</sup> In this section the paper only briefly discusses India's steps to enhance its naval capabilities.

The *Indian Maritime Doctrine 2015* highlighted the necessity for India to establish a strong presence in the Indian Ocean Region with its Navy through strengthening its coastal defence and offshore military bases. The doctrine was also pushing for the indigenisation of its naval vessels within the "Make in India" framework, relying on local ship building facilities.<sup>56</sup> The *Maritime Capability Perspective Plan 2027* specified it and set out a goal to have 200 warships, 500 naval aircrafts and 24 attack submarines by 2027, which is a significant step considering that as of 2020 India has around 132 warships, 220 aircrafts and 15 submarines.<sup>57</sup> Unfortunately, due to the Covid-19, India's defence budget had faced serious slashes for some time, as high as 40% according to some sources, which could completely undermine its original defence plans. That being said, under the light of China's adventurism in the Himalayas the Modi Government decided to remove the spending cap on defence for the third quarter.<sup>58</sup> Besides the fast modernisation of its outdated conventional weapon systems, India is also trying to create its own strategic bubble through establishing and developing its offshore military bases. As highlighted by the *Asia Maritime Transparency Initiative* India has 10 offshore military bases. These are Navidet Bitra (2016) – surveillance and intelligence collection, Agatti Runway – aircraft, ICG District Headquarters (CGHQ-12) (2010) – activity monitoring and maritime patrols, Navdet Androth (2016) – surveillance, sea lines monitoring, communication, Navdet Minicoy (2017) – dual-use airport but no visible construction as of 2019, INS Baaz (2012) – surveillance aircrafts, further plans delayed, INS Kardip – ship maintenance and logistics, possible port for larger warships, Car Nicobar Air Force Base (2019) – supporting combat aircraft and heavy transport aircrafts, 9,000-foot runway, INS Jarawa (1) and INS Utkrosh (2) – (1) 8 ships, four coastal radars, lighthouses, (2) 10,000-foot runway, two air squadrons, reconnaissance aircraft, light utility helicopters, INS Kohassa (2001–2019) naval air station – plans for further extension.<sup>59</sup> With a three dimensional blue water navy under modernisation, serious radar systems and natural geopolitical advantages India poses as a real challenger to Beijing. That being said, underestimating China never ends well, that is why international and regional defence cooperation is more significant than ever before to New Delhi's approach to its own security dimension.

## The Indian Ocean Region and the Quad

The final part of this paper aims to highlight the importance of the Quadrilateral Security Dialogue, or in short QSD/Quad, in the Indian Ocean Region (IOR) – the most significant

<sup>55</sup> [Ports and Partnerships: Delhi Invests in Indian Ocean Leadership](#). [online], Asia Maritime Transparency Initiative, 05.12.2019. Source: [amti.csis.org](http://amti.csis.org) [07.12.2020].

<sup>56</sup> [Indian Maritime Doctrine – 2015 Version](#). [online], Indian Navy, 2015. Source: [indiannavy.nic.in](http://indiannavy.nic.in) [07.12.2020].

<sup>57</sup> Chand, Naresh: [Navy's Quest for Modernisation](#). [online], SP's Naval Forces, 01.2020. Source: [spsnavalforces.com](http://spsnavalforces.com) [07.12.2020].

<sup>58</sup> Nair, Remya – Sneesh, Alex Philip: [Modi Govt Removes Spending Cap on Defence for Q3 Amid Tensions with China](#). [online], The Print, 01.10.2020. Source: [theprint.in](http://theprint.in) [07.12.2020].

<sup>59</sup> Stanzel 2019.

international informal strategic forum between major regional powers India, the United States, Australia and Japan – as a tool of deterrence against Beijing. To do that, the paper assesses the India–U.S. defence relation first and the many turbulences the new administration will face. Then it takes a closer look at the Quad's cooperation regarding the IOR, and how their alliance evolved and what might come next.

## ***Wind of change and India's strategic autonomy towards the United States***

As I have already argued in the second section India has certain advantages which makes it an important player in the IOR. And the fact that New Delhi does not want to give up her traditional posture of strategic autonomy from great powers is completely understandable because of two reasons. Firstly, India was a colony for about two hundred years, suffering in the hands of a great power taught her to take dependency seriously.<sup>60</sup> Another factor is its unique geopolitical environment, surrounded by one of the most important oceans on the South, contained by China on the East and the North, and threatened by Pakistan on the West. Having China as a neighbour was manageable for hundreds of years, because of the Himalayas and – because of the same geographical reason – even in the 20<sup>th</sup> century due to a mostly dysfunctional People's Liberation Army. Having said that, the 21<sup>st</sup> century came with a both economically and militarily powerful China, posing a more serious danger to India than ever before, which shows in the increased number of peacetime border clashes between the two and Beijing's activity around the disputed border.<sup>61</sup> Since their last clash in the summer of 2020 in the Ladakh and Sikkim region New Delhi has realised that the possibility of dealing with its giant neighbour without the clear support of others, and most importantly the U.S., is risky.<sup>62</sup> Lately New Delhi strengthened its defence ties with Vietnam on a virtual summit where the two countries agreed to do so by regular ship visits, joint exercises and training, capacity building programmes and intensified defence industry collaboration.<sup>63</sup>

The U.S. and India have inked five “foundational agreements” so far.<sup>64</sup> The first was in 2002 to protect shared military information, then came the logistics and security communication pacts in 2015 (COMCASA), in 2016 (LEMOA). And finally, the Basic Exchange and Cooperation Agreement (BECA) which allows for the sharing of sensitive geospatial data to enhance the accuracy of Indian drones and cruise missiles. There is

<sup>60</sup> Tharoor, Shashi: 'But What about the Railways ...?' *The Myth of Britain's Gifts to India*. [online], The Guardian, 08.03.2017. Source: theguardian.com [07.12.2020].

<sup>61</sup> *A Frozen Line: The India–China Standoff at the Top of the World*. [online], Center for Strategic and International Studies, 30.09.2020. Source: youtube.com [07.12.2020].

<sup>62</sup> Ayres, Alyssa: *The China–India Border Dispute: What to Know*. [online], Council on Foreign Relations, 18.06.2020. Source: cfr.org [07.12.2020].

<sup>63</sup> Sharma, Pranay: *India, Vietnam Strengthen Defence Ties Amid Shared Concerns over China's Assertiveness*. [online], South China Morning Post, 23.12.2020. Source: scmp.com [04.01.2021].

<sup>64</sup> Rej, Abhijnan: *India and US Likely to Sign Geospatial Intelligence Pact*. [online], The Diplomat, 24.08.2020. Source: thediplomat.com [07.12.2020].

also the U.S.–India Civil Nuclear Cooperation Initiative from 2008, which acknowledged India as a *de facto* great power.<sup>65</sup>

Overall, the two countries have reached an increasing level of strategic convergence, which is most apparent in the area of defence and security – as of 2020 the U.S. is the fourth largest military supplier of India – under the Modi and Trump era.<sup>66</sup> Still, this paper argues that the U.S. must do far better in aiding its most vital allies in the IOR, and most importantly India by convincing it to establish a formal alliance with Washington. Starting with the case of Diego Garcia where India voted in favour of Mauritius who demanded the U.K. to withdraw from the Chagos Archipelago, thus causing some headache for Washington as well.<sup>67</sup> One thing is clear, the most important job of the upcoming Biden Administration is to re-establish the presence of the U.S. in the region both diplomatically and militarily. To do that effectively, the new administration must heal the wounds of its divided nation first, without the clear support of the home front waging an efficient Asia-Pacific policy can get really hard. Another important question is how the future administration will address the Modi Government's crackdown on Muslims, especially in the disputed region of Jammu and Kashmir.<sup>68</sup> Considering that the Kashmir problem is extremely sensitive and the ruling Bharatiya Janata Party is a Hindu nationalist one, foreign pressure might prove to be fatal to the future of a deep defence cooperation.

### *Towards an enhanced defence cooperation*

China's crackdown on the Hong Kong protests and increased assertiveness towards both Taiwan and the South China Sea – let alone, its heightened militarisation in general – made like-minded countries who share common interest in the region to unite once again and reactivate the Quadrilateral Security Dialogue after more than a decade of slumber in 2017. In the same year the United States, Japan, Australia and India has embraced the Quad as a tool to keep the eastern maritime trade routes free and open, and also as a way to rebalance China's coercive policies in the region.<sup>69</sup> The core countries also met with the “Quad Plus” members – Vietnam, South Korea and New Zealand – to discuss coordinated responses to the Covid-19 which shows that their long term goal is to expand the alliance throughout the Indian Ocean even more.<sup>70</sup>

---

<sup>65</sup> U.S.–India: *Civil Nuclear Cooperation*. [online], U.S. Department of State, 2009. Source: 2001-2009.state.gov [27.01.2021].

<sup>66</sup> Levesques, Antoine: *India–US Relations in the Age of Modi and Trump*. [online], IISS, 27.03.2020. Source: iiss.org [07.12.2020].

<sup>67</sup> *India Votes in Favour of UNGA Resolution Demanding UK Withdraw from Chagos Archipelago*. [online], The Hindu, 23.05.2019. Source: thehindu.com [07.12.2020].

<sup>68</sup> *India: Abuses Persist in Jammu and Kashmir*. [online], Human Rights Watch, 04.08.2020. Source: hrw.org [07.12.2020]; *Joe Biden's Agenda for Muslim American Communities*. [online], Joe Biden for President, 08.2020. Source: joe Biden.com [07.12.2020].

<sup>69</sup> Bennett, Yan C. – Garrick, John: *China's Actions Have Driven the Evolution of the Quad*. [online], ASPI The Strategist, 29.11.2020. Source: aspistrategist.org [07.12.2020].

<sup>70</sup> Teo, Sarah: *What the Quad Meeting Means for ASEAN*. [online], The Diplomat, 09.11.2020. Source: thediplomat.com [07.12.2020].

The decade between Quad 1.0 and 2.0 has allowed the ties of the four nations to mature and deepen, and as a result intra-Quad dialogues were upgraded to ministerial level, and bilateral exercises into “minilateral” arrangements. To name some of these landmarks – not including the India–U.S. agreements as the paper has already discussed them briefly in the previous part – the Japan–India civil nuclear cooperation agreement in 2017 was such, or when Japan became a permanent member of the U.S.–India naval exercise at Malabar in 2015. Furthermore, the increased AUSINDEX exercise between India and Australia, then India joined Australia’s Pitch Black air defence exercise in 2019. Finally, it is worth to mention that Japan joined the U.S.–Australia Talisman Saber exercise in 2019 after participating in the Southern Jackaroo (2017) and Kakadu (2016) multilateral exercises, hosted by Australia.<sup>71</sup> Or the robust JIMEX 2020 bilateral exercise between Japan and India in the North Arabian Sea.<sup>72</sup> Not to mention one of the most important developments that this year involved high profile combined military drills known as Malabar exercises. The event was hosted by the Indian Navy and featured ships, aircrafts and personnel from Australia, India, Japan and the United States in the Bay of Bengal, on 3 November 2020.<sup>73</sup> Before that in October the U.S, Japan and Australia conducted a trilateral naval exercise in the South China Sea with Burke-class guided-missile destroyers without India, which proves that New Delhi is not ready yet to turn its back to Beijing completely.<sup>74</sup>

It is clear that the Quad was made for this year, not just because of the path of Xi Jinping has set for it, but also because of the record high unfavourable views of China in many countries – including Australia, the U.S. and Japan – as a result of the way Beijing handled the pandemic and its assertiveness.<sup>75</sup> The upcoming meetings and cooperation will define the direction of the Quad, but as long as China continues on the path of Xi Jinping, the cooperation will deepen and more countries will join.<sup>76</sup> Still, the Quad has resisted to openly identify China as its primary objective so far – only the U.S labelled it as “adversary” in its National Security Strategy.<sup>77</sup> The question is for how long can they do that? The fact is, that not many countries are keen to join a military alliance against China, thus angering it and provoking economic restriction in the middle of the pandemic. On the other hand, the Quad would have an objective in its core, which could help coordinate their efforts towards something. This would also enhance the deterrence

<sup>71</sup> Buchan, Patric Gerard – Rimland, Benjamin: *Defining the Diamond: The Past, Present, and Future of the Quadrilateral Security Dialogue*. [online], CSIS Briefs, 16.03.2020. Source: csis.org [07.12.2020].

<sup>72</sup> Rej, Abhijnan: *India and Japan Hold Bilateral Naval Exercise in North Arabian Sea*. [online], The Diplomat, 28.09.2020. Source: thediplomat.com [07.12.2020].

<sup>73</sup> *India Hosts Japan, Australia, U.S. in Naval Exercise MALABAR 2020*. [online], America’s Navy, 02.11.2020. Source: navy.mil [07.12.2020].

<sup>74</sup> *U.S., Japan, Australia Conduct Trilateral Naval Exercises in South China Sea*. [online], Commander, U.S. 7<sup>th</sup> Fleet, 19.10.2020. Source: c7f.navy.mil [07.12.2020].

<sup>75</sup> Silver, Laura et al.: *Unfavorable Views of China Reach Historic Highs in Many Countries*. [online], Pew Research Center, 06.10.2020. Source: pewresearch.org [07.12.2020].

<sup>76</sup> Shoebriidge, Michael: *The Quad Was Made for 2020*. [online], ASPI The Strategist, 08.10.2020. Source: aspistrategist.org [07.12.2020].

<sup>77</sup> *National Security Strategy of the United States of America*. [online], The White House, 12.2017. Source: whitehouse.gov [07.12.2020].

value of the group, as pointed out by Derek Grossman, then he adds that a formalised military alliance is unnecessary and signalling willingness to help each other in case of a tension or an armed conflict should be sufficient.<sup>78</sup>

## Conclusion

As the paper showed the People's Republic of China went through an incredible modernisation regarding both its economy and military in the last four decades. All that, within an international environment dominated by western powers, but most notably the U.S. itself. As of 2021, it is clear that the concept of "China's peaceful rise" was a misunderstanding by many. Thinking that economic changes and an emerging middle class will alter the way the CCP rules China. Let alone, turning the one-party system into a democracy.

In the last two decades Beijing was trying to replace the U.S. in the Indian Ocean region by foreign investments through the BRI. Unfortunately for them, the Chinese Navy still faces serious problems regarding their overseas bases. So far, they have only Djibouti as a military base, and although Beijing is trying to find other possible facilities on the east coast of Africa and the South Pacific, it seems they ran out of luck. Mostly because of the fragile structure of these ties between China and its host nations, making these facilities more of a burden and Beijing's global and regional ambitions unreachable in their current state.<sup>79</sup> That said, China will do anything to establish a real presence in the region, especially in the case of Gwadar. After all, Beijing must find a way to address the Malacca Dilemma, and Pakistan is their only way considering that China imports a great deal of its crude oil from countries like Saudi Arabia, Angola, Iraq, Oman and Iran – just to name some.

China's assertiveness towards its immediate neighbours, most importantly Taiwan and India, clearly indicates that Beijing's paranoia against encirclement should not be taken lightly. That is why the U.S. must strengthen its ties with the above-mentioned countries. In particular with India, which is strongly stated in the recently declassified U.S. Strategic Framework for the Indo-Pacific. According to this, the U.S. sees India as a key strategic partner against China, but there are other countries in the neighbourhood as well, like the Maldives, Bangladesh and Sri Lanka. Still, this framework has nothing new to scare the horses and only states the reality that a resurgent China will inevitably challenge the U.S. soon, and India is Washington's best bet to box it in.<sup>80</sup> As for a broader strategic cooperation, the Quad has its dawn it seems. After a dozen successful joint naval exercises in the last couple of years between its core members, Canada participated in the latest Sea Dragon 2021 anti-submarine warfare exercise.<sup>81</sup> This is an interesting

---

<sup>78</sup> Grossman, Derek: [The Quad Is Poised to Become Openly Anti-China Soon](#). [online], The Rand Blog, 28.07.2020. Source: rand.org [07.12.2020].

<sup>79</sup> Grady, John: [Chinese Navy Faces Overseas Basing Weakness, Report Says](#). [online], USNI News, 22.01.2021. Source: news.usni.org [07.12.2021].

<sup>80</sup> Kartha, Tara: [In Declassified US' Secret Indo-Pacific Strategy, India Is Central, Pakistan Has Fallen Out](#). [online], The Print, 18.01.2021. Source: theprint.in [27.01.2021].

<sup>81</sup> Bhattacharyya, Anirudh: [Canada Joins Quad Joint Naval Exercise in Pacific Ocean](#). [online], The Hindustan Times, 25.01.2021. Source: hindustantimes.com [27.01.2021].

turn of events, which indicates that a broader strategic cooperation might be under the horizon, drawing in additional nations willing to show their teeth to contain the China threat. The way the CCP handled the pandemic and the bad quality of medical equipment sent to its allies certainly had a mark on China's diplomatic stability. On the other hand, it was the first major economy to recover from Covid-19, although it still remains a mystery in the face of job losses, uneven growths and record high prices which made many sceptical about it.<sup>82</sup>

The new Biden Administration has already made steps to contain China, from reaffirming Taiwan about their support to rejecting Beijing's South China Sea claims by backing Japan.<sup>83</sup> Not to mention Joe Biden's plan to unite democratic countries against China thus building blocks, which strongly resembles the Cold War, but was opposed by German Chancellor, Angela Merkel.<sup>84</sup> All things considered, the future of the Asia-Pacific is more important than ever before and it is highly unlikely that either Beijing or Washington will give up their regional goals.

## REFERENCES

- [A Frozen Line: The India–China Standoff at the Top of the World](#). [online], Center for Strategic and International Studies, 30.09.2020. Source: youtube.com [07.12.2020]
- Ansari, Usman: [Pakistan and China Launch Joint Naval Drills. Should India Be Concerned?](#) [online], Defense News, 08.01.2020. Source: defensenews.com [07.12.2020]
- Ayres, Alyssa: [The China–India Border Dispute: What to Know](#). [online], Council on Foreign Relations, 18.06.2020. Source: cfr.org [07.12.2020]
- Bennett, Yan C. – Garrick, John: [China's Actions Have Driven the Evolution of the Quad](#). [online], ASPI The Strategist, 29.11.2020. Source: aspistrategist.org [07.12.2020]
- Bhattacharyya, Anirudh: [Canada Joins Quad Joint Naval Exercise in Pacific Ocean](#). [online], The Hindustan Times, 25.01.2021. Source: hindustantimes.com [27.01.2021]
- Bhatti, Baber Ali: [Ports and Their Importance for Pakistan](#). [online], Maritime Study Forum, 22.03.2020. Source: maritimestudyforum.org [07.12.2020]
- Bjerga, Alan – Dormido, Hannah – Hoffman, Cindy – Leung, Adrian: [Choking on Our Harvest: Threats Loom over Global Food Trade](#). [online], Bloomberg, 18.05.2018. Source: Bloomberg.com [07.12.2020]
- Brewster, David (2016): India and China at Sea: A Contest of Status and Legitimacy in the Indian Ocean. *Asia Policy*, (22), 4–10. Online: <https://doi.org/10.1353/asp.2016.0030>
- Buchan, Patric Gerard – Rimland, Benjamin: [Defining the Diamond: The Past, Present, and Future of the Quadrilateral Security Dialogue](#). [online], CSIS Briefs, 16.03.2020. Source: csis.org [07.12.2020]
- Chand, Naresh: [Navy's Quest for Modernisation](#). [online], SP's Naval Forces, 01.2020. Source: spsnavalforces.com [07.12.2020]
- [China Delivers the Biggest-Ever, Most Advanced Naval Warship to Pakistan](#). [online], The EurAsian Times, 24.08.2020. Source: eurasiatimes.com [07.12.2020]

<sup>82</sup> Kuo, Lily: [China Becomes First Major Economy to Recover from Covid-19 Pandemic](#). [online], The Guardian, 19.10.2020. Source: theguardian.com [28.01.2021].

<sup>83</sup> [US Reaffirms Taiwan Support after China Sends Warplanes](#). [online], Eyewitness News, 24.01.2021. Source: abc13.com [28.01.2021]; McCurry, Justin: [US Takes Aim at China Territorial Claims as Biden Vows to Back Japan](#). [online], The Guardian, 28.01.2021. Source: theguardian.com [28.01.2021].

<sup>84</sup> Mai, Jun: [Merkel Backs Xi on Need to Avoid New Cold War, but Presses China on Human Rights, Transparency](#). [online], The Guardian, 27.01.2021. Source: theguardian.com [28.01.2021].

- Chinese Power Projection Capabilities in the South China Sea. [online], Asia Maritime Transparency Initiative, s. a. Source: amti.csis.org [07.12.2020]
- Cho, Tony K.: *Mao's War of Resistance: Framework for China's Grand Strategy*. [online], United States Army War College, 17.03.2011. Source: apps.dtic.mil [07.12.2020]
- Cohen, Nick: *Why Do Muslim States Stay Silent over China's Abuse of the Uighurs?* [online], The Guardian, 04.07.2020. Source: theguardian.com [07.12.2020]
- Cole, J. Michael: *The Third Taiwan Strait Crisis: The Forgotten Showdown Between China and America*. [online], The National Interest, 10.03.2017. Source: nationalinterest.org [07.12.2020]
- Cordesman, Anthony H. – Hess, Ashley – Yarosh, Nicholas S.: *Chinese Military Modernization and Force Development*. [online], Wikileaks, 09.2013. Source: cryptome.wikileaks.org [07.12.2020]
- Davis, Malcolm – Lyons Jones, Charlie: *China's Military Watch*. [online], ASPI The Strategist, 02.10.2020. Source: aspistrategist.org [07.12.2020]
- Defense Intelligence Agency: *China Military Power*. [online], Defense Intelligence Agency, 03.01.2019. Source: dia.mil [07.12.2020]
- Defense of Japan 2013. [online], Japan Ministry of Defense, 2013. Source: mod.go.jp [07.12.2020]
- Defense of Japan 2020. [online], Japan Ministry of Defense, 2020. Source: mod.go.jp [07.12.2020]
- Dreyer, June Teufel: *Xi Jinping's Second Coronation – And What It (May) Mean for China and the Rest of Us*. [online], Foreign Policy Research Institute, 20.03.2018. Source: fpri.org [07.12.2020]
- Garcia, Zenel (2019): China's Military Modernization. In *China's Military Modernization, Japan's Normalization and the South China Sea Territorial Disputes*. Cham: Palgrave Pivot. 45–59. Online: [https://doi.org/10.1007/978-3-030-12827-2\\_4](https://doi.org/10.1007/978-3-030-12827-2_4)
- Gill, Bates – Adam, Ni (2019): China's Sweeping Military Reforms: Implications for Australia. *Security Challenges*, 15(1), 33–46.
- Glosserman, Brad: *'Debt trap' Diplomacy Is a Card China Seldom Plays in Belt and Road Initiative*. [online], The Japan Times, 01.09.2020. Source: japantimes.co.jp [07.12.2020]
- Grady, John: *Chinese Navy Faces Overseas Basing Weakness, Report Says*. [online], USNI News, 22.01.2021. Source: news.usni.org [07.12.2021]
- Graham, Allison: *What Xi Jinping Wants*. [online], The Atlantic, 31.05.2017. Source: theatlantic.com [07.12.2020]
- Grossman, Derek: *The Quad Is Poised to Become Openly Anti-China Soon*. [online], The Rand Blog, 28.07.2020. Source: rand.org [07.12.2020]
- Harper, Tom: *How the Century of Humiliation Influences China's Ambitions Today*. [online], Imperial & Global Forum, 11.07.2019. Source: imperialglobalxeter.com [07.12.2020]
- India Hosts Japan, Australia, U.S. in Naval Exercise MALABAR 2020. [online], America's Navy, 02.11.2020. Source: navy.mil [07.12.2020]
- India Votes in Favour of UNGA Resolution Demanding UK Withdraw from Chagos Archipelago. [online], The Hindu, 23.05.2019. Source: thehindu.com [07.12.2020]
- India: Abuses Persist in Jammu and Kashmir. [online], Human Rights Watch, 04.08.2020. Source: hrw.org [07.12.2020]
- Indian Maritime Doctrine – 2015 Version. [online], Indian Navy, 2015. Source: indiannavy.nic.in [07.12.2020]
- Joe Biden's Agenda for Muslim American Communities. [online], Joe Biden for President, 08.2020. Source: joebiden.com [07.12.2020]
- Kamphausen, Roy – Lai, David – Tanner, Travis (eds.): *Assessing the People's Liberation Army in the Hu Jintao Era*. [online], Homeland Security Digital Library, 04.2014. Source: hsdli.org [07.12.2020]
- Kartha, Tara: *In Declassified US' Secret Indo-Pacific Strategy, India Is Central, Pakistan Has Fallen Out*. [online], The Print, 18.01.2021. Source: theprint.in [27.01.2021]
- Kaufman, Alison A.: *The "Century of Humiliation" and China's National Narratives*. [online], U.S.–China Economic and Security Review Commission, 11.03.2011. Source: uscc.gov [07.12.2020]
- Khan, Abdullah: *The Malacca Dilemma: A Hindrance to Chinese Ambitions in the 21st Century*. [online], Berkeley Political Review, 26.08.2019. Source: bpr.berkeley.edu [07.12.2020]
- Kilcullen, David (2020): *The Dragons and the Snakes. How the Rest Learned to Fight the West*. London: Hurst. Online: <https://doi.org/10.1093/oso/9780190265687.001.0001>

- Kim, Woosang – Gates, Scott (2015): Power Transition Theory and the Rise of China. *International Area Studies Review*, 18(3), 219–226. Online: <https://doi.org/10.1177/2233865915598545>
- Kuo, Lily: [China Becomes First Major Economy to Recover from Covid-19 Pandemic](#). [online], The Guardian, 19.10.2020. Source: [theguardian.com](https://www.theguardian.com) [28.01.2021]
- Levesques, Antoine: [India–US Relations in the Age of Modi and Trump](#). [online], IISS, 27.03.2020. Source: [iiiss.org](https://www.iiiss.org) [07.12.2020]
- Mai, Jun: [Merkel Backs Xi on Need to Avoid New Cold War, but Presses China on Human Rights, Transparency](#). [online], The Guardian, 27.01.2021. Source: [theguardian.com](https://www.theguardian.com) [28.01.2021]
- Marshall, Timothy (2018): *A Földrajz Fogságában. Tíz térkép, amely mindent elmond arról, amit tudni érdemes a globális politikai folyamatokról*. Budapest: Park Könyvkiadó.
- Mastro, Oriana Skylar: [The Stealth Superpower: How China Hid Its Global Ambitions](#). [online], Foreign Affairs, 11.12.2019. Source: [foreignaffairs.com](https://www.foreignaffairs.com) [07.12.2020]
- Mattis, Peter: [China's 'Three Warfares' in Perspective](#). [online], War on the Rocks, 30.01.2018. Source: [warontherocks.com](https://www.warontherocks.com) [07.12.2020]
- McCurry, Justin: [US Takes Aim at China Territorial Claims as Biden Vows to Back Japan](#). [online], The Guardian, 28.01.2021. Source: [theguardian.com](https://www.theguardian.com) [28.01.2021]
- McGregor, Richard: [Party Man Xi Jinping's Quest to Dominate China](#). [online], Foreign Affairs, 08.2019. Source: [foreignaffairs.com](https://www.foreignaffairs.com) [07.12.2020]
- Missile Defense Project: [Missiles of China](#). [online], Missile Threat, Center for Strategic and International Studies, 14.06.2018. Source: [missilethreat.csis.org](https://www.missilethreat.csis.org) [07.12.2020]
- Morgan, Forrest E. – Mueller, Karl P. – Medeiros, Evan S. – Pollpeter, Kevin L. – Cliff, Roger: [Dangerous Thresholds, Managing Escalation in the 21st Century](#). [online], RAND, 2008. Source: [rand.org](https://www.rand.org) [07.12.2021]
- Mulvenon, James: [Chairman Hu and the PLA's "New Historic Missions"](#). [online], China Leadership Monitor, 2008. Source: [fnvaworld.org](https://www.fnvaworld.org) [07.12.2020]
- Nair, Remya – Snehesh, Alex Philip: [Modi Govt Removes Spending Cap on Defence for Q3 Amid Tensions with China](#). [online], The Print, 01.10.2020. Source: [theprint.in](https://theprint.in) [07.12.2020]
- [National Security Strategy of the United States of America](#). [online], The White House, 12.2017. Source: [whitehouse.gov](https://www.whitehouse.gov) [07.12.2020]
- Ni, Adam: [The Future of China's Nuclear-Powered Ballistic Missile Submarine Force](#). [online], ASPI The Strategist, 08.05.2020. Source: [aspistrategist.org](https://www.aspistrategist.org) [07.12.2020]
- O'Sullivan, Stephen: [China: Growing Import Volumes of LNG Highlight China's Rising Energy Import Dependency](#). [online], The Oxford Institute for Energy Studies, 06.2019. Source: [oxfordenergy.org](https://www.oxfordenergy.org) [07.12.2020]
- Phillips, Tom: [The Cultural Revolution: All You Need to Know about China's Political Convulsion](#). [online], The Guardian, 11.05.2016. Source: [theguardian.com](https://www.theguardian.com) [07.12.2020]
- [Ports and Partnerships: Delhi Invests in Indian Ocean Leadership](#). [online], Asia Maritime Transparency Initiative, 05.12.2019. Source: [amti.csis.org](https://www.amti.csis.org) [07.12.2020]
- Quang, Nguyen Minh: [The Bitter Legacy of the 1979 China–Vietnam War](#). [online], The Diplomat, 23.02.2017. Source: [thediplomat.com](https://www.thediplomat.com) [07.12.2020]
- Rahn, Wesley: [China Has the World's Largest Navy – What Now?](#) [online], DW, 21.10.2020. Source: [dw.com](https://www.dw.com) [07.12.2020]
- Rajagopalan, Rajeswari Pillai: [China–Pakistan Naval Drills: More than just Symbolism](#). [online], The Diplomat, 10.01.2020. Source: [thediplomat.com](https://www.thediplomat.com) [07.12.2020]
- Rej, Abhijnan: [India and Japan Hold Bilateral Naval Exercise in North Arabian Sea](#). [online], The Diplomat, 28.09.2020. Source: [thediplomat.com](https://www.thediplomat.com) [07.12.2020]
- Rej, Abhijnan: [India and US Likely to Sign Geospatial Intelligence Pact](#). [online], The Diplomat, 24.08.2020. Source: [thediplomat.com](https://www.thediplomat.com) [07.12.2020]
- Russel, Daniel R. – Berger, Blake H.: [Weaponizing the Belt and Road Initiative](#). [online], Asia Society Policy Institute, 09.2020. Source: [asiasociety.org](https://www.asiasociety.org) [07.12.2020]
- Shams, Shamil: [Has China–Pakistan Economic Corridor Lived Up to the Hype?](#) [online], DW, 30.09.2019. Source: [dw.com](https://www.dw.com) [07.12.2020]

- Sharma, Pranay: [India, Vietnam Strengthen Defence Ties Amid Shared Concerns over China's Assertiveness](#). [online], South China Morning Post, 23.12.2020. Source: scmp.com [04.01.2021]
- Shishir, Gupta: [China Sells 50 Armed Drones to Pakistan, Begins Psyops. It's a Reminder](#). [online], Hindustan Times, 26.12.2020. Source: hindustantimes.com [04.01.2021]
- Shoebridge, Michael: [The Quad Was Made for 2020](#). [online], ASPI The Strategist, 08.10.2020. Source: aspistrategist.org [07.12.2020]
- Silver, Laura – Devlin, Kat – Huang, Christine: [Unfavorable Views of China Reach Historic Highs in Many Countries](#). [online], Pew Research Center, 06.10.2020. Source: pewresearch.org [07.12.2020]
- Singh, Abhijit: [India Has a Bigger Worry than LAC. China Now Expanding Military Footprint in Indian Ocean](#). [online], The Print, 12.06.2020. Source: theprint.in [07.12.2020]
- Stanzel, Angela: [China Trends #2 – China's String of Ports in the Indian Ocean](#). [online], Institut Montaigne, 25.06.2019. Source: institutmontaigne.org [07.12.2020]
- Teo, Sarah: [What the Quad Meeting Means for ASEAN](#). [online], The Diplomat, 09.11.2020. Source: thediplomat.com [07.12.2020]
- Tharoor, Shashi: ['But What about the Railways ...?' The Myth of Britain's Gifts to India](#). [online], The Guardian, 08.03.2017. Source: theguardian.com [07.12.2020]
- The Military Balance (2018): Chapter Six: Asia. *The Military Balance*, 118(1), 219–314. Online: <https://doi.org/10.1080/04597222.2018.1416982>
- Tiezzi, Shannon: [China's Plan for a New, Improved Military](#). [online], The Diplomat, 01.12.2015. Source: thediplomat.com [07.12.2020]
- [Transfers of Major Weapons: Deals with Deliveries or Orders Made for 2010 to 2019](#). [online], Stockholm International Peace Research Institute, 07.12.2020. Source: armstrade.sipri.org [07.12.2020]
- [U.S.–India: Civil Nuclear Cooperation](#). [online], U.S. Department of State, 2009. Source: 2001-2009.state.gov [27.01.2021]
- [U.S., Japan, Australia Conduct Trilateral Naval Exercises in South China Sea](#). [online], Commander, U.S. 7<sup>th</sup> Fleet, 19.10.2020. Source: c7f.navy.mil [07.12.2020]
- [US Reaffirms Taiwan Support after China Sends Warplanes](#). [online], Eyewitness News, 24.01.2021. Source: abc13.com [28.01.2021]
- Ward, Jonathan D. T. (2019): *China's Vision of Victory*. Atlas Publishing and Media Company.

Réka Szolga<sup>1</sup>

# The Role of the Currently Applicable Water Treaties in Conflict Resolution

*The Middle East and South Asia are hydropolitical hotspots, where the competition for freshwater has dramatically increased and the amount of available resources decreased, due to several reasons. This paper offers an analysis about two water conflicts, in which relevant paragraphs of the international water law would only provide a temporary water conflict resolution, because present water treaties must be urgently updated to enhance hydropolitical resilience. Overexploitation of the water resources, development of the critical region's hydroecological conditions, hydrohegemony's unilateral decisions can be handled with an effective international water governance and waterpolitical reforms.*

**Keywords:** *international water conflict resolution, hydropolitical resilience, hydrohegemony, international water and environmental law, water wars*

## Introduction

Water is one of the main geopolitical issues of the world. It has been central for humans, therefore it is a source of several conflicts. Instead of generating conflicts, with the help of diplomacy, water can be an asset for peace and cooperation. Waterdiplomacy can ease tensions over water issues and manage international relations. Water geopolitics identifies three dimensions:<sup>2</sup>

1. Conflicts when water resources are causes of a violent confrontation.
2. Water is a tool in achieving political, economic, military interest.
3. Weaponisation of water as a military strategy.

This paper examines two of the most serious water conflicts in the world. I conducted analytical investigations about some significant indicators of hydropolitical vulnerability of the territories involved. Factors, that cause water stress. International rules and treaties are available and were applicable in different cases, I will enlighten their influence. The hydropolitical vulnerability of the basins will be treated in relation with the political systems and their institutional resilience, infrastructural background as categories of hydropolitical risks. I am trying to underline that both internal and foreign policy are the most influencing factors of the hydropolitical dynamics. The literature identifies common

---

<sup>1</sup> PhD student, University of Public Service. E-mail: [szolgareka1@gmail.com](mailto:szolgareka1@gmail.com)

<sup>2</sup> Dinar, Shlomi – Dinar, Ariel (2000): Negotiating in International Watercourses: Diplomacy, Conflict and Cooperation. *International Negotiation*, 5(2), 193–200.

features of serious water conflicts like levels of tensions changing parallel with the population size, territorial extension, level of democracy.<sup>3</sup>

Several cases of conflicts are mostly non-violent and more likely to be resolved with cooperation in transboundary basins. The literature about political background, geopolitics or diplomacy showed that water-related interactions between countries are mostly based on socio-economic factors.

## Serious water conflicts that can lead to war

The related conflicts are

- India and Pakistan's water conflict, the Indus Water Treaty
- water conflict in the Middle East: Iraq, Turkey, Syria: large-scale uncoordinated projects on the Euphrates<sup>4</sup>

Freshwater as a limited resource is influenced by geographical conditions, geopolitical agendas and social-political dynamics on several scales. In my essay, I intend to enlighten regional geography characteristics related to two continent's freshwater problems. Freshwater resources are under pressure when alterations are done to serve individual needs. By 2030, water scarcity is predicted to grow and will affect 40% of the world's population. Water security is the criterion of the world's security. Within many international river basins including those in the Middle East and Asia, the demand for water for domestic, industrial, environmental purposes is growing. Waters will become more vulnerable to tensions, conflicts, climate change. "In the international community, freshwater resources are still debated as to whether they are a human right or a global commodity. Worldwide, an estimated 1.2 billion people lack access to safe drinking water and more than 2.4 lack access to sanitation. The problem may have technological and economic solutions, but scholars increasingly see the problem nested in the imbalance of power, lack of agency in marginalized populations, and lack of political will in local or national governments."<sup>5</sup>

River is an ecosystem. It gives freshwater and flood services such as water purification or natural flood protection. Alterations like channel construction, dikes, closures, deepening has severe direct and indirect impacts on the entire river and floodplain ecosystem. Nature's interest is the free-flowing river, industry's and trade's interest to increase income through navigability. Wetland and riparian areas are the most productive ecosystems. People benefit from rivers directly and indirectly. The economic values of waters seem higher than just exploiting the advantages of the international trade. River modifications cause environmental and social consequences. A river performs a lot of ecosystem services

---

<sup>3</sup> Wolf, Aaron T. (2008): Healing the Enlightenment Rift: Rationality, Spirituality and Shared Waters. *Journal of International Affairs*, 61(2), 51–73.

<sup>4</sup> Turkey, Syria and Iraq: Conflict over the Euphrates–Tigris. [online], Climate Diplomacy, 2009. Source: climate-diplomacy.org [06.05.2023].

<sup>5</sup> Veilleux, Jennifer C.: *Relationship Between Freshwater Resources, Socio-Cultural Dynamics and Geopolitical Stability*. [online], Oregon State University, 2021. Source: researchgate.net [03.02.2021].

such as purifying water, drinking water, moderates floods and droughts, support ground-water resources, maintains habitat for wildlife. It supports fishery, forestry, agriculture activities. The water quantity and quality streams reflect the conditions in the watershed including the riparian areas and the upland areas.<sup>6</sup> Rivers and lakes across the world have been heavily modified, anthropogenic reasons are floods, navigability, domestic, agricultural. Freshwater plays a significant role in political and economic stability, it influences sustainable development, democracy and equity, but within these sectors its importance fluctuates. Scarcity persists, in large part due to politics, power and competing interests rather than technology or economics. The imbalance of power within and between nation states, and lack of political will of governments to take action to improve sanitation and freshwater distribution can lead to serious water conflicts.<sup>7</sup>

In South and Southeast Asia, people have to face some challenges like population growth, urbanisation, industrialisation, overexploitation of the natural resources such as water; economic changes mean a pressure on the water resources. There is a competition for freshwater resources, demand is increasing. Water management is more complicated than in other parts of the world as transboundary water systems are shared by several countries that have differing development goals. These countries – referring to our examination points – do not have proper institutional systems with legal mechanisms, they cannot always manage occurring water issues. In most cases, the politically dominant and powerful country, the hydrohegemon dictates and controls the development process. The dominant country is basically upstream and it often acts unilaterally, its behaviour leads to a water conflict. Building dams on international rivers is a serious source of a dispute, the flow regime in downstream countries could be affected concerning the water use and the whole riparian environment.

## The water conflict between India and Pakistan

There are four transboundary river basins of the region, the Indus River is in the focus of the first part of the paper. As it was pointed above, overpopulation, traditional agricultural practices, rapid urbanisation, increasing industrialisation and a general lack of pollution control facilities are exerting growing pressure on the water resources.<sup>8</sup>

In responding to the water challenges around the world, several treaties and agreements emerged. The world needed a document, that can work in several circumstances, both in water-rich and water-scarce countries. The UNECE<sup>9</sup> Water Convention was designed to manage water issues in very different conditions. The water treaties have a lot in common: they manage availability, quality of water (environmental and ecological aspects of water management), economic utilisation of transboundary water resources

<sup>6</sup> Veilleux 2021.

<sup>7</sup> Veilleux 2021.

<sup>8</sup> [Hydropolitical Vulnerability and Resilience along International Waters: ASIA](#). [online], UNEP, 2009. Source: unep.org [02.05.2022].

<sup>9</sup> United Nations Economic Commission for Europe.

(mainly navigation, hydropower development, storage/irrigation, fishing), management of hydrological variability (floods, droughts, etc.) and institutional questions.<sup>10</sup>

The global treaties' success largely depends on the effectiveness of their administration and enforcement. The UNECE Water Convention regulates water management indirectly, so it does not often have a practical impact on local issues.

In several cases regional and basin treaties can be more effective. The experts of the UN (United Nations) think workable monitoring provisions, enforcement mechanisms, and specific water allocation provisions are needed in managing global water issues. Treaties try to follow key principles to guide the conduct of nations regarding shared watercourses: as they emphasise “equitable and reasonable use” and “the obligation not to cause significant harm” to neighbours. However, it is up to countries themselves to spell out precisely what these terms mean in their watersheds, those regional methods that follow the international principles usually depend on the socio-economic aspects of water management and highlight the links between water, energy, food and human security from a regional perspective, historical context, legal aspects, frameworks for negotiation and mediation and system analysis.<sup>11</sup>

According to the UN literature, there is a consensus among experts that international watercourse agreements need to be more clear, setting out measures to enforce treaties made and giving detailed conflict resolution mechanisms in case disputes are generated. Better cooperation also requires identifying clear yet flexible water allocations and water quality standards, taking into account hydrological events, changing basin dynamics and societal values.

In this paper, several treaties and sources of international law will be mentioned relating to the water cases concerned: the Indus Water Treaty, UN Watercourses Convention, Helsinki Law, Harmonie Doctrine. The UN Water Convention can work as an international legal instrument and as an intergovernmental platform which is applicable in transboundary water debates, since it facilitates cooperation.

## **The treaty was born to avoid a water war**

The Indus Water Treaty had to face several challenges. Earlier, it was established as a short-term agreement that survived two wars between nuclear-armed neighbours. The treaty is more than 50 years old, and India may not be obliged to take it into consideration. Indian–Pakistani cooperation was a step in the global hydrodiplomacy, in which the World Bank had an important role, when two countries needed financial support to extend their irrigated areas and create suitable infrastructure for water.

Their political goal was to avoid serious water scarcity. India is in the position to handle disputes over the projects on the western rivers of the Indus system. India opposed to join the UN Watercourses Convention, that contributes the norms of the relevant paragraphs of the international law.

---

<sup>10</sup> Baranyai, Gábor: *European Water Law and Hydropolitics: An Inquiry into Resilience of Transboundary Water Governance in the European Union*. [online], Pázmány Péter Catholic University, 2019. Source: real-phd.mtak.hu [07.04.2021].

<sup>11</sup> *Transboundary Waters*. [online], UN Water, 2021. Source: unwater.org [22.04.2022].

The Indus Water Treaty is considered to be a successful mediation because it brought a resolution. A greater conflict could have happened over the past 60 years. In reference to any other conflicts surrounding poverty, infectious diseases and environmental degradation are factors that, when combined with other factors such as social and political instability, can lead to war. Some experts emphasise and a large amount of research underlines that scarcity of resources, like water, could contribute to social instability and violent conflict. Often times, debates over resources could deteriorate into something violent. In the case of India and Pakistan, the resolution surrounding the Indus Basin came early and helped the parties avoid water wars.<sup>12</sup>

## Political and social background

### India

India is usually categorised as a growing superpower, as it plays an important role in the international affairs, its population is enormous and it has the fifth largest economy in the world.<sup>13</sup> India is a Sovereign Socialist Secular Democratic Republic with a parliamentary form of government which is federal in structure with unitary features.<sup>14</sup> The country is a multiparty democracy, the government is led by Prime Minister Narendra Modi and his Hindu nationalist Bharatiya Janata Party has presided over discriminatory policies and a rise in persecution affecting the Muslim population. The constitution guarantees civil liberties.

The most serious challenges that India has to face are

- overpopulation
- poverty
- malnutrition
- illiteracy
- malnutrition
- spyware detection
- prevention of terrorism, Islamic fundamentalists

When considering the indicators of a water conflict, the background of hydropolitical vulnerability and resilience in Asian countries, climatic reasons should be highlighted: there is a variety of climatic conditions, in some parts it is tropical, elsewhere there is humid tropical. Water management is considered to be poor, so water issues are sensitive. There are four major transboundary river basins in the south and southeast region of Asia. Water problems are predicted to grow and affect other sectors here.<sup>15</sup>

---

<sup>12</sup> Nax, A. Natalie: [The Indus Water Treaty and Climate Change](#). Thesis. [online], University of Oregon, 2019. Source: [scholarsbank.uoregon.edu](#) [12.05.2022].

<sup>13</sup> [GDP by Country](#). [online], Worldometer, s. a. Source: [worldometers.info](#) [10.10.2022].

<sup>14</sup> [Governance and Administration](#). [online], National portal of India, 2022. Source: [india.gov.in](#). [11.10.2022].

<sup>15</sup> [Hydropolitical Vulnerability and Resilience along International Waters: ASIA](#). [online], UNEP, 2009. Source: [unep.org](#) [02.05.2022].

The geographical-geopolitical location, the ethnic-religious composition, the economic developmental rates, the ground for political rights, territorial disputes, religious and political extremism gives the picture of the relevant country's status, its position in a conflict resolution process. India is called the 'partly free' category as it is officially a parliamentary democracy but its system is instable.

India's foreign policy is based on the concept of neighbourhood. Millions of Indian people live and work abroad and constitute an important link with the mother country. Countries considered India's closest foreign partners are the United Arab Emirates, the Russian Federation, Israel, Afghanistan, France, Bhutan, Bangladesh and the United States. Russia is the largest supplier of military equipment to India, followed by Israel and France. It has diplomatic relations with hundreds of countries all around the world, and a member of different international organisations such as the World Trade Organization, International Monetary Fund, and a lot of relevant regional organisations in Asia.<sup>16</sup>

## **Pakistan**

Pakistan is an Islamic Republic, with an important Muslim population. Its economy is growing, it has got a democratic multi-party parliamentary system. It has to face serious challenges such as terrorism, overpopulation, religious extremism, poverty. Extreme political activities, terrorist attacks are not rare in the country.

As for Pakistan's foreign relations, it is a significant ally of China, its international relations mainly focus on other Muslim countries. The Kashmir conflict determines its relations with India, so Turkey and Iran also play an important role in its policy against India. Pakistan is an influential member of the Treaty on Nuclear Non-Proliferation, it has got a nuclear deterrence program to counter India's nuclear ambitions. Geopolitically, the country is becoming a nuclear power. It is located in a geopolitical corridor of the oil supplies.

## **Indian–Pakistani water conflict**

In the first part, the function of the Indus Water Treaty was briefly summarised. The population growth in both countries challenged their effectiveness.

The Indus Water Treaty does not monitor border states properly, the climatic conditions changed significantly since the two countries agreed. It has to be updated. Climate change can reduce access to freshwater and lead to a conflict, if it does not adapt to the future changes. Water access affects human and economic conditions. All in all, the whole region's integrity is involved in the water issues.<sup>17</sup>

---

<sup>16</sup> Kapur, Ashok (2011): *India and the South Asian Strategic Triangle*. London – New York: Routledge.

<sup>17</sup> According to the latest UN Water Report, understanding the region's hydroecological conditions, water demands, social and economic needs would be necessary for an effective policy-making. Overpopulation, frequent droughts, therefore the overexploitation of groundwater resources usually lead to unilateral actions. India behaves as a hydrohegemon. Figure 8.6 (p. 135) shows the natural recharge of groundwater in the region, that is very low. *UN World Water Development Report 2022*. [online], UN Water, 2022. 135–136. Source: unwater.org [14.11.2022].

Due to the fact that India and Pakistan had serious conflicts over the ownership of Kashmir, the roots of the water dispute lead back in time. In this paper, it was described that two large countries with growing population need a huge amount of water. The potential is reducing, real cooperation is missing. The importance of the political stability and democratic background was emphasised. The Kishan Ganga Project on the River Jhelum and the Baglihar Hydropower and the Dam Project on Chenab are two cases that have caused controversy,<sup>18</sup> which is due to the tense foreign relations between them. There is a competition also in the division of natural resources. Climate change contributes to the serious consequences of overexploitation, the water quantity is feared to diminish, although water is the backbone to life in both countries.

The Treaty needs updating, it has to include flexibility and variability in order to become resilient. It should manage climate change effects, stop disproportionate division, address water pollution. Water management in this region should be considered a joint responsibility.<sup>19</sup>

## Water conflict in the Middle East

### *Iraq, Turkey and Syria in the Euphrates–Tigris River Basin*

This region supports a diverse number of cultures and people for nearly 6,000 years. When examining the roots of conflicts, the fact has to be highlighted that people living here are from a variety of origins and have completely different ways of life. “In the lowlands live peasant cultivators, *fellahin* who irrigate lands along the banks of the rivers. Nomadic desert *Bedouin* graze their flocks on the arid plains, and semi-nomadic *Madan*, or “Marsh Arabs,” reside in the swamps and marshes.”<sup>20</sup> Furthermore, “an increasing number of urbanites who inhabit the cities are using water for domestic uses. In the highlands of Kurdistan, the Kurdish mountaineers rely on water sources as do a few remaining Armenians, who though now largely displaced were expelled by the Turks early in the twentieth century. Such basin diversity demands regional cooperation for its survival”<sup>21</sup>

Tigris–Euphrates River Basin is earlier called the Cradle of civilisation and the Garden of Eden, where water became the root of life and therefore the source of serious conflicts. One of them is the Turkish GAP project (Güneydoğu Anadolu Projesi or Southeastern Anatolia Project). Its construction started in the 1960s but there is an ongoing debate on the Turkish dam building. The GAP project includes some 22 dams, 25 irrigation projects and 19 hydroelectric power plants. It is divided into 13 major sub-projects, 7 of which is located on the Euphrates River and 6 on the Tigris. On the Euphrates, the Lower Euphrates is the largest sub-project, encompassing the Atatürk Dam and tunnels together

<sup>18</sup> Nax 2019.

<sup>19</sup> Nax 2019: 40.

<sup>20</sup> MacQuarrie, Patrick: *Water Security in the Middle East. Growing Conflict in the Development of the Euphrates–Tigris River Basin*. Thesis. [online], Trinity College, Dublin, Ireland, 2014. 7. Source: [transboundarywaters.science.oregon-state.edu](https://transboundarywaters.science.oregon-state.edu) [22.05.2022].

<sup>21</sup> MacQuarrie 2014: 8.

with five smaller sub-projects.<sup>22</sup> Before the introduction of the water conflict and the role of the international law in the Tigris–Euphrates River Basin, it would also be relevant to enlighten the political background of the riparian states.

## Political background of the rivalries

### Turkey

It is a middle power in the region with its significant role in international relations. It is situated in the intersection of three important areas: the Middle East, Europe and the previous ‘near abroad’,<sup>23</sup> such as Ukraine. It is clear, why it is considered a regional power, why it is so dominant in the regional issues and behaves like a hydrohegemon. The Atatürk era was very determining in the relevant water conflict. Turkish foreign policy was trying to avoid confrontation during the Kemalist times. The main doctrine was about ‘Peace at home, peace in the world’, so Turkey did not seek territorial expansion. At present, the country seems more active. In the third age of Erdogan’s foreign policy, Turkey moved in an authoritarian direction: political purging is not rare to stabilise the present power of Erdogan. The country has a powerful military potential, ‘zero problems with neighbours’ doctrine works in the foreign relations. Turkey is not striving to influence regional affairs. Its economic position has remarkably improved, its diplomatic network was build up precisely. Turkey gets diplomatically consolidate gains from several military victories in Libya and Syria. Regional competition has increased with Russia and Iran.

Turkey has economic success, social progress. Cooperation with the regional countries such as Syria and Iraq has not reached a good dimension. Turkey is a western-oriented state in the Middle East, as it is a member of the Council of Europe and applied for a full membership. But there was a set-back in the Turkey–EU relations when Turkey supported North Cyprus in the Cyprus conflict.<sup>24</sup> Another problematic issue is the Turkish attitude against the Kurds. In the shadow of the Russian–Ukrainian war, Erdogan started a military operation against the Kurds in Iraq. The Turkish military campaign against PKK (Kurdistan Workers Party) fighters is a keynote event in world politics. After the Peace Treaty, Turkey ignored the Kurdish demand for autonomy and inducted a series of violent actions against them. Another critical factor of the EU membership is the Turkish support for Northern Cyprus in the Cyprus debate.<sup>25</sup> Turkey is a chief ally of the U.S., in the 1950s it became a member of NATO and the salient American support to Turkey endangers the power of Russia in the region.<sup>26</sup>

---

<sup>22</sup> MacQuarrie 2014: 13.

<sup>23</sup> The post-Soviet states around Russia, the former Soviet Union.

<sup>24</sup> The Cyprus debate is a conflict between the governments of Turkey and Greece. Only Turkey recognises the Turkish Republic of Northern Cyprus.

<sup>25</sup> A debate emerges between the Greek and the Turkish government, they cannot agree on serious territorial questions of Cyprus.

<sup>26</sup> Egeressy, Zoltán: *Enyhülés az EU és Törökország között*. [online], KKI Elemzések, 2021. Source: kki.hu [02.02.2022].

## Iraq

Another dominant member of this tripartite water conflict is Iraq, comes second after Turkey, because it has not got such a political power. Although it controls the world's third largest oil reserves, cross-border terrorism twisting away from here to the broader Middle East makes it one of the most dangerous nations. After 11 September 2001, President Bush introduced the Great Middle East Initiative, which is about the democratisation of the region in an American style. The Iraq war in 2003 had concentric circles here, and so did terrorism. The American intervention created a new strategic environment. Before it dissolved, the Soviet Union was the main partner of Iraq. Iraq and Syria both belonged to the former socialist states. The Great Middle East Initiative was established against terrorism. Traditionally, the conflict between Arab, Iranian and Turkish ethnic groups derives from the Sunni and Shiite Islamic religious groups. After 1978, the Egyptian–Israel peace agreement was a cardinal step to the unity of the Arab world but was the beginning of a serious regional competition. Interference of the great powers of the world increased. Iraq has an important role in the Middle East with its geopolitically strategic location. Its characteristic is a mixture of its ancient, traditional culture and modernism, that is supported by the international community. It has got tribal characteristics, radical religious groups, Sunni and Shiite confrontation. Furthermore, the country is a cross point of different ethnic groups, such as Arabic, Persian and Turkish.<sup>27</sup>

## Syria

Lastly, Syria in this conflict has got the most politically instable background. According to the Global Peace Index (2018), it is the most dangerous country in the world.<sup>28</sup> It is very diverse both ethnically and involving its religion: Syrian Arabs, Kurds, Turkmen, Assyrians, Greeks live here. During the phenomenon of the Arab Spring,<sup>29</sup> President Assad was accused of human rights abuses and violence. The wave of Arab spring revolutions reached Syria, the civil war has not ended since 2011 having serious effects in the international policy. Due to the great powers involved, it turned to a never ending proxy war. Millions died, millions escaped causing refugee conflicts all over Europe. There were protests against the Assad Government that practically led to the present military conflict. Since the beginning of the war, alternative governments were formed but did not work. Without a stable political background, conflicts cannot be solved. Syrian–Turkish and Syrian–Iraqi interactions, political relations are very tense, Syria is politically isolated from its neighbours. Syria's traditional allies are Turkey and Iran.

<sup>27</sup> N. Rózsa, Erzsébet: *The War in Iraq and the Broader Middle East*. [online], KKI Elemzések, 2008. Source: kki.hu [23.05.2022].

<sup>28</sup> *The Global Peace Index Report 2018*. [online], Institute for Economics and Peace, 2018. Source: reliefweb.int [05.07.2022].

<sup>29</sup> N. Rózsa, Erzsébet: *The Geostrategic Consequences of the Arab Spring*. [online], IE Med analysis, 2013. Source: euro-mesco.net [12.10.2022].

Before the details of the water conflict, the situation of four million Kurds has to be enlightened in the shadow of the tense foreign relations in the Middle East. Kurds have a major role in the Middle East. Iraqi Kurdistan influences the policy of each country where they live. Kurdish minority lives in Turkey, Iran, Iraq, Syria and Armenia. They believe in the unification of their nation in a united Kurdistan but they are considered one of the most critical security threat, because they are not usually afraid of armed struggle in a political issue. The Kurds always renew their terrorist activities and try to maintain and reinforce Kurdish identity, power and want to gain representation in politics. In the shadow of the Russian–Ukrainian war, Erdogan was quite decided to start a military attack against the PKK rebels in Iraq. In Syria, Turkey led several operations against the Kurds in the northern part of the country.

“On the Iraqi front, Turkey has been reinforcing its alliance with the Kurdistan Regional Government, which controls northern Iraq, by negotiating a new energy deal. Given Russia’s invasion of Ukraine, these energy relations have become even more important. With Turkey looking to diversify its energy portfolio in various directions, the recent discovery of large, untapped natural gas reserves to the east and south of Kirkuk, Iraq, is just another reminder for Ankara that the KRG is an important strategic partner.”<sup>30</sup> Concerning energy deals, Turkey is trying to diversify its energy sector. In the question of the present military action against the Kurds, it is more important for Erdogan to be re-elected in 2023 than being aware of the transatlantic will.

## Water conflict between the riparians

Political instability and lack of cooperation between Turkey, Iraq and Syria led to a water conflict. Turkey is using water as a weapon against Kurds, Syria is trying to harmonise the interests of riparian countries, monitoring water issues. There is no tripartite agreement, therefore there are recent conflicts over water usage. Syria and Iraq have historical rights. Cooperation so far has not worked between riparians, international water course law could not be implemented in the regional water management. Water security management strategy would be necessary but the complex way of pursuing a water sharing agreement makes it impossible.

Turkey treats the other two countries involved as historically political rivals; the historical and political contradictions were underlined in the previous chapter. Turkey wants to develop without being aware of the other two riparian countries’ historical rights. Water scarcity, inefficient water abstraction, land and water use, unilateral objectives, ignored international water law led to several water conflicts. The Turkish GAP project<sup>31</sup> became the source of conflict. Southeast Anatolia Development Project was started in the Atatürk era, which was a hydroelectric and irrigation development scheme. The Turkish hydrodevelopment program, first of all, had its main objective: economic growth by

---

<sup>30</sup> Siccardi, Francesco: [Why Has Erdogan Ramped up Turkey’s Clash with the PKK?](#) [online], Foreign Policy, 23.05.2022. Source: [foreignpolicy.com](#) [02.01.2023].

<sup>31</sup> Güneydoğu Anadolu Projesi (Southeastern Anatolia Project).

developing economic structure of the southeast region. Economic growth can lead to social stability, utilisation of resources in the region.

Turkey was striving to increase productivity and employment opportunities. The GAP project includes many dams, among which the Atatürk Dam causes serious conflict between Turkey and Syria. Once Turkey stopped the whole Euphrates river flow for a month.

According to Patrick MacQuarrie, the GAP project lost its original mission. It became a multi-sectoral socio-economic program. The name changed in 1995 to GAP RDA (Regional Development Administration Strategy) and some new elements were introduced comparing to the firstly issued GAP Plan. Its objective is to manage water and land resources, introduce better farm management, improve manufacturing industries and social services by responding to regional needs. Originally, it focused on hydroelectric planning but later turned into a regional economic project touching international relations with the EU and the Kurdish issue.

## The role of treaties and international law in the resolution

At the beginning of the twentieth century Britain and France, two coloniser countries had an agreement, the Convention of 23 December (1920) that recorded the role of the powers in the water issues: any plans for irrigation works undertaken in the basin that affect the countries had to be examined by the British and French commission. Later it was followed by some similar documents, such as the Franco-Turkish Agreement (1921), the Treaty of Lausanne (1923), Water Treaty of Ankara (1926), Agreement about the Joint Usage of the Euphrates (1930). All of them were written with the supervision of the colonisers. Finally, the Treaty of Friendship and Neighbourly Relations (1946) was signed first by Iraq and Turkey, which was the first legal instrument of their cooperation.<sup>32</sup> Syria was involved, when the first major dam was built. It was the Turkish Keban Dam and it motivated the first tripartite talks on the Euphrates water issues. The Keban dam was financed by the United States Agency for International Development (USAID) and recorded: Turkey must not harm downstream riparians but has to guarantee flows downstream, and that both sides agree to the plans. The World Bank financed the Karakaya Dam and requested similar downstream guarantees. Turkey thought that international donors favoured downstream riparians, so it tried pursuing their own financing for subsequent projects. It also led to the establishment of the Joint Technical Committee between the three countries.

“The Joint Technical Committee or JTC met trilaterally for the first time in 1965, although an earlier meeting between Syria and Turkey occurred a year earlier. The main concern at the time was the filling of Keban dam in Turkey, Syrian planning for Tabqa Dam and the Haditha Dam in Iraq [...]. The thorny issue of diverting Tigris river water to the Euphrates created a big stir amongst water academics, with Iraq strongly opposed to the idea, following by Syria. The early 1970s were characterised by field trips and

<sup>32</sup> MacQuarrie 2014: 38.

occasional meetings, but no one dare make reference to a water rights agreement lest a wrath of haste descend upon ye from all three sides.”<sup>33</sup>

The JTC was still active in the 1980s and 1990s. They mainly discussed the plans of the GAP project, the building of the Atatürk Dam and the consequences downstream. The issue divided the group to share the ‘international rivers’, or a regime to determine the ‘utilisation of a transboundary watercourse’. Turkey insisted that both watercourses are Transboundary Rivers that cross international boundaries, but do not constitute them. However, Syria and Iraq claim they are international rivers and that they are co-riparians, justifying an equal share of their waters. “Conflict over filling Atatürk reservoir did produce a water sharing agreement between Syria and Iraq, normally adversarial toward one another. This was a positive outcome but is also limited to the provision that Turkey sends Syria sufficient flowrates on the Euphrates. The treaty does bind Syria and Iraq together against Turkey, but does little to advance a solution to the basin-wide water sharing security dilemma.”<sup>34</sup>

The International Law Commission, a UN affiliated body involved in the formulation of the Law of Non-Navigational Uses of International Watercourses states that basins shared by two or more states (successive rivers) or constitute the boundary between them (contiguous rivers) define an international river, ‘international watercourse’ refers to hydrographic components such as rivers, lakes, canals, glaciers and groundwater constituting, by their physical relationship, a unified whole. The UN Convention states that ‘Watercourse’ means a system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus. ‘International watercourse’ means a watercourse, parts of which are situated in different States.<sup>35</sup>

There were some crucial principles of the international law that could be used in this tripartite water dispute. The Helsinki Law regulated the equitable and reasonable use of transboundary rivers and states that national water policy has to consider the rights of each riparian state. The Harmone Doctrine was also involved, the absolute territorial integrity gave the right to use fluvial water within its own territory without limitation. Turkey was not the only country that could take its position in the case. Absolute territorial integrity records that no state may utilise the waters of an international river that would damage a co-riparian. This usually serves to maintain the natural regime of the river basin. Iraq uses this principle to state it claims to Euphrates and Tigris river water, particular in reference to its historical water rights. In this way, Iraq insists that it deserves an appropriation of water based on its historic and established regime. Syria also wants to take its right to develop 24% of the Euphrates river that flows there.

Equitable and reasonable utilisation principle with the Convention for the Non-Navigation Uses of International Watercourses pushed international watercourse law a step further toward mutual shared resource law, or common jurisdiction. Syria and Iraq

---

<sup>33</sup> MacQuarrie 2014: 62.

<sup>34</sup> MacQuarrie 2014: 63.

<sup>35</sup> MacQuarrie 2014: 65.

both agree, that this tact is in their best interest, particularly Iraq, but Turkey is objecting strongly and contends the UN convention. Painfully, the international law interprets equitable uses without giving priority to one of them, each riparian has an equal right to use the Euphrates river. Politically, national preferences can dominate in the economic and social factors concerning the water usage. If national will dominates, countries usually do not cooperate.

## Conclusion

I have chosen two critical water conflicts to enlighten the fact that political background is a determining factor in the question of water. Both cases show that there is always a dominant party who acts unilaterally. Their position is upstream and developments influence the downstream countries' economy and society. The regional geography characteristics in water questions are crucial. Water is under pressure if alterations and demand for it have dramatically increased. There is a debate around using water resources, because it needs new technological and economic investments. Building dams on the international rivers is always a serious source of dispute.

In this paper, it can be seen how much influence the political and social background have in the serious water issues in Asia and in the Middle East. Asia has to face a dramatic population growth with overexploitation of the natural resources. Earlier, the Middle East was the Cradle of civilisation based on water. At present, it is the most dangerous part of the world, where war and terrorism have unstopably been lasting for decades.

Considering the role of the international law in the relevant water issues, Indian–Pakistani cooperation was a step in the global hydrodiplomacy, India is in the position to handle disputes over the projects on the western rivers of the Indus system. It opposed to join the UN Watercourses Convention that contributes the norms of the relevant paragraphs of the international law. The Indus Water Treaty is considered to be a successful mediation because it brought a resolution, without the international law a greater conflict could have happened due to any other conflicts surrounding poverty, infectious diseases, and environmental degradation are factors that, when combined with other factors such as social and political instability, can lead to war. The Treaty besides, needs updating.

In the Middle East, Turkey, Iraq and Syria are in a tripartite water debate in the Euphrates–Tigris River Basin. UN Watercourses Convention, Helsinki Law, Harmone Doctrine, absolute territorial integrity could give a temporary resolution to the problem, although Turkey, the greatest regional power as the hydrohegemon in the basin, refuses the UN Convention.

All in all, global water law treaties, like the UN Convention or the UNECE Water Convention<sup>36</sup> considers the relevant factors in the water debate like geography, hydrology, climate, social and political background of the country concerned. Hopefully, the Indus Water Treaty will be updated implementing some present trends of successful water

<sup>36</sup> UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes.

management to avoid an international water conflict. Turkey, Iraq and Syria have to come to a conclusion by a trilateral water agreement, in which tripartite consultation and equitable water usage is provided.

## REFERENCES

- Baranyai, Gábor: *European Water Law and Hydropolitics: An Inquiry into Resilience of Transboundary Water Governance in the European Union*. [online], Pázmány Péter Catholic University, 2019. Source: real-phd.mtak.hu [07.04.2021]
- Dinar, Shlomi – Dinar, Ariel (2000): Negotiating in International Watercourses: Diplomacy, Conflict and Cooperation. *International Negotiation*, 5(2), 193–200. Online: <https://doi.org/10.1163/15718060020848721>
- Egeressy, Zoltán: *Enyhülés az EU és Törökország között*. [online], KKI Elemzések, 2021. Source: kki.hu [02.02.2022] Online: <https://doi.org/10.47683/KKIElemzések.E-2021.15>
- GDP by Country. [online], Worldometer, s. a. Source: worldometers.info [10.10.2022]
- Governance and Administration. [online], National portal of India, 2022. Source: india.gov.in. [11.10.2022]
- Hydropolitical Vulnerability and Resilience along International Waters: ASIA. [online], UNEP, 2009. Source: unep.org [02.05.2022]
- Kapur, Ashok (2011): *India and the South Asian Strategic Triangle*. London – New York: Routledge. Online: <https://doi.org/10.4324/9780203841990>
- MacQuarrie, Patrick: *Water Security in the Middle East. Growing Conflict in the Development of the Euphrates–Tigris River Basin*. Thesis. [online], Trinity College, Dublin, Ireland, 2014. Source: transboundarywaters.science.oregonstate.edu [22.05.2022]
- N. Rózsa, Erzsébet: *The Geostrategic Consequences of the Arab Spring*. [online], IE Med analysis, 2013. Source: euromesco.net [12.10.2022]
- N. Rózsa, Erzsébet: *The War in Iraq and the Broader Middle East*. [online], KKI elemzések, 2008. Source: kki.hu [23.05.2022]
- Nax, A. Natalie: *The Indus Water Treaty and Climate Change*. Thesis. [online], University of Oregon, 2019. Source: scholarsbank.uoregon.edu [12.05.2022]
- Siccardi, Francesco: *Why Has Erdogan Ramped up Turkey's Clash with the PKK?* [online], Foreign Policy, 23.05.2022. Source: foreignpolicy.com [02.01.2023]
- The Global Peace Index Report 2018*. [online], Institute for Economics and Peace, 2018. Source: reliefweb.int [05.07.2022]
- Transboundary Waters. [online], UN Water, 2021. Source: unwater.org [22.04.2022]
- Turkey, Syria and Iraq: *Conflict over the Euphrates–Tigris*. [online], Climate Diplomacy, 2009. Source: climate-diplomacy.org [06.05.2023]
- UN World Water Development Report 2022*. [online], UN Water, 2022. Source: unwater.org [14.11.2022]
- Veilleux, Jennifer C.: *Relationship Between Freshwater Resources, Socio-Cultural Dynamics and Geopolitical Stability*. [online], Oregon State University, 2021. Source: researchgate.net [03.02.2021]
- Wolf, Aaron T. (2008): Healing the Enlightenment Rift: Rationality, Spirituality and Shared Waters. *Journal of International Affairs*, 61(2), 51–73. Online: <https://transboundarywaters.science.oregonstate.edu/sites/transboundarywaters.science.oregonstate.edu/files/Publications/Wolf-Healing%20the%20Enlightenment%20Rift%2008%20FINAL.pdf>

Tamás Csiki Varga<sup>1</sup>

## Enabling Factors of Deepening the Visegrád 4 Defence Cooperation<sup>2</sup>

*The Visegrád countries occasionally step up as a “political block” through highly visible political declarations and began to practically expand their cooperation to include defence after 2011. This has often been considered a breakthrough achievement, but the long-term strategic prospects, the “depth” of this new formation of sub-regional defence cooperation is scarcely analysed. Based on European lessons learnt, this study offers a novel qualitative analysis focusing on the V4, measuring their cooperation in the light of enabling conditions of successful defence cooperation in the period 1999–2019. Reflecting on significant shortcomings identified, the author argues that much remains to be done if the V4’s ambitious strategic plans on defence, outlined until 2032, are to be realised, particularly regarding political and technical conditions.*

**Keywords:** Visegrád countries, Central Europe, defence cooperation, armed forces, strategy

### Introduction

Central European sub-regional defence cooperation initiatives emerged only after the 2008 economic crisis and started to gain scholarly attention afterwards. The cooperation of the Visegrád countries, active since 1991, created a definite defence policy dimension from January 2011, becoming more and more ambitious throughout the years and drawing up long-term strategic plans for deepening this cooperation up until 2032. However, the long-term strategic prospects, the “depth” of the cooperation has not been analysed yet. Without such analysis, it is hard to judge, whether the cooperation of the V4 in the field of defence bears the prospects of elaborated, truly aligned and meaningful, mutually strengthening relations, having a solid value and interest-based fundament, or more driven forward by spectacular but empty or half-hearted political declarations and limited military pragmatism. Not only from academic and analytical points of view, but also for its policy relevance, understanding the coherence (or divergence) of enabling conditions for such strategic cooperation is important, though uncovered so far.

To name a clear-cut example: one can observe a contradiction between the highly visible defence cooperation that is attractive to sell in political communication,<sup>3</sup> and the low-key practical deliverables that the V4 yielded so far, if we take a closer look even at the

---

<sup>1</sup> Senior Research Fellow, University of Public Service, Institute for Strategic and Defense Studies. E-mail: [csiki.tamas@uni-nke.hu](mailto:csiki.tamas@uni-nke.hu)

<sup>2</sup> Supported by the ÚNKP-20-4-II-NKE-93 New National Excellence Program of the Ministry for Innovation and Technology from the Source of the National Research, Development and Innovation Fund.

<sup>3</sup> WEISS 2012; LORENZ 2013; SUPLATA 2013a.

most significant achievement, the V4 EU Battlegroup.<sup>4</sup> Despite the triumphant communication that sold the establishment of the V4 BG, the main shortcoming in this regard is that the Battlegroups, along their current rules of engagement, are dysfunctional. This is shown by the fact that they have never been deployed by the European Union to any crisis management operation. The reasons for this are manifold: the lack of political consensus about the need and mandate of deployment as well as the rules of (military) engagement, the unfavourable financing mechanism that puts much of the financial burden on the participating states, diminishing their will to participate, and the potential capability shortcomings that make deployment and sustained action much of a challenge.<sup>5</sup> These issues had not successfully been addressed by the V4 either, moreover, their international ambitions in these regards significantly differ (learn more about their strategic culture and international goals below in this paper). Despite this, as defence cooperation had become a hot topic both within NATO and at the EU level after the Russian aggression against Ukraine in 2014, V4 leaders could use the opportunity and the high visibility of this “flagship project” to highlight their united efforts as a political block. This image became handy during their political quarrels with EU institutions regarding immigration, border security, internal security, rule of law etc. issues in subsequent years. This has been a low-risk achievement, as the establishment of the joint unit required limited effort, yet it yielded maximum political capital, while still there is no realistic option that among the current circumstances any EU BG would/could be deployed due to political and financial obstacles. However, establishing their long-term defence cooperation on political communication and short-term political yield would be a mistake. This paper will outline what more needs to be added and developed along the international lessons learnt from successful examples of regional defence cooperation.

Therefore, after outlining the motives for proliferating multinational defence cooperation in Europe and particularly in Central Europe, this paper provides an overview of the development of sub-regional defence cooperation of the V4. Having this focus, the author aims at offering a qualitative case study analysis of the 14 enabling conditions of successful defence cooperation identified by Valásek<sup>6</sup> and Zandee et al.,<sup>7</sup> aligned in 3 groups (strategic, political, technical enablers) to estimate the realisation prospects of the V4's future plans. Based on examining a broad cluster of practical examples of multinational defence cooperation and their lessons learnt, these conditions had been identified as the following: the similarity of strategic cultures; trust and solidarity; similar sizes and specificities of the armed forces; comparable defence industries; low corruption in the defence sphere; realism, clarity and seriousness of intentions; sovereignty and autonomy; geography and historical background; the number of partners; simultaneous top-down political and military leadership and bottom-up engagement; mindset, defence culture and organisation; defence planning alignment; standardisation and interoperability; and the involvement of parliaments.

<sup>4</sup> CSIKI 2017: 177–178.

<sup>5</sup> MAJOR–MÖLLING 2011; HATZIGEORGOPOULOS 2012; REYKERS 2017.

<sup>6</sup> VALÁSEK 2011: 21–26.

<sup>7</sup> ZANDEE et al. 2016: 4–6.

The qualitative analysis of these conditions serves to answer the question: What is the “strategic depth” of the Visegrád defence cooperation considering the long-term plans that had been drafted up until 2032? The author will argue that much remains to be done, especially in the field of creating joint capability planning, developing the parliamentary dimension of the cooperation, and harmonising decision-making that would move the cooperation beyond the pooling of capabilities towards deeper formats, such as joint acquisitions or role and task sharing.

Based on the currently available literature, there are fundamental elements of this cooperation that lack scholarly research – to which the current paper will offer remedy within the boundaries of available information. First, the Visegrád 4’s strategic culture has not been compared systematically yet, this paper will offer a concise comprehensive assessment. Second, there are sporadic empirical studies, public opinion polls available on trust and solidarity towards each other regarding both the population and policy shapers of the V4, and this study will summarise and compare some of these to get a more complete picture. Third, several technical aspects of the cooperation, identified as enabling conditions, have not been examined yet, such as the specificities of armed forces (size, force profile, mission goals, international affiliation), production capabilities of national defence industries, or the risks of defence corruption. Based on the limited available information, this paper will start the analytical process that should be further elaborated by focused in-depth research. Fourth, further enabling conditions had not been examined even superficially yet, most likely due to the lack of available information or difficult access to information regarding the four countries’ national defence establishments and militaries. These include top-down political and military leadership and bottom-up engagement, the alignment of defence culture and organisation, as well as of defence planning; the interoperability of the armed forces and the involvement of national parliaments. The aim of this paper is to signal the need of continued elaborated research regarding these aspects, while offering general assessment where possible.

To offer a comprehensive evaluative framework for the V4 defence cooperation and provide in-depth answer to the research question, first the study explains how multinational defence cooperation has become an important policy field and scholarly research topic with a Central European focus. Then following the outline of the research methodology, the so far achieved results of this cooperative format are listed, identifying the scale of intensity of these activities, and pointing out that there is still much way forward to go in order to create elaborated in-depth cooperation. Finally, the analysis of those enabling conditions follows, that could make such deeper cooperation happen, pointing out the specific strategic, political, and technical aspects that are still missing.

## **How has studying multinational defence cooperation gained relevance in (Central) Europe?**

Multinational activities aimed at defence capability development have been multiplying in Europe after the Cold War ended, through regional (pan-European), as well as

sub-regional<sup>8</sup> initiatives (NORDEFECO, Baltic defence cooperation, Central European cooperation initiatives) both in multilateral and bilateral frameworks, first within NATO during the 1990s, then also in the European Union after the turn of the millennium. Since then capability development has been broadened and deepened throughout Europe in various aspects. On the one hand, greater roles were given to minilateral,<sup>9</sup> sub-regional formats of cooperation, uniting a small number of states in a joint effort, besides comprehensive NATO and EU initiatives. Thus, also those sub-regions – like Central Europe – could newly design, form and join multinational defence cooperation projects, that had not been active in this field before. While on the other hand, multinational defence cooperation programs have encompassed more and more areas and evolved into more complex forms. After the turn of the millennium both regional organisations began to coordinate multinational defence cooperation more closely and align it with their capability planning systems (the NATO Defence Planning Process on behalf of NATO, Headline Goals, European Capability Planning, Permanent Structured Cooperation on behalf of the EU). These gained further political support as a result of the resource scarcity caused by the effects of the 2008–2009 financial and economic crisis.

Scholarly research on preserving and developing military capabilities in the post-bipolar era can rely on a wide basis of academic literature.<sup>10</sup> As these sources show, comprehensive, systemic research in this field has been induced by practical problems, as intensifying multinational military capability development has been triggered by numerous factors: emerging challenges from a continually transforming security environment;<sup>11</sup> the need for joint action to tackle emerging crises;<sup>12</sup> the will for establishing European strategic autonomy;<sup>13</sup> decreasing defence funds,<sup>14</sup> increasing defence inflation,<sup>15</sup> resource-intensive research and development in the defence sector,<sup>16</sup> as well as symbolic reasons.<sup>17</sup> Based on this literature, we can say that there are generally two approaches for studying European (regional) defence cooperation: on the one hand examining institutionalised processes within the European Union and NATO in a top-down manner, while on the other hand through identifying and analysing converging national interests and the ensuing practical

<sup>8</sup> The notions of 'region' and 'sub-region' vary across the academic literature depending on whether the analytical unit, 'region' was interpreted in the wider sense as Eurasia (regional security complexes theory or the approach of the Organization for Security and Cooperation in Europe), and the Transatlantic region, within which Europe itself would be a sub-region; or the analytical framework is Europe as a region, within which smaller geographical units, such as Central Europe are identified as 'sub-regions'. In this paper I use the terminology 'Central European sub-regional defence cooperation', referring to cooperative formats within this sub-region of Europe.

<sup>9</sup> See MORET 2016: 2.

<sup>10</sup> PALIN 1995; MOSKOS et al. 2000; ALEXANDER–GARDEN 2001; JONES 2007; HARTLEY 2006; MÉRAND 2008; MATLARY 2009; KING 2005; BISCOP 2013, BISCOP–COELMONT 2013; MAJOR–MÖLLING 2013; MISSIROLI et al. 2013; NÉMETH 2014.

<sup>11</sup> JONES 2007.

<sup>12</sup> MÉRAND 2008; BISCOP 2013.

<sup>13</sup> MAJOR–MÖLLING 2013; MISSIROLI et al. 2013.

<sup>14</sup> KING 2005.

<sup>15</sup> ALEXANDER–GARDEN 2001.

<sup>16</sup> HARTLEY 2006.

<sup>17</sup> STEIN 1993; PALIN 1995.

cooperation that emerges in a bottom-up manner. This paper follows the latter endeavour of understanding bottom-up initiatives, focusing on the Visegrád countries.

Moreover, we could also witness several cases of sub-regional defence cooperation dating back to the Cold War.<sup>18</sup> By now the cooperation of the Nordic states (NORDEF) has become the most developed and complex sub-regional defence cooperation framework in Europe.<sup>19</sup> Compared to these, Central European sub-regional defence cooperation initiatives emerged much later, and have not gained notable scholarly attention before the 2008 economic crisis. The Central European Defence Cooperation (CEDC/CEDI)<sup>20</sup> gained momentum from October 2010,<sup>21</sup> while the Visegrád cooperation became more active from January 2011, also gaining more scholarly attention both in a descriptive and comparative manner, primarily from regional experts.<sup>22</sup> These sources shed some light on the motives and drivers of the cooperation, some<sup>23</sup> also offer policy recommendations for broadening and deepening various aspects of the cooperation, though the necessary conditions for achieving success are not examined.

Based on this overview of literature we can conclude that the Visegrád countries' defence cooperation has been gaining more scholarly attention, but systemic analyses on its drivers and prospects are missing. One such endeavour was the elaborate work undertaken previously by Csiki<sup>24</sup> that examined the Visegrád 4's strategic culture, threat perception, converging or diverging national defence interests and the ensuing practical cooperation in a bottom-up manner.

Following upon this exploratory work and extending the focus of examination to the 14 enabling conditions of successful defence cooperation identified by Valásek<sup>25</sup> and Zandee et al.,<sup>26</sup> this paper is aimed at pointing out where the gaps are and if the promise of integration actually corresponds to the political proclamations in the case of the V4. These enabling factors are aligned here in 3 groups (strategic, political, technical enablers), and the following parts will offer an overview of the broadening and deepening of the V4 cooperation in the field of defence in order to map up the foundations and future strategic directions of the cooperation for which political commitment has already been undertaken. First, a qualitative analysis will evaluate the intensity of the cooperation along the scale of various pooling and sharing solutions for military capabilities to show

<sup>18</sup> BAILES 1999; COTTEY 1999, 2000.

<sup>19</sup> BÁTORA–MATLARY 2012; JÄRVENPÄÄ 2017.

<sup>20</sup> Central European Defence Cooperation (earlier Central European Roundtable on Defence Cooperation, currently also as Central European Defence Initiative – CEDI) is a non-institutionalised defence collaboration framework among Austria, Croatia, the Czech Republic, Hungary, Slovakia and Slovenia in which participating states discuss and realise practical initiatives for defence capability development that can be realised on the ground in the short term (CSIKI–NÉMETH 2011: 15).

<sup>21</sup> MOLNÁR–CSIKI 2010; CSIKI–NÉMETH 2012.

<sup>22</sup> KRON–BALOGH 2012; BALOGH 2013; MADEJ 2013; VALÁSEK–SUPLATA 2012; SUPLATA 2013b; MAJER 2015.

<sup>23</sup> VALÁSEK–SUPLATA 2012; SUPLATA 2013b; MAJER 2015.

<sup>24</sup> CSIKI 2017.

<sup>25</sup> VALÁSEK 2011: 21–26.

<sup>26</sup> ZANDEE et al. 2016: 4–6.

the limits of the achieved results versus the room for possible extension in the future. This is followed by the evaluation of the 14 enabling conditions that would increase the chances of realising the adopted long-term plans.

## Research methodology

The methodology of the paper rests on two pillars. First, the content and intensity of the cooperation will be mapped up, then a qualitative assessment will be undertaken to uncover what future prospect the V4 cooperation might hold in the light of lessons learnt from existing European multinational defence cooperation formats.

As the first step, the overview of the evolving defence cooperation of the Visegrád countries in the next sub-section will scale the intensity of the cooperation. The analysed period spans 20 years, from the end of the 1990s, when the harmonisation of their foreign policies was articulated as a shared aim and the first defence ministerial was also held (1999), until 2019 when the V4 EU Battlegroup was on standby for the last time. The intensity of the cooperation is evaluated with regards to the broader theoretical categories of capability pooling and sharing: 1. sharing of capabilities; 2. pooling of capabilities; 3. pooling through acquisition; and 4. role and task sharing.<sup>27</sup> Within these the first category, the sharing of capabilities (1) is the least intensive, giving up minimal national sovereignty for the sake of cooperation (e.g. the coordination of training and maintenance activities), not integrating force structures or sharing any command and control authorities, thus creating only very limited dependence on the partners. Going further, when the pooling of capabilities (2) occurs, some national capabilities are integrated into a joint force structure of the participating countries, while the command of the forces remains under national control. In these cases (e.g. when creating multinational units, such as an EU Battlegroup), it is the coordinated force planning process that decreases personnel and logistics costs. Pooling through acquisition (3) takes place when partner countries align their force development to such an extent that those capabilities that are lacking from their national armed forces but are deemed necessary are procured and then operated together with joint funds (e.g. NATO's Strategic Airlift Capability). Either realised through joint acquisition (of available off-the-shelf equipment) or co-development (of new equipment), this results not only in the reduction of costs for the individual nations, but also in a significant degree of sovereignty sharing, namely dependences on the others. The most intense form of cooperation, role and task sharing (4) would require the highest level of trust and results in the highest degree of dependence, when one country is lacking or must give up a certain capability and supposes that the other partner will provide this (e.g. in case of Baltic Air Policing).

This assessment is useful to point out that compared to other, more developed and complex functional examples of regional defence cooperation, the V4 have engaged in defence cooperation only through the pooling and sharing of capabilities. This ensures that the command of their cooperating armed forces remains under national control, and

---

<sup>27</sup> CSIKI-NÉMETH 2012: 3–5.

they only need to accept slight limitations on their sovereign decision-making and they only need to undertake weak dependence on their partners. Other European examples of defence cooperation, such as NORDEFECO or various formats in Western Europe with Benelux or German participation, show that going along the way of truly integrating some parts or functions of their armed forces would require way more concessions from them. In order to show what exact functions and cooperative elements are missing, namely where the gaps are and if the promise of integration actually corresponds to the political proclamations in the case of the V4, the second part of the analysis will show where the V4 fall short of deep, elaborate defence cooperation.

In this second step, a qualitative case study analysis of the 14 enabling conditions of successful defence cooperation, identified by Valásek<sup>28</sup> and Zandee et al.<sup>29</sup> will be undertaken to estimate the realisation prospects of the V4's future plans. To ensure a clear focus, these will be aligned in 3 groups (strategic, political, technical enablers). The converging or diverging characteristics regarding these enablers – or preconditions – will show the obstacles due to which the current level of cooperation has not been surpassed. Also, these obstacles, or shortcomings identify those areas in which national governments can boost their efforts to overcome these if they truly want to create deeper and more capable defence cooperation, as envisaged by their long-term defence plans.

When conducting this comparison, in some respects we can rely on empirical research results (such as measuring public opinion or elite attitudes, surveying the potential of defence corruption) or hard data (some characteristics of the armed forces or production potential of national defence industries). In other cases, we can use national strategic documents and joint declarations, as well as long-term plans for the modernisation of the armed forces. While in a number of cases such assessment can be done through evaluating the ongoing political discourse and debate at national, regional and also at European levels.<sup>30</sup> At the same time, some aspects are more challenging to uncover, like the technical working-level progress of cooperative programs, as the sharing of information by the defence establishments of the V4 is limited.

Upon concluding the assessment of the 14 enabling conditions, here, aligned in three functional groups to ensure a clear understanding, I will identify those areas which, compared to other European models, are functional – versus those that lack the necessary depth, content and attention on behalf of decision-makers. Those that are functional serve as the basis of the evolving cooperation formats, while those that are underdeveloped contribute to the incomplete nature of the V4 defence cooperation format.

<sup>28</sup> VALÁSEK 2011: 21–26.

<sup>29</sup> ZANDEE et al. 2016: 4–6.

<sup>30</sup> Observing the wider discourse is relevant because in recent years the sub-regional defence cooperation of the V4, that had been established to complement NATO and EU capability development, became embedded in the wider political debate about the reform and future of the European Union, with the V4 often appearing as a political pole standing up against EU institutions. These debates, in the mid- to long-term, will definitely affect the ability and willingness of the V4 to formulate their joint cooperative endeavours, predetermining the “seriousness of intent” to work together in such sensitive fields as defence that would require a significant degree of sovereignty-sharing.

## What have the V4 achieved in the field of defence cooperation and what lies ahead?

The first move of the V4 to include security and defence-related issues in their cooperation was the adoption of their Kromeríz Declaration in 2004.<sup>31</sup> Throughout the following years the V4 Prime Ministers in a general sense supported the elaboration of EU CSDP as well as the European Neighbourhood Policy, further enlargement plans for both the European Union and NATO and subscribed to the evolving security and defence policy of both organisations. Their Bratislava Declaration of 2011, issued on the 20<sup>th</sup> anniversary of their cooperation, reinforced their endeavour to cooperate and possibly even further align their positions within both NATO and the EU, highlighting competitiveness, energy security and infrastructure development as current issues of mutual interest and importance on the European agenda.<sup>32</sup> In the same year, they also identified the establishment of a V4 EU Battlegroup (BG) as a shared aim at their defence ministerial meeting in Levoča (Slovakia), later on officially declared and agreed upon in Warsaw in 2013, elevating the V4 cooperation to a new level.<sup>33</sup>

Between 2012 and 2014 the V4 have deepened their defence cooperation step by step. In their joint declaration issued on the occasion of the NATO Chicago Summit, they signalled their intent to engage in joint capability development in the fields of air controller training (FAC/JTAC), Chemical, Biological, Radiological and Nuclear defence (CBRN), helicopter pilot training (MATC), joint logistics, medical treatment facilities, multinational experimentation, pooling maritime patrol aircraft, and training in Counter Improvised Explosive Devices (C-IED). In the coming months the Litoměřice Declaration (2012), the Warsaw Declaration (2013) and the Bratislava Declaration (2013) repeatedly reinforced these aims. The more frequent political messages can also be attributed to the recognition that the V4 must strengthen the visibility of the “V4 brand” to gain better leverage of their cooperation within the EU and more acknowledgement within NATO. (From the autumn of 2014, when the crisis in Ukraine began and since the conflict in Eastern Ukraine has been going on, issuing such declarations on defence efforts has become more challenging as these could not leave out the V4 joint position on Russia, regarding which the four countries take somewhat different positions.)

The October 2013 Joint Statement of the Visegrad Group Heads of Government on Strengthening the V4 Security and Defence Cooperation (Budapest) paved the way for adopting the Long-term Vision of the Visegrad Countries on Deepening their Defence Cooperation in March 2014. The Long-term Vision defined the foundations for their defence cooperation up until 2032, identifying the conceptual elements of capability development, the joint mechanisms of defence planning, the harmonisation

---

<sup>31</sup> Declaration of Prime Ministers of the Czech Republic, the Republic of Hungary, the Republic of Poland and the Slovak Republic on Cooperation of the Visegrad Group Countries after their Accession to the European Union. Kromeríz, 12 May 2004.

<sup>32</sup> Bratislava Declaration of the Prime Ministers of the Czech Republic, the Republic of Hungary, the Republic of Poland and the Slovak Republic on the Occasion of the 20th Anniversary of the Visegrad Group. Bratislava, 15 February 2011.

<sup>33</sup> WEISS 2012; VALÁSEK 2012; LORENZ 2013; PAULECH–URBANOVSKÁ 2014.

of multinational exercises and the aim of defence industrial cooperation. According to the Vision, both a high-level V4 Planning Group and practical Working Teams would be created to support the realisation of these aims. Furthermore, the Long-term Vision identified eight broad areas in which strategic cooperation is to be developed: 1. V4 EU Battlegroup; 2. cooperation in defence planning; 3. joint training and exercises; 4. joint procurement and defence industrial cooperation; 5. military education; 6. joint air control; 7. harmonising and promoting V4 joint positions; 8. communication strategy for the V4.<sup>34</sup>

In March 2015 five projects had been shortlisted as targets for short- to mid-term cooperation in the Joint Communiqué of the defence ministers: 1. training and exercises; 2. the creation of a Joint Logistics Support Group; 3. Chemical, Biological, Radiological and Nuclear defence; 4. training Joint Terminal Attack Controllers; 5. Special Operations Forces' Tactical Training. It is worth to note that this package was not over-ambitious at all as Central European countries (the V4 plus Austria, Croatia and Slovenia in various parallel formats) had been working on most of these for years by then. Besides, developing an Advanced Ground Combat Vehicle was also identified as “an area with a high potential for intensive cooperation among V4 countries and is thus worth further discussion”,<sup>35</sup> and the feasibility of conducting joint V4 airspace protection was set to be examined. Furthermore, according to the tasks set, the V4 Training and Exercise Strategy, including the 2016–2020 Midterm Plan of Training Opportunities was drafted and the work on creating the Visegrad Group Military Educational Platform (VIGMILEP) began. Last, but not least, the Action Plan of the Visegrad Group Defence Cooperation for the period July 2016 – June 2018 was adopted by the Slovak V4 presidency.<sup>36</sup>

However, practical deliverables regarding these elements have only been partial and the development – especially deepening – of the cooperation along these priorities has been losing momentum. Since the creation (2015) and activation of the ca. 3,700 troops strong V4 EU BG (2016) the defence cooperation of the Visegrád countries has blended into NATO's Readiness Action Plan and adaptation measures, such as strengthening the Enhanced Forward Presence. This is practically in line with the 2015 consensus that “all options related to the establishment of the Permanent V4 Modular Force operational for NATO and EU Rapid Reaction Forces as well as for crisis management tasks” should be discovered and evaluated. As a pragmatic measure, the recurrence of the EU BG in a mainly unchanged force structure and capability profile, but including Croatian troop contributions as well, in the second half of 2019 took place.

It is worth to note that the momentum of defence cooperation has weakened after 2015–2016, since when the European refugee crisis overtook the political agenda and the V4, and their Central European partners began to (temporarily?) shift the focus of cooperation towards border control and the management of mass migration.<sup>37</sup> This shift was driven not only by security needs (as the Balkans wave of mass migration halted by the end of 2015 and both the European Union, its member states and third countries

<sup>34</sup> Long Term Vision of the Visegrad Countries on Deepening their Defence Cooperation. Visegrad, 14 March 2014.

<sup>35</sup> Joint Communiqué of the Visegrad Group Ministers of Defence. Tomášov, 23 April 2015.

<sup>36</sup> Report of the Slovak Presidency of the Visegrad Group, July 2014 – June 2015.

<sup>37</sup> NÉMETH 2018.

adopted preventive measures), but also by the political aim to keep the anti-immigration V4 position visible within the European Union by tying it to the “V4 brand” in every possible aspect. Defence cooperation, on the contrary, seems to have lost its priority position.

As we have seen, a multitude of high-level political declarations and strategic planning documents have been adopted by the V4, and these could/can serve as the foundation of deeper defence cooperation with practical deliverables. As Table 1 shows, we can evaluate these achievements and plans against the scale of pooling and sharing formations to get a picture of the current and possible intensity of the cooperation in terms of sharing sovereignty, command and control, etc., resulting in increasing degrees of political, financial and functional dependence. The current form of the V4 defence cooperation – primarily because of the recurring V4 Battlegroup – fits into the second category, the pooling of capabilities, which takes place “when national capabilities are integrated into an international force structure, while the command and control of these forces is still retained by national authorities. In this case it is the integrated and coordinated force planning process that decreases the costs of personnel and logistics”.<sup>38</sup>

**Table 1: The intensity of realised and planned defence cooperation of the V4 in terms of pooling and sharing**

	Characteristics of cooperation	Example	Current V4 cooperation	Future V4 cooperation
<b>Role and task sharing</b>	When a state needs to give up a certain capability and another country makes this capability available in case of need.	Belgian and Dutch navies: Belgium provides logistics and maintenance of minesweepers for both countries, while the Netherlands provides the same for both navies' frigates.	–	<i>Developing niche capabilities or providing for certain air policing and air defense functions.</i>
<b>Pooling through acquisition</b>	Joint acquisition: countries join to purchase, maintain and operate a capability. Very cost-effective, but significantly reduces sovereign national control over the assets.  Co-development: countries begin to jointly develop and produce an asset that they individually could not afford	NATI Airbone Warning and Control System (AWACS), Strategic Airlift Capability (SAC), Alliance Ground Surveillance (AGS)  Eurofighter Typhoon fighter jets, A400M military transport aircraft, Eurocopter helicopters	–	<i>V4 Advanced Ground Combat Vehicle</i>
<b>Pooling of capabilities</b>	National capabilities integrated into an international force structure, force planning process coordinated. Command and control still retained by national authorities, operation costs fall upon countries in proportion of participation.	Multinational corps: EU Battlegroups, NATO Response Force, Eurocorps.	Recurring V4 EU Battlegroup (2016, 2019)	Permanent V4 EU Battlegroup / NATO Response Force rotations



I  
N  
T  
E  
R  
N  
A  
T  
I  
O  
N  
A  
L

<sup>38</sup> CSIKI-NÉMETH 2012: 3.

<p><b>Sharing of capabilities</b></p>	<p>Based on national capabilities, force structures are not integrated into a single international force structure. Command and control are retained by national armed force, operational costs fall upon countries in proportion of their participation. National governments retain their sovereign control.</p>	<p>Coordination of multinational education, training and maintenance activities, the drafting of joint doctrines, the enhancement of interoperability and the exchange of information.</p>	<p>V4 joint trainings</p>	<p>Extending V4 joint trainings, creating joint military education, establish shared maintenance programs.</p>
---------------------------------------	--	--	---------------------------	--



*Note: Shaded areas represent future – still unrealised – cooperation possibilities, italics highlight cooperation formats that would be more intense than the current programs.*

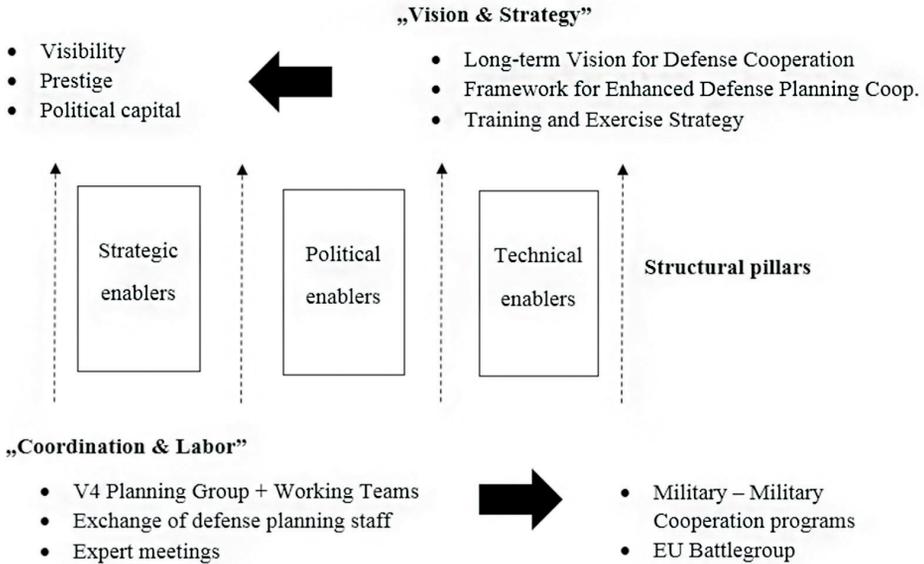
*Source: Compiled by the author.*

The long-term strategic goals that had been defined prior to 2016 also include deeper cooperation and integration formats, such as joint acquisition and pooling through acquisition (examining any potential cases when two or more states can procure and operate any assets together), co-development (of the V4 Advanced Ground Combat Vehicle), as well as role and task sharing (developing niche capabilities or providing for certain air policing and air defence functions). We are still to see whether the V4 would go down the road to undertake such steps. To get a better understanding of the chances of realisation, the earlier mentioned enabling conditions of defence cooperation are assessed in the following part.

### **The enabling conditions of (and obstacles to) deeper V4 defence cooperation**

Beyond the theoretical categorisation we also possess practical measures to assess how long the V4 have gone down the road of defence cooperation: the lessons learnt from existing formats of sub-regional defence cooperation are summarised by Valásek and Zandee et al. These 14 enabling conditions are aligned in 3 groups in the following part: strategic, political and technical enablers are assessed for members of the V4 group. The importance of such assessment is that these enabling conditions serve as the connection between short-term practical activities and the long-term strategic goals. These pillars – as shown in Figure 1 – underpin the realisation prospects of the long-term goals for the next 15 years. The weakness, or lack of synergy in these fields will make the deepening of defence collaboration less likely, limiting the prospects of V4 cooperation. The assessment that follows will build upon the research previously done by Csiki.<sup>39</sup>

<sup>39</sup> CSIKI 2017.



**Figure 1: The structural pillars (14 enabling preconditions organised into strategic, political and technical enablers) that connect the current cooperation activities to long-term strategic goals and should underpin them**

*Source: Compiled by the author.*

## **Strategic enablers**

Strategic enablers are geographical and historical background, the number of partners involved and the similarity of strategic cultures of the participating countries. Assessing the geographical position (geopolitics) and historical background is important to identify the determining external relations, such as alliances and conflicts, the relation to great powers and the use of military force, based on historical experience. Even though in case of the Visegrád countries the general approach is that ‘Central European’ countries share their historical past, we can observe certain differences that influence their ability to foster defence cooperation. The most important of these is the relation to Russia. Poland, on the one hand, is primarily exposed to effects from Eastern Europe, its geopolitical focus is primarily set on the region and the historical background predetermines the vivid threat-awareness from Russia, due to which Warsaw is much preoccupied with territorial defence and ensuring direct defence guarantees from NATO and bilaterally from the U.S.<sup>40</sup> Even though the other three countries share the historical experience of being members of the Eastern Block during the Cold War, the Czech Republic and Hungary in spite of the experience of Soviet interventions to suppress democratic revolutions, they are not so much anti-Russian in their perceptions and policies these years. Hungary, on

<sup>40</sup> KNEZOVIC 2015.

the other hand, is primarily exposed to effects from the Balkans, its geopolitical focus is primarily the Southern neighbourhood.<sup>41</sup> Also, because the Czech Republic, Hungary and Slovakia are small states with a narrow geopolitical focus, and the middle power Poland is more concerned with territorial defence than crisis management in other regions,<sup>42</sup> it is more likely that these countries would be willing to create joint structures with a Central European territorial defence purpose for the longer term, not so much “expeditionary forces” for crisis management – unless major allies, such as the U.S. would trigger them to participate in such operations, as we had witnessed in case of Iraq and Afghanistan. Great power intervention both from the East and the West, in any case, is a determining historical factor across the region.<sup>43</sup> Another factor that should be kept in mind is the historical background of the V4 themselves, in which regard the 20<sup>th</sup> century track-record signs the potential of friction between Hungary and Slovakia about national minorities. There seems to be a 2 + 2 formation in place among them, with Hungary and Poland having an idealised, historically supportive relation towards each other, and Slovakia and the Czech Republic sharing a better understanding based on their shared state until 1993.

The limited number of partners, namely the non-institutionalised minilateral cooperation of the four countries should offer room for discussion both in terms of political and technical aspects. Still in this regard, the more substantial capabilities of Poland that would enable Warsaw to step up as the “lead nation of the V4”, should be subject for discussion, whether this would be desirable, necessary or avoidable.

The elements of strategic culture<sup>44</sup> of the V4 show important discrepancies in various regards. We can see somewhat varying positions with regards to the prioritised role of NATO and Atlanticism in general, which is strongest by far for Poland, accompanied by strong U.S. bilateral relations and underpinned by operational commitment.<sup>45</sup> The U.S. is identified as a bilateral strategic partner for Slovakia as well. NATO is defined as the cornerstone of Hungary’s security,<sup>46</sup> and is prioritised in security and defence for Slovakia as well.<sup>47</sup> Czech defence policy grants formally equal role for both NATO and the EU, while operational commitment and capability development is strongly tied to NATO. The support provided for EU Common Security and Defence Policy (CSDP) programs, such as PESCO is the strongest for Slovakia (even leading one project, the Indirect Fire Support Capability – “EuroArtillery”). For Hungary, the participation in the CSDP is granted but the general sovereignty protection and opposition to further deepening of the European integration contradicts meaningful commitment to EU programs, such as PESCO.<sup>48</sup> Similarly, the strong tradition of Euroscepticism questions the meaningful commitment to structured EU defence cooperation in the Czech Republic,<sup>49</sup> while in

<sup>41</sup> TÁLAS–CSIKI 2013: 171.

<sup>42</sup> TERLIKOWSKI 2013: 273.

<sup>43</sup> SIRÉN 2009: 211.

<sup>44</sup> On the concept and operationalisation of strategic culture see BIEHL et al. 2013: 13–16.

<sup>45</sup> TERLIKOWSKI 2013: 269–273.

<sup>46</sup> Government Resolution 1035/2012 (21.II.) on Hungary’s National Security Strategy: 11.

<sup>47</sup> White Paper on Defence of the Slovak Republic. Bratislava, 2016: 42.

<sup>48</sup> CSIKI 2017: 148–149.

<sup>49</sup> JIREŠ 2013: 71.

Poland EU CSDP has gained in importance in the past couple of years but the primacy of NATO is unquestionable.<sup>50</sup> For the Czech Republic and Hungary, the strengthening of ties with Germany is also observable.

International ambitions are limited in all four cases, while for Poland the primary focus of foreign policy is the Post-Soviet region and Eastern Europe,<sup>51</sup> for Slovakia Eastern Europe and the Balkans,<sup>52</sup> for Hungary Central Europe and the Balkans<sup>53</sup> and for the Czech Republic the wider Euro-Atlantic region.<sup>54</sup> This has a determining impact on threat perceptions, as well as on the political will to participate in any military or defence-related activities (be it collective defence, stabilisation or crisis management) in the East or in the South. These not fully overlapping foci of interest foreshadow conflicting positions about where, for what purpose, under what kind of mandate and in what format should and could joint forces be deployed in any future operation.

The lessons learnt on the use of military force from the past two decades' international engagements show that the four countries have similar aims and means, taking mostly combat support and support roles, primarily relying on their land forces and to some extent on special operations forces (SOF) – with the exception of Poland, willing to undertake combat roles and higher levels of engagement if allied requests (particularly on behalf of the U.S.) justify it.<sup>55</sup> The decision-making process regarding defence issues is somewhat aligned as the necessity to be able to participate in NATO and EU (rapid reaction) collective defence operations required all allies to introduce swift, government-centred decision-making schemes. However, necessary *post factum* approval of national parliaments or the President in the case of Poland might make maintaining such engagement more challenging.<sup>56</sup>

### **Political enablers**

Political enablers are respective countries' relation to sharing their sovereignty or retaining their autonomy, trust and solidarity towards each other, realism, the clarity and seriousness of intentions, the involvement of parliaments and low corruption in the defence sphere.

The political willingness of the V4 to form structured, strategic cooperation with each other is much predetermined by their general stance towards sharing sovereignty versus retaining autonomy. This issue lies at the heart of many political debates across the European Union – and the Visegrád countries in general stand for the strengthening of nation states' sovereignty. Hungary and Poland particularly aim at ensuring the strong

<sup>50</sup> TERLIKOWSKI 2013: 273–274.

<sup>51</sup> TERLIKOWSKI 2013: 272.

<sup>52</sup> NICOLINI et al. 2013: 307–309.

<sup>53</sup> Government Resolution 1035/2012 (21.II.) on Hungary's National Security Strategy: 12.

<sup>54</sup> Security Strategy of the Czech Republic. Prague, 2015: 8.

<sup>55</sup> White Book on the National Security of the Republic of Poland. Warsaw, 2013: 12; National Security Strategy of the Republic of Poland. Warsaw, 2014: 20–21.

<sup>56</sup> TERLIKOWSKI 2013: 269.

protection of national sovereignty,<sup>57</sup> which goes directly against the sharing of responsibility for political and military decisions, command and control, and increasing mutual dependence. The stance of Slovakia in this regard is more moderate due to its Eurozone membership.<sup>58</sup> This contradictory situation has not been addressed by the V4 so far.

We can get an idea of trust and solidarity among the V4 based on public opinion polls extending to all four countries. This should be further elaborated by focused opinion polls carried out among decision-makers, policy influencers, and members of the military as well to get a clearer picture. What we see now is an unbalanced picture: the majority of respondents would stand behind allied nations in case of an attack, with very strong support in Poland (90%), strong support in the Czech Republic (70%) and Hungary (68%) and majority support in Slovakia (54%).<sup>59</sup> Regarding trust, the 2 + 2 formation is observable again: the Czech and the Slovak, as well as the Poles and the Hungarians show rather strong mutual trust towards each other. For Czech respondents, trust towards Slovaks (79%) is strongest, followed by Poles (58%) and Hungarians (37%). For Hungarian respondents, trust towards Poles (58%) is strongest, followed by Slovaks (40%) and the Czech (40%). Trust for Polish respondents is rather equally strong towards Slovaks (69%), Czechs (61%) and Hungarians (61%). Slovak respondents trust the Czech most (78%), followed by the Poles (44%) and the Hungarians (30%) with considerably lower levels of trust.<sup>60</sup>

As for estimating the clarity and seriousness of intentions, one must note that even though general plans for strategic cooperation until 2032 had been drafted in the Long-term Vision in 2014, addressing three areas – 1. capability development, joint procurement and defence industrial cooperation; 2. creation of multinational units (a regional, modular force that is regularly offered to NATO and the EU); 3. improving common training, education and exercises – the possible divisions are not addressed even at the strategic level. Among those noted here and further below, the different geopolitical foci, the distinct relations to great powers, especially to Russia, the lack of a shared vision for the deployment/operational use for the EU Battlegroup or any subsequent recurring or permanent format seem to be the most decisive challenges. Looking forward, the significant differences in qualitative enablers, such as parliamentary involvement and popular support, the low-level involvement of the military, limited ambitions to work on a V4 defence identity and culture; as well as gaps in practical enablers, such as high-level information sharing, better aligned defence planning, cooperative defence industry projects are also clearly visible. Avoiding the discussion of these basic issues also questions somewhat the seriousness of intent for the long-term strategic cooperation at the highest political and military levels. As an additional factor, the popular support for the V4 cooperation

<sup>57</sup> Workshop discussion with Polish foreign policy expert in Budapest on 8 December 2016.

<sup>58</sup> Workshop discussion with Slovak foreign policy expert in Budapest on 8 December 2016.

<sup>59</sup> Answering the question: “Would you help defend your NATO allies in case of an attack?” MILO et al. 2017:17.

<sup>60</sup> Answering the question: “To what extent can we trust and rely on the following nations?” Responses for “definitely trust + rather trust” and “rather distrust + definitely distrust” are merged; the opinion about 12 nations (Americans, Austrians, British, Croats, French, Germans, Hungarians, Poles, Russians, Slovaks, Slovenians and Ukrainians) had been surveyed. GYÁRFÁŠOVÁ–MESEŽNIKOV 2016: 20–21.

(in general) can be measured by public opinion polls: moderate support was witnessed in the Czech Republic (46%) and in Hungary (52%), with rather strong support in Poland (62%) and in Slovakia (75%).<sup>61</sup>

The parliamentary dimension of multinational cooperation could provide wider political support for joint endeavours not only among decision-makers, but also involving constituencies. However, MPs have not been involved in the development of the cooperation so far, it is primarily driven by prime ministers, ministers of defence/foreign affairs and Chiefs of Defence, Political Directors.<sup>62</sup> This leaves much room for deepening the embeddedness of the cooperation.

Another politically driven enabling factor would be the (expected) low level of corruption in the defence sphere. This can be examined based upon Transparency International's Government Defence Anti-Corruption Index that currently appears to be the best available tool, relying on a solid methodological background.<sup>63</sup> Even though Slovakia was not included in the last iteration of the index scores (2015), the Czech Republic and Hungary did show moderate risk of corruption in average with high risk in activities related to Procurement (both countries) and Operations (Czech Republic). Poland in general showed low risk of defence corruption, with high risk regarding Operations. As these two areas are likely to be the focal points of any future cooperation, much attention needs to be dedicated to counter this challenge, especially in the years to come, when the initiated defence modernisation programs will be executed.

### ***Technical enablers***

Technical enablers include the similar sizes and specificities of the cooperating countries' armed forces, comparable national defence industries, defence planning alignment, standardisation and interoperability among national armed forces, supported by similar mindset, defence culture and organisational culture, as well as simultaneous top-down political and military leadership and bottom-up engagement.

The comparison of the size and specificities of the armed forces show the clear distinction of the Polish Armed Forces, suitable for a European middle power in terms of personnel, equipment and defence budget, with a clear territorial defence profile.<sup>64</sup> Meanwhile, the other three countries started to modernise their relatively smaller armed forces later and with more limited resources. In this regard, Poland bears the potential to become a lead nation in any Central European multinational format, providing the

<sup>61</sup> GYÁRFÁŠOVÁ 2013: 103.

<sup>62</sup> Panel discussion with Czech, Polish and Slovak security policy experts in Budapest on 21 September 2018.

<sup>63</sup> Transparency International 2015.

<sup>64</sup> The Czech Republic: 21,750 active + 3,650 other military personnel; organised in 2 services (Army, Air Force); territorial reserve forces being set up; defence expenditure in 2020: 3,252 Bn USD. Hungary: 27,800 active + 20,000 reserve military personnel; 3 services (Army, Air Force, Logistics) organised into a joint force; territorial reserve forces to be set up; defence expenditure in 2020: 2,410 Bn USD. Poland: 123,700 active + 73,400 paramilitary military personnel; organised into 4 services (Land Forces, Air Force, Navy, Special Forces); territorial reserve forces being set up; defence expenditure in 2020: 13,027 Bn USD. Slovakia: 15,850 active military personnel; organised into 4 services (Central Staff, Army, Air Force, Support and Training); defence expenditure in 2020: 1,837 Bn USD. IISS 2020; SIPRI 2020.

operational headquarters, command and control and staff elements, if the others are willing to “plug in” their units.<sup>65</sup>

In terms of the defence industrial potential the situation is even more unbalanced.<sup>66</sup> Poland has regionally meaningful production capabilities with more advanced technology and tie-in to international production lines. The Czech and Slovak defence industries rather represent niche fields, while Hungary has very limited capacities in this field.<sup>67</sup> Meaningful cooperation based on this industrial background is more likely for the land forces’ equipment and regarding logistics or defence services. The proposed idea to co-develop and jointly procure an Advanced Ground Combat Vehicle type for the V4 thus might be a suitable target but would require careful planning for long-term production prospects (determining specifications, rational research and development schedule, economical production, export options).<sup>68</sup>

The ambition of creating a V4 Planning Group to align defence planning and procurement programs was articulated in 2014, working groups for coordination exist, though no proof of meaningful results in this field has been publicly disclosed. The major acquisition programs by Poland, the Czech Republic and Hungary in the past decade had been realised without coordination as for types of equipment.<sup>69</sup> Thus, the mutual and complementing knowledge of each other’s planning goals beyond the NATO Defence Planning Process is not ensured. Hungary has particularly not shared any concrete plans of its “Zrínyi – 2026” long-term modernisation plan beyond vague goals, and any information-sharing on procurement decisions has been *post factum* so far.

The strengthening of interoperability is primarily driven by NATO, though the highest level including all V4 countries is achieved within the EU BG. Standardisation is only occasional for some weapon systems (e.g. Gripen multipurpose jets both in the Czech and Hungarian Air Forces) and it is not incorporating all four countries’ armed forces. On similar grounds, there is a shared minimum of NATO and EU compatibility regarding the mindset, defence culture and organisation of the four countries aiming at defence cooperation, while the V4 EU Battlegroup serves mutual enculturation and the creation of a V4 organisational culture.

<sup>65</sup> IISS 2018: 94, 114–115, 135, 145.

<sup>66</sup> The Polish defence industry, made up of 200 security and defence companies altogether (some Tier 2 and one Tier 1 company), possesses production capabilities in several fields including advanced weapons systems, and is capable to produce for export as well, seeking further European and U.S. defence industry cooperation in producing major weapons systems. Czech defence industry has production capabilities in the fields of aircraft industry, firearms, CBRN and logistics, about 100 defence companies altogether, including some Tier 2 companies as well, making them able to produce for export (SZENES 2017: 7). Slovakia has much smaller defence industry and R&D capacities with about 35 security and defence companies altogether (no Tier 1 and 2 company), which are able to provide services for the land forces, mostly regarding vehicles, communication systems and ammunitions (Security and Defence Industry Association of the Slovak Republic s. a.). The Hungarian defence industry is almost non-existent (about 30 security and defence companies altogether, no Tier 1 and 2 companies, no export) with limited service capabilities, and lacking any meaningful R&D (CSIKI 2014: 131). This situation is only expected to change as a result of the ‘Zrínyi’ long-term armed forces development program.

<sup>67</sup> Security and Defence Industry Association of the Slovak Republic 2016; SZENES 2017: 7; CSIKI 2014: 131.

<sup>68</sup> Panel discussion with Czech, Polish and Slovak security policy experts in Budapest on 21 September 2018.

<sup>69</sup> Panel discussion with Czech, Polish and Slovak security policy experts in Budapest on 21 September 2018.

Last, but not least, the top-down political and military leadership and bottom-up engagement have not been systematically studied in any participating country so far, we can only make estimations of centralised top-level participation and hardly any bottom-up engagement based on consultations with members of national defence forces.

Summarising the qualitative analysis of these enabling conditions, we can conclude that much remains to be done among the Visegrád countries if their ambitious strategic plans regarding defence cooperation were to be realised. The long-term strategic plans that had been outlined in 2014 would require significant harmonisation and deepening especially in the fields of joint capability planning, information sharing, decision-making, also involving members of both the political and military, as well as MPs. Furthermore, broadening the strategic discourse to include currently unaddressed issues, such as the different geopolitical foci, relations to great powers, especially to Russia, the lack of a shared vision for the operational use for any joint military formation is necessary to ensure meaningful cooperation in the future.

## Conclusions

The cooperation of the Visegrád countries, active since 1991, created a definite defence policy dimension from January 2011, reaching its (currently) most complex form via establishing an EU Battlegroup, thus becoming more and more ambitious throughout the years and drawing up long-term strategic plans for deepening this cooperation up until 2032. Despite the fact that scholarly attention dedicated to multinational defence cooperation in Europe has been dealing with various cases, manifold reasons and enabling conditions that make such cooperative endeavours more successful had been identified, the long-term strategic prospects, the “depth” of the V4 defence cooperation is scarcely analysed. Without such analyses, it is hard to judge, whether the cooperation of the V4 in the field of defence bears the prospects of elaborated, truly aligned and meaningful, mutually strengthening relations, having a solid value and interest-based fundament, or more driven forward by spectacular but empty or half-hearted political declarations and limited military pragmatism. Not only from academic and analytical points of view, but also for its policy relevance, understanding the coherence (or divergence) of enabling conditions for such strategic cooperation is important, though not much covered so far.

This paper was aimed at assessing the long-term strategic prospects of the sub-regional defence cooperation of the Visegrád countries based on lessons learnt of the period 1999–2019. The analysis was based on two pillars. First, the evolution and content of the cooperation was mapped up to scale its intensity. This has shown that the current cooperative formats qualify as amounting to the (1) sharing of capabilities and the (2) pooling of capabilities as a maximum, within the four theoretical categories of capability pooling and sharing. Harmonised training and joint exercises embody the sharing of capabilities, while the most intense current form of the V4 defence cooperation – primarily because of their recurring EU Battlegroup – fits into the second category. This implies that there is further room for intensifying their defence cooperation to (3) forms of pooling through

acquisition, as well as (4) role and task sharing. This assessment is useful to point out that the V4 have engaged in defence cooperation only through the first two categories that still ensure that the command of their cooperating armed forces remains under national control. Thus, they only need to accept slight limitations on their sovereign decision-making and they only need to undertake weak dependence on their partners. Going along the way of truly integrating some parts or functions of their armed forces would require way more concessions from them.

The second part of the paper has shown the obstacles why this has not happened yet and why it might be challenging in the years to come as well. In the light of lessons learnt from proliferating formats of multinational defence cooperation in Europe, the qualitative case study analysis of the 14 enabling conditions of successful defence cooperation identified by Valásek<sup>70</sup> and Zandee et al.,<sup>71</sup> was used to estimate the realisation prospects of the V4's plans for the future. Here, these preconditions had been aligned in 3 groups (strategic, political, technical enablers) to ensure a clear focus and understanding of the role these aspects (should) play. The diverging characteristics of these enablers highlight the obstacles due to which the current level of cooperation has not been surpassed. At the same time, these shortcomings identify areas in which national governments can boost their cooperative efforts if they truly want to create deeper and more capable defence cooperation, as envisaged by their long-term defence plans.

In sum, the paper was aimed at providing original contribution in terms of qualitative assessment and highlight those factors that still lack in-depth research. Among others, a concise picture of the V4's strategic culture was provided, as well as a sample of public opinion polls available on trust and solidarity towards each other. It is important to point out that scholars need to engage in further analysis regarding several technical aspects of the cooperation, such as the specificities of armed forces, production capabilities of national defence industries, or the risks of defence corruption. Further exploratory studies on the four countries' national defence establishments and militaries are definitely needed, comparing the respective countries, including top-down political and military leadership and bottom-up engagement, the alignment of defence culture and organisation, as well as of defence planning, the interoperability of the armed forces and the involvement of national parliaments in developing multinational defence cooperation.

The qualitative assessment has shown that substantially better harmonisation and the intensification of cooperation would be required especially in the fields of joint capability planning, information sharing, decision-making, also involving members of both the political and military establishment, as well as MPs. Furthermore, broadening the strategic discourse to include currently unaddressed issues, such as the different geopolitical foci, relations to great powers, especially to Russia, the lack of a shared vision for the operational use for any joint military formation is necessary to ensure meaningful cooperation in the future. Such developments would require more sovereignty-sharing and move the cooperation beyond the pooling of capabilities towards deeper formats, as

---

<sup>70</sup> VALÁSEK 2011: 21–26.

<sup>71</sup> ZANDEE et al. 2016: 4–6.

outlined in long-term goals, also increasing joint action potential. The sustained weakness, or lack of synergy in these fields will make the deepening of defence collaboration less likely, limiting the prospects of V4 cooperation.

## REFERENCES

### Primary sources

- Annex to the Visegrad Cooperation Approved by the Prime Ministers' Summit Bratislava on 14<sup>th</sup> May 1999. Bratislava, 29 June 2002. Online: <https://www.visegradgroup.eu/cooperation/annex-to-the-content-of>
- Bratislava Declaration of the Prime Ministers of the Czech Republic, the Republic of Hungary, the Republic of Poland and the Slovak Republic on the Occasion of the 20<sup>th</sup> Anniversary of the Visegrad Group. Bratislava, 15 February 2011. Online: <https://www.visegradgroup.eu/2011/the-bratislava>
- Contents of the Visegrad Cooperation Approved by the Prime Ministers' Summit Bratislava on 14<sup>th</sup> May 1999. Bratislava, 14 May 1999. Online: <https://www.visegradgroup.eu/cooperation/contents-of-visegrad-110412>
- Declaration of Prime Ministers of the Czech Republic, the Republic of Hungary, the Republic of Poland and the Slovak Republic on Cooperation of the Visegrad Group Countries after their Accession to the European Union. Kromeriz, 12 May 2004. Online: <https://www.visegradgroup.eu/2004/declaration-of-prime>
- Declaration on Cooperation between the Czech and Slovak Federal Republic, the Republic of Poland and the Republic of Hungary in Striving for European Integration. Visegrád, 15 February 1991. Online: <http://www.forost.ungarisches-institut.de/pdf/19910215-1.pdf>
- Government Resolution 1035/2012 (21.II.) on Hungary's National Security Strategy. Online: <https://eda.europa.eu/docs/default-source/documents/hungary-national-security-strategy-2012.pdf>
- Joint Communiqué of the Ministers of Defence of the Visegrad Group. Litoměřice, 04 May 2012. Online: <https://www.visegradgroup.eu/calendar/2012/joint-communiqué-of-the>
- Joint Communiqué of the Visegrad Group Ministers of Defence. Tomášov, 23 April 2015. Online: <https://www.visegradgroup.eu/calendar/2015/joint-communiqué-of-the>
- Joint Statement of the Visegrad Group Heads of Government on Strengthening the V4 Security and Defence Cooperation. Budapest, 14 October 2013. Online: <https://www.visegradgroup.eu/calendar/2013/budapest-joint-statement-140929>
- Long Term Vision of the Visegrad Countries on Deepening their Defence Cooperation. Visegrad, 14 March 2014.
- National Security Strategy of the Republic of Poland. Warsaw, 2014. Online: [https://www.bbn.gov.pl/ftp/dok/NSS\\_RP.pdf](https://www.bbn.gov.pl/ftp/dok/NSS_RP.pdf)
- Report of the Slovak Presidency of the Visegrad Group, July 2014 – June 2015.
- Security Strategy of the Czech Republic. Prague, 2015. Online: [https://www.army.cz/images/id\\_8001\\_9000/8503/Security\\_Strategy\\_2015.pdf](https://www.army.cz/images/id_8001_9000/8503/Security_Strategy_2015.pdf)
- White Book on the National Security of the Republic of Poland. Warsaw, 2013. Online: [www.spbn.gov.pl/english](http://www.spbn.gov.pl/english)
- White Paper on Defence of the Slovak Republic. Bratislava, 2016. Online: [https://www.mosr.sk/data/WPDSR2016\\_LQ.pdf](https://www.mosr.sk/data/WPDSR2016_LQ.pdf)

### Further reading

- ALEXANDER, Michael – GARDEN, Timothy (2001): The Arithmetic of Defence Policy. *International Affairs*, 77(3), 509–529. Online: <https://doi.org/10.1111/1468-2346.00204>
- BAILES, Alyson J. K. (1999): The Role of Sub-Regional Cooperation in Post-Cold War Europe: Integration, Security, Democracy. In COTTEY, Andrew (ed.): *Subregional Cooperation in the New Europe. Building*

- Security, Prosperity and Solidarity from the Barents to the Black Sea*. London: Palgrave Macmillan. 153–183. Online: [https://doi.org/10.1007/978-1-349-27194-8\\_9](https://doi.org/10.1007/978-1-349-27194-8_9)
- BALOGH, István (2013): Magyarország és a visegrádi országok biztonságpercepciói: hasonlóságok és különbségek. *MKI Tanulmányok*, 2013/20. Online: [https://kki.hu/assets/upload/Tanulmányok\\_2013\\_20\\_Magyarorszeg\\_ees\\_a\\_visegre\\_.pdf](https://kki.hu/assets/upload/Tanulmányok_2013_20_Magyarorszeg_ees_a_visegre_.pdf)
- BÁTORA, Jozef – MATLARY, Janne Haaland (2012): Regional Security Integration: Nordic and Visegrad Approaches. In BALDERSHEIM, Harald – BÁTORA, Jozef (eds.): *The Governance of Small States in Turbulent Times. The Exemplary Cases of Norway and Slovakia*. Verlag Barbara Budrich. 19–37. Online: <https://doi.org/10.2307/j.ctvdf01dj.6>
- BIEHL, Heiko – GIEGERICH, Bastian – JONAS, Alexandra eds. (2013): *Strategic Cultures in Europe. Security and Defence Policies Across the Continent*. Wiesbaden: Springer. Online: <https://doi.org/10.1007/978-3-658-01168-0>
- BISCOB, Sven (2013): Peace without Money, War without Americans: Challenges for European Strategy. *International Affairs*, 89(5), 1125–1142. Online: <https://doi.org/10.1111/1468-2346.12063>
- BISCOB, Sven – COELMONT, Jo (2013): Military CSDP: The Quest for Capability. In BISCOB, Sven – WHITMAN, Richard G. (eds.): *The Routledge Handbook of European Security*. London: Routledge. 78–90. Online: <https://doi.org/10.4324/9780203098417-10>
- BODNÁROVÁ, Barbora (2013): Visegrad Four Battle Group 2016: Run-up to Visegrad Four NATO Response Force 2020? *CENAA Policy Papers*, 6.
- BRUMMER, Chris (2014): *Minilateralism: How Trade Alliances, Soft Law and Financial Engineering are Redefining Economic Statecraft*. Cambridge: Cambridge University Press. Online: <https://doi.org/10.1017/CBO9781107281998>
- COTTEY, Andrew ed. (1999): *Subregional Cooperation in the New Europe. Building Security, Prosperity and Solidarity from the Barents to the Black Sea*. London: Palgrave Macmillan. Online: <https://doi.org/10.1007/978-1-349-27194-8>
- COTTEY, Andrew (2000): Europe's New Sub-Regionalism. *The Journal of Strategic Studies*, 23(2), 23–47. Online: <https://doi.org/10.1080/01402390008437789>
- CSIKI, Tamás (2014): Kísérlet a magyar védelmi ipar felélesztésére Magyarországon? In CSIKI, Tamás – TÁLAS, Péter (eds.): *Magyar biztonságpolitika, 1989–2014. Tanulmányok*. Budapest: Ludovika – University of Public Service, Institute for Strategic Studies. 127–142. Online: <https://svkk.uni-nke.hu/document/uni-nke-hu/magyar-biztonsagpolitika-1989-2014-original.original.pdf>
- CSIKI, Tamás (2017): A kelet-közép-európai államok védelmi együttműködési törekvései, 2008–2016. PhD Dissertation. Budapest: Ludovika – University of Public Service, Doctoral School of Military Sciences.
- CSIKI, Tamás – NÉMETH, Bence (2011): Perspectives of Central European Multinational Defence Cooperation: A New Model? In MAJER, Marian – ONDREJCSAK, Róbert (eds.): *Panorama of Global Security Environment 2013*. Bratislava: Centre for European and North Atlantic Affairs. 11–23.
- CSIKI, Tamás – NÉMETH, Bence (2012): Multinational Development of Military Capabilities: Recommendations for the Central European Roundtable for Defence Cooperation. *European Geostrategy, Long Post*, 13 June 2012.
- DANGERFIELD, Martin (2014): V4: A New Brand for Europe? Ten Years of Post-Accession Regional Cooperation in Central Europe. *Poznan University of Economics Review*, 14(4), 71–90. Online: <https://doi.org/10.18559/ebr.2014.4.839>
- GYÁRFÁŠOVÁ, Olga (2013): Mental Map of the V4 Group or How Do We Perceive Each Other? In MARUŠIAK, Juraj et al.: *Internal Cohesion of the Visegrad Group*. Bratislava: VEDA. 100–111.
- GYÁRFÁŠOVÁ, Olga – MESEŽNIKOV, Grigorij (2016): *25 Years of the V4 as Seen by the Public*. Bratislava: Institute for Public Affairs.
- HARTLEY, Keith (2006): Defence Industrial Policy in a Military Alliance. *Journal of Peace Research*, 43(4), 473–489. Online: <https://doi.org/10.1177/0022343306064976>
- HATZIGEORGOPOULOS, Myrto (2012): The Role of EU Battlegroups for European Defence. *ISIS Europe, European Security Review*, June 2012.
- IISS (2018): *The Military Balance 2018*. London: International Institute of Strategic Studies. Online: <https://www.iiss.org/publications/the-military-balance/the-military-balance-2018>

- IISS (2020): *The Military Balance 2020*. Chapter 4: Europe. London: International Institute of Strategic Studies. Online: <https://doi.org/10.1080/04597222.2020.1707964>
- JÄRVENPÄÄ, Pauli (2017): NORDEFCO: “Love in a Cold Climate?” Tallinn: International Center for Defence and Security.
- JIREŠ, Jan (2013): Czech Republic. In BIEHL, Heiko – GIEGERICH, Bastian – JONAS, Alexandra (eds.): *Strategic Cultures in Europe. Security and Defence Policies Across the Continent*. Wiesbaden: Springer. 69–83. Online: <https://doi.org/10.1007/978-3-658-01168-0>
- JONES, Seth G. (2007): *The Rise of European Security Cooperation*. Cambridge: Cambridge University Press. Online: <https://doi.org/10.1017/CBO9780511491443>
- KING, Anthony (2005): Towards a Transnational Europe: The Case of the Armed Forces. *European Journal of Social Theory*, 8(3), 321–340. Online: <https://doi.org/10.1177/1368431005054797>
- KNEZOVIĆ, Sandro (2015): *EU and NATO Membership – Way Forward for Croatia*. Zagreb: Hanns Seidel Stiftung.
- KRON, Robert – BALOGH, István (2012): Visegrad Defence Cooperation: A Recipe for Success. In GRYGIEL, Jakub J. (ed.): *Navigating Uncertainty: U.S. – Central European Relationship 2012*. Washington D.C.: Center for European Policy Analysis.
- LORENZ, Wojciech (2013): EU Battle Group. A Chance for Breakthrough in Visegrad 4 Cooperation? *PISM Bulletin*, 492(39).
- MADEJ, Marek (2013): Visegrad Group Defence Cooperation: What Added Value for the European Capabilities? *Nordica Programme*, 2013/19. Online: <https://www.files.ethz.ch/isn/166134/201319.pdf>
- MAJER, Marian (ed.) (2015): DAV4 III Expert Group Report: From Bullets to Supersonics: V4 on the Brink of Industrial Cooperation. Bratislava: Central European Policy Institute.
- MAJOR, Claudia – MÖLLING, Christian (2011): EU Battlegroups: What Contribution to European Defence? Berlin: *SWP Research Paper*, RP 8, June 2011. Online: [https://www.swp-berlin.org/publications/products/research\\_papers/2011\\_RP08\\_mjr\\_mlg\\_ks.pdf](https://www.swp-berlin.org/publications/products/research_papers/2011_RP08_mjr_mlg_ks.pdf)
- MAJOR, Claudia – MÖLLING, Christian (2013): The Dependent State(s) of Europe: European Defence in Year Five of Austerity. In BISCOB, Sven – FIOTT, Daniel (eds.): *The State of Defence in Europe: State of Emergency?* Egmont Paper 62. Gent: Academia Press. 13–18.
- MATLARY, Janne Haaland (2009): *European Union Security Dynamics. In the New National Interest*. Basingstoke: Palgrave Macmillan. Online: <https://doi.org/10.1057/9780230594302>
- MÉRAND, Frédéric (2008): *European Defence Policy. Beyond the Nation State*. London – New York: Oxford University Press. Online: <https://doi.org/10.1093/acprof:oso/9780199533244.001.0001>
- MILO, Daniel – KLINGOVÁ, Katarína – HAJDU, Dominika (2017): *Globsec Trends 2017*. Bratislava: Globsec Policy Institute.
- MISSIROLI, Antonio – ROGERS, James – GILLI, Andrea (2013): *Enabling the Future: European Military Capabilities 2013–2025: Challenges and Avenues*. Paris: EU Institute for Security Studies. Online: [https://www.iss.europa.eu/sites/default/files/EUISSFiles/Report\\_16.pdf](https://www.iss.europa.eu/sites/default/files/EUISSFiles/Report_16.pdf)
- MOLNÁR, Ferenc – CSIKI, Tamás (2010): Seminar on Central European Solutions for Pooling and Sharing of Capabilities. Budapest: Hungarian Ministry of Defence – Institute for Strategic and Defence Studies.
- MORET, Erica (2016): Effective Minilateralism for the EU. What, When and How. *ISSUE Brief*, 17. Online: [https://www.iss.europa.eu/sites/default/files/EUISSFiles/Brief\\_17\\_Minilateralism.pdf](https://www.iss.europa.eu/sites/default/files/EUISSFiles/Brief_17_Minilateralism.pdf)
- MOSKOS, Charles C. – WILLIAMS, John Allen – SEGAL, David R. (2000): *The Postmodern Military. Armed Forces after the Cold War*. Oxford: Oxford University Press.
- NÉMETH, Bence (2014): Magyarország szerepe a regionális biztonsági-védelmi együttműködésekben. In CSIKI, Tamás – TÁLAS, Péter (eds.): *Magyar biztonságpolitika, 1989–2014. Tanulmányok*. Budapest: Ludovika – University of Public Service, Institute for Strategic Studies. 127–142. Online: <https://svkk.uni-nke.hu/document/uni-nke-hu/magyar-biztonsagpolitika-1989-2014-original.original.pdf>
- NÉMETH, Bence (2017): *Outside the NATO and the EU: Sub-Regional Defence Co-operation in Europe*. PhD Dissertation. London: King’s College.
- NÉMETH, Bence (2018): Militarisation of Cooperation against Mass Migration – the Central European Defence Cooperation (CEDC). *Defense & Security Analysis*, 34(1), 16–34. Online: <https://doi.org/10.1080/14751798.2018.1421401>

- NICOLINI, Mário – ŽÍDEK, Rudolf – PŠIDA, Ján (2013): Slovakia. In BIEHL, Heiko – GIEGERICH, Bastian – JONAS, Alexandra (eds.): *Strategic Cultures in Europe. Security and Defence Policies Across the Continent*. Wiesbaden: Springer. 307–317. Online: [https://doi.org/10.1007/978-3-658-01168-0\\_24](https://doi.org/10.1007/978-3-658-01168-0_24)
- PALIN, Roger H. (1995): *Multinational Military Forces. Problems and Prospects*. Oxford: Oxford University Press. Online: <https://doi.org/10.4324/9781315000381>
- PAULECH, Michal – URBANOVSKÁ, Jana (2014): Visegrad Four EU Battlegroup. Meaning and Progress. *Defence and Strategy*, 14(2), 49–60. Online: <https://doi.org/10.3849/1802-7199.14.2014.02.049-060>
- REYKERS, Yf (2017): EU Battlegroups: High Costs, No Benefits. *Contemporary Security Policy*, 38(3), 457–470. Online: <https://doi.org/10.1080/13523260.2017.1348568>
- Security and Defence Industry Association of the Slovak Republic (2016): *Defence Industry of the Slovak Republic*. Online: [https://www.zbop.sk/files/ZBOP2016\\_brochure-4.pdf](https://www.zbop.sk/files/ZBOP2016_brochure-4.pdf)
- Security and Defence Industry Association of the Slovak Republic (s. a.): *Slovak Defence Industry's Manufacturing Capabilities*. Online: [https://www.zbop.sk/files/V%C3%BDrobn%C3%A9-schopnosti-ZBOP\\_AJ2.pdf](https://www.zbop.sk/files/V%C3%BDrobn%C3%A9-schopnosti-ZBOP_AJ2.pdf)
- SIPRI (2020): *Military Expenditures Database, 1949–2020*. Online: [https://sipri.org/sites/default/files/SIPRI-Milex-data-1949-2020\\_0.xlsx](https://sipri.org/sites/default/files/SIPRI-Milex-data-1949-2020_0.xlsx)
- SIRÉN, Torsti (2009): *State Agent, Identity and the "New World Order": Reconstructing Polish Defence Identity after the Cold War Era*. Helsinki: National Defence University. Online: <https://core.ac.uk/download/pdf/39944304.pdf>
- STEIN, George (1993): The Euro-Corps and Future European Security Architecture. *European Security*, 2(2), 200–226. Online: <https://doi.org/10.1080/09662839308407119>
- SUPLATA, Milan ed. (2013a): *DAV4 II Expert Group Report on Visegrad Defence Collaboration. From Battlegroup to Permanent Structures*. Bratislava: Central European Policy Institute.
- SUPLATA, Milan (2013b): *The Visegrad Battlegroup: Building New Capabilities for the Region*. Globsec Policy Brief. Bratislava: Central European Policy Institute.
- SZENES, Zoltán (2016): Cél vagy eszköz? A visegrádi védelempolitika fejlődése (1.) *Honvédségi Szemle*, 144(6), 3–20. Online: [https://honvedelem.hu/files/files/60181/hsz\\_2016\\_06\\_beliv.pdf](https://honvedelem.hu/files/files/60181/hsz_2016_06_beliv.pdf)
- SZENES, Zoltán (2017): A visegrádi védelempolitika fejlődése (2.) *Honvédségi Szemle*, 144(1), 3–23. Online: [https://honvedelem.hu/files/files/61193/cel\\_vagy\\_eszkoz\\_a\\_visegradi\\_vedelempolitika\\_fejlodes.pdf](https://honvedelem.hu/files/files/61193/cel_vagy_eszkoz_a_visegradi_vedelempolitika_fejlodes.pdf)
- TÁLAS, Péter – CSIKI, Tamás (2013): Hungary. In BIEHL, Heiko – GIEGERICH, Bastian – JONAS, Alexandra (eds.): *Strategic Cultures in Europe. Security and Defence Policies Across the Continent*. Wiesbaden: Springer. 165–179. Online: [https://doi.org/10.1007/978-3-658-01168-0\\_13](https://doi.org/10.1007/978-3-658-01168-0_13)
- TERLIKOWSKI, Marcin (2013): Poland. In BIEHL, Heiko – GIEGERICH, Bastian – JONAS, Alexandra (eds.): *Strategic Cultures in Europe. Security and Defence Policies Across the Continent*. Wiesbaden: Springer. 269–280. Online: [https://doi.org/10.1007/978-3-658-01168-0\\_21](https://doi.org/10.1007/978-3-658-01168-0_21)
- Transparency International (2015): *Government Defence Anti-Corruption Index*. Online: <https://government.defenceindex.org/>
- VALÁSEK, Tomáš (2011): *Surviving Austerity. The Case for a New Approach to EU Military Collaboration*. Brussels: Centre for European Reform.
- VALÁSEK, Tomáš (2012): *Prospects for Deeper Visegrád Collaboration*. Brussels: Centre for European Reform.
- VALÁSEK, Tomáš – SUPLATA, Milan eds. (2012): *DAV4 – Towards a Deeper Visegrad Defence Partnership*. Bratislava: Central European Policy Institute.
- WEISS, Tomáš (2012): Visegrád Battlegroup: A Flagship that Should not Substitute for Real Defence Cooperation. *V4 Revue*, 04 June 2012.
- ZANDEE, Dick – DRENT, Margriet – HENDRIKS, Rob (2016): *Defence Cooperation Models. Lessons Learned and Usability*. The Hague: Clingendael Institute.

Péter Balog<sup>1</sup>

# Geospatial Crisis Index – Developing Geospatial Analysis System to Support the Hungarian Defence Forces<sup>2</sup>

*Security geography examines the military geography factors influencing the security system and environment of an area, and its investigation method is rooted in geography. The data set related to this, mainly open source databases, is a rapidly changing data set, so its analysis only shows the current state, but if the data set is large enough and considered mass data, it may be suitable for drawing new connections and conclusions for the future. A geospatial analysis system applicable to security geographic analysis is under development, which is continuously collecting data by taking predefined variables into account for a specific area of interest. The geospatial crisis index can be obtained from these local data following a professional analysis procedure based on predefined algorithms. This new index is a unitless numerical value issued by the geospatial evaluation and analysis system used to analyse crisis zones. It is a benchmark allowing areas to be compared in terms of a fixed risk factor or factors to be ranked in a hierarchy by fixing the area. This helps shape the order of the analysis, speeds up the actual text and map evaluation, reduces the need for human resources, and supports commanders in decision-making.*

**Keywords:** security geography, crisis, geospatial information, mass data, analysis, open source reconnaissance (OSINT)

## Introduction

Geospatial support activity includes the production and acquisition of cartographic and military geography materials and data. This geospatial dataset is analysed to support the security geography analysis of Hungary – or any other area of interest of the Hungarian Defence Forces. Most of the geo-related data can be obtained from open sources. The geospatial analysis system under development is an automatised tool of collecting, cleaning and organising the raw data, (making) turning them into useful information after the process of analysing and determining the related geospatial crisis index.

During my research, I examined the following: Can military geography factors and their methodology be used for security geography analysis as part of a geospatial analysis system? Is the mass data, the available quantity of spatial data suitable for such a geospatial

---

<sup>1</sup> PhD student, University of Public Service. E-mail: [balog.peter@gmail.com](mailto:balog.peter@gmail.com)

<sup>2</sup> The present publication was presented in an oral form on the *II Military Science and Military Art International Conference* at the Ludovika University of Public Service, Budapest, Hungary, on 14 October 2022. Prepared with the professional support of the Doctoral Student Scholarship Program of the Co-operative Doctoral Program of the Ministry of Culture and Innovation financed from the National Research, Development and Innovation Fund.

analysis system? How should we plan the geospatial analysis to support military personnel? How can we delaminate the area to be analysed? In this paper, I present the answers to the questions above.

## Security geography

According to one possible definition, security is the absence of a threat.<sup>3</sup> Security geography examines those military-related geographic factors that affect the security system and environment of a country or region.<sup>4</sup> Therefore, we must first examine what are the factors that can pose a threat to the security of the given area from the point of view of military geography. The military geographic analysis uses territorial-based division in its analysis at tactical, operational and strategic levels. Although there are Regional Security Complexes based on geographical proximity, which Buzan and Wæver say is a group of states whose security-related problems are closely related, and security threats are examined in a composite way, thus security complexes are developing.<sup>5</sup>

Marton introduces another approach, the concept of a question-specific security complex, where security complexes are based on causal events, not on territorial bases.<sup>6</sup> According to him, spatiality cannot be drawn on all security complexes, but he does not question the role of geography or maps, their role in the representation of certain geographical sources is still preserved. He says the definition of a threat within a security complex can be geographically or causally arguable and can exist from multiple valid perspectives.<sup>7</sup> It does not deny the geographically-based relationship, it just does not content with it. This idea is also based on the opinion that certain elements of a threat form boundaries with each other, so there is a geographically displayable connection between them.

Both security geography and military geography are rooted in geography. It can be concluded that the security geography analysis also includes military geography factors only the approach to the analysis is different. These factors are the following: geographical location of countries, physical geography, socio-political conditions, economy, transport characteristics, military, national security information, history, and ethnic and armed conflicts in the country.<sup>8</sup> It is important to mention here that some of the threats are not necessarily limited to a country, such as armed and, especially, ethnic conflicts. For these kinds of analyses, we need to use other kinds of delimitation than administrative boundaries. The military geography approach helps us to delimit the crisis area, the National

<sup>3</sup> Gazdag, Ferenc – Remek, Éva (2018): *A biztonság tanulmányok alapjai*. Budapest: Dialóg Campus. 17.

<sup>4</sup> Siposné Kecskeméthy, Klára (2019): Biztonságföldrajz. In Krajnc, Zoltán (ed.): *Hadtudományi lexikon. Új kötet*. Budapest: Dialóg Campus. 102.

<sup>5</sup> Buzan, Barry – Wæver, Ole (2003): *Regions and Powers. The Structure of International Security*. Cambridge: Cambridge University Press. 44.

<sup>6</sup> Marton, Péter (2019): *Biztonsági komplexumok. A biztonság empirikus elemzésének alapjai*. Budapest: Budapesti Corvinus Egyetem.

<sup>7</sup> Marton 2019: 121.

<sup>8</sup> Siposné Kecskeméthy, Klára (2019): Katonaföldrajzi értékelés. In Krajnc, Zoltán (ed.): *Hadtudományi lexikon. Új kötet*. Budapest: Dialóg Campus. 524.

Security Strategy<sup>9</sup> is the source for identifying threats, and geospatial analyses provide the results of expert work.

### ***Dimensions of security geography***

There are social, environmental, political, economic, military and IT dimensions of security, so these are examined and analysed by the respective sub-science of geography dealing with them.<sup>10</sup> It is hard to define nowadays where the battlefield ends and where the area that is no longer part of the battlefield begins. Geographically relevant, mainly natural areas (terrestrial, marine, aerial and cosmic), social spaces (military, political, economic, cultural and psychological) have become operational dimensions as well during the age of unrestricted warfare – forming more dimensions, so it is considered more like battlespace than a battlefield. Respectively, the cyberspace connecting geo and social spaces has all become an operational dimension.<sup>11</sup> Attacks that threaten security can no longer be characterised simply by occupying or retaining territory.

The information and data used for security geographic analyses can be linked to both the Earth and its immediate environment. It refers to its immediate environment, according to our current concepts these are all geospatial data. There is no difference between security geography and geospatial analysis in the location of the examined area, only in its size and delimitation. Similarly, there is no difference in the available data, only in the processing methodology.

### ***Security geography and geospatial information***

Geospatial information is “a set of spatial data and information about the Earth and its immediate surroundings”.<sup>12</sup> All factors that have a geographically relevant security dimension or have an impact on geographical and social relations and that can influence the outcome of a possible crisis, the possible course of an armed conflict, should be part of modern geospatial analyses. Different dimensions of security examine different sub-areas, yet together they affect the security of an area. That crisis area needs to be delineated and studied locally, regionally, or globally, depending on the nature of the effect.<sup>13</sup> This effect can vary, as mentioned above, social, environmental, political, economic, military and IT dimensions of security can be distinguished.

---

<sup>9</sup> Government of Hungary: [Government Resolution 1393/2021 \(VI.24.\) on the National Military Strategy of Hungary](#). [online], Hungarian Gazette, 2021. Source: defence.hu [04.12.2022].

<sup>10</sup> Gazdag–Remek 2018: 21–24.

<sup>11</sup> Szenes, Zoltán (2017): Katonai biztonság napjainkban. Új fenyegetések, új háborúk, új elméletek. In Finszter, Géza – Sabjanics, István (eds.): *Biztonsági kihívások a 21. Században*. Budapest: Dialóg Campus. 90.

<sup>12</sup> Kállai, Attila (2019a): Geoinformáció. In Krajnc, Zoltán (ed.): *Hadtudományi lexikon. Új kötet*. Budapest: Dialóg Campus. 314.

<sup>13</sup> Gerencsér, Árpád (2016): *A Kaukázus térség biztonságföldrajzi értékelése*. PhD thesis. Budapest: Nemzeti Közzolgálati Egyetem. 21.

We need a large data set to collect for this study. All data from publications intended for wider use should be obtained from open sources to avoid classification. In addition to the use of printed sources, the Internet and open source information collection provide an excellent opportunity.

## Open source reconnaissance

Open source reconnaissance (OSINT) is an intelligence using open, non-secret, freely accessible, usable and downloadable public, accessible resources.<sup>14</sup> The point is that the data is publicly available to all individuals through legal means, possibly with limited dissemination, but not classified information. The discovery, collection, selection, analysis and evaluation of the use of this data for professional purposes is covered by open source discovery. This has several advantages and disadvantages.

### *Advantages and disadvantages*

The advantage of OSINT is that this amount of information, especially spatial data, has never been available before,<sup>15</sup> so a large amount of information can be obtained in a relatively cost-effective way.<sup>16</sup>

Disadvantages can be that it is not enough to collect this data, the information must be filtered, selected, organised, analysed and evaluated, always according to the defined purpose. It slows down the process and requires professional qualifications and experience, which requires continuous training and organisation. Likewise, too much information can be a disadvantage if not handled properly. The need to know everything about everyone may be an expectation, however, an unachievable one.

As Karcsai demonstrates the problem: “It is like a pizza: basic information, as topographic background, as the pizza dough, and technical data as the tomato sauce, are musts. But all other information, just as all kinds of toppings, cannot, or hardly can be placed on the pizza itself, nor can all the information represented on a map.”<sup>17</sup> However, it is a rational need to collect all this information, analyse it after appropriate professional selection and display it to the extent necessary.

### *Types of open source data*

There are different types of open source data that shall clearly be distinguished. There are open source data, which mean a raw document or knowledge that can be provided by primary sources. It can turn to open source information, which means the data is

<sup>14</sup> Kovács, László (2019): Nyílt forrású felderítés. In Krajnc, Zoltán (ed.): *Hadtudományi lexikon. Új kötet.* Budapest: Dialóg Campus. 846.

<sup>15</sup> Olasz, Angéla (2017): Big Data és térbeliség. *Geodézia és Kartográfia*, 69(5), 12.

<sup>16</sup> Dobák, Imre (2019): OSINT – Gondolatok a kérdéskörhöz. *Nemzetbiztonsági Szemle*, 7(2), 87.

<sup>17</sup> Karcsai, András (2021): *The Usage of Geospatial Related NATO STANAGs.* Presentation at the Geoinformation Service HDF, 23 June 2021.

processed, collected, selected, and evaluated according to a given approach. Then comes open source information acquisition, which is the procedure itself, when information is obtained from openly available sources, in order to achieve a specific goal. It is necessary to prioritise, to be able to determine which of the available data should and can be used for the given task, which is relevant, and filter what we know, and might be useful to us later, but we need not consider it at the time being. This requires both experience and training. The availability of metadata, the secondary information assigned during processing, is essential, potentially for anything we consider important to assign them, and provides data retrieval.

Following the above concept, we will carry out the process of searching, collecting, selecting, evaluating and using data within the OSINT activity. It is worth mentioning that we do this with open source so that the publications made from them are not classified and are available to the target audience (Hungarian Defence Forces). Of course, OSINT does not replace the collection of secret information but complements and guides it, and even, depending on the target task, can replace it in the preparation of geospatial-related publications. At the same time, the time factor has become one of the most important elements of OSINT, which, in addition to credibility and control, is an essential factor for quick decision-making.<sup>18</sup>

## Ever-changing geographical space

The interpretation of space is constantly changing, becoming multidimensional; in English terminology, the term “battlespace” is used much more than “battlefield”. The military science approach and definition of space are also changing. Anything that has a spatial or geographical relevance can be interpreted as space – geography is an inescapable factor for warring parties since the way of warfare, the forms and methods of applying the armed forces, mainly depend on the factors influencing its implementation.<sup>19</sup> These factors are realised in space, so in all five dimensions of the new battlefield concept – land, air, sea, cosmic and information.<sup>20</sup> Time also has an increasing role: the significance of having immediate access to real-time information has become more vital than ever. We need information about everything, and we need it now. The task of geospatial evaluation is to analyse the typical, defining and essential properties, components, and relationships of space, and to analyse the data collected with the investigation methods of military geography.<sup>21</sup> After data collection, the totality of military geographic factors is examined by security geography, which determines the security system of a given area and its surroundings.

---

<sup>18</sup> Dobák 2019: 87.

<sup>19</sup> Szendy, István (2017): A hadviselés, mint tudományelméleti és tudomány-rendszertani kategória. *Hadtudomány*, 27(3–4), 106.

<sup>20</sup> Szenes 2017: 97.

<sup>21</sup> Kállai, Attila (2019b): Geoinformációs támogatás. In Krajnc, Zoltán (ed.): *Hadtudományi lexikon. Új kötet*. Budapest: Dialóg Campus. 315.

## Geospatial information of operational space

“However, the network-centric operation does not replace the professional (military) knowledge and preparedness of the commanders and soldiers. In other words, we can only provide the decision-makers with enough information to accurately see the situation, and nothing more.”<sup>22</sup> The space thus recognised is the operational space, which, in contrast to ‘traditional’ battlefields, has no size limitations but rather technical ones. The operational space is, therefore, the cognitive space of the geographical space that decision-makers and managers have especially learnt about and processed to the extent necessary for a given activity. This operational space and military activity mutually affect and shape each other dynamically, since the operational space is where planned and ongoing military activities have an effect. Geospatial analysis is a tool for learning and processing them.

## Mass data in geospatial analyses

According to Gartner<sup>23</sup> Big Data – in this paper I regard mass data the same in volume and nature – is high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision-making and process automation.<sup>24</sup> This means capturing, processing, analysing, sharing and displaying unprecedented amounts of mass data from various sources.

The amount of data available exceeds the capabilities of commonly used data capture and processing software. According to the most common definition, three things characterise this kind of spatial mass data: quantity, speed and variety.<sup>25</sup> This means that there is a huge amount of data that is constantly and rapidly generated, and it is usually unstructured.<sup>26</sup>

## Spatial mass data

I am studying the geospatial analysis system under development as part of my doctoral research. The analyses discussed in this article are derived from the results obtained from the system as well as from the improvements made in it. All geospatial data and specific sources of data collection had to be precisely determined before the development process with the help of the system plan. The database must be large enough to be able to draw appropriate conclusions and mass data from it, but no agreement has yet been reached

<sup>22</sup> Szternák, György (2008): Gondolatok a hatásalapú- és hálózatközpontú katonai műveletekről. *Hadtudományi Szemle*, 1(3), 1–7.

<sup>23</sup> Gartner is a global research and consulting firm that provides information, advice and tools in areas such as IT and communications.

<sup>24</sup> Gartner: *Big data*. [online], Gartner, 2021. Source: gartner.com [04.12.2022]

<sup>25</sup> Laney, Doug: *3D Data Management: Controlling Data Volume, Velocity and Variety*. [online], Meta Group, 2001. Source: studylib.net [20.11.2022].

<sup>26</sup> Szűts, Zoltán – Jinil, Yoo (2016): Big Data, az információs társadalom új paradigmája. *Információs Társadalom*, 16(1), 11.

on the definition of the term 'large'. Potentially, the entire Internet is a set of data that the developed system must analyse for the given crisis phenomena.

Spatial data in the traditional sense, such as vector and raster data, have also undergone tremendous development, encouraged by the development of data collection softwares. The time of data collection has been shortened and the amount of data surveyed at one time is increasing, largely due to new generation technologies.<sup>27</sup> However, only about a third of the data set created in this way is suitable or worth analysing, so most of the data we create and store is not useful in this sense.<sup>28</sup> The analysis of the data after its collection and the publication of the knowledge is not fast enough compared to the amount of data received, therefore pre-processing, data preparation, coordination of data and information from different sources are necessary.

One of the key elements in processing, in addition to relevance, is speed. Spatial mass data is always linked to a well-defined geographical location, furthermore, it can be originated from very different sources and in very different formats. This data needs to be cleaned, filtered, analysed and published in a very short time as expected.<sup>29</sup> The collection and characterisation of spatial data are not enough in themselves, the size, variety and update speed of location data sets exceed the capabilities of geospatial technologies.<sup>30</sup> We have reached the limit of the processing capacity in the possibility of quantitative data collection, it does not make sense to collect more data, or increase the processing volume, the pre-selection; targeted data collection needs to be improved.<sup>31</sup> The geoinformation analysis and evaluation system that we are developing during my doctoral research uses the latter method – targeted data collection became the key; it plays a particularly important role. A properly developed data collection method reduces the size of the currently used local database. If the types of data are systematised, the area is properly delineated and the risk factor is properly defined, the algorithm collects data in a targeted manner. It is not the processing time that is shortened in the first place but the time of data collection – of course, this shortens the whole process.

A huge data set is created when using networked devices that change rapidly, so its analysis shows only a momentary state. If the data set is large enough, it may be suitable for a level of knowledge of a given process that can be used to formulate relationships that have not been explored with good efficiency or to draw conclusions for the future.<sup>32</sup> The system to be developed does not work with a permanent data set but is continuously collecting data for the delimited, given area of interest, considering the variables we had defined. The data collection is essentially based on algorithms. The available database is often not a single database but a set of data that is continuously being produced from

---

<sup>27</sup> Such technologies are Unmanned Aerial Vehicle (UAV) used for remote sensing, aerial surveying or orthophoto, the Remotely Piloted Aircraft (RPA) and laser-based remote sensing, LiDAR (Light Detection and Ranging).

<sup>28</sup> Gantz, John – Reinsel, David: *The Digital Universe in 2020: Big Data, Bigger Digital Shadows, and Biggest Growth in the Far East*. [online], IDC, December 2012. Source: cs.princeton.edu [04.11.2022]

<sup>29</sup> Olasz, Angéla (2018): *Big Data és térbeliség*. PhD thesis. Budapest: Eötvös Loránd Tudományegyetem. 33.

<sup>30</sup> Shekhar et al. (2012): Spatial Big-Data Challenges Intersecting Mobility and Cloud Computing. *MobiDE'12: Proceedings of the Eleventh ACM International Workshop on Data Engineering for Wireless and Mobile Access*, May 2012, 1–6.

<sup>31</sup> Lee, Jae-Gil – Kang, Minseo (2015): Geospatial Big Data: Challenges and Opportunities. *Big Data Research*, 2(2), 78.

<sup>32</sup> Szűts–Jinil 2016: 9.

a variety of sources and formats, with the continuous, fast and comprehensive analysis of which results can be obtained.<sup>33</sup> The delimitation of the area can be done on an administrative basis – by designating country borders, regions and groups of countries – or by defining the specific security complexes in the case of cross-border natural and social phenomena, e.g. natural and/or social disasters, such as flooding or locust infestation and, as a most likely consequence of it, migration.

### ***Risk factors to be examined***

The risk factors to be examined are determined by Hungary's National Security Strategy.<sup>34</sup> The key security risks that may affect Hungary, closely related to security geography, are the following:

- illegal migration
- unexpected armed attack
- financial and economic destabilisation of Hungary through diplomatic, information and intelligence operations
- cyberattacks
- an act of terrorism in Hungary or against Hungarian interests abroad
- attempts to infringe national sovereignty by depriving national decision-making powers
- sustained population decline, ageing population
- international economic crisis
- disruption of energy imports
- the establishment of a 'failed state' in the immediate vicinity of our country or in our region
- revolutionary technological developments falling into unauthorised hands
- strengthening influence of criminal organisations
- an attack or terrorist act against Hungary or the surrounding countries with weapons of mass destruction (nuclear, radiological, biological or chemical)
- industrial accidents in Hungary or neighbouring countries
- epidemic causing mass illness
- the formation of higher floods and extensive inland waters
- permanent water shortages due to global warming

This is why it is necessary to ensure the most probable results from the huge mass of openly accessible data, and the above, often multifactorial risks, as soon as possible, since the commander's decision-making process has also been shortened. I call this result the Geospatial Crisis Index. It helps to decide which area needs to be analysed in further detail, and requires a geoinformation survey with the involvement of human resources, even with the involvement of experts from other related fields. However, the system does

<sup>33</sup> Szűts–Jinil 2016: 11.

<sup>34</sup> Government of Hungary: [Government Resolution 1163/2020 \(IV.21.\) on Hungary's National Security Strategy](#). [online], Magyar Közlöny, 2020. Source: honvedelem.hu [12.11.2022].

not replace but precedes the detailed, human-intensive evaluation analysis. It helps with prioritisation, so work can be more focused and, therefore, more efficient.

## **Geospatial Crisis Index**

As part of the geoinformation analysis system, a new index is being developed. Geospatial Crisis Index is a unitless numerical value issued by the geospatial assessment and analysis system used for the geospatial analysis of crisis areas. It is created by an algorithm-based methodology based on open source data related to military geographic factors. It is a benchmark allowing areas to be compared in terms of a fixed risk factor or factors to be ranked in a hierarchy by fixing the area. This helps shape the order of the analysis, speeds up the actual text and map evaluation, reduces the need for human resources, and supports commanders in decision-making. The algorithm-based methodology for determining the crisis index based on military geographical factors is also being developed.

The target group of users of the Geospatial Crisis Index is primarily the professional staff of the Hungarian Defence Forces dealing with geospatial information, but as a result, the entire national defence can enjoy the benefits of the innovation. At the command level, the expectation is a fast, clear, essential product, accordingly, the Geospatial Crisis Index together with other specific information and data, such as thematic maps or country descriptions, are useful tools for evaluation and decision-making.

## ***Geospatial Analysis System – System plan***

The system plan of the geospatial analysis system under development is as follows.

First, we have to develop a dataset based on the obtainable data. There is a Crawler that downloads information from web pages into a Local Database. That database is a structured set of relevant data, used for algorithm-based analyses. This activity is based on existing, downloaded web pages, and it develops itself as it searches for 'similar' web pages using machine learning algorithms.

The algorithm was developed through experience, the results of many years of human experience were incorporated into the formulas. Each type of crisis as factors of military geography were examined and analysed, and shaped the formula in such a way that it gives the same result as the parallel examination of specialists. Looking for new data on the separately set, fine-tuned variables, the result also changed and became more precise, in accordance with the original analysis direction. The program is able to search for new, previously unknown sources and, after human verification, include the data in the analysis.

The processing engine extracts important information for the system from downloaded web pages. For this, it uses Natural Language Processing (NLP). NLP is a pre-processing that involves preparing the original textual data for the software to be able to analyse it and an algorithm to work on. Elasticsearch is also part of the processing engine. It is a search and analytics engine that can be used to search for any kind of document. It acts

as a stable environment during the process of storing large amounts of data and content. In addition, this technology enables data retrieval and storage extremely quickly. The theory of the engine is based on data reliability investigation and testing new data.

The third element of the system is the Administration interface (User Interface – UI). Here, one can set the search parameters, such as search terms, value limits, events to watch, or territorial distribution. It is the interface where we can manage the source data; a new source that can be added manually (typically, for example, a new web address). Moreover, existing data can be modified or deleted; new, raw data can be uploaded; and we can rank the sources (e.g. in terms of reliability).

The risk factor (Geospatial Crisis Index) calculation module weights the processed data based on the parameters specified on the administration interface and calculates the risk factor of the given area or event.

At last, there is the display component. It demonstrates the parameters specified on the administration interface and the resulting risk factor in a way that is acceptable to users on a map or in a graph. There is an external data requester planned, that produces a geo database, in a form that can be processed by a third party, e.g. ArcGIS; the software used for GIS tasks in the Hungarian Defence Forces.

## Results of the research

The results of my research so far are as follows.

- The investigation method of security geography is rooted in geography, it examines the military geography factors that influence the security system and environment of an area. Publications on it must be open materials in order to reach the target audience, so we use data from open sources to create them.
- After targeted acquisition and quality processing, i.e. selection, analysis and evaluation of a sufficient amount of the available spatial data, a new opportunity will present itself for the preparation of security geography analyses based on geoinformation professional foundations.
- Algorithms can be applied to the instant analysis of the ever-expanding, huge geoinformation data set regarded as mass data. This can be used in the commander's decision-making system, prioritised by it before decision-making.
- The procedure is suitable for analysing the security geography risk of an area, even for previously undiscovered connections, or for formulating conclusions regarding the future.

The geoinformation analysis system used for security geography analysis examined in my research is continuously collecting data for a delimited area of interest, depending on specified variables – geographical factors regarding the specified crisis phenomena. The targeted data collection is the key, which is based on algorithms. A set of data is continuously being produced from diverse sources and forms, and results can be obtained through continuous, rapid, comprehensive analysis.

## Conclusion

The analysis method of security geography is rooted in geography, it examines the military geography factors affecting the security system and environment of the given area. This necessary territorial delimitation is the basis for the preparation of GIS analyses and evaluations examining the same factors. These publications need to be open source to reach their target audience, so we create open source data. The risk factors to be taken into account in security geography analyses can be created on the basis of the National Security Strategy, the delimitation of the operational space is the task of security geography specialists. After defining the area of interest and the crisis factor, we can perform the analysis and evaluation, as well as the Geospatial Crisis Index.

The amount of spatial data available for this purpose today provides a new opportunity for quality processing – selection, analysis and evaluation – during the preparation of security geography analyses based on geospatial information. Relying on the system created by the experts, the data on the given variables can be collected and used according to the purpose of the task. In view of the constantly expanding geospatial mass data set, the algorithms can be used for immediate analysis. This can be used in the command-decision system to determine priorities. The procedure is suitable for analysing the geospatial security risk of an area, either for formulating undiscovered correlations or for drawing conclusions about the future.

## REFERENCES

- Buzan, Barry – Wæver, Ole (2003): *Regions and Powers. The Structure of International Security*. Cambridge: Cambridge University Press. Online: <https://doi.org/10.1017/CBO9780511491252>
- Dobák, Imre (2019): OSINT – Gondolatok a kérdéskörhöz. *Nemzetbiztonsági Szemle*, 7(2), 83–93. Online: <https://doi.org/10.32561/nasz.2019.2.7>
- Gartner: *Big Data*. [online], Gartner, 2021. Source: gartner.com [04.12.2022]
- Gantz, John – Reinsel, David: *The Digital Universe in 2020: Big Data, Bigger Digital Shadows, and Biggest Growth in the Far East*. [online], IDC, December 2012. Source: cs.princeton.edu [04.11.2022]
- Gazdag, Ferenc – Remek, Éva (2018): *A biztonsági tanulmányok alapjai*. Budapest: Dialóg Campus.
- Gerencsér, Árpád (2016): *A Kaukázus térség biztonságföldrajzi értékelése*. PhD thesis. Budapest: Nemzeti Közzolgálati Egység.
- Government of Hungary: *Government Resolution 1393/2021 (VI.24.) on the National Military Strategy of Hungary*. [online], Hungarian Gazette, 2021. Source: defence.hu [04.12.2022]
- Government of Hungary: *Government Resolution 1163/2020 (IV.21.) on Hungary's National Security Strategy*. [online], Magyar Közlöny, 2020. Source: honvedelem.hu [12.11.2022]
- Kállai, Attila (2019a): Geoinformáció. In Krajnc, Zoltán (ed.): *Hadtudományi lexikon. Új kötet*. Budapest: Dialóg Campus.
- Kállai, Attila (2019b): Geoinformációs támogatás. In Krajnc, Zoltán (ed.): *Hadtudományi lexikon. Új kötet*. Budapest: Dialóg Campus.
- Karcsai, András (2021): *The Usage of Geospatial Related NATO STANAGs*. Presentation at the Geoinformation Service HDF, 23 June 2021.
- Kovács, László (2019): Nyílt forrású felderítés. In Krajnc, Zoltán (ed.): *Hadtudományi lexikon. Új kötet*. Budapest: Dialóg Campus.

- Laney, Doug: *3D Data Management: Controlling Data Volume, Velocity and Variety*. [online], Meta Group, 2001. Source: studylib.net [20.11.2022]
- Lee, Jae-Gil – Kang, Minseo (2015): Geospatial Big Data: Challenges and Opportunities. *Big Data Research*, 2(2), 74–81. Online: <https://doi.org/10.1016/j.bdr.2015.01.003>
- Marton, Péter (2019): *Biztonsági komplexumok. A biztonság empirikus elemzésének alapjai*. Budapest: Budapesti Corvinus Egyetem.
- Olasz, Angéla (2017): Big Data és térbeliség. *Geodézia és Kartográfia*, 69(5), 12–21.
- Olasz, Angéla (2018): *Big Data és térbeliség*. PhD thesis. Budapest: Eötvös Loránd Tudományegyetem.
- Shekhar, Shasi – Evans, Michael R. – Gunturi, Viswanath – Yang, KwangSoo (2012): Spatial Big-Data Challenges Intersecting Mobility and Cloud Computing. *MobiDE'12: Proceedings of the Eleventh ACM International Workshop on Data Engineering for Wireless and Mobile Access*, May 2012, 1–6. Online: <https://doi.org/10.1145/2258056.2258058>
- Siposné Kecskeméthy, Klára (2019): Biztonságföldrajz. In Krajnc, Zoltán (ed.): *Hadtudományi lexikon. Új kötet*. Budapest: Dialóg Campus.
- Siposné Kecskeméthy, Klára (2019): Katonaföldrajzi értékelés. In Krajnc, Zoltán (ed.): *Hadtudományi lexikon. Új kötet*. Budapest: Dialóg Campus.
- Szendy, István (2017): A hadviselés, mint tudományelméleti és tudomány-rendszertani kategória. *Hadtudomány*, 27(3–4), 106–129. Online: <https://doi.org/10.17047/HADTUD.2017.27.3-4.106>
- Szenes, Zoltán (2017): Katonai biztonság napjainkban. Új fenyegetések, új háborúk, új elméletek. In Finszter, Géza – Sabjanics, István (eds.): *Biztonsági kihívások a 21. Században*. Budapest: Dialóg Campus.
- Szternák, György (2008): Gondolatok a hatásalapú- és hálózatközpontú katonai műveletekről. *Hadtudományi Szemle*, 1(3), 1–7.
- Szűts, Zoltán – Jinil, Yoo (2016): Big Data, az információs társadalom új paradigmája. *Információs Társadalom*, 16(1), 8–28. Online: <https://doi.org/10.22503/infvars.XVI.2016.1.1>

Elena-Alexandra Mazilu (Alexandrescu)<sup>1</sup>

# The Necessity of the Process of Modernisation of the Human Resources of the Military System<sup>2</sup>

*The field of human resources has an important role in the process of militarisation and it is necessary that human resources of the military system to adapt to all the transformations which are taking place. In recent years, the Romanian military system had to upgrade, to adapt and to transform all the structures, which are implied in ensuring national security. Those transformations entailed the necessity of modernisation of human resources of the military system because militaries have new responsibilities, they have to apply different procedures and in most of the cases, the way of working has changed. In order to adapt to all those changes, employees have to modernise and commanders are those who support them in this process of modernisation.*

*The deployment of military resources also implies an effective organisation of the military system, establishing clear procedures. Human resources are the first stakeholder in the modernisation process, which is why it is necessary to research this area in order to understand what the modernisation of human resources in the Romanian military system entails.*

**Keywords:** human resources, militarisation, modernisation, security

## Introduction

The modernisation of human resources of the military system is necessary because it increases the performance of the whole system. It is hard to imagine what would happen if an organisation does not invest and establish human resource strategies.

It could result in an underperforming HR management which may lead to a decline of the performance for the entire organisation and to a loss of top talent. The military system should invest and implement innovative solutions in order to keep the talents in the organisation and to attract new talents. HR departments should be proactive and permanently should seek talents.

Human resource departments have an essential role in maintaining a peaceful and productive environment, but they need smart instruments in order to permanently adapt to all the changes that appear in the military system. Here we might include innovative recruiting strategies, digital tools such as an ERP (Enterprise Resource Planning) or cloud computing.

---

<sup>1</sup> PhD student, “Carol I” National Defence University, Bucharest. E-mail: [alexandra.alexandrescu89@gmail.com](mailto:alexandra.alexandrescu89@gmail.com)

<sup>2</sup> The present publication was presented in an oral form on the *II Military Science and Military Art International Conference* at the Ludovika University of Public Service, Budapest, Hungary, on 14 October 2022.

The modernisation of human resources also involves an increase in the quality of life, new training programs for militaries and the discovery and the development of leaders in the organisation.

## The evolution and modernisation of human resources of the military system

For a long time, human resource management was dealing only with personnel affairs, but now it is involved in many processes such as evaluation, career management, recruitment and selection, performance management, personnel motivation, salary management. Being involved in so many processes, human resource management is enforced to upgrade, to automatise its processes and implicitly with the modernisation of the human resources.

In 1961, at the University of Michigan studies referred to the fact that Management of Personnel Quarterly includes labour management and firstly in 1972 the term of HRM – Human Resource Management appeared.

Since the 1990s, different academicians have used more and more the term strategic Human Resource Management because globalisation conducted to this development or transformation from management of personnel to Human Resource Management and then to Strategic Human Resource Management – SHRM.<sup>3</sup> SHRM refers to the fact that HR policies and procedures contribute to the future development of the organisation and the achievement of its objectives. The main objective for SHRM is to develop inside the organisation different policies in order to have capable and motivated workforce, using different recruiting techniques, supporting and developing high-quality employers.

David Ulrich in his book *Human Resource Champion* identified four main functions of the Human Resource system. Firstly, described as a strategic partner, which is following to create a balance between the organisational goals and employees' goals. Secondly, playing the role of administrative expert, respecting the law and the human rights, creating a pleasant place for work. Last, as an employee champion and change agent which is always looking to get the best results, to improve the key performance indicators, to be a problem solver, developing leadership inside organisations.<sup>4</sup>

In 2015, Armstrong and Taylor set the most important goals of Human Resource Management. Firstly, HRM has the role to support the organisation in achieving its objectives by developing and implementing human resource strategies that are integrated in the business strategy. Then, HRM should contribute to the development of a high-performance culture because this way employee engagement can be best developed.<sup>5</sup>

<sup>3</sup> Boxall, Peter (1996): The Strategic HRM Debate and the Resource-Based View of the Firm. *Human Resource Management*, 6(3), 59–75.

<sup>4</sup> Ulrich, David (1997): *Human Resource Champions. The Next Agenda for Adding Value and Delivering Results*. Boston: Harvard Business School Press.

<sup>5</sup> Armstrong, Michael – Taylor, Stephen (2015): *Armstrong's Handbook of Human Resource Management Practice*. London: Kogan Page. 55.

By ensuring that the organisation has the talented, skilled and engaged people it needs, HRM should be involved in the design of every job by establishing as clearly as possible the responsibilities of that job and what type of people are necessary on those jobs.

Moreover, from their perspective, HRM should create a positive relationship between management and employees in a climate of mutual trust by encouraging the application of an ethical approach to people management.

## **Digitalisation of the human resource management system**

According to the development of the HR system over the years, specialists had to find different solutions in order to modernise it, one of the main solutions being by digitising it. Digitalisation represents the path to success both in public and private system. There are different solutions to digitalise human resource management systems according to the need of the organisation.

One solution could be the use of an Enterprise Resource Planning (ERP). All those processes have an important role in the development of the organisation and in the development of the employees. Military organisations should implement an ERP because this way employees could automatise their tasks, they will be more efficient, they will communicate easier with their colleagues from other services and have access to information easier. Employees are looking more and more for digital experience and by implementing an ERP in a military organisation might reduce workforce retention. An ERP might help militaries because this way they have access rapidly to all kinds of information and they can access it everywhere, at any moment.

For example, by using an ERP employees might participate in different trainings all over the world. Moreover, electronic meetings can be organised. An ERP brings benefits both for the employees and for the organisation, saving time and money. By implementing an ERP, the organisation can eliminate or reduce the bureaucratic activities specific to the human resource field, by automatising administrative tasks and speed up internal processes. An ERP could be used on processes like trainings, payroll, recruitment, evaluation of professional performance.

An ERP might also be upgraded in order to migrate its processes to the cloud environment. Implementing cloud-based technologies in the military system brings different advantages, such as cost-efficiency, collaboration and security benefits and with time it is recommended as most of the national defence organisations migrate to cloud services and technologies.

## **How can cloud technologies influence cost cutting in the military system?**

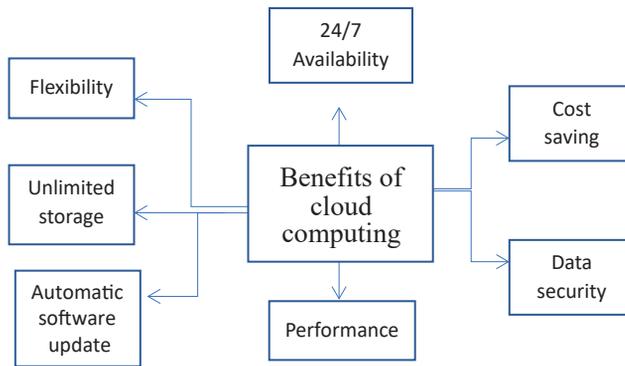
Firstly, using on-site servers to stock data is more expensive than using cloud solutions. In this domain, there are high amounts of sensitive data and huge amounts of money are spent in order to secure it. In addition, cloud technologies allow personnel to work and to access information in real time, improving collaboration and communication

between departments and external institutions. In this way, manual and repetitive tasks are reduced and better levels of interoperability are delivered across military systems.

Cloud technologies also improve the security measures implemented in this system, reducing IT incidents. Cloud technologies should be secured against cyberattacks and respect legal duties, being necessary to attract, retain and develop cyber professionals in the system and also develop strategic partnerships with different organisations.

Cloud technologies might also contribute to the development of cyber capabilities as an integral part of military operations by the development of cyber means for tactical use and the setup of defensive digital means during missions.

Using cloud computing is more secure, being developed with the security of information at its core, you can control any moment who accesses what information and you can eliminate the heavy workload created by paperwork. Also, data is protected in case of different disasters, like an office fire.



**Figure 1: Benefits of cloud computing**

*Source: Compiled by the author.*

For maintaining their employees, it is necessary to develop career plans in order to draw the career path of the employees in the organisation for a longer period, to establish a transparent and objective evaluation and remuneration procedure.

In recent years, the Romanian military system had to upgrade, to adapt and to transform all the structures, which are implied in ensuring national security. Those transformations and the fact that nowadays we can use the advantages of the digital era represent a great challenge for the employees who are working in the military system. For understanding and adapting to all those changes, people need help and the Human Resource (HR) department has an important role in this process. The HR department should be the main connection between employees and the commander and the HR manager has to be organised, to send clear messages and to establish clear strategies. The modernisation process of the Romanian Military system implies also the modernisation of the HR management system.

The Romanian military system confronts with more and more complex internal and external missions. Especially the missions outside the national territory influence the

modernisation process of the Romanian military system through the modernisation of the human resource management. Those aspects are available for militaries all over the world because their missions are very difficult and besides the dangers, they are confronting with difficult weather conditions as well.

Overall, we can say that the entire modernisation of the Romanian military system implies the two most important structures of the organisation. One is the modernisation of the equipment used by the soldiers and the second one is the modernisation of the human resource management, including the education and training of the employees. Those aspects should be taken into consideration by militaries all over the world.

The main steps when an organisation decides to implement different HR practices are for managers to establish clear objectives, to establish the things they want to change and to explain to their employees, which are the reasons they want to change those things.

Managing change is difficult, but managers have different tools, which they can use in order to make this process easier. Managers should explain to their workers that using different high-performance practices, managing change is easier. It was shown that organisations, which use high-performance work practices have motivated staff, have an excellent system of training the employees and provide an excellent career plan.<sup>6</sup> It is relevant for the Head of Personnel and Mobilisation to present to all the employees the organisation's plans regarding the implementation of different HR practices. People need to know why the organisation took those decisions, which are the plans and if the management is open and they trust in their employees, people are more open to accept those changes. In my opinion, changes should be done by a long period, people should receive official information and all of them at the same time because this way managers avoid employees to be misinformed. According to different studies, companies implement different HR practices, have a lower labour turnover and an ascending profitability because they reduce costs when they have a small rate of labour turnover.<sup>7</sup> Those aspects are also available in the military system because when militaries feel that their rights are respected and when they have perspectives to evolve in the organisation, then they want to stay with the organisation for a long time.

It is important for military organisations to analyse the connection between people management and performance before establishing a transformation strategy. Different authors concluded that using different HR practices, establishing clear HR objectives, which are clearly presented and explained to all the employees, may influence employee attitudes and also could improve worker performance.<sup>8</sup>

A possible method of analysing the effectiveness of HR practices could be by establishing direct discussions with militaries, asking for their opinion because this way insights could be obtained regarding the effectiveness of HR practices. In addition, different surveys could be deployed in order for employees to express their opinion regarding the connection between human resource management and organisational performance,

---

<sup>6</sup> Beardwell, Julie – Thompson, Amanda (2017): *Human Resource Management*. London: Pearson Education Limited. 17.

<sup>7</sup> Beardwell–Thompson 2017: 15.

<sup>8</sup> Beardwell–Thompson 2017: 16.

regarding their needs and their objectives and how they perceive the strategy of implementing different HR practices.

The Chartered Institute of Personnel and Development (CIPD, 2006) had an important role in the research regarding the strong connection between human resource management and performance. According to their studies, it was demonstrated that organisational performance and productivity depends a lot on the model of management chosen by the organisation, being important for the organisation to believe that effective people management together with a contemporary system of work organisation influence the performance of the organisation.<sup>9</sup>

Furthermore, in the military domain an option of modernising the human resource management department could be the use of different HR systems, in order for the HR personnel to be involved more in strategic activities, to focus on bringing value to the organisation, to the objectives established by the organisation and to spend less time on transactional activities.

For being present and active in the general strategy established by the military organisation, the HR personnel need to know the detailed plans established by the commander, in order to build strong HR strategies. At this moment, from my point of view, an important objective for the HR services of the military should be the focus on the modernisation of the recruitment process, retention process and career plan.

Moreover, it is interesting to study the modernisation of the Romanian Armed Forces through the transformation of the human resource management in terms of ergonomic requirements. An important aspect in the modernisation of the human resource management is represented by the ergonomic factor because employees need to learn to use the equipment with maximum efficiency.<sup>10</sup> The military receive more and more complex fight equipment and they need special training for learning how to work, to use that equipment. Military organisations should send people to trainings at the companies, which produce that equipment and then they should organise in-house trainings for the other employees. It is more efficient to send a reduced number of employees to external trainings and then they maintain in-house trainings for the other colleagues or for the new entries.

Human resource management in the military system is still going through a complex process of modernisation and the ergonomic factor has an important role in this process because it influences the training of military and civilian personnel in the military domain. Also, we mention that the ergonomic factors have an important role in the process of developing new strategies of the military organisation. Managing the human resource activity in a military institution may be a very difficult and challenging task because you work with people who are involved in dangerous activities and you have to be aware of their emotional and physical needs.

Nowadays, we are living a very difficult period regarding the Covid pandemic which has changed our personal and professional lives a lot. The HR departments should be aware

<sup>9</sup> Beardwell–Thompson 2017: 17.

<sup>10</sup> Opincă, Mihai (2016): *Improvement of the Human Resource Management from the Perspective of Ergonomics Requirements in the Romanian Military*. PhD thesis. Bucharest. 8.

of those changes, which affects also the professional lives of their employees. Militaries are also involved in different activities regarding the Covid pandemic and commanders have to manage very well the tensions which appeared in the last two years, such as taking special measures regarding the health of their employees, maintain motivation and take measures to not reduce the size of the workforce.

Over the years, military organisations focused to recruit for upper levels only personnel from within the organisation, but they realised that it was not the wisest choice. Candidates from external organisations can also be fit for these tasks, because if they are specialists on a certain field, they can also perform in military organisations.<sup>11</sup> For improving the quality of the new human resource personnel of the military organisation, firstly organisations should upgrade their selection and recruiting process. One solution could be to improve the theoretical tests. On the other hand, by modernising the process of promoting the available jobs and by promoting those jobs inside universities, then military organisations could attract specialists from specific fields, with potential, who are open to support the development of the military system.

Moreover, several studies confirm that the compensation system in military organisations should also be transformed because the promotion of military and civilian personnel is presently by rank, the salary is linked directly to rank and years of service, i.e. it is not directly linked to performance.<sup>12</sup> Military and civilian personnel might be disappointed of those conditions and they could be not interested to develop their experience, to perform, to learn new things because these do not help them to increase their salaries.

In the military domain, employees are changing often the department where they are working and their responsibilities are completely different. They are doing this thing for obtaining a higher rank and sometimes it is possible in the conditions of working in another field. To make the transition easier, militaries should participate in a training oriented on the responsibilities of the new job. In this way, productivity becomes higher in a very short time. For doing this, it is necessary for commanders to establish training programs for new employees, even if they are coming from an internal department. In-house trainings are very useful because it is a common change of knowledge. If organisations are interested to develop a program of in-house trainings, every department has to establish a training program with the support of the human resource department.

In most of the cases, the employees working in the human resource departments of military organisations are not being prepared for delivering trainings. Being a trainer is not an easy job. From my point of view, employees from HR departments should participate in external trainings and after that, they would support the managers from other departments to deliver specific trainings on the job, to establish a training program for the new employees. In-house trainings could also be very useful because new employees discover the organisation and its objectives in a very short period. In this way, the organisation supports the modernisation of the human resource department within the organisation.

---

<sup>11</sup> North Atlantic Treaty Organisation: *NATO Human Resources (Manpower) Management*. [online], NATO, 2012. Source: sto.nato.int [04.11.2022]. 49.

<sup>12</sup> North Atlantic Treaty Organisation 2012: 49.

## Leadership

Managers have an important role in the modernisation process of human resources in military organisations. For supporting this process, they have to know very good the members of their team, how they work and which are the responsibilities they are in charge. Managers can propose different solutions of modernisation to their colleagues, but it is very important that they act as leaders. People are not born leaders; the qualities of being a good leader develop daily. The organisation should support the process of developing leaders inside the organisation. Managers should develop the ability to effectively lead and motivate a group of people. Leaders choose the right action at the right time, they innovate, permanently come up with better solutions to accomplish the goal, they respect people and their rights and they do what is right – legally and morally. Military leaders build and motivate teams, they are interested permanently about the projects. Change processes are dynamic and that is why it is good to have one or more leaders in your organisation when you start a process of transformation or modernisation.<sup>13</sup> A leader is always revising the change plan when something is wrong, and remains calm, optimistic and centred even when problems appear.

Becoming a successful leader is specific to the organisation and to the rank, which a leader has. We have no recipe for becoming a successful leader, but some authors established which are the main steps a person could follow in order to become a successful leader. Leaders are those who supports the best process of modernisation of human resources because they enjoy innovation and transformation. Leadership is “influencing people by – providing purpose direction and motivation – while operating to accomplish the mission and improving the organization”<sup>14</sup>

A good leader is the person who inspires and counts on trust and confidence from the part of their team members. In addition, one of the best qualities of a leader is the fact that they have a special way of ensuring that the mission and vision of the organisation are understood.<sup>15</sup>

Leaders should possess creativity, innovation and psychological abilities. Communication, time management and stress management are qualities, which leaders should possess in order to find solutions to the problems, which appear on different missions. In such kind of problematic missions, military leaders should be prepared psychologically because you need to understand the people from your team, to know how to react when one of your colleagues has a serious problem and find solutions in the moment. Commanders should establish different procedures and different measures in order for the militaries who are involved in different missions to have a high morale, a positive mood because in stressful conditions, a pessimistic mood does not help. Militaries often confront with dangerous operations and in those moments, it is good for them to be balanced and not to be tired. Commanders have an important role to ensure a positive

<sup>13</sup> McLagan, Patricia (2002): *Change Is Everybody's Business*. San Francisco: Berrett-Koehler Publishers. 638.

<sup>14</sup> Campbell, Donald J. – Dardis, Gregory J. (2004): *The “Be, Know, Do” Model of Leader Development*. Human Resource Planning Society. 26.

<sup>15</sup> Campbell–Dardis 2004: 26–39.

state of mind of the militaries by different techniques, such as involving militaries in fun activities, in order to have some laughter and good mood. Militaries have a positive mood when they trust in their commanders, when they benefit of a decent space to sleep, when they benefit of all the necessary instruments in order to communicate with their families and friends.

In addition, if their families have different problems, commanders should find different solutions in order to help them to solve their problems. In these conditions, militaries are relaxed and they can concentrate on their work. Leaders should also help militaries to adapt quickly to changes.

However, leaders also need special psychological training before the mission because they are also stressed and they have a lot of work to do. Training helps them to organise, to communicate, not to panic and to find solutions. Communication and time management trainings may help leaders to make the best for their team.

The creation of mixed teams is recommended because military missions imply high risks and mixed teams from the point of view of personality have real success.

The technique of negotiating is very important in this process because there are common interests and it is beneficial to follow a common goal. Militaries working in special and difficult missions should receive a special training because they have to learn to work together in cold weather conditions – on land, in the air and at sea.

Digitalisation may help human security, providing different tools in order to ensure people's wellbeing, rights and capabilities. Digitalisation contributes to ensure global security and nowadays investing in different solutions in order to reduce global warming is necessary all around the world.

## **Conclusion**

Nowadays, modernisation of the human resource management system of the military system is based on digitalisation and leadership. More and more processes need to be automatized in order for the militaries to establish different strategies to confront electronic warfare, using cloud computing and other technologies. Cloud computing might be used by military units to overcome constraints, to modernise operational capabilities, being aware of cybersecurity.

Leaders become more and more important in the development of militaries and in the evolution of the military system. More and more leaders are participating in different trainings and different assessment centres in order to develop different capabilities, which will help them to lead their teams, to offer the best professional advices.

Leaders need to be very well organised, to possess technical and personal skills, because soldiers face constant professional challenges. However, they also face private problems regarding their health or their families' health and in those moments leaders should find solutions for them. Leaders are developing continuously, wishing to develop certain capabilities regarding the ways soldiers have to fight, modernising the equipment, and the most important, prepare the people who are working in the military system by different trainings.

Military digitalisation is the most recent instrument, which contributes to the modernisation of human resources of the military system by implementing new informatics systems and processes.

Technology contributes to the modernisation of HR processes, transforming them, making them more accurate and effective, creating a productive environment.

## REFERENCES

- Armstrong, Michael – Taylor, Stephen (2015): *Armstrong's Handbook of Human Resource Management Practice*. London: Kogan Page.
- Beardwell, Julie – Thompson, Amanda (2017): *Human Resource Management*. London: Pearson Education Limited.
- Boxall, Peter (1996): The Strategic HRM Debate and the Resource-Based View of the Firm. *Human Resource Management Journal*, 6(3), 59–75. Online: <https://doi.org/10.1111/j.1748-8583.1996.tb00412.x>
- Campbell, Donald J. – Dardis, Gregory J. (2004): *The “Be, Know, Do” Model of Leader Development*. Human Resource Planning Society.
- Lefter, Viorel – Deaconu, Alexandrina – Marinaş, Cristian – Puia, Ramona (2008): *Managementul resurselor umane*. Bucureşti: Editura Economică.
- Manolescu, Aurel (2001): *Managementul resurselor umane*. Bucureşti: Editura Economică.
- McLagan, Patricia (2002): *Change Is Everybody's Business*. San Francisco: Berrett-Koehler Publishers.
- Nicolescu, Ovidiu (2004): *Managerii și managementul resurselor umane*. Bucureşti: Editura Economică.
- North Atlantic Treaty Organisation: *NATO Human Resources (Manpower) Management*. [online], NATO, 2012. Source: [sto.nato.int](http://sto.nato.int) [04.11.2022]
- Opincă, Mihai (2016): *Improvement of the Human Resource Management from the Perspective of Ergonomics Requirements in the Romanian Military*. PhD thesis. Bucharest.
- Storey, John ed. (1995): *Human Resource Management. A Critical Text*. London: Routledge.
- Ulrich, David (1997): *Human Resource Champions. The Next Agenda for Adding Value and Delivering Results*. Boston: Harvard Business School Press.

Anna Urbanovics<sup>1</sup>

# Cybersecurity Strategies in the Visegrád Countries – A Cross-Country Analysis<sup>2</sup>

*The European Union is one of the most developed regions with regard to its cyber policy. While 14 out of the top 15 countries based on the National Cybersecurity Index are European countries, the Central European region is in a semi-peripheral position being less developed in cybersecurity policy. The paper aims to evaluate four of these countries – namely the Czech Republic, Hungary, Poland and Slovakia – often referred to as “Visegrád” countries, based on their cybersecurity policy. The region is geopolitically exposed to cyberattacks, however, only Poland follows a military approach in cyber policy development. The methodology is based on a mixed approach, consisting of the quantitative analysis of the countries based on international databases and a qualitative strategy analysis. The results indicate that the Czech Republic leads among the countries of the region. Although the countries of the region concentrate on the fight against cybercrime and personal data protection, other indicators such as the contribution to global cybersecurity policy allow further development.*

**Keywords:** Visegrád countries, militarisation, cybersecurity, strategy analysis, cyber policy development

## Introduction

Central European countries and within them especially the Visegrád countries – namely the Czech Republic, Hungary, Poland and Slovakia – form a special group of countries based on similar historical path and similar geopolitical conditions. In the field of security and defence policy, they are active participants in both the North Atlantic Treaty Organization (NATO) and the European Union (EU). Nowadays, due to the growing number of cyberattacks and the ever-widening type of cyber threats, cybersecurity has become an integral part of the defence policy of a country and an important domain of national interests. Cybersecurity is often identified in the international literature as “the technologies, processes, and policies that help prevent and/or reduce the negative impact of events in cyberspace that can happen as the result of deliberate actions against information technology by a hostile or malevolent actor”.<sup>3</sup>

---

<sup>1</sup> PhD student, University of Public Service. E-mail: [anna.urbanovics@gmail.com](mailto:anna.urbanovics@gmail.com)

<sup>2</sup> The present publication was presented in an oral form on the *II Military Science and Military Art International Conference* at the Ludovika University of Public Service, Budapest, Hungary, on 14 October 2022. Project no. TKP2021-NVA-16 has been implemented with the support provided by the Ministry of Innovation and Technology of Hungary from the National Research, Development and Innovation Fund, financed under the TKP2021-NVA funding scheme.

<sup>3</sup> Clark, David – Berson, Thomas – Lin, Herbert S. eds. (2014): *Computer Science and Telecommunications Board. At the Nexus of Cybersecurity and Public Policy*. Washington, D.C.: The National Academy Press.

In recent years, we can see that cyberattacks are on the rise, as stakeholders are often not prepared to tackle these issues. This could be observed during the Covid-19 pandemic and the Ukrainian war that began in February 2022. Countries are exposed to cyberattacks and more specific national-level policy development is needed. However, European countries stand out from this respect based on the world ranking of the National Cybersecurity Index (14 out of the top 15 countries are European), the Visegrád countries still lag behind compared to the Western European countries.

This paper aims to provide an overview on a comparative basis, involving quantitative and qualitative tools, about the national cybersecurity policies of the four Visegrád countries – the Czech Republic, Hungary, Poland and Slovakia.

The paper is divided into six sections. After the introduction, the second chapter deals with the militarisation of cyberspace and the relevance of national cybersecurity strategies. Then, the methodology of the paper is presented. In the fourth section, the digital adoption level of the studied countries is summarised, while in the fifth section the results of the comparative analysis are summarised. Following these, in the sixth section conclusions of the research are listed.

## The militarisation of cyberspace and the development of national cybersecurity policies

As we could see from the world ranking of the National Cybersecurity Index, European countries are among the leaders in national cyber policy and preparedness.<sup>4</sup> The NCSI database was chosen as the primary database of the current comparative analysis due to its holistic view on national cybersecurity policies and achievements, also due to its evidence-based data collection and methodology. Although cyber threats do not have a unified definition, due to their different nature, safeguarding national security in cyberspace has become crucial for these countries.<sup>5</sup> Some key concepts need to be clarified. Building a comprehensive cyber policy requires “cybersecurity governance” referring to “a holistic and integrated vision of the security of networks, systems, services, and infrastructures in society. It includes the institutions, initiatives, policies, programs, and other mechanisms (formal and informal) that are part of an ecosystem of distributed capacities and responsibilities regarding cybersecurity”.<sup>6</sup> As a result, a cybersecurity strategy is launched in countries which can be defined as “a political manifestations of the country subscriber to the extent that your content tends to divide responsibilities among national stakeholders, stipulate the strategic objectives pursued, define goals, furthermore, in the country, concrete steps should be achieved within defined deadlines and the potential threats perceived by the country should be identified”.<sup>7</sup>

<sup>4</sup> National Cybersecurity Index. [online], e-Governance Academy Foundation, s. a. Source: ncsi.ega.ee [12.10.2022].

<sup>5</sup> Świątkowska, Joanna ed. (2012): *V4 Cooperation in Ensuring Cyber Security – Analysis and Recommendations*. Kraków: Koszuszko Institute.

<sup>6</sup> Hurel, Louise Marie (2021): *Cybersecurity in Brazil: An Analysis of the National Strategy*. *Igarapé Institute, Strategic Paper 54*, April 2021.

<sup>7</sup> Luijff, Eric et al. (2013): *Nineteen National Cyber Security Strategies*. *International Journal of Critical Infrastructure Protection*, 9(1–2), 3–31.

In the 2010s, cyberspace as a new domain of war emerged. In 2016, NATO recognised it as a domain of military operations. Countries use their capabilities in cyberspace that leads to the “characterization of the digital environment as a martial “cyber” domain”<sup>8</sup>

The European Union is active in the cybersecurity field as well. In 2017, the EU reaffirmed its “commitment to the peaceful settlement of international disputes in cyberspace” and it focuses on stability and reducing misunderstandings arising from the use of ICT tools. In this effort, it actively shapes cyber diplomacy.<sup>9</sup> The EU lacks the offensive cyber capabilities, therefore its approach to cybersecurity derives from the protection of fundamental rights and economic interdependence both at a global and intra-EU level.<sup>10</sup> It is important to note that among EU member states, the Visegrád group has established active cooperation in the field of cybersecurity and cyber diplomacy.<sup>11</sup>

There are two main concepts how cybersecurity issues can be perceived by states. The so-called national security paradigm highlights the role of the state in guaranteeing the borders of the countries and the application of the rule of law within its territory.<sup>12</sup> Following this logic, cybersecurity is a multifaceted policy area that establishes cybersecurity that requires states to secure public, private and economic cyber activities.<sup>13</sup> Cybersecurity is considered fundamental to the military and economic security of a state and is approached as such with traditional national security arguments based on protecting the homeland. In contrast to the military concept, the civil approach regards cybersecurity as a matter of economic interests, as the Internet plays a key role in economic development and welfare of the country.<sup>14</sup> From this approach, the creation of a comprehensive cybersecurity policy requires the participation of different stakeholders and the public–private partnership. Among the studied countries, Poland follows the military approach, while the Czech Republic, Hungary and Slovakia follow the economic approach in cybersecurity policy development.<sup>15</sup>

In alignment with the securitisation theorists (referred to as Copenhagen school),<sup>16</sup> there is a growing dependence of nations on cyber infrastructure, therefore cybersecurity issues have become securitised.<sup>17</sup> The securitisation concept suggests that the

<sup>8</sup> Zittrain, Jonathan (2017): ‘Netwar’: The Unwelcome Militarization of the Internet Has Arrived. *Bulletin of the Atomic Scientists*, 73(5), 301.

<sup>9</sup> Molnár, Anna (2022): A kiberdiplomácia fejlődése az Európai Unióban. In Molnár, Anna – Molnár, Dóra (eds.): *Kiberdiplomácia*. Budapest: Ludovika University Press. 55–72.

<sup>10</sup> Kasper, Agnes et al. (2021): Ciberseguridad y ciberdiplomacia de la UE. *IDP*, 34, 1–15.

<sup>11</sup> Tikos, Anita (2022): Cyber Diplomacy and the V4 Countries. In Molnár, Anna – Mártonffy, Balázs (eds.): *Cyber Diplomacy from the European Perspective*. Budapest: Ludovika University Press. 129–150.

<sup>12</sup> Newmeyer, Kevin P. (2015): Elements of National Cybersecurity Strategy for Developing Nations. *National Cybersecurity Institute Journal*, 1(3), 9–19.

<sup>13</sup> Harknett, Richard – Stever, James A. (2009): The Cybersecurity Triad: Government, Private Sector Partners, and the Engaged Cybersecurity Citizen. *Journal of Homeland Security and Emergency Management*, 6(1).

<sup>14</sup> Newmeyer 2015: 9–19.

<sup>15</sup> Tomic, Dusko et al. (2018): Cyber-Security Policies of East European Countries. In Carayannis, Elias – Campbell, David – Efthymiopoulos, Marios (eds.): *Handbook of Cyber-Development, Cyber-Democracy, and Cyber-Defense*. Cham: Springer. 1039–1055.

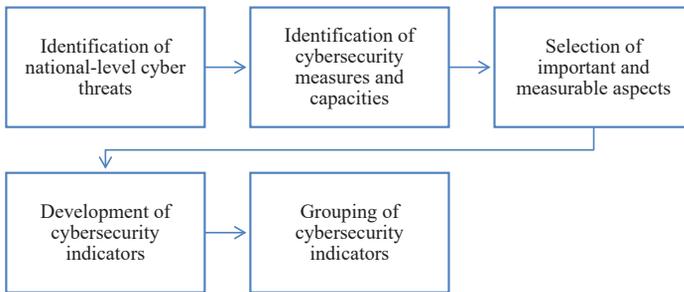
<sup>16</sup> Buzan, Barry et al. (1998): *Security. A New Framework for Analysis*. Boulder: Lynne Rienner.

<sup>17</sup> Lobato, Luisa Cruz – Kenkel, Kai Michael (2015): Discourses of Cyberspace Securitization in Brazil and in the United States. *Revista Brasileira de Política Internacional*, 58(2), 23–43.

materialisation of this process is highlighted through an analysis of policies and institutional and strategic responses. Thus, it is important to analyse how states, acting as securitising actors, become alert to the risks of cyberattacks and then establish a specific agenda to deal with threats. In this context, maintaining a secure cyberspace legitimises the use of extraordinary measures.

## Methodology

The methodology used in the paper is based on comparative quantitative analyses. It can be divided into two parts. It is important to note here that the quantitative analyses based on international indexes provides a solid background for data analysis, because they use the same methodology and evaluation form in every case;<sup>18</sup> therefore, the positions of the objects of the analyses relative to each other give reliable result. First, basic indicators introduced a general picture of the selected countries, including individual-specific and country-level indicators. These can be found in the general overview section of the study. Then, a more detailed quantitative analysis was conducted using the National Cybersecurity Index (NCSI).<sup>19</sup> The National Cybersecurity Index is a global index, which measures the preparedness of countries to prevent cyber threats and manage cyber incidents. The NCSI is also a database with publicly available evidence materials and a tool for building national cybersecurity capacity. The development process of the NCSI database consists of 5 steps (Figure 1).



**Figure 1: Steps of the development process of the National Cyber Security Index database**

*Source: Compiled by the author based on the information provided by the NCSI.*

The database focuses on the measurable aspects of cybersecurity implemented by the national central governments, including the legislations in force, the established units, the cooperation formats and the outcomes. It collects evidence in three categories, 12 capacities and 46 indicators.

<sup>18</sup> Bolgov, Radomir: *The UN and Cybersecurity Policy of Latin American Countries*. 2020 Seventh International Conference on eDemocracy and eGovernment (ICEDEG). 259–263.

<sup>19</sup> National Cybersecurity Index s. a.

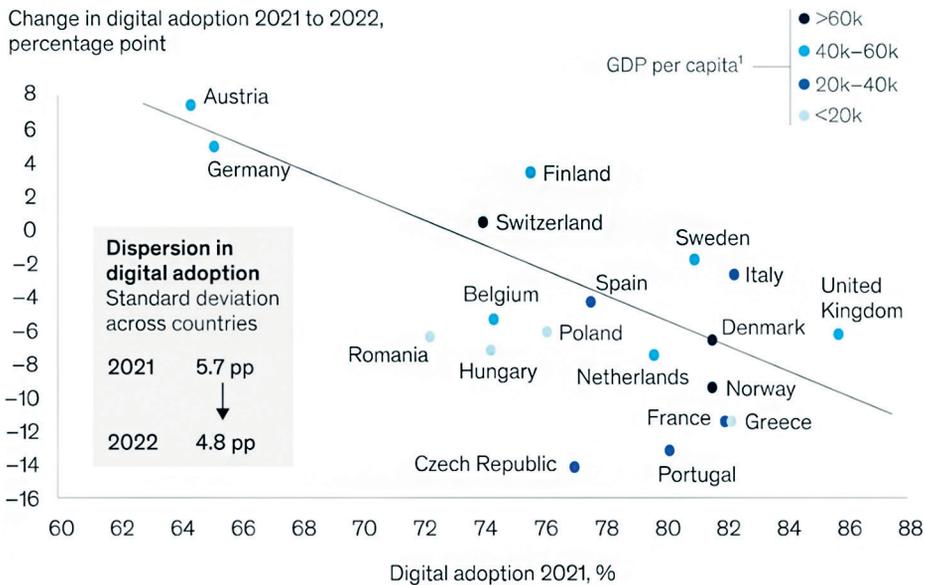
A qualitative document analysis has been carried out as well, based on national cybersecurity strategies as follows:

- The Czech Republic: National Cyber Security Strategy of the Czech Republic 2021–2025
- Hungary: Government Decision No. 1139/2013 (21 March) on the National Cyber Security Strategy of Hungary
- Poland: Cybersecurity Strategy of the Republic of Poland for 2019–2024
- Slovakia: The National Cybersecurity Strategy 2021–2025

The database includes data about the Czech Republic as of 4 February 2020, about Hungary (13 October 2022), about Poland (21 December 2020) and Slovakia (6 July 2020). The legislation and cited data are included in the database, here they will not be placed in the reference list.

## The digital adoption of the Visegrád Countries

Before studying the national cybersecurity developments in the Visegrád countries, we should study the more general digital context of these countries. This helps to highlight the countries’ preparedness for the implementation of the cybersecurity policy.



**Figure 2: The change in digital adoption 2021 to 2022 and the digital adoption level of European countries**

Source: Hajro et al. 2022

The IMD World Digital Competitiveness Index<sup>20</sup> measures the countries' digital competitiveness worldwide based on three pillars, including knowledge, technology and future readiness. According to the 2022 report, we can see that the studied Central European countries are among the top 50 countries in each pillar, led by the Czech Republic in overall (33<sup>rd</sup> place in the world ranking), followed by Hungary (42<sup>nd</sup> place), Poland (46<sup>th</sup> place) and Slovakia (47<sup>th</sup> place). Regarding the pillars, the Czech Republic leads in the knowledge pillar (32<sup>nd</sup> place) and the future readiness pillar (29<sup>th</sup> place), while Hungary achieved a higher ranking in the technology pillar (31<sup>st</sup> place).

After studying digital competitiveness, it is worth checking the country-level digital adoption as well. Based on a recent report (June 2022) launched by McKinsey & Company, there is a correlation between the level of digital adoption and the GDP per capita in European countries. Higher the GDP per capita, higher the level of digital adoption, including Denmark, Finland, Sweden, Switzerland, while the lower the GDP per capita, the lower the level of digital adoption, for example, in case of the Czech Republic, Hungary and Poland. During the Covid-19 pandemic, as we can see in the figure (Figure 2), there were some countries falling back in digital adoption, including the Czech Republic, Hungary and Poland. Based on the results of the Global Digital Sentiment Insight Survey, there are significant differences between sectors in digital adoption. The sector-specific results are summarised in Table 1 (note here that data about Slovakia are not available).

**Table 1: The sector-specific change in digital adoption 2021 to 2022**

	The Czech Republic	Hungary	Poland
Education	-23	-26	-19
Retail	-11	-15	-7
Public sector	-8	-4	-4
Healthcare	-8	-6	-20
Travel	-7	-14	-13
Insurance	-6	-4	0
Utilities	-5	-9	-3
Entertainment	-3	-5	-2
Grocery	-2	0	-4
Telco carriers	0	-3	2
Banking	1	1	1
Average	-5	-7	-6

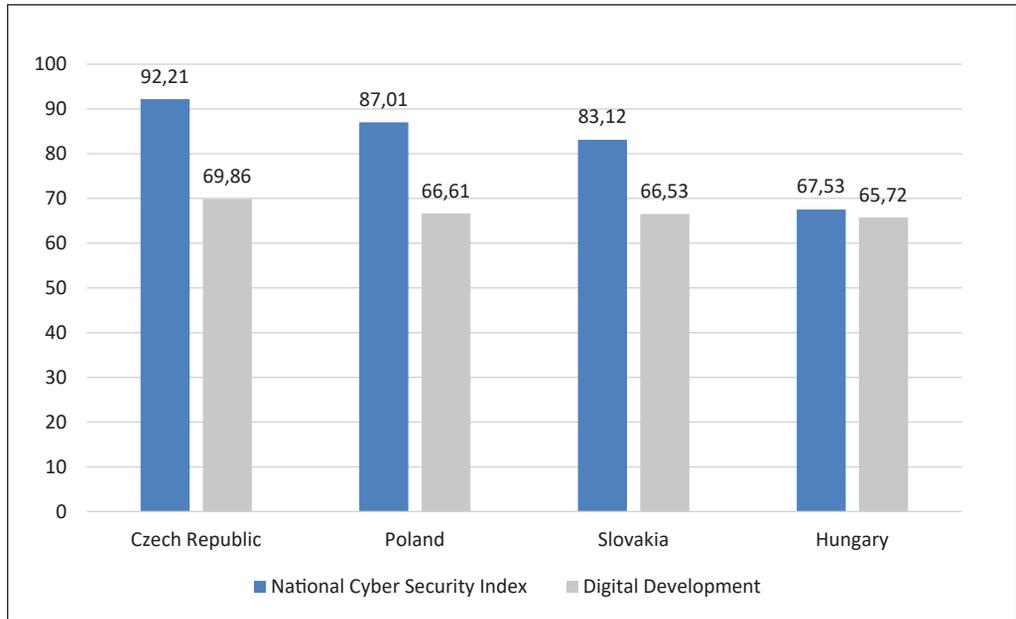
*Source: Compiled by the author based on Hajro et al. 2022*

We can see that, on average, the biggest decrease was in Hungary (-7%). The most significant drops can be observed in education (26% in Hungary), in retail (15% in Hungary), in healthcare (20% in Poland) and in the travel sector (14% in Hungary). The banking sector is the only one where improvement could be achieved in terms of the level of digital development between 2021 and 2022.

<sup>20</sup> [IMD World Digital Competitiveness Index](#). [online], International Institute for Management Development, s. a. Source: imd.org [03.12.2022].

## Comparative analysis of cybersecurity developments

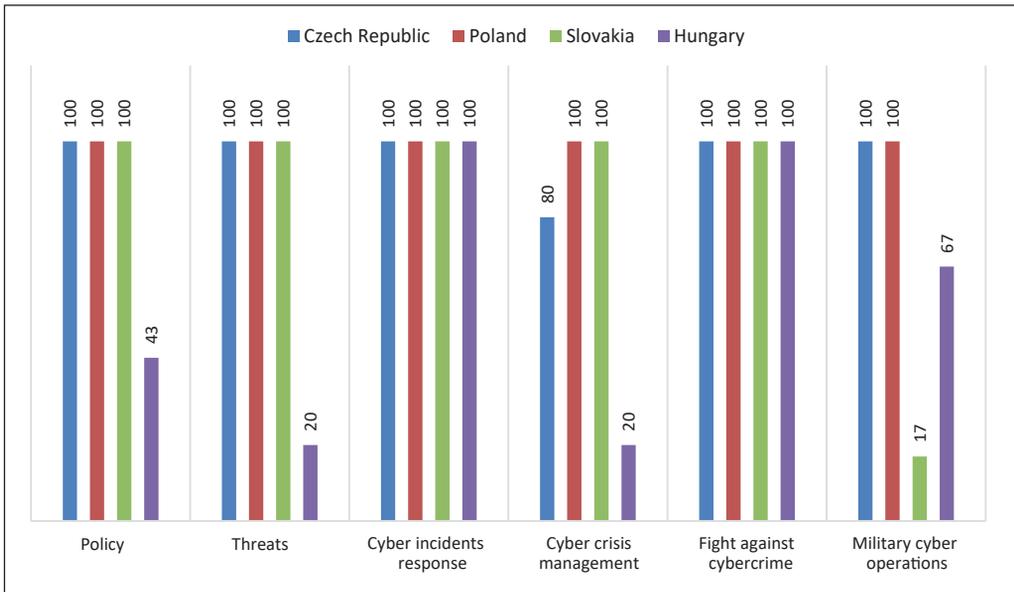
The National Cyber Security Index and the Digital Development Index provide overall indicators for comparative analysis. To focus on every aspect of these two pillars, however, goes beyond the framework of the present study.



**Figure 3: Ranking of the countries by the National Cyber Security Index and Digital Development Index**

*Source: Compiled by the author based on the information provided by the NCSI.*

The database of the National Cybersecurity Index provides two general indicators – namely the National Cyber Security Index and the Digital Development Index – to measure the preparedness of the national cyber policies of countries in a complex way (Figure 3). From both aspects, the Czech Republic stands out, with 92.21 points in the National Cyber Security Index and 69.86 points in the Digital Development. At the second place regarding the NCSI we find Poland (87.01 points), while in the Digital Development, we find Hungary (65.72 points). The countries show a relatively high preparedness according to the NCSI, but there is room for further development in the Digital Development. On the global ranking, the Czech Republic takes the fifth place, followed by Poland (10<sup>th</sup> place), Slovakia (17<sup>th</sup> place) and Hungary (35<sup>th</sup> place).



**Figure 4: Evaluation of the Visegrád countries based on policy-related indicators of the National Cyber Security Index**

*Source: Compiled by the author based on the information provided by the NCSI.*

In the analysis, the altogether 12 indicators will be divided into two sets of indicators. The first set of indicators is rather related to the political and defence dimensions of cybersecurity, and the cybersecurity policy in general (Figure 4).

The cyber incident response and fight against cybercrime indicators are equally developed in every country studied, they have already reached full potential according to the NCSI database. Regarding the cyber incident response, the countries have an established unit – namely the CERT and CSIRT in the Czech Republic, the NCSC unit in Hungary, CERT in Slovakia, and a collection of 3 CIRTs at national level (CSIRT NASK, CSIRT GOV, CSIRT MON) in Poland. In addition, digital service providers and operators of essential services have an obligation to report cyber incidents, while the governments provide a single point of contact for international cyber coordination. In every country, cybercrimes are criminalised by the national law; the first country to include cybercrime in their national Penal Code was Slovakia in 2005 among them, followed by the Czech Republic in 2009. The countries provide a list on what they consider a cybercrime, in Hungary, for example, these are as follows:

- illegal access to information system
- illegal system interference
- illegal data interference
- illegal interception of computer data
- misuse of devices

Regarding cyber crisis management, Poland and Slovakia stand out, having a cyber crisis management plan, having organised national-level cyber crisis management exercise, participating in international cyber crisis exercises, and providing operational support of volunteers in cyber crises. In Slovakia, the National Cyber Security Centre (SK-CERT) has conducted national table-top exercises, focused on cyber crisis management for various subjects, while in Poland cross-sectoral cybersecurity exercises took place in 2017 (LIBERO 2017) and 2019 (LIBERO 2019).

Regarding the military cyber exercises, the Czech Republic and Poland stand out, both having a cyber operations unit, an organised cyber operations exercise at national level, and participated in an international military cyber operation. In Slovakia, the cyber operation unit has not been established yet, but they have already participated in international cyber military operation, while Hungary is somewhat more developed because the only missing aspect is that the country has not organised a national level cyber operation. All of these countries are active in international military cyber operations; a list is as follows:

- The Czech Republic: Cyber Coalition 2017, Locked Shields 2017, Locked Shields 2019
- Hungary: EU MilCERT Interoperability Conference (MIC) 2021–2022, Locked Shields 2021
- Poland: Cyber Coalition 2018, Crossed Swords 2019, Locked Shields 2019
- Slovakia: Cyber Coalition 2017

Further details are summarised in Table 2 on the legislative framework and structure of these countries in their cyber policy. The countries became FIRST<sup>21</sup> members in different periods, starting with Poland in 1997, followed by Hungary in 2006, the Czech Republic in 2015 and Slovakia in 2018. The date of joining the FIRST network shows the different maturity of national cyber policies. We can see some differences with respect to the national cybersecurity strategy as well, the earliest still relevant strategy is in Hungary (compiled in 2013), then in Poland in 2019 for the period of 2019–2024, and the latest can be found in the Czech Republic and Slovakia for the period 2021–2025. Every country has its own national-level central administrative entity, in the Czech Republic as a form of agency, in Hungary a coordination council, while the two other countries handle cybersecurity within a more complex ministerial entity.

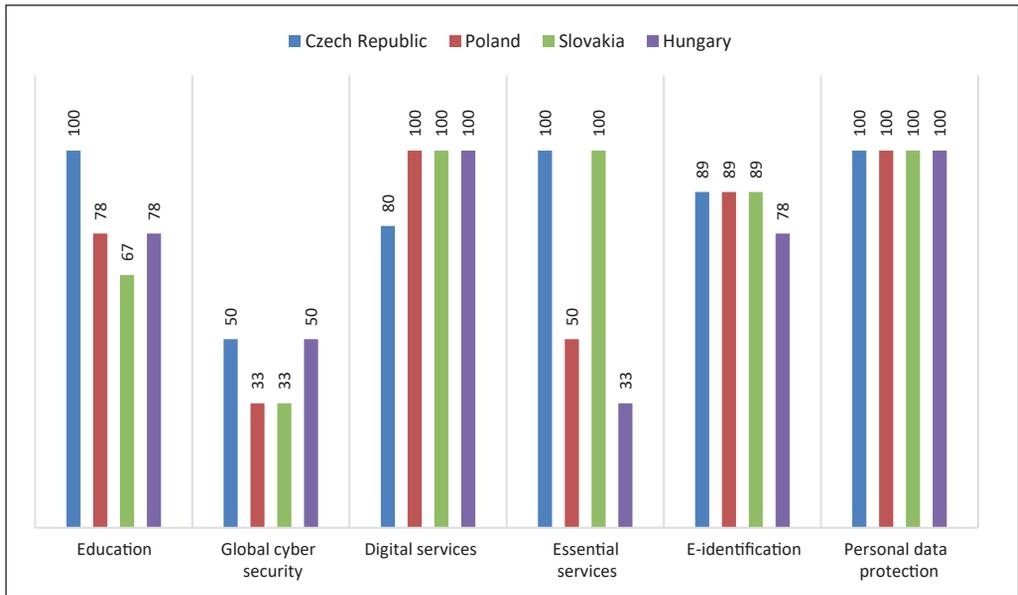
---

<sup>21</sup> The FIRST is an international network bringing together incident response and security teams from every country across the world to ensure a safe internet for all. It aims to provide platform and tools for collaboration.

**Table 2: Main elements of national cybersecurity policy**

Country	Strategy documents	Dedicated agency	Summary of responsibilities	National CERT/ CSIRT	FIRST membership
Czech Republic	<ul style="list-style-type: none"> <li>• The Defence Strategy of the Czech Republic 2017</li> <li>• National Cyber Security Strategy of the Czech Republic 2021–2025</li> <li>• The Prague Proposals: Cyber Security of Communication Networks in a Globally Digitalized World</li> <li>• How to Approach 5G Policies</li> <li>• Implementation and Development of 5G Networks in the Czech Republic</li> <li>• 2020 Report on Cyber Security in the Czech Republic</li> </ul>	National Cyber and Information Security Agency	Serves as central administrative body for cyber security, including the protection of classified information in information and communication systems and cryptographic protection. Responsible for the implementation of the public regulated service of the global navigation satellite system under the Galileo programme.	CSIRT (CSIRT.CZ)	2015 (CSIRT.CZ)
Hungary	<ul style="list-style-type: none"> <li>• National Cyber Security Strategy of Hungary (No. 1139/2013)</li> <li>• Cyber Defence Concept of the Hungarian Defence Forces</li> <li>• National Security Strategy (No 1163/2020)</li> </ul>	National Cyber Security Coordination Council	Responsible for planning, regulation, control and incident handling.	CERT (govCERT)	2006 (govCERT)
Poland	<ul style="list-style-type: none"> <li>• Cybersecurity Doctrine of the Republic of Poland</li> <li>• Cyberspace Protection Policy of the Republic of Poland</li> <li>• National Security Strategy Of The Republic Of Poland 2020</li> <li>• Cybersecurity Strategy of the Republic of Poland, 2019–2024</li> </ul>	Ministry of Digital Affairs	Its main tasks are to develop broadband infrastructure, support the creation of web content and e-services and promote digital competences among citizens.	CERT Polska CSIRT GOV CSIRT MON	1997 (CERT Polska)
Slovakia	<ul style="list-style-type: none"> <li>• Cyber Security Concept of the Slovak Republic (2015–2020)</li> <li>• White Paper on Defence of the Slovak Republic</li> <li>• National Strategy for Information Security in the Slovak Republic</li> <li>• National Cybersecurity Strategy 2021–2025</li> </ul>	National Security Authority	It is the central government body for Protection of Classified Information, Cryptographic Services, Trust Services and Cyber Security. Manages and coordinates carrying out of state administration. Determines the standards, operational procedures, issues the methodology and policy of behaviour in cyberspace; Determines the principles for preventing cybersecurity incidents and principles for their handling; Elaborates the National Cybersecurity strategy and the annual report on the state of cybersecurity in the Slovak Republic in cooperation with the respective state authorities.	CERT (SK-CERT)	2018 (SK-CERT)

*Source: Compiled by the author based on the data of the UNIDIR Cyber Policy Portal.*



**Figure 5: Evaluation of the Visegrád countries based on data protection-related indicators (National Cyber Security Index)**

*Source: Compiled by the authors based on the data of the NCSI*

The second set of indicators is mainly related to services and data protection issues (Figure 5). Among them, the personal data protection is the most developed in these countries. All of them have established and enacted national regulations and set up the authority specialised in data protection issues. As all of them are member states of the European Union, the GDPR<sup>22</sup> applies, too. In the Czech Republic, the Office for Personal Data Protection (an independent body) tackles data protection issues based on Act 110/2019 Coll. In Hungary, the National Authority for Data Protection and Freedom of Information, in Poland, the Personal Data Protection Office, and in Slovakia, a supervisory authority responsible for all essentials on data protection, the Office for Personal Data Protection is the main entity. As we can see, the protection of digital services and essential services are relatively developed indicators as well. However, the protection of essential services, in Poland, the competent supervisory authority, in Hungary, the same authority, and a regular monitoring of security measures is absent.

Regarding education, the Czech Republic offers the most comprehensive opportunities in cybersecurity education including cyber safety competencies in primary or secondary schools, Bachelor's, Master's and PhD level degree programs, and cybersecurity professional certificates. In Hungary, the Bachelor's level degree program, in Poland the PhD

<sup>22</sup> The [General Data Protection Regulation](#) (2016/679, "GDPR") is a Regulation in EU law on data protection and privacy in the EU and the European Economic Area.

level degree program, while in Slovakia the cyber safety competencies in primary and secondary school and PhD level degree programs are missing.

The countries studied perform relatively low – compared to the other indicators – in the contribution to global cybersecurity. In an attempt, Hungary contributed to the development of cyber capacity of Uganda within the framework of an International Development Programme in the Republic of Uganda. The title of the program was *Enhancing Local IT Capacities and Capabilities*. Cybersecurity threats pose one of the greatest challenges to developing countries and modern economies alike. Therefore, Hungary implemented a “specially designed cybersecurity development project in Uganda with the aim of enhancing local defence capacities and capabilities. The project included the establishment of a Malware and Forensic Analysis Laboratory, in addition to the provision of the necessary trainings. The project was completed in May 2020”<sup>23</sup>

Similarly, the Czech Republic participated in Africa-related programs as well – namely the Africa Endeavour Symposium organised by the U.S. Africa Command from 30 July to 3 August 2018 and from 19 to 23 August 2019.

After the index-based quantitative comparison, it is worth studying the national cybersecurity strategies of these countries from a qualitative approach. Here, the emphasis is put on the vision and mission of the strategies and the strategic objectives. Common points can be found in all four strategies; however, compared to the complex nature of the other three, Hungary’s strategy does not include so many details. It is important to note, however, that in Hungary a new cybersecurity strategy is under progress currently. The vision in each country is built around strategic cooperation and alliances and the encouragement of a resilient information society. The Czech strategy states these as follows: “The Czech Republic will have a resilient society and infrastructure, will act confidently in cyberspace, and will actively confront the entire spectrum of cyber threats while strengthening reliable alliances.” The Slovak strategy is in some way broader: “The vision of the National Strategy is to strengthen and create an open, free, and secure cyberspace for everyone.” In the Hungarian strategy, cybersecurity is defined as a national interest and a key element in maintaining the country’s sovereignty. “The protection of Hungary’s sovereignty in the Hungarian cyberspace is also of national interest, too; a free, democratic, and secure functioning of the Hungarian cyberspace based on the rule of law is regarded as a fundamental value and interest. In Hungary, the freedom and security of cyberspace is ensured through the close cooperation and coordinated activities between Government, academia, business sector, and civil society based on their shared responsibility.” The Polish strategy focuses more on the information systems and safe operation in cyberspace, as follows: “The efficient and safe operation of information systems and means of electronic communication contributed to the successful growth of the Republic of Poland, the increasing the effectiveness of the economy and performance of institutions and entities, also including its social activity and everyday functioning of individual members of the society. Therefore, as part of the actions planned in the Cybersecurity

<sup>23</sup> Hungary’s International Development Programme in the Republic of Uganda. [online], International Development Cooperation, 2019. Source: [nefe.kormany.hu](http://nefe.kormany.hu) [03.12.2022].

Strategy, by the year 2024, the government shall systematically enhance and develop the national cybersecurity system.”

Parallel with these, strategic objectives are set in national strategies. These objectives have several focus points that can be found in every strategy, including the national-level cyber capacity building, public awareness and education, promoting the development of research innovation in cybersecurity, preparing a resilient private sector, enhancing the public–private partnership, and actively engaging with the international partners to create strong partnerships abroad.

## Conclusions and perspectives

Due to the growing number of cyberattacks in recent years, the NATO and EU has already established a focused cybersecurity policy based on the trust and collaboration of member states. This helps member states become competitive and many times leaders in cybersecurity policy not just regionally but worldwide. These tendencies are reflected in the IMD Digital Competitiveness report as well. However, during the Covid-19 pandemic there was a serious decline in most of the sectors related to digital adoption.

The studied region – namely the Czech Republic, Hungary, Poland and Slovakia – forms a semi-periphery regarding the maturity of their cybersecurity national policies, although the countries have already taken promising steps and have quite mature cybersecurity strategies. The Czech Republic stands out among them both with regard to the National Cybersecurity Index score and the Digital Development scores. However, these countries are among the most developed ones regarding defence-related cybersecurity policy indicators – mainly in cyber incident response and the fight against cybercrime, room for further development can be found related to service and data protection indicators, and the contribution to global cyber policy.

Regarding future scenarios, these countries must rethink their geopolitical conditions mainly in light of the Ukrainian war and include a stronger military approach – following the example of Poland – in the cybersecurity policy.

## REFERENCES

- Bolgov, Radomir (2020): *The UN and Cybersecurity Policy of Latin American Countries*. 2020 Seventh International Conference on eDemocracy and eGovernment (ICEDEG). 259–263. Online: <https://doi.org/10.1109/ICEDEG48599.2020.9096798>
- Buzan, Barry – Wæver, Ole – de Wilde, Jaap (1998): *Security. A New Framework for Analysis*. Boulder: Lynne Rienner. Online: <https://doi.org/10.1515/9781685853808>
- Clark, David – Berson, Thomas – Lin, Herbert S. eds. (2014): *Computer Science and Telecommunications Board. At the Nexus of Cybersecurity and Public Policy*. Washington, D.C.: The National Academy Press.
- [Cybersecurity Strategy of the Republic of Poland for 2019–2024](#). [online], Ministry of Digital Affairs, 2019. Source: [mc.bip.gov.pl](http://mc.bip.gov.pl) [03.01.2022]
- [Government Decision No. 1139/2013 \(21 March\) on the National Cyber Security Strategy of Hungary](#). [online], Government of Hungary, 2013. Source: [kormany.hu](http://kormany.hu) [03.01.2022]

- Hajro, Neira – Hjartar, Klemens – Jenkins, Paul – Vieira, Benjamim: **Opportunity Knocks for Europe's Digital Consumer: Digital Trends Show Big Gains and New Opportunities**. [online], McKinsey Digital, 28 June 2022. Source: [mckinsey.com](https://mckinsey.com) [03.12.2022]
- Harknett, Richard – Stever, James A. (2009): The Cybersecurity Triad: Government, Private Sector Partners, and the Engaged Cybersecurity Citizen. *Journal of Homeland Security and Emergency Management*, 6(1). Online: <https://doi.org/10.2202/1547-7355.1649>
- Hungary's International Development Programme in the Republic of Uganda**. [online], International Development Cooperation, 2019. Source: [nefe.kormany.hu](https://nefe.kormany.hu) [03.12.2022]
- Hurel, Louise Marie (2021): Cybersecurity in Brazil: An Analysis of the National Strategy. *Igarapé Institute, Strategic Paper 54*, April 2021.
- IMD World Digital Competitiveness Index**. [online], International Institute for Management Development, s. a. Source: [imd.org](https://www.imd.org) [03.12.2022]
- Kasper, Agnes – Osula, Anna-Maria – Molnár, Anna (2021): Ciberseguridad y ciberdiplomacia de la UE. *IDP* (34), 1–15. Online: <https://doi.org/10.7238/idp.v0i34.387469>
- Lobato, Luísa Cruz – Kenkel, Kai Michael (2015): Discourses of Cyberspace Securitization in Brazil and in the United States. *Revista Brasileira de Política Internacional*, 58(2), 23–43. Online: <https://doi.org/10.1590/0034-7329201500202>
- Luijff, Eric – Besseling, Kim – De Graaf, Patrick (2013): Nineteen National Cyber Security Strategies. *International Journal of Critical Infrastructure Protection*, 9(1–2), 3–31. Online: <https://doi.org/10.1504/IJCIS.2013.051608>
- Molnár Anna (2022): A kiberdiplomácia fejlődése az Európai Unióban. In Molnár, Anna – Molnár, Dóra (eds.): *Kiberdiplomácia*. Budapest: Ludovika University Press. 55–72.
- National Cyber Security Strategy of the Czech Republic 2021–2025**. [online], NÚKIB, 2021. Source: [nukib.cz](https://nukib.cz) [03.12.2022]
- National Cybersecurity Index**. [online], e-Governance Academy Foundation, s. a. Source: [ncsi.ega.ee](https://ncsi.ega.ee) [12.10.2022]
- Newmeyer, Kevin P. (2015): Elements of National Cybersecurity Strategy for Developing Nations. *National Cybersecurity Institute Journal*, 1(3), 9–19.
- Świątkowska, Joanna ed. (2012): *V4 Cooperation in Ensuring Cyber Security – Analysis and Recommendations*. Kraków: Kosciuszko Institute.
- The National Cybersecurity Strategy 2021–2025**. [online], National Security Authority, 2021. Source: [nbu.gov.sk](https://nbu.gov.sk) [03.01.2022]
- Tikos, Anita (2022): Cyber Diplomacy and the V4 Countries. In Molnár, Anna – Mártonffy, Balázs (eds.): *Cyber Diplomacy from the European Perspective*. Budapest: Ludovika University Press. 129–150.
- Tomic, Dusko – Šaljić, Eldar – Cupic, Danilo (2018): Cyber-Security Policies of East European Countries. In Carayannis, Elias – Campbell, David – Eftymiopoulos, Marios (eds.): *Handbook of Cyber-Development, Cyber-Democracy, and Cyber-Defense*. Cham: Springer. 1039–1055. Online: [https://doi.org/10.1007/978-3-319-09069-6\\_59](https://doi.org/10.1007/978-3-319-09069-6_59)
- UNIDIR Cyber Policy Portal**. [online], United Nations, s. a. Source: [cyberpolicyportal.org](https://cyberpolicyportal.org) [03.12.2022]
- Zittratin, Jonathan (2017): 'Netwar': The Unwelcome Militarization of the Internet Has Arrived. *Bulletin of the Atomic Scientists*, 73(5), 300–304. Online: <https://doi.org/10.1080/00963402.2017.1362907>

Krisztián Bene<sup>1</sup>

# Changes in the Composition, Equipment and Tactics of the 1<sup>st</sup> Foreign Cavalry Regiment of the French Foreign Legion during the Indochina War<sup>2</sup>

*For nearly a hundred years after its creation, the French Foreign Legion consisted exclusively of infantry units, supplemented only temporarily by “mounted” infantry units, depending on the needs of the theatre of operations. These units did not exceed the size of a company, and their members used their mounts (horses, mules, camels) only to move around, and continued to fight their battles on foot. Based on this positive experience, the 1<sup>st</sup> Foreign Cavalry Regiment was created in 1922, and was then successfully deployed in Syria and Morocco between the two World Wars, and with varying effectiveness in France, Tunisia and Germany during the Second World War. The First Indochina War broke out in 1946 and the 1<sup>st</sup> Foreign Cavalry Regiment joined the conflict in Southeast Asia in 1947, only to leave in 1955 as one of the last French units. During the war, the ranks of the troop, composed mainly of foreign nationals, were reinforced within a short time by a significant number of local soldiers to alleviate the permanent shortage. In addition, depending on local geography, the unit was equipped with armoured and amphibious vehicles, and sometimes ships, which were used to develop new tactics and operate effectively in these new and very different circumstances. In view of its successes, the unit was greatly improved, originally consisting of 7 squadrons, and by the end of the conflict it had grown to 18 squadrons.*

**Keywords:** French Foreign Legion, Indochina War, cavalry troops, tactics, equipment

## Introduction

The French Foreign Legion was traditionally composed of light infantry units representing French interests in the colonial territories. However, the difficult terrain and long distances required the deployment of cavalry units in these theatres of war on many occasions. Consequently, the Foreign Legion headquarters had already established small cavalry units in the 19<sup>th</sup> century to enable them to operate effectively and with high mobility against enemy forces. The experience gained with these units was convincing, and they gradually took on an increasingly important role in the ranks of the Foreign Legion.

Drawing on the military experience of Central and Eastern European volunteers who joined the Foreign Legion after the First World War, the cavalry units played a decisive

<sup>1</sup> Dean, University of Pécs, Faculty of Humanities and Social Sciences. E-mail: [bene.krisztian@pte.hu](mailto:bene.krisztian@pte.hu)

<sup>2</sup> The present publication was presented in an oral form on the *II Military Science and Military Art International Conference* at the Ludovika University of Public Service, Budapest, Hungary, on 14 October 2022.

role in all the major campaigns in which the Legion took part in the first half of the 20<sup>th</sup> century. The most significant of these units is the 1<sup>st</sup> Cavalry Regiment, which was created in 1921 and is still active today. Its longest deployment in its more than a century of existence was during the Indochina War, in which it fought continuously for nearly eight years. During this campaign, the size, composition, equipment and combat procedures of the regiment were changed significantly – adapting to local conditions. The aim of the study is to review the development and transformation of the Foreign Legion's cavalry corps during the first half of the 20<sup>th</sup> century, with reference to the Indochina War period, which was particularly decisive in the unit's history.

## The birth of the cavalry units of the French Foreign Legion

The French Foreign Legion, created primarily to participate in colonial operations, played an important role in the expansion and defence of the French colonial empire on several continents. Although it was not originally intended to play a greater role, it has been called upon to represent French interests on the European battlefields on several occasions during its existence. In the 1830s, it was deployed in the Spanish Civil War,<sup>3</sup> in the 1850s took part in the Crimean War<sup>4</sup> and the Second Italian War of Independence,<sup>5</sup> in 1870–1871 in the Franco–Prussian War<sup>6</sup> and in the First World War in France and the Balkans.<sup>7</sup>

Participation in the latter came at a particularly high price. The Foreign Legion had only 8,800 members before the outbreak of the Great War,<sup>8</sup> but this number grew rapidly when the French Government authorised foreigners living in the country to enlist for the duration of the war in 1914. As a result, volunteers of various nationalities turned up en masse at the recruiting offices, and by the end of the war 42,883 of them – 32,000 before 1 May 1915 – had passed the medical examination and were able to start military service.<sup>9</sup> However, the losses suffered in the field were so great that the four marching regiments formed at the beginning of the war and deployed in France were merged on 11 November 1915 into a single corps. The regiment remained in combat until the end of the war, its losses were being replaced on a permanent basis by fresh recruits.<sup>10</sup> These losses were heavy: by the end of the conflict, the Foreign Legion had lost some 35,000 men, of whom 11,000 were killed and 1,200 missing.<sup>11</sup> However, the Corps not only made sacrifices but also achieved significant combat achievements, which were rewarded with numerous commendations from the command. As a result, by the end of the war, the Foreign

<sup>3</sup> Blond, Georges (2008): *Histoire de la Légion étrangère*. Paris: Perrin. 43–52.

<sup>4</sup> De Gmeline, Patrick (2016): *Nouvelle histoire de la Légion étrangère*. Paris: Perrin. 105–113.

<sup>5</sup> Bergot, Erwan (1972): *La Légion*. Paris: Balland. 69–71.

<sup>6</sup> Mahuault, Jean-Paul (2013): *Engagés volontaires à la Légion étrangère pour la durée de la guerre (E.V.D.G.) 1870–71, 1914–18, 1939–45*. Paris: Grancher. 17–70.

<sup>7</sup> Porch, Douglas (1994): *La Légion étrangère 1831–1962*. Paris: Librairie Arthème Fayard. 395–446.

<sup>8</sup> Comor, André-Paul (2013): *La Légion Etrangère. Histoire et dictionnaire*. Paris: Robert Laffont – Ministère de la Défense. 323.

<sup>9</sup> Bergot, Erwan (1984): *Régiment de marche de la Légion*. Paris: Presses de la Cité. 13.

<sup>10</sup> SHD GR 26 N 862/2. 2<sup>e</sup> régiment de marche du 2<sup>e</sup> régiment étranger: J.M.O. 1<sup>er</sup> janvier – 11 novembre 1915.

<sup>11</sup> Porch 1994: 444.

Legion's marching battalion was the second most decorated unit in the French armed forces, an exceptional achievement considering the number of units in the French army.<sup>12</sup>

This attitude also contributed to the fact that, after the conflict, the French General Staff gave the Foreign Legion a greater role in colonial conflicts than before. Despite the large number of units in the French colonial forces, the Legion's performance in the war led them to seek a wider deployment. The first condition was to increase the number of units. Accordingly, in addition to the existing permanent units (1<sup>st</sup> and 2<sup>nd</sup> Foreign Infantry Regiments), the 3<sup>rd</sup> Infantry Regiment was formed in Morocco in 1920 from the members of the marching regiment which had fought in France during the World War,<sup>13</sup> and in 1922, building on the 1<sup>st</sup> Battalion of the 1<sup>st</sup> Infantry Regiment and supplemented by the large number of volunteers, the 4<sup>th</sup> Infantry Regiment was created.<sup>14</sup> In 1930, the 5<sup>th</sup> Infantry Regiment was formed in French Indochina in Southeast Asia by merging previously independent battalions,<sup>15</sup> and in 1939 the 6<sup>th</sup> Infantry Regiment was established in Syria.<sup>16</sup>

At the same time, the need arose to supplement the corps, which had previously consisted mainly of infantry units, with cavalry units, which would allow for more agile and therefore more effective warfare in the large colonial territories, which often lacked any infrastructure. The Foreign Legion had already met this need early on in its operations and had tried to find an appropriate solution. In 1866, during the Mexican campaign, a "mounted" company was formed, all of them on foot, but with the help of the horse and mule corps assigned to them, they were more mobile than usual and could be quickly deployed to the far reaches of the vast theatre of operations.<sup>17</sup> This experimental innovation proved to be a success, and over the following decades several such units were created within the Foreign Legion, but they were exclusively company-sized units and continued to fight on foot. Consequently, they were not yet true cavalry units, but merely infantry troops with above-average mobility due to the use of load-carrying vehicles, which fought their battles on foot.<sup>18</sup> It seemed logical, therefore, to create a separate cavalry unit within the Foreign Legion, with an excellent supply of men from the volunteers from Central and Eastern Europe, mainly Russians, who were unable to return home because of political changes in their countries, but who had considerable experience in light cavalry warfare. It is estimated that in the early 1920s as many as 20% of the legionnaires were of Russian origin, and among them were many former cavalry officers and non-commissioned officers whose expertise was essential to the new corps being planned.<sup>19</sup> There were also disagreements within the political and military leadership about the way it was to be

<sup>12</sup> Bergot 1984: 98.

<sup>13</sup> Montagnon, Pierre (1999): *La légion étrangère. De 1831 à nos jours*. Paris: Pygmalion. 182.

<sup>14</sup> SHD GR 12 P 81. Dossier 1. 4<sup>e</sup> Demi-Brigade de la Légion Étrangère. Historique, 6.

<sup>15</sup> Thoumelin, Pierre (2013): *L'ennemi utile. 1946–1954. Des vétérans de la Wehrmacht et de la Waffen-SS dans les rangs de la Légion étrangère en Indochine*. Zwickau: Schneider Text. 75.

<sup>16</sup> SHD GR 4 H 257/3. Dossier 3: Groupement de légion étrangère, devenu 6<sup>e</sup> régiment étranger.

<sup>17</sup> Comor, André-Paul (2007): Aux origines de l'infanterie portée et de la cavalerie blindée: les compagnies montées et la cavalerie de la Légion étrangère en Afrique du Nord (1881–1939). *Guerres mondiales et conflits contemporains*, 58(1), 38.

<sup>18</sup> Porch 1994: 372–394.

<sup>19</sup> De Gmeline 2016: 295.

implemented, as not everyone trusted the Russian soldiers because of the revolutionary events. This is illustrated by an episode in Syria, where a cavalry regiment of Russians was formed in March 1919 and disbanded by order of the General Staff in early April.<sup>20</sup>

Following this precedent, the creation of an independent legionary cavalry unit began in Algeria in August 1920 and continued in Tunisia, resulting in the creation of the 1<sup>st</sup> Foreign Cavalry Regiment (*Régiment étranger de cavalerie – REC*) in 1922.<sup>21</sup> The officers were transferred from the existing legionary infantry regiments, while the non-commissioned officers and crew were mostly volunteers of Russian nationality. For example, of the 156 members of the first squadron of the regiment, 128 were of Russian origin, 22 of them Cossacks, 30 former officers (including a general and a colonel), 14 former non-commissioned officers and 11 former cavalry soldiers.<sup>22</sup> This confirms the summary statistics that the proportion of Russians in the unit was still 82% in 1925, therefore, it is no exaggeration to say that the Legion's first cavalry unit drew heavily on the traditions and fighting methods of the Russian light cavalry.<sup>23</sup> At the same time, it is worth mentioning that members of other Central European nations also strengthened the corps, and thus Hungarians were also present in significant numbers in the ranks of the cavalry regiment.<sup>24</sup> The new unit chose its motto partly in reference to the traditions brought by the volunteers and partly to the traditionally aristocratic nature of the cavalry: *Nec pluribus impar* (There is no match for it). This also contributed to the fact that the unit was soon known within the Legion as the Royal Legionnaire (*Royal Étranger*), a name that suited the regiment perfectly.<sup>25</sup>

## The Legionary Cavalry Corps(es) between the two World Wars

The original mission of the unit, which was made up of four squadrons and a training squadron, was to provide reconnaissance and to maintain order in Tunisia, but the difficulties that arose in the French colonial empire soon made it necessary to use it for other purposes.

The first crisis zone was Syria, which came under French control as a mandate area at the end of the First World War. Even the establishment of French sovereignty in the early 1920s had been difficult, but the situation took a serious turn in July 1925 with the outbreak of the Druze uprising, which spread throughout Syria in a matter of months.<sup>26</sup> The French command redeployed a number of troops to deal with the situation, including the 4<sup>th</sup> Foreign Infantry Regiment, reinforced by the 4<sup>th</sup> Squadron of the 1<sup>st</sup> Foreign

<sup>20</sup> SHD GR 4 H 40/6. Dossier 6: Effectifs de la compagnie montée russe, procès-verbaux de formation et de dissolution.

<sup>21</sup> Szečko Tibor (1994): *La Légion. Une légende en marche. 1<sup>er</sup> étranger de cavalerie*. Paris: Editions Atlas. 9.

<sup>22</sup> De Gmeline 2016: 300.

<sup>23</sup> Porch 1994: 450–451.

<sup>24</sup> Montagnon 1999: 181–182.

<sup>25</sup> Comor 2013: 757–759.

<sup>26</sup> See more about this Ferwagner, Péter Ákos (2017): A francia gyarmati uralom megrendülése a Közel-Keleten. Az 1925–1927-i szíriai felkelés. *Világtörténet*, 39(4), 545–573.

Cavalry Regiment, which was engaged in operations against the Druze up to 1927. It was a complete success, as the Squadron distinguished itself several times.<sup>27</sup>

The other serious problem was in Morocco, where in April 1925 Abd el-Krim's Rif forces launched a major offensive against French troops after the defeat of the Spanish army. The Foreign Legion, alongside the 1<sup>st</sup> Foreign Infantry Regiment, was represented by the other companies of the 1<sup>st</sup> REC in the major engagements here. The uprising was finally suppressed in 1926 by a joint force of French and Spanish troops, with substantial reinforcements from the mainland, but the complete crushing of the resistance and pacification of Morocco lasted until 1935, with the Legionnaires playing their part.<sup>28</sup> In the process, the cavalry regiment, which was entirely dedicated to this theatre of operations, proved so successful that its numbers were increased to six squadrons, and in the early 1930s it began to be equipped with transport vehicles and armoured reconnaissance vehicles (initially the 4<sup>th</sup> and 5<sup>th</sup> Squadrons).<sup>29</sup>

Subsequently, the different squadrons of the regiment were assigned in Tunisia and Morocco to garrison and policing duties, a distribution which proved so definitive that in 1939 the 2<sup>nd</sup> Foreign Cavalry Regiment was formed from the units stationed in Morocco.<sup>30</sup> The creation of the new unit was also a recognition of the effectiveness of the cavalry arm, proving that the cavalry, well adapted to changing circumstances, had clearly proved its worth within the Foreign Legion.

## The Foreign Legion Cavalry in the Second World War

After the outbreak of the Second World War, the Legion could not be officially deployed within the borders of the mother country, only the newly created formations could be used to defend it – but there were many Legionnaires transferred from the permanent units. From the point of view of the legionnaire cavalry units, the 97<sup>th</sup> Reconnaissance Group is the most interesting. On 1 December 1939, the French command ordered the creation of the so-called 180<sup>th</sup> Reconnaissance Group, using personnel from the existing legionnaire cavalry regiments and recruits who had completed their training. The 1<sup>st</sup> Squadron of the 1<sup>st</sup> Foreign Cavalry Regiment formed the basis of the new unit, supplemented by recruits, while the 2<sup>nd</sup> Foreign Cavalry Regiment replaced the officers and non-commissioned officers from its own cadre. The unit, consisting of 23 officers and 650 legionnaires, arrived in Marseille on 21 March 1940, where it was given a new number (97<sup>th</sup>) and transferred to the 7<sup>th</sup> North African Infantry Division.<sup>31</sup> During its short stay in the south of France, it also received new means of transport, so that the four squadrons of the detachment were equipped as follows in the spring of 1940: the 1<sup>st</sup> Squadron continued to travel on horseback, the 2<sup>nd</sup> Squadron received solo and sidecar

---

<sup>27</sup> Blond 2008: 339–341.

<sup>28</sup> Soulié, Pierre (2010): 1901–1935: la Légion étrangère au Maroc. *Guerres mondiales et conflits contemporains*, 60(1), 18–24.

<sup>29</sup> Comor 2007: 44–45.

<sup>30</sup> Porch 1994: 515.

<sup>31</sup> Montagnon 1999: 214.

motorcycles, the 3<sup>rd</sup> Squadron, equipped with heavy machine guns and anti-tank guns, was fitted with trucks, as was the command squadron.<sup>32</sup>

The unit, under the command of Lieutenant Colonel Paul Lacombe de La Tour, was engaged on 17 May to the Montdidier area, about 100 kilometres north of Paris, to help stop German armoured forces advancing inland.<sup>33</sup> This small but well-trained unit performed particularly well compared to other French units: between 18 and 25 May, it successfully stopped the heavily outnumbered German armoured units in its sector with good manoeuvring and bold attacks.<sup>34</sup> The severity of these losses is illustrated by the fact that, at the time of the armistice, the unit had only 12 officers and 250 legionnaires.<sup>35</sup> The troop, originally tasked with reconnaissance missions and accordingly equipped with light weapons, was recognised for its exceptional performance with a palm-medal decorated War Cross,<sup>36</sup> and 359 of its personnel were individually decorated for their conduct in combat, many of them posthumously. At the end of the campaign in France, the unit was disbanded on 30 September and its survivors were reassigned to the 1<sup>st</sup> Foreign Cavalry Regiment.<sup>37</sup>

The defeat in 1940 also had a serious impact on the Foreign Legion. Its units deployed in the mother country were either destroyed or suffered such heavy losses that they had to be disbanded, and volunteers who enrolled for the duration of the war had to be withdrawn after the armistice, reducing the size of the corps by about half.<sup>38</sup> The numbers were so critical that two of the units stationed in the colonies were disbanded: the 4<sup>th</sup> Infantry Regiment and the 2<sup>nd</sup> Cavalry Regiment,<sup>39</sup> whose members were transferred to other units to maintain their combat value.<sup>40</sup> This was also necessary two years later when, following the landing of Allied troops in North Africa, the French colonial forces stationed there joined the fighting against the Axis powers in December 1942. The most rapidly deployable and well-prepared units were brought together in the 19<sup>th</sup> Corps, under the command of General Louis Koeltz,<sup>41</sup> which was subordinate to the U.S. Army in the Tunisian campaign.<sup>42</sup> These included the 3<sup>rd</sup> Infantry Regiment, formed largely from subunits of the 1<sup>st</sup> and 2<sup>nd</sup> Infantry Regiments, and a separate detachment of two squadrons of the 1<sup>st</sup> Cavalry Regiment. The legionary units had a good fighting spirit, were eager to take part in the war after a long period of inactivity, and most of their

<sup>32</sup> Képi blanc (2008): Le GRD 97, première unité de reconnaissance. *Képi blanc*, 52(6), 22–23.

<sup>33</sup> Gandy, Alain (1985): *Royal Étranger. Légionnaires cavaliers au combat 1920–1984*. Paris: France Loisirs. 65–67.

<sup>34</sup> Roumiantzoff, Nicolas Pierre (2018): « Le Roum ». *Le spahi du général de Gaulle*. Paris: Cherche-Midi. 62–63.

<sup>35</sup> Blond 2008: 371.

<sup>36</sup> Képi blanc 2008: 23.

<sup>37</sup> Comor 2013: 437–438.

<sup>38</sup> Porch 1994: 559–563.

<sup>39</sup> Also, on 31 December 1941, the 6<sup>th</sup> Foreign Infantry Regiment was disbanded after fighting against Allied forces in Syria. De Wailly, Henri (2006): *Syrie 1941. La guerre occultée. Vichystes contre gaullistes*. Paris: Perrin. 451.

<sup>40</sup> Montagnon 1999: 232.

<sup>41</sup> De Gouberville, Michel (1971): Le corps franc d'Afrique (1942–1943). *Revue historique des armées*, 27(4), 50–51.

<sup>42</sup> Broche, François (2002): *L'Armée française sous l'Occupation. La métamorphose*. Paris: Presses de la Cité. 358–369.

members had considerable combat experience, but their equipment, especially heavy weapons, was incomplete and outdated.<sup>43</sup>

Despite this difficulty, their mission in early January proved successful, as they took 235 prisoners with negligible casualties, while capturing a considerable number of heavy weapons. However, the German counterattacks that began on 18 January inflicted heavy casualties on all the French formations that were affected. In particular, the Foreign Regiment was badly hit by the offensive, losing about half of its personnel in the fighting.<sup>44</sup> The cavalry regiment played an important role in helping the French to break out of the encirclement of the German troops, who were outnumbered and outgunned (Tiger heavy tanks were used here for the first time).<sup>45</sup> Nonetheless, its losses were so heavy (two-thirds of its original strength) that it was withdrawn to Morocco at the beginning of March, where it was disbanded on 31 March and its members returned to their parent unit. However, the French command also recognised their efforts by awarding them the War Cross with a palm.<sup>46</sup>

Nevertheless, it became clear that courage and good training without proper equipment were not enough in a confrontation with the armed forces of a major European power, and it became time to modernise the entire armament of the Foreign Cavalry Regiment, together with the other French units in North Africa, which in practice meant the installation of American weapons and vehicles. This changeover took place in Morocco from September 1943, during which the unit was trained as a reconnaissance regiment of the newly created 5<sup>th</sup> French Armoured Division.<sup>47</sup> The division, which included a similarly reorganised and reinforced Foreign Legion Marching Regiment,<sup>48</sup> landed in southern France in September 1944, from where it advanced northwards in pursuit of German invaders retreating from Allied troops. The last German resistance foxhole in the Colmar area was cleared in February 1945, after which the legionaries crossed the Franco–German border in March, crossed the Black Forest to take Stuttgart and from there pushed on to Austria, where, after further fighting, the war ended.<sup>49</sup> The 1<sup>st</sup> Foreign Cavalry Regiment lost 30% of its personnel during the campaign, but earned its third Military Cross in World War II.<sup>50</sup>

## The beginning of the Indochina War

In the aftermath of the Second World War, the French colonial administration faced a very serious crisis in Indochina. This territory of the French colonial empire in the Far

---

<sup>43</sup> Compagnon, Jean (1981): *La Légion étrangère dans la campagne de Tunisie (1942–1943)*. *Revue historique des armées*, 37(1), 193–194.

<sup>44</sup> Porch 1994: 569.

<sup>45</sup> SHD GR 12 P 81. Dossier 1. 4<sup>e</sup> Demi-Brigade de la Légion Étrangère. Historique, 3.

<sup>46</sup> Szciesko 1994: 10–11.

<sup>47</sup> De Gmeline 2016: 383–384.

<sup>48</sup> Hallo, Jean-Pierre (1981): *Le régiment de marche de la Légion étrangère (1943–1945)*. *Revue historique des armées*, 37(1), 225.

<sup>49</sup> Gandy 1985: 113–118.

<sup>50</sup> Comor 2013: 759.

East was officially called the Indochinese Federation and included Cochinchina, Annam, Tonkin, Laos and Cambodia. Having suffered a crushing defeat in Europe, France was forced to give in to the demands of the Japanese Empire. As a result, under pressure from Japanese diplomacy, the French authorities signed agreements (on 30 August and 22 September 1940) with Japan that allowed the latter to install its troops north of the Red River and to use three airfields in Indochina.<sup>51</sup> From July 1941 onwards, agreements were signed allowing Japan to station its troops throughout Indochina, thus making the territory a strategic starting point for Japanese conquest operations. In 1945, fearing an Allied landing in the region, the Japanese decided to take control in Indochina. On 9 March 1945, Japanese forces attacked the French garrisons by surprise. Despite the fierce resistance of the encircled French garrisons, the Japanese vanquished by occupying all the strategic points of the colony.<sup>52</sup>

In 1945, the French Government intended to re-establish its authority in Indochina. To achieve this goal, the French Expeditionary Corps in the Far East was set up under the command of General Leclerc. However, the realisation of this project was prevented by the action of Ho Chi Minh because the communist politician launched a call for general insurrection on 13 August. His troops, the communist Viet Minh forces, disarmed the Japanese army on the territory of Indochina, which did not show much resistance. As a result of these successful operations and the capture of many weapons and equipment, on 2 September 1945, he declared the country's independence in the name of the provisional government of the Democratic Republic of Vietnam.<sup>53</sup> At the same time, the French authorities started negotiations with the local powers to keep Indochina within the newly created French Union (in October 1946). However, diplomatic negotiations were interrupted in November 1946 when French army artillery bombed the port of Haiphong. This incident provoked an insurrection in Hanoi on 19 December which was led by Ho Chi Minh. As a result, war broke out against French sovereignty by the Viet Minh attacking French troops.<sup>54</sup>

## The 1<sup>st</sup> Foreign Cavalry Regiment during the Indochina War

The French High Command tried to redirect all its mobilisable units to the remote theatre of operations, and most of the airborne units were therefore deployed in the conflict. Accordingly, the 2<sup>nd</sup>, 3<sup>rd</sup> and 5<sup>th</sup> Foreign Infantry Regiments, the 13<sup>th</sup> Demi-Brigade of the Foreign Legion, the 1<sup>st</sup> Foreign Cavalry Regiment, the 1<sup>st</sup> and 2<sup>nd</sup> Foreign Parachute Battalions, as well as several smaller transport, repair and engineering units, fought in Indochina.<sup>55</sup> Despite the fact that the legionnaires represented a smaller part of the

<sup>51</sup> Sergent, Pierre (1977): *Les Maréchaux de la Légion. L'odyssée du 5<sup>e</sup> Étranger (1940–1945)*. Paris: Fayard. 145–149.

<sup>52</sup> Broche, François (2003): *L'Armée française sous l'Occupation. Le rassemblement*. Paris: Presses de la Cité. 369–371.

<sup>53</sup> Windrow, Martin (1996): *French Foreign Legion Infantry and Cavalry since 1945*. Oxford: Osprey. 3.

<sup>54</sup> Bonnacarrère, Paul (2006): *Par le sang versé. La Légion étrangère en Indochine*. Paris: Perrin. 57.

<sup>55</sup> Montagnon 1999: 309–312.

French Expeditionary Force (about 15% of the personnel), the Foreign Legion is the real spearhead of the French forces that is deployed in difficult situations.<sup>56</sup>

The Cavalry Regiment arrived in Indochina from Algeria in February 1947. At that time, it consisted of seven companies without any vehicles, so the first missions were carried out on foot against the Viet Minh forces around the city of Huế.<sup>57</sup> The arrival of conventional vehicles – American and British made – allowed the participation in the protection of supply convoys, which was a priority for the outposts. 4 squadrons received combat vehicles and 2 were further deployed as mechanised infantry. The regiment was subsequently deployed in Annam and Cochinchina. These vehicles enabled the regiment to contribute as a rapid reaction force to support infantry units and guard posts in emergency situations. The unit's primary tasks were patrolling, maintaining the security of routes, escorting transports and reconnaissance, while its high mobility meant that its subunits were deployed several times in various offensive operations to clear a particular area. The corps therefore initially performed classic cavalry tasks.<sup>58</sup>

From 1948, the regiment underwent a major transformation. Its original staff began to be supplemented by local commando units of soldiers, whose fighting style differed from regular warfare, as they basically fought the insurgents using guerrilla methods. The number of local soldiers within the corps steadily increased, a process of yellowing introduced by the French High Command.<sup>59</sup> At the same time, this increase in numbers also allowed the regiment to expand, with the gradual creation of new companies, which by 1954 had grown to 18, almost three times as many subunits serving in the regiment as at the start of the war. This development also allowed the regiment to take on a greater role in operations, as the new units increased its combat strength.<sup>60</sup>

At the same time, the equipment of the corps was also significantly modified. To adapt to the local geographic conditions, part of the unit was equipped with American-made M29 and LVT-4 amphibious vehicles, which provided the airmen with considerable mobility in terrain with rivers and rice fields. In 1951, the regiment was equipped with amphibious vehicles as well as tanks, and then with armoured patrol boats to improve its operational capabilities in the river-rich regions of Annam and Cochinchina.<sup>61</sup> To ensure the transport of supplies, an armoured train was also assigned to the regiment, which the Legionnaires worked to reinforce and then to command and protect. To operate not only inland against enemy forces, but the regiment also deployed a junk to patrol the waters off the coast to prevent arms smuggling, and to transport supplies and troops to support larger military operations.<sup>62</sup> The change in numbers and equipment also had an impact on the

---

<sup>56</sup> Porch 1994: 608.

<sup>57</sup> Bodin, Michel (2007): La cavalerie en Indochine, 1945–1954. *Guerres mondiales et conflits contemporains*, 58(1), 65–66.

<sup>58</sup> Szecsko 1994: 12.

<sup>59</sup> Bodin, Michel (2010): Le jaunissement de la Légion en Indochine, 1950–1954. *Guerres mondiales et conflits contemporains*, 61(1), 69–70.

<sup>60</sup> Comor 2013: 760.

<sup>61</sup> Gandy 1985: 121–126.

<sup>62</sup> De Gmeline 2016: 426–428.

operational use and tactics of the unit. As the regiment gained considerable mobility in Southeast Asian conditions, which were very different from the European (and African) theatre of operations due to the amphibious vehicles and the heavy firepower provided by the tanks, it was able to carry out major offensive operations, either alone or in cooperation with other units, to completely clear a sector of insurgents.<sup>63</sup> As a result, the regiment achieved several successes in the central (Annam) and southern (Cochinchina) parts of the colony, leading to the deployment of some of its units in Tonkin. However, the terrain in Tonkin was not conducive to the use of amphibious vehicles, and the unit proved less successful in operations here than it had been in the south of the country.<sup>64</sup>

The general deterioration of the military situation was accompanied by a reduction in the number of cavalry regiments on the battlefield. They won one of the last victories of the French expeditionary force in the summer of 1954, but this was achieved only at great cost. After the decisive defeat at Dien Bien Phu, the local soldiers were transferred to the Vietnamese army and the regiment's numbers rapidly dwindled,<sup>65</sup> with the companies created during the war being disbanded one by one until only four companies were left. The regiment was among the last to leave Indochina, sailing for Africa in January 1956. The unit lost 400 men (including 25 officers) and 500 wounded during the war, a heavy price to pay for its achievements in the battlefield – in a war that was lost.<sup>66</sup>

## Summary

A little-known episode in modern military history is the process by which the cavalry formations of the French Foreign Legion were created and then constantly adapted and evolved to changing circumstances. Among these units, the 1<sup>st</sup> Foreign Cavalry Regiment stands out, which has been involved in the activities of the Legion since its creation in 1922. The regiment has participated in all the major campaigns of the Legion, but its longest deployment was in the Indochina War, where it fought for nearly eight years.

This was a crucial period for the regiment, which underwent a fundamental transformation in the face of new circumstances and new challenges. It took advantage of local recruitment opportunities to significantly increase its numbers and then the number of deployable units. It then deployed these units with equipment better suited to the terrain, often using creative tactics, and was able to fight the insurgency with great success. As a consequence of this adaptability, the regiment was always successful in the tasks assigned to it, as it is shown by the fact that it was one of the last French units to leave Indochina, only to be sent back to Algeria to fight in another colonial war.

<sup>63</sup> Blond 2008: 450–451.

<sup>64</sup> Szecsko 1994: 13–14.

<sup>65</sup> Bodin 2010: 71.

<sup>66</sup> Cadeau, Ivan et al. (2021): *La guerre d'Indochine. Dictionnaire*. Paris: Perrin – Ministère des Armées. 777.

## REFERENCES

### Archival sources

Service Historique de la Défense (Vincennes):

GR 4 H 40/6. Dossier 6 : Effectifs de la compagnie montée russe, procès-verbaux de formation et de dissolution. Mars-avril 1921.

GR 4 H 257/3. Dossier 3 : Groupement de légion étrangère, devenu 6<sup>e</sup> régiment étranger. Journal des marches et opérations des corps de troupes. Septembre 1939 – mars 1940.

GR 12 P 81. Dossier 1. 4<sup>e</sup> Demi-Brigade de la Légion Étrangère.

GR 26 N 862/2. 2<sup>e</sup> régiment de marche du 2<sup>e</sup> régiment étranger: J.M.O. 1<sup>er</sup> janvier 1915 – 11 novembre.

## REFERENCES

Bergot, Erwan (1972): *La Légion*. Paris: Balland.

Bergot, Erwan (1984): *Régiment de marche de la Légion*. Paris: Presses de la Cité.

Blond, Georges (2008): *Histoire de la Légion étrangère*. Paris: Perrin.

Bodin, Michel (2007): La cavalerie en Indochine, 1945–1954. *Guerres mondiales et conflits contemporains*, 58(1), 63–79. Online: <https://doi.org/10.3917/gmcc.225.0063>

Bodin, Michel (2010): Le jaunissement de la Légion en Indochine, 1950–1954. *Guerres mondiales et conflits contemporains*, 61(1), 63–80. Online: <https://doi.org/10.3917/gmcc.237.0063>

Bonnecarrère, Paul (2006): *Par le sang versé. La Légion étrangère en Indochine*. Paris: Perrin.

Broche, François (2002): *L'Armée française sous l'Occupation. La métamorphose*. Paris: Presses de la Cité.

Broche, François (2003): *L'Armée française sous l'Occupation. Le rassemblement*. Paris: Presses de la Cité.

Cadeau, Ivan – Cochet, François – Porte, Rémy (2021): *La guerre d'Indochine. Dictionnaire*. Paris: Perrin – Ministère des Armées.

Comor, André-Paul (1988): *L'Épopée de la 13<sup>ème</sup> Demi-brigade de Légion Étrangère 1940–1945*. Paris: Nouvelles Éditions Latines.

Comor, André-Paul (2007): Aux origines de l'infanterie portée et de la cavalerie blindée: les compagnies montées et la cavalerie de la Légion étrangère en Afrique du Nord (1881–1939). *Guerres mondiales et conflits contemporains*, 58(1), 37–45. Online: <https://doi.org/10.3917/gmcc.225.0037>

Comor, André-Paul (2013): *La Légion Étrangère. Histoire et dictionnaire*. Paris: Robert Laffont – Ministère de la Défense.

Compagnon, Jean (1981): La Légion étrangère dans la campagne de Tunisie (1942–1943). *Revue historique des armées*, 37(1), 185–216.

De Gouberville, Michel (1971): Le corps franc d'Afrique (1942–1943). *Revue historique des armées*, 27(4), 50–58.

De Gmeline, Patrick (2016): *Nouvelle histoire de la Légion étrangère*. Paris: Perrin.

De Wailly, Henri (2006): *Syrie 1941. La guerre occultée. Vichystes contre gaullistes*. Paris: Perrin.

Ferwagner, Péter Ákos (2017): A francia gyarmati uralom megrendülése a Közel-Keleten. Az 1925–1927-ig szíriai felkelés. *Világtörténet*, 39(4), 545–573.

Gandy, Alain (1985): *Royal Étranger. Légionnaires cavaliers au combat 1920–1984*. Paris: France Loisirs.

Hallo, Jean-Pierre (1981): Le régiment de marche de la Légion étrangère (1943–1945). *Revue historique des armées*, 37(1), 217–241.

Képi blanc (2008): Le GRD 97, première unité de reconnaissance. *Képi blanc*, 52(6), 22–23.

Mahuault, Jean-Paul (2013): *Engagés volontaires à la Légion étrangère pour la durée de la guerre (E.V.D.G.) 1870–71, 1914–18, 1939–45*. Paris: Grancher.

Montagnon, Pierre (1999): *La légion étrangère. De 1831 à nos jours*. Paris: Pygmalion.

Porch, Douglas (1994): *La Légion étrangère 1831–1962*. Paris: Librairie Arthème Fayard.

- Roumiantzoff, Nicolas Pierre (2018): « *Le Roum* ». *Le spahi du général de Gaulle*. Paris: Cherche-Midi.
- Sergent, Pierre (1977): *Les Maréchaux de la Légion. L'odyssée du 5<sup>e</sup> Étranger (1940–1945)*. Paris: Fayard.
- Soulié, Pierre (2010): 1901–1935: la Légion étrangère au Maroc. *Guerres mondiales et conflits contemporains*, 60(1), 7–24. Online: <https://doi.org/10.3917/gmcc.237.0007>
- Szecsco, Tibor (1994): *La Légion. Une légende en marche. 1<sup>er</sup> étranger de cavalerie*. Paris: Editions Atlas.
- Thoumelin, Pierre (2013): *L'ennemi utile. 1946–1954. Des vétérans de la Wehrmacht et de la Waffen-SS dans les rangs de la Légion étrangère en Indochine*. Zwickau: Schneider Text.
- Windrow, Martin (1996): *French Foreign Legion Infantry and Cavalry since 1945*. Oxford: Osprey.

Dániel Solymári<sup>1</sup> – Ráhel Czirják<sup>2</sup>

# Most Current Issues and Perspectives of the Urban Slum Problem in Kenya

## Examining the Results of the KENSUP Slum Upgrade Programme in Kibera

*The paper examines the largest-scale historical slum development program, that has been running in Kibera, the biggest slum of Kenya, since the turn of the millennium: Kenya Slum Upgrading Programme (KENSUP) and its two projects Kibera Integrated Water, Sanitation and Waste Management Project (K-WATSAN) and Kibera Slum Upgrading Initiative (KSUI). The paper synthesises the available literature to examine the extent to which the objectives originally set for 2020 have been achieved. The study found that K-WATSAN was successful both in terms of actively involving the locals and improving their life conditions. However, KSUI did not utilise the experiences gained regarding the significance of community participation. Consequently, structural flaws emerge that call into question the actual fulfilment of the programme's goals, as well as the programme's sustainability.*

**Keywords:** Kibera, urban slums, KENSUP, community participation, slum upgrading

## Introduction: problem identification and methodology

For the metropolises of the Global South, fast population growth presents an enormous challenge. The supply cannot meet the continuously increasing demand for suitable housing, workplaces and city services, so people are compelled to satisfy their own needs. In terms of housing, this equates with moving to the slums, that has assumed mass proportions in the second half of the 20<sup>th</sup> century.<sup>3</sup> Presently, every eighth human on Earth is a slum resident; which, according to the estimates, amounts to globally approximately 1 billion people.<sup>4</sup> In terms of proportions, even though some improvement can be discerned in the decades after the turn of the millennium – between 2000 and 2014, the proportion of city population living in the slums of the developing world decreased from 39 to 30% – considering the absolute numbers, we are facing a growing tendency.<sup>5</sup> Since

<sup>1</sup> University of Pécs, Political Science Doctoral Programme, Faculty of Humanities and Social Sciences, Hungarian Charity Service of the Order of Malta, Fellow of the Royal Geographical Society. E-mail: [solymari.daniel@maltai.hu](mailto:solymari.daniel@maltai.hu)

<sup>2</sup> University of Pécs, Geopolitical Doctoral Programme, Hungarian Charity Service of the Order of Malta. E-mail: [czirjak.rahel@maltai.hu](mailto:czirjak.rahel@maltai.hu)

<sup>3</sup> Czirják, Ráhel (2019): Community-led Planning: The Key to Successful Slum Upgrading? *DETUROPE: Central European Journal of Tourism and Regional Development*, 11(1), 164–181.

<sup>4</sup> UN HABITAT (2020): *World Cities Report 2020. The Value of Sustainable Urbanisation*. Nairobi: UN-HABITAT. 377.

<sup>5</sup> United Nations (2015): *The Millennium Development Goals Report*.

the turn of the millennium, the number of people living in metropolitan slums has been growing globally by 6 million per year, which meant the arrival of 16,500 new people daily. As a result of this, in Sub-Saharan Africa, 56% of city residents, and 46% of those in Kenya, are slum dwellers.<sup>6</sup> For dealing with this problem, we can see various types of solutions, from forced relocation and bulldozing to improving local conditions through infrastructural development and building new houses for residence. In our present study, we introduce the settlement rehabilitation of Kibera in Nairobi, which is considered to be Africa's largest slum district, and within this introduction, we provide a detailed account of the Kenya Slum Upgrading Programme (subsequently: KENSUP).

In our investigation, we are applying a secondary data analysis method, disclosing – according to accessible sources – the results of the programme, which was originally planned to be carried out by 2020. For this purpose, we present how KENSUP is historically and legally embedded, as well as summarising to what extent the aims that were set in relation to Kibera were realised.

Here, we have to note that in our work, the principle of autopsy could not be fully applied, as a considerable percentage of the UN Habitat documents listed in our references are inaccessible. Only the initial 2007 and 2008 documents can be downloaded from their homepage, and upon our request, the colleagues of the Nairobi centre confirmed that they do not possess any more reports. In spite of this, we managed to find a few more investigation results that were officially made for Habitat, but this situation undoubtedly calls into question the organisation's effective involvement, given that their emphasised task during this programme would have been to register, process and disseminate their experiences. We 'bumped up against' a similar problem concerning Kenyan state documents, without getting any response to our request.

In our writing, we first review the history of how Kenyan slums came to be, then we introduce how the legal environment that serves to manage the problem has been evolving. In the second part of our study, we provide a detailed account of KENSUP, with special regard paid to the two projects of the programme that are implemented in Kibera. Finally, based on the data from accessible literature, we present a summarised evaluation of the extent to which the established goals were realised during this rehabilitation. Such a large slum upgrading programme may offer numerous lessons for all the participants of the international development cooperation scene. Thus, the aim of this complex investigation – with its first element being the present study – is to disclose these lessons and summarise them in a manner that can be set into practice.

The Hungarian Charity Service of the Order of Malta and the Africa Research Centre of the University of Pécs have already completed the first summary of the KENSUP.<sup>7</sup> The present paper presents the partial results of the settlement development programme in English language, complementing the first summary.

---

<sup>6</sup> UN HABITAT 2020.

<sup>7</sup> Solymári, Dániel et al. (2021): Overview of Kenyan Government Initiatives in Slum Upgrading: The Case of KENSUP and KISIP Projects. *Hungarian Journal of African Studies*, 15(3), 37–59.

## A historic review: Slum problem and how Kenya handles it

Almost half of Kenya's city population resides in informal settlements, i.e. slum quarters, out of which the largest one is Kibera, by now evolved into an actual district in Nairobi. This settlement is a 'state within a state': the local jurisdiction does not extend here, the place has no sewage system, no legal (and safe) water or power.<sup>8</sup> Actually, only an estimation of the population is possible, as the city management has no exact data. Often, not even the personal identities are known of the dwellers who rent their shanties without authorisation; these people are non-existent for the state's safety net.<sup>9</sup> The history of how settlements such as Kibera came to be reaches back as far as colonial times, as a result of the settlement regulations excluding and restricting Africans.

Not long after founding Nairobi, the new capital, in 1899, the rulers started legally regulating and restricting how the ethnically mixed population could settle down, move into cities, and what activities they could perform. The first such legislation was enacted in 1905, and similar laws followed it in 1927, as well as 1948.<sup>10</sup> In practice, this law restricted moving into Nairobi for Africans, designating different zones where different ethnicities could reside within the city.<sup>11</sup> In the city, Kenyans belonged into the 'tolerated' category, and they lived in the city sections with the worst conditions, mainly in temporary residences.<sup>12</sup> The base of reference for establishing these ethnic and racial zones was the public health act of 1930, which aimed to create a disease-free city environment, at the lowest possible cost.<sup>13</sup> They wanted to defend the European population from tropical diseases by means of ethnic segregation. Informal settlements and slum/shantytown quarters had already started to form at that time, as the Kenyans were not only crowded out from city areas with better conditions and thus forced to move into bad-quality lodgings without appropriate infrastructure supply, but in the 1915 Land Act, they were also prohibited from owning real estates – not only in good-quality agricultural areas – but in cities, as well. This way, Africans were forced to move into informal settlements near their job opportunities.<sup>14</sup>

When Kenya gained its independence, upon lifting the urban settlement restrictions, huge crowds began pouring into the cities from the rural areas where they had to tackle drought, in some cases low-quality land areas and the lack of jobs – their primary urban

<sup>8</sup> Solymári, Dániel (2014): *Harcok és távlatok: Kelet-afrikai nyomortelepek ma és holnap. Afrika Tanulmányok*, 8(2), 5–16.

<sup>9</sup> Solymári, Dániel et al. (2020): The Impact of Covid-19 on the Livelihoods of Kenyan Slum Dwellers and the Need for an Integrated Policy Approach. *PLoS ONE* 17(8).

<sup>10</sup> Amiss, Philip (1988): Commercialized Rental Housing in Nairobi, Kenya. In Patton, Carl V. (ed.): *Spontaneous Shelter. International Perspectives and Prospects*. Philadelphia: Temple University Press. 235–257; Ottichilo, Wilber (2011): Tracking Regional Growth and Development: The Nairobi Case. In Birch, Eugenie – Wachter, Susan (eds.): *Global Urbanisation*. Philadelphia: University of Pennsylvania Press. 167–171.

<sup>11</sup> Seger, Martin (1992): Nairobi – egy gyarmati múltú nagyváros szerkezeti tagolódása. *Földrajzi Közlemények*, 156(1–2), 57–68.

<sup>12</sup> Magutu, Jerry (1994): The Role of Informal Settlements in Housing the Urban Poor in Nairobi, Kenya. *Ekistics*, 61(366–367), 206–213.

<sup>13</sup> Amiss 1988: 235–257; Ottichilo 2011; Macharia, Kinuthia (1992): Slum Clearance and the Informal Economy. *The Journal of Modern African Studies*, 30(2), 221–236.

<sup>14</sup> Anderson, Mark – Mwelu, Keziah (2013): *Kenyan Slum Upgrading Programs: KISIP & KENSUP*.

choice being Nairobi – where they saw a better chance to get on.<sup>15</sup> Facing the accelerated urbanisation, however, the government had neither an appropriate development strategy nor sufficient financial resources to satisfy the increased housing demand, so the people erected their own shelters from available raw materials.<sup>16</sup> In this way, slums further multiplied.

In the very first years, rife as they were with numerous legal, administrative, governmental challenges, the government, led by Jomo Kenyatta, handled the unregulated growth and proliferation of informal settlements by returning to the public health act of the 1930s, which in practice meant bulldozing slums.<sup>17</sup> In the 1960s, these shantytowns were regarded as dark stains on the cities, factors inhibiting the city's development.<sup>18</sup>

In the 1970s, the situation only changed to a lesser extent. In 1978, President Moi, who ascended into power after Kenyatta's death, continued to implement a similar procedure against the slums, and in spite of all the proposals, he did not modify the constitution that had been created at the time of gaining independence – in which human rights, such as the right for housing, did not appear to be emphasised with sufficient momentum.<sup>19</sup> Internationally, public opinion grew more and more critical towards mass evictions and bulldozing. As it happened, by this time Nairobi became the centre of international organisations and NGOs; it grew into a bona fide 'humanitarian hub' of the region, so the concepts of adequate housing and general human rights that they have so frequently proclaimed, increasingly became a part of the policy discourse in the East African country, as well. Thus, as a result of outside pressure, the attitude of handling the problem gradually shifted from bulldozing towards Slum Upgrading.<sup>20</sup>

However, the challenge of satisfying the increased housing demand did not diminish even in the 1980s. As a result of the Structural Adjustment Programs – SAPs – of the World Bank and the IMF, social inequalities grew considerably, and poverty escalated.<sup>21</sup> After the mass evictions and bulldozing in the 1980s and 1990s, from the turn of the millennium onwards, the manner of handling the slum problem in Kenya was and still is characterised by a state attitude that is more favourable for the poor;<sup>22</sup> in forming

<sup>15</sup> K'akumu, Owiti A. – Olima, Washington H. A. (2007): The Dynamics and Implications of Residential Segregation in Nairobi. *Habitat International*, 31(1), 87–99.

<sup>16</sup> GOK-KENSUP (2005): Government of Kenya, KENSUP Financing Strategy.

<sup>17</sup> Macharia 1992: 221–236.

<sup>18</sup> Lewis, Oscar (1959): *Five Families. Mexican Case Studies in the Culture of Poverty*. New York: Basic Books; Clinard, Marshall (1966): *Informal Settlements and Community Development. Experiments in Self-Help*. New York: The Free Press; Juppenlatz, Morris (1970): *Cities in Transformation. The Urban Squatter Problem of the Developing World*. St. Lucia, Queensland: University of Queensland Press.

<sup>19</sup> Omenya, Alfred – Huchzermeyer, Marie (2006): Slum Upgrading in the Complex Context of Policy Change: The Case of Nairobi. In Huchzermeyer, Marie – Karam, Aly (eds.): *Perpetual Challenge? Informal Settlements at the Local and Policy Level*. Cape Town: Juta–UCT Press. 290–311.

<sup>20</sup> Solymári et al. 2021: 37–59.

<sup>21</sup> Otiso, Kefa M. (2003): State, Voluntary and Private Sector Partnerships for Slum Upgrading and Basic Service Delivery in Nairobi City. *Kenya Cities*, 20(4), 221–229.

<sup>22</sup> Muraguri, Leah (2011): Kenyan Government Initiatives in Slum Upgrading. *The East African Review*, 44, 119–127; Githira, Daniel (2016): *Growth and Eviction of Informal Settlements in Nairobi*. MSc Thesis. Twente: University of Twente.

this attitude, the influence of the international narrative as well as the recognition that physically annihilating slums is merely a symptomatic ‘treatment’ of the existing problem, played an important role.<sup>23</sup>

In 2000, the UN’s member states elaborated on and accepted the Millennium Development Goals, in which they targeted the significant improvement of at least 100 million people residing in slums (Target 7.D).<sup>24</sup> Among those who signed the document, Kenya was also present. Partly as a result of this, in 2001, the Kenyan President Daniel arap Moi and Anna Tibaijuka, the executive manager of the UN Habitat at that time, discussed the challenges of the Kenyan housing situation within an official meeting, as a result of which in 2003, the parties signed a memorandum of understanding, and in 2004, they officially launched KENSUP, the long-term Slum Upgrading Programme, which was to be implemented via the cooperation of the Kenyan Government and the UN Habitat.<sup>25</sup>

Kenya’s attitude shift and the country’s endeavours are also reflected in how the legal environment has evolved, and they are apparent in the strategic plan documents, as well. After thirty-seven years, in 2004, the National Housing Policy Directive was reviewed, which, similarly to the original version, sought a solution to the deteriorating housing situation and the problem of the lack of housing, primarily in the cities. However, on this occasion, they intended to achieve this goal by means of building apartments that would be offered to low- and medium-income people, improving the housing conditions of slums and informal settlements, as well as an incentive to the house rental system<sup>26</sup> – as opposed to bulldozing the slums that hinder the new investments serving the needs of more well-to-do people.

In 2007, the government issued the long-term state development strategy named Kenyan Vision 2030, in which the housing problem issue is also present. According to the document, by 2030, the goal would be for people to live under appropriate housing conditions in a safe environment.<sup>27</sup>

In a subsequent move, the National Land Policy of 2009 dealt with the problems related to the spread of slums and the intervention measures directed at handling the estate laws of informal settlements. The act<sup>28</sup> suggested modernising the slums, evaluating the territories occupied by slums regarding the aspect of how suitable they would be for modernising, as well as a substantive consultation with the slum dwellers. However, as a result of weak implementation strategies, these endeavours could not be set into practice.<sup>29</sup>

---

<sup>23</sup> Solymári et al. 2021.

<sup>24</sup> [Millennium Development Goals Indicators](#). [online], MDG Indicators, s. a. Source: unstats.un.org [22.01.2023].

<sup>25</sup> UN HABITAT (2008): *UN HABITAT and the Kenya Slum Upgrading Programme. Strategy Document*. Nairobi: UN HABITAT. 72.

<sup>26</sup> Government of Kenya (2004): *Sessional Paper No. 3 of 2004 on National Housing Policy for Kenya*. Nairobi: Government Printer.

<sup>27</sup> Government of Kenya (2007): *Vision 2030*. Nairobi: Ministry of Planning and National Development.

<sup>28</sup> Government of Kenya (2009a): *Sessional Paper No. 3 of 2009 on National Land Policy*. Nairobi: Government Printer. 48.

<sup>29</sup> Obare, Michael (2015): *An Evaluation of Slum Upgrading Schemes in Nairobi County. The Case of Kibera Slums*. Research Project EPM 492. 96.

In 2010, Kenya's new constitution was adopted, guaranteeing the right for 'accessible and appropriate housing', as well as for reasonable norms of hygiene. Furthermore, Article 43 recognises the right of ownership for lawfully obtained real estates and lands, as well as firmly stating that the state cannot deprive a single person of their property, prescribing immediate full restitution as a compensation for the benefit of the possibly injured person.<sup>30</sup>

The National Urban Development Directive of 2011 reorganised the city development, as up to that time, it had been burdened with corruption, contradictions and conflicts. The law intended to establish a proper framework for the sustainable development of city areas, also targeting the solution of problems pertaining to slums, such as social infrastructure and services, city housing, safety and disaster management, as well as the marginalisation of vulnerable social groups.<sup>31</sup>

The Kenyan Government's next move was the NSUPP – National Slum Upgrading and Prevention Policy draft,<sup>32</sup> completed by the Ministry of Housing in 2012, which proposed accepting a comprehensive slum upgrading and prevention plan that could be the basis of slum-related interventions. This document's framers also deemed it necessary to deal with issues such as regulating property right relations, establishing a proper institutional background, environment protection, planning and development control, substantive inclusion of every interested party in the process of interventions, with special regard to more vulnerable groups, developing and maintaining the infrastructure, and so on.<sup>33</sup> Nevertheless, up to this very day, no all-encompassing slum upgrading law has been passed in Kenya, so the relevant developments that are implemented in the cities continue to be realised according to a number of ambiguous and ineffective legislations.<sup>34</sup>

From the review, it is obvious that Kenya's attitude towards slums has changed a lot since the colonisation. Moving away from forcible evictions and bulldozing, the present goal is an approach that keeps in mind the interests of the most vulnerable; upgrading slums, improving the life conditions of their residents, guaranteeing the housing for the poorest is more or less a general directive.<sup>35</sup> Even though the slum upgrading act that would serve as a unified framework for effective intervention has not yet been passed, and evicting people from public properties in need of development is still an existing phenomenon in Kenya, the trend is by all means promising.

In the following section, we will introduce how the Kenya Slum Upgrading Programme, one of the most significant results and tools of this attitude shift, was realised, and to what extent it contributed to managing the housing problem of the poorest.

<sup>30</sup> Government of Kenya (2010): *The Constitution of Kenya*.

<sup>31</sup> Obare 2015.

<sup>32</sup> Government of Kenya (2013): *Background Document. The National Slum Upgrading and Prevention Policy*. Nairobi: Government Printer. 4.

<sup>33</sup> Government of Kenya 2013.

<sup>34</sup> Agayi, Collins Ouma – Serdaroğlu Sağ, Neslihan (2020): An Evaluation of Urban Regeneration Efforts in Kibera, Kenya through Slum Upgrading. *IDA: International Design and Art Journal*, 2(2), 176–192.

<sup>35</sup> Czirják, Ráhel (2018): A nyomornegyedekben rejlő lehetőségek. *Parola: a közösségi fejlesztőmunka folyóirata*, 27(3), 8–11.

## The KENSUP Programme

The Kenya Slum Upgrading Programme – KENSUP – was launched by the UN Habitat and Kenya's government in 2001, after Kenya's former president, Daniel arap Moi met the UN Habitat's executive manager at that time, Anna Tibaijuka. The parties signed a memorandum of understanding in 2003, and the programme was officially launched on 4 October 2004, the world day of housing.<sup>36</sup> KENSUP includes altogether eight projects, with the venues for implementing them being assigned in five Kenyan cities: Nairobi, Kisumu, Mavoko, Mombasa and Thika.<sup>37</sup> In our present study, we will only focus on the projects linked to Kibera, the largest slum within Nairobi.

The programme targets the improvement of life conditions of Kenyan urban slum residents and workers. The long-term programme is intended to apply a multi-disciplinary, integrated approach to handle the complex problem, via improving the housing situation, generating income, establishing the safety of the right of estate ownership, as well as offering physical and social infrastructure.<sup>38</sup> According to KENSUP's intentions, and translated into numbers, all this means the improvement of life conditions for 5.3 million city slum residents until 2020; the budget of this endeavour was estimated to amount to 884 billion Kenyan shillings; that is, approximately 13 billion U.S. dollars.<sup>39</sup> For financing the programme, KENSUF (Kenya Slum Upgrading, Low-Cost Housing and Infrastructure Fund) was created, the budget of which is comprised of payments from international donors – such as the UN Habitat – and the Kenyan state.<sup>40</sup>

A wide-range partnership between the UN Habitat, the Kenyan Government, local authorities, the affected communities, non-governmental organisations, as well as the private sector, constitutes the basis of this programme. The participants' tasks are divided as follows:

- UN Habitat: technical aid, capacity enhancement, counselling, documentation, analysis
- Kenyan Government and local authorities: implementing the programme, directing and managing the processes, such as resolving estate ownership issues, creating a favourable legal, institutional and political framework for developments
- Non-governmental organisations: contributing with their expertise, mobilising local communities<sup>41</sup>

In order to implement the programme, a Slum Upgrading Department (SUD) was established within the Kenyan Housing Ministry – as it was called at that time – as

---

<sup>36</sup> UN HABITAT 2008.

<sup>37</sup> At the same time, it is important to note that out of the five cities listed in the initial plans (UN HABITAT 2007; UN HABITAT 2008), Habitat's 2014 report only mentions four venues for implementing the project, leaving out Thika (UN HABITAT 2014).

<sup>38</sup> Candiracci, Sara – Syrjänen, Raakel (2007): *UN HABITAT and the Kenya Slum Upgrading Programme*. Nairobi: UN HABITAT.

<sup>39</sup> GOK–KENSUP 2005.

<sup>40</sup> Anderson–Mwelu 2013.

<sup>41</sup> Candiracci–Syrjänen 2007.

a government-level institution responsible for its execution.<sup>42</sup> While at the start of the programme, the Habitat and the Kenyan Government participated in planning like equal partners, in the course of the following years, the multilateral organisation passed the programme entirely on to the East African state.<sup>43</sup> The Kenyan Government's participation is by all means promising, considering that up until recently, decision-makers turned a blind eye to slums, ignoring their existence – not listing them in any city development documents. In the UN Habitat documents, Kenya appears as one of the few governments in Africa devoted to upgrading the slums.<sup>44</sup>

In order to successfully implement the long-term programme, in its early stage, a pilot project was chosen, so that the conclusions and experiences formulated in the process of implementing it would serve as valuable lessons for the later implementation of the programme. This project was named the Kibera Integrated Water, Sanitation and Waste Management Project, Nairobi, subsequently K-WATSAN. The pilot was implemented in the village named Kibera Soweto East. Based on these experiences, also the second KENSUP project related to Kibera (Kibera Slum Upgrading Initiative – KSUI was (and still is) implemented here. Besides these two partial programmes, a third initiative called Youth Empowerment Programme, Kibera and Mavoko was also actualised.<sup>45</sup> However, since this project – one that targets youth education and creates a more favourable labour market position for young people – does not entail infrastructural elements, it is difficult to investigate several years after its launch, so we do not deal with it in the following segment of our article.

So, as an experimental venue, Soweto East was chosen, with a population of nearly 20,000. The reason for choosing it was that compared to other parts of the slum, the ownership relations are relatively transparent here, the place possesses an optimal road accessibility, it is an ethnically 'heterogeneous' 'cosmopolitan' area, with a relatively stable inner 'government'. Also, there have been development endeavours earlier on, which KENSUP can join in a relevant manner.<sup>46</sup>

## **Kibera Integrated Water, Sanitation and Waste Management Project (K-WATSAN)**

The K-WATSAN project, which is being implemented in Kibera's easternmost region, in Soweto East, was intended for the 'entry point' of the entire large-scale slum programme, in the course of which the project, employing a hybrid approach, combined the community

<sup>42</sup> KNCHR (2015): Kenyan Commission on Human Rights: A Report Submitted to the High Court of Kenya (Nairobi) by the Kenyan National Commission on Human Rights on the Implementation of Petition No. 304 of 2015. Allocation of housing units in Kibera Soweto East Zone 'A' – Redevelopment project under the Kenya Slum Upgrading Programme. 101.

<sup>43</sup> Scuggs, Gregory: [Turning Mud Huts Into Apartment Towers in Nairobi's Biggest Slum](#). [online], Yahoo News, 10 August 2015. Source: news.yahoo.com [22.01.2023].

<sup>44</sup> Candiracci–Syrjänen 2007.

<sup>45</sup> UN HABITAT 2008.

<sup>46</sup> Mitra, Shreya et al. (2017): Developing Risk or Resilience? Effects of Slum Upgrading on the Social Cohesion in Kibera, Nairobi. *Environment & Urbanisation*, 29(1), 103–122.

perspective that ensured the involvement and active participation of the affected people with a ‘top down’ approach – which, in the present situation, meant connecting the decision-makers and sources of the process with the affected people.<sup>47</sup>

Beyond the explicit target setting, the initiative was dedicated to gain the trust of the locals and ensure their commitment for the long-term programme.<sup>48</sup> This was necessary because, due to the hitherto failed slum development interventions in Kenya, such kinds of developments are typically surrounded by mistrust. For successfully realising this programme, however, the support from affected people (and what is more, their active participation), is indispensable – as Habitat calls our attention to it several times.<sup>49</sup>

The K-WATSAN integrated intervention was intended to improve the living conditions of those who reside in Soweto East, with their active participation in the areas of water and sanitation, sewage, waste collection, physical accessibility, safety and capacity enhancement. Through gaining the locals’ trust and ensuring their commitment, the ‘entry point’ project prepared the field for a large-scale apartment-building investment – Kibera Slum Upgrade Initiative (KSUI) – to be implemented in the district – while at the same time improving the living conditions of those who were left out of the latter initiative.<sup>50</sup>

According to the original plans, after some delay, and due to a development enlargement – namely building an exploration road, keeping in mind the feedback from the locals – the initiative with a \$318,000 USD budget, which was launched in November 2005, was finally completed in 2010, with an altogether \$1.05 million U.S. dollar expenditure.<sup>51</sup>

Disclosing the initial situation started in 2001, with the document entitled *Nairobi Situation Analysis*,<sup>52</sup> followed in 2004 by the work Participatory Urban Appraisal, during the completion of which, investigations proceeded to discover local living conditions, with community participation, in all thirteen quarters of Kibera.<sup>53</sup> Until 2006, this was followed by the creation of several other analyses and strategies.<sup>54</sup>

One of the most important institutions of the hybrid project that combined initiatives coming from below with a process governed from above was the Settlement Executive Committee, subsequently SEC.<sup>55</sup> The body that ensured the formal participation of the affected community consisted of 18 members, including local community-based organisations (CBO), non-governmental organisations (NGOs), the representatives of religious communities, renters, building owners, as well as several participants from the

<sup>47</sup> Meredith, Thomas – MacDonald, Melanie (2017): Community-Supported Slum-Upgrading: Innovations from Kibera, Nairobi, Kenya. *Habitat International*, 60, 1–9.

<sup>48</sup> Meredith–MacDonald 2017.

<sup>49</sup> Candiracci–Syrjänen 2007; UN HABITAT 2008; UN HABITAT 2014; Meredith–MacDonald 2017.

<sup>50</sup> Meredith–MacDonald 2017.

<sup>51</sup> UN HABITAT 2014.

<sup>52</sup> Syagga, Paul et al. (2001): *Nairobi Situation Analysis*. Joint project of the Government of Kenya and UNCHS Collaborative Nairobi Slum Upgrading Initiative.

<sup>53</sup> KENSUP – UN HABITAT (2004): A study to conduct Kibera socio-economic mapping Participatory Urban Appraisal (PUA) report on main findings Soweto East village.

<sup>54</sup> UN HABITAT 2014.

<sup>55</sup> Ministry of Lands and Housing (2004): Terms of Reference (TOR) and roles for the settlement executive committee (SEC).

decision-making side.<sup>56</sup> The most important task of SEC was to create unity between the affected and the decision-makers, as well as guaranteeing that throughout the project's entire duration, the slum residents' requests and feedbacks would reach the decision-makers, who would keep these in mind, according to their promise.<sup>57</sup> This institutional form is unique in its own nature, and it is evaluated as an outstanding point of KENSUP's innovative methodology.<sup>58</sup>

As the next important move within preparing for the upgrades, in 2006, a community sensitisation workshop was created, whose aim was to address each and every party affected by the project, and clarify the scopes of responsibility,<sup>59</sup> as well as agreeing on the financial action plan.<sup>60</sup> As a result of the workshop, the local community's better accessibility – namely, building an exploration road – was identified as a main priority, a development that was absent from the earlier plans. Inserting the road building into the project was a good demonstration of K-WATSAN's adaptive approach,<sup>61</sup> as well as the effective operation of the SEC – since it could successfully mediate the local population's need.

As a result of K-WATSAN, set for being implemented by 2010, the following developments were executed: through implementing rainwater drains, altogether seven community sanitation facilities and small-scale, house-to-house rubbish collection, as well as recycling services, public hygiene conditions were successfully improved. Within the slum quarter, a low-traffic road and adjoining sidewalk for pedestrians or bicycle riders was laid in, thus improving the local community's accessibility. For the quarter's 1,000 households, the project provided the possibility of joining the power grid, with the contribution of the Kenya Power and Lighting Company. A community and youth centre were established, which, besides its community-building function, also offers healthcare services for local children and expectant mothers. The project also provided training for the local community's members, which would (will) enable them to effectively participate in the construction work – road building, handling solid waste, and so on – as well as maintenance work.<sup>62</sup>

After implementing the project, the UN Habitat commissioned a widespread review among the affected population in order to assess in what manner the developments influenced people's lives, and how they relate to continuing the KENSUP programme. The review yielded the unanimous result that the K-WATSAN fulfilled its goals flawlessly, considerably improving the locals' life quality, and due to the successful active participation, as well as the satisfactory outcome, the majority of the people is optimistic

---

<sup>56</sup> Meredith–MacDonald 2017.

<sup>57</sup> Ministry of Lands and Housing 2004.

<sup>58</sup> UN HABITAT 2014.

<sup>59</sup> UN HABITAT 2014.

<sup>60</sup> Meredith–MacDonald 2017.

<sup>61</sup> Meredith–MacDonald 2017.

<sup>62</sup> UN HABITAT 2011.

regarding implementing further elements of KENSUP.<sup>63</sup> All this visibly demonstrated that the community participation also stressed by the UN has a key role in successfully upgrading slums.

## Kibera Slum Upgrading Initiative (KSUI)

The K-WATSAN prepared the Kibera Slum Upgrading Initiative (KSUI) as an ‘entry point’, setting the aim of bulldozing the shanties in the Soweto East quarter, establishing new residence buildings for the people living there.

The first phase of the KSUI was realised between 2002 and 2004, when the social-economical mapping and situational analysis of the target area, Soweto East, was completed. The organisers managed to contact the affected population, as well as establish the framework necessary for enacting the project. Out of the \$410,000 budgeted for the initial project element, Cities Alliance financed \$240,000, the UN Habitat offered \$110,000, and the Kenyan Government gave \$60,000.<sup>64</sup>

Soweto East was divided into four zones (A, B, C, D), and during 2004–2005, the household census started, under the management of the Ministry of Lands. The process was conducted with the participation of the affected community and other actors, while at the same time, numerous forums were organised that served the sensitisation of the public.<sup>65</sup> During the census, key information was gathered about the renters and owners, and it was all registered in the database called *Master Register*. Subsequently, the heads of the households received individual identification cards having their names, the building’s identification number, and the people residing in the given household printed on it, along with other personal data.<sup>66</sup> As a result of this process, altogether 19,318 individuals were enumerated, out of which 16,899 people were renters and 2,419 were building owners. In Zone A, altogether 6,377 people lived at the time of the survey.<sup>67</sup>

In order for the project to be seamlessly implemented, the affected residents signed a memorandum of understanding with the Housing Ministry, in which the locals agreed to move out of the territory to the venue designated for them for the time of the construction work, and move into the buildings of Zone A after the new houses were completed, where they would pay the rent up to the 10<sup>th</sup> of every month. According to the implemented financing system, the rental fee that they paid would be the instalment of the apartment loan; that is, through paying these instalments, they may become the owners of the newly built homes.<sup>68</sup> The apartment prices were settled as a result of a consultation with the locals – well below the market value, considering their economic status. A one-room apartment’s price was fixed to be in 600,000 Kenyan shillings (KSh), a two-room apartment cost 1,000,000, and the price of three-room apartments amounted

---

<sup>63</sup> Meredith–MacDonald 2017.

<sup>64</sup> UN HABITAT (2007): [Briefing Note on GOK/UN HABITAT. Kenya Slum Upgrading Programme \(KENSUP\)](#). [online], United Nations Human Settlements Programme, 16–20 April 2007. Source: preventionweb.net [12.01.2023].

<sup>65</sup> KNCHR 2015.

<sup>66</sup> KNCHR 2015.

<sup>67</sup> KNCHR 2015.

<sup>68</sup> KNCHR 2015.

to 1.35 million KSh. The duration of the instalments was 25 years, with a 3% interest. One of the conditions for apartment-eligibility was for the beneficiaries to pay 10% of the entire purchase price as a down payment.<sup>69</sup>

Several institutions were established in order to involve Soweto East's residents into the project. The first one, similarly to the K-WATSAN project, was a SEC (Settlement Executive Committee) which was established in 2004 in the case of Zone A of Soweto East; it consisted of 17 members; whose task was to address the community and mobilise them in order to ensure their participation in the project, as well as maintaining communication between the locals and the implementing organisations.<sup>70</sup>

The other important institution was the Housing Cooperative, created by the Ministry of Housing in 2007. This type of organisation was established in all four zones of Soweto East, with the aim of helping mobilise the sources of the affected population in order for them to become the owners of the newly built houses. Until 2015, 1,766 members joined the Housing Cooperative of Zone A, collecting the sum of altogether 147,675,306 KSh for registration, stock sharing, savings and interests.<sup>71</sup>

For the temporary relocation venue of the residents, originally a location along the river Athi was chosen, situated 23 kilometres from Kibera, but finally, due to the intercession of Raila Odinga, Kibera's territorial parliamentary representative, the locals' protest was finally acknowledged, and the temporary lodgings were set up in Lang'ata, seven kilometres to the south-east of Kibera. The first phase of the temporary relocation was carried out in 2009.<sup>72</sup>

The five-storey buildings consisted of 17 blocks<sup>73</sup> definitely meant a step forward in terms of infrastructure, as the good-quality houses offered appropriate hygiene conditions and safety. And yet, in spite of this – or rather, precisely because of this – after moving in, serious structural problems came to light. One of these serious problems was the issue of affordability. According to the complaints of the affected tenants, the government did not involve them into determining the rental fees.<sup>74</sup> According to certain sources, the rental fee for the temporary lodgings was almost equal to the earlier Kibera prices;<sup>75</sup> however, the fee for the formal public utility services established here exceeded the fee for using the former, informally provided or non-existent utilities.<sup>76</sup> Other sources reported on a significant increase in the rental fees: whereas earlier, the renters had to pay 500 KSh per month for a room in Kibera, in Lang'ata, this sum was raised to 3,000 KSh – together with the cost of living<sup>77</sup> – that is, the housing costs grew six times higher. Considering that two-thirds of Soweto East's population is not formally employed, this extent of increase

<sup>69</sup> KNCHR 2015.

<sup>70</sup> KNCHR 2015.

<sup>71</sup> KNCHR 2015.

<sup>72</sup> Fernandez, Rosa Amelia Flores – Calas, Bernard (2011): The Kibera Soweto East Project in Nairobi. *The East African Review*, 44, 1–13.

<sup>73</sup> Fernandez–Calas 2011.

<sup>74</sup> Anderson–Mwelu 2013.

<sup>75</sup> Mitra et al. 2017.

<sup>76</sup> Fernandez–Calas 2011.

<sup>77</sup> Fernandez–Calas 2011.

in housing costs amounted to a considerable financial challenge for them.<sup>78</sup> On top of all this, the locals even had to save money through the Housing Cooperation, in order to be able to make the down payment for the new apartments, which further increased their financial burden.<sup>79</sup>

However, at the same time, the incomes of numerous affected people decreased or came into jeopardy: with their moving away from their original residences, their business and social contact network became impossible to sustain,<sup>80</sup> since the majority of slum residents sells various goods or provides services as a forced entrepreneur at the busier venues of the slum. Their customers are also coming from among lower-income people. With their relocation, they lost precisely this circle of customers – occasionally together with their facility. If they wished to continue their business activities within Kibera in the future, they had to travel a greater distance, which increased their expenses.<sup>81</sup> Their economic exposure was enhanced by losing the established social networks connected to their living places.<sup>82</sup> The close-knit connections with their neighbours and relatives function as an important safety net through mutual help for the slum city residents. Moving away, however, deconstructed the communities linked to their living place, which takes a long time to be rebuilt.

As a solution to these emerging problems, a lot of people moved back to other parts of Soweto East, illegally renting out their temporary lodgings in Lang'ata. The new tenants that moved in in this manner were typically not Kiberan residents but persons of higher social status, who for example possess their own cars, and go shopping into Nairobi's shopping centres – so they do not even contribute to the functioning of the micro-entrepreneurships owned by Soweto East residents who live in Lang'ata.<sup>83</sup>

According to KSU's original plans, the vacated shanties in Zone A of Soweto East would have been demolished immediately after the residents had moved over to the temporary lodgings. However, this plan was postponed for three years, after a group of shanty owners filed a lawsuit to the Supreme Court in 2009, because they wanted to prevent their buildings – which guaranteed their income source – from being demolished without a compensation.<sup>84</sup> Finally, the court rejected the lawsuit, finding for the government, so the construction works could be started in 2012, as a result of which, 822 apartments, 245 commercial booths, a multi-function centre, as well as the adjoining public facilities and infrastructural elements were erected.<sup>85</sup>

Following this, the beneficiaries had to declare what size of an apartment they would like; then in March 2016, the specific real estates were allotted to them. On 5 May 2016, the keys of the newly built homes were ceremonially handed over,<sup>86</sup> after which, the gov-

<sup>78</sup> Fernandez–Calas 2011.

<sup>79</sup> Mitra et al. 2017.

<sup>80</sup> Mitra et al. 2017.

<sup>81</sup> Agayi – Serdaroglu Sag 2020.

<sup>82</sup> Mitra et al. 2017.

<sup>83</sup> Mitra et al. 2017.

<sup>84</sup> Government of Kenya (2009b): *Petition 498*. The High Court of Kenya, Government of Kenya.

<sup>85</sup> KNCHR 2015.

<sup>86</sup> KNCHR 2015.

ernment announced that for the second phase of the project; that is, upgrading Zone B, would be implemented within two years, which would entail building 3,072 apartments, to the value of 6.5 billion KSh.<sup>87</sup>

## Evaluating the K-WATSAN and KSUI projects

Based on the results of the impact assessment completed by the UN Habitat,<sup>88</sup> we can state that by 2010, the K-WATSAN successfully implemented the goals it had set: with the active involvement of the concerned community they managed to improve the living conditions of the locals with small-scale developments like building rainwater sewage and sanitation facilities, establishing a house-to-house rubbish collection system, or building an exploratory road.<sup>89</sup> One of the most important institutions involving the community was the SEC (Settlement Execution Committee), in which both the affected population and the project's decision-makers were represented, thus guaranteeing that slum residents' needs and feedbacks reached the decision-makers for the entire duration of the project, who then duly acted on these.<sup>90</sup> Although the committee's functioning was not exempt from criticism, they essentially fulfilled their goal, as the locals' requests were noted, and thus a new element was integrated into the development, which did not constitute a part of the preliminary plans; that is, constructing the already mentioned exploratory road. Another mark of the project's success is that according to Habitat's impact assessment, the commitment towards KENSUP grew considerably among those interviewed, with the majority of the people having an optimistic attitude towards the further realisation of the programme.<sup>91</sup>

The project demonstrated that substantially and actively involving the locals, even though it is rather energy- and time-consuming, has to be one of the key elements of a successful slum upgrade.<sup>92</sup> In a certain sense, KSUI ran parallel to the K-WATSAN project – since the situation analysis started as early as between 2002 and 2004. According to the original concepts, building on the methodology of K-WATSAN, the KSUI project would have been implemented through the substantial involvement of the affected community; however, this aspect of the project drew a number of criticisms. Even though in the case of the KSUI a SEC was established, in which the local community had the opportunity to represent themselves, closer scrutiny of the project disclosed the lack of substantial involvement.

From the interview that Amnesty International conducted among the residents of Soweto East in 2009, it became clear that the locals were not sufficiently involved in the project, thus beyond their actual needs and insights not getting the chance of being sufficiently integrated into the plans; in several cases, they could not access basic information

<sup>87</sup> Nairobi News: [Kibera to Get over 3,000 Houses in Slum-Upgrading Project](#). [online], Nairobi News, 21 July 2016. Source: [nairobinews.nation.africa](http://nairobinews.nation.africa) [22.01.2023].

<sup>88</sup> UN HABITAT 2014.

<sup>89</sup> UN HABITAT 2011.

<sup>90</sup> Ministry of Lands and Housing 2004.

<sup>91</sup> UN HABITAT 2014.

<sup>92</sup> Meredith-MacDonald 2017.

such as the evolution of housing costs, the building designs of the new houses or the details concerning the relocation to the temporary lodgings. In the opinion of those interviewed, the decision processes were governed from above and the residents themselves could merely acquire information about the final results.<sup>93</sup>

Leaving the affected community out of the planning process resulted in several problems. On the one hand, the relocation to Lang'ata can only be filed as no more than a half-success: even though the residents could forgo moving to a 23 km distance from Kibera, determining the relocation venue did not occur according to an assessment of their social-economic needs and requests, but it was rather the available space that determined the choice.<sup>94</sup> Even should it be true that the government's options in this aspect were limited, overarching solutions could have been found, substantially involving the affected, which might have helped the residents' economic prospering at the new venue. On the other hand, as the rental fee of the temporary lodgings was determined without considering their needs and financial status, many of them could not pay for the enhanced costs, so they moved back to other parts of Soweto East while they illegally rented out their temporary lodgings. A similar problem emerged concerning building of the new apartments, as well: in spite of the successfully completed construction of the 822 apartments, more than half of the families who were entitled to move in sold or rented out their apartments after delivery, as the rental fee or the monthly instalment stood too high for them.<sup>95</sup>

Based on all these, we agree with Fernandez and Calas, who put it like this in their 2011 investigation: "There is no proof that during the procedure, the KSUI integrated earlier experiences and recommendations for the programme [that is, the K-WATSAN]"<sup>96</sup> which led to failure in several points of the project. On top of all this, the KSUI is a one-sided answer bestowed on a complex problem: the slums – similarly to the whole of the settlement – consist in three dimensions: society, economy, and (man-made as well as natural) environment, all in a tight interaction with one another. However, this intervention merely focused on the man-made physical surroundings, disregarding the economic dimension that guaranteed people's livelihoods, as well as ignoring the social dimension that functioned as a safety net, thus undermining the successful realisation of the project and its sustainability. After all, due to the enhanced housing costs, it was precisely the most exposed social groups, living in extreme poverty – the target group of the KENSUP programme – that were crowded out. Furthermore, to make matters worse, their exposedness was enhanced due to the dissolution of their connective systems that had been formed in their living environment, and which would have amounted to a certain level of social safety through the mutual support. The harmful effect of this cannot be measured at all.

---

<sup>93</sup> Fernandez–Calas 2011.

<sup>94</sup> Agayi – Serdaroglu Sag 2020.

<sup>95</sup> Agayi – Serdaroglu Sag 2020.

<sup>96</sup> Fernandez–Calas 2011.

## Summary and closing thoughts

The present writing is the first element of the research that comprehensively scrutinises the effects and results of the Kenya Slum Upgrading Programme (KENSUP), with which research, our ultimate aim is, deducing the lessons from the large-scale programme, to formulate practical advice which contributes to a more effective slum upgrade implemented by the Hungarian Charity Service of the Order of Malta on the one hand, and other actors of our Hungarian international developmental cooperation scene. In the course of our review, we focused on the two elements of the programme that Kibera saw implemented; that is, the Kibera Integrated Water, Sanitation and Waste Management Project (K-WATSAN) and the Kibera Slum Upgrading Initiative – KSUI, which was partly built on the aforementioned project.

This study provided an outline of the perspective shift, starting from colonial times that can be pinpointed in the attitude and problem-solving procedures regarding the slums of Kenyan cities. We found that following the turn of the millennium, the emphasis shifted from bulldozing, demolitions, and forced relocations as experienced during colonial times, towards an approach minding the perspective of the most needy, developing the conditions that dominate the slums. All this is reflected in policy directives and legal acts, as well. Even though in this aspect shortcomings still exist, launching KENSUP can undoubtedly be considered a huge result. In our writing, we subjected the two projects of the programme implemented in Kibera to scrutiny. We found that K-WATSAN, as an 'entry project' paving the way for the KSUI was successful both in terms of improving the life conditions for the residents of Soweto East village in Kibera and actively involving the locals, as well as ensuring their long-term commitment for the programme. However, contrary to the preliminary concepts KSUI did not utilise the experiences gained regarding the significance of community participation. The project, wishing to handle the complex problem with a one-sided intervention and infrastructural development, was governed from above, failing to present the needs and ideas of the affected. Consequently, structural flaws emerge that call into question the actual fulfilment of the programme's goals, as well as the programme's sustainability.<sup>97</sup>

Considering all this, numerous questions were formulated, for which we will seek the answers by means of field studies as well as interviews with both the affected local residents and experts participating in the developments. Among others, we are seeking the answer to who are the new residents of Zone A in Soweto East, how did the situation change for those who were forced to move back to other parts of the slum, what is the reason for the lack of community involvement in the case of the KSUI project and to what proportion does the Kenyan Government consider this project successful. We continue our reflective study with an impact assessment of Hungarian developmental aid programmes. With the results of these, we can contribute to a better understanding of the region and specifically, urban segregates in Sub-Saharan Africa.

---

<sup>97</sup> Czirják 2019: 164–181.

## REFERENCES

- Agayi, Collins Ouma – Serdaroğlu Sağ, Neslihan (2020): An Evaluation of Urban Regeneration Efforts in Kibera, Kenya through Slum Upgrading. *IDA: International Design and Art Journal*, 2(2), 176–192.
- Amiss, Philip (1988): Commercialized Rental Housing in Nairobi, Kenya. In Patton, Carl V. (ed.): *Spontaneous Shelter. International Perspectives and Prospects*. Philadelphia: Temple University Press. 235–257.
- Anderson, Mark – Mwelu, Keziah (2013): *Kenyan Slum Upgrading Programs: KISIP & KENSUP*. Online: <http://healthycities.berkeley.edu/uploads/1/2/6/1/12619988/kenya.pdf>
- Candiracci, Sara – Syrjänen, Raakel (2007): *UN HABITAT and the Kenya Slum Upgrading Programme*. Nairobi: UN HABITAT.
- Clinard, Marshall (1966): *Informal Settlements and Community Development. Experiments in Self-Help*. New York: The Free Press.
- Czirják, Ráhel (2018): A nyomornegyedekben rejlő lehetőségek. *Parola: a közösségi fejlesztőmunka folyóirata*, 27(3), 8–11.
- Czirják, Ráhel (2019): Community-led Planning: The Key to Successful Slum Upgrading? *DETUROPE: Central European Journal of Tourism and Regional Development*, 11(1), 164–181. Online: <https://doi.org/10.32725/det.2019.010>
- Fernandez, Rosa Amelia Flores – Calas, Bernard (2011): The Kibera Soweto East Project in Nairobi. *The East African Review*, 44, 1–13. Online: <https://doi.org/10.4000/eastafrica.536>
- Githira, Daniel (2016): *Growth and Eviction of Informal Settlements in Nairobi*. MSc Thesis. Twente: University of Twente.
- GOK–KENSUP (2005): Government of Kenya, KENSUP Financing Strategy.
- Government of Kenya (2013): *Background Document. The National Slum Upgrading and Prevention Policy*. Nairobi: Government Printer.
- Government of Kenya (2010): *The Constitution of Kenya*.
- Government of Kenya (2004): *Sessional Paper No. 3 of 2004 on National Housing Policy for Kenya*. Nairobi: Government Printer.
- Government of Kenya (2007): *Vision 2030*. Nairobi: Ministry of Planning and National Development.
- Government of Kenya (2009a): *Sessional Paper No. 3 of 2009 on National Land Policy*. Nairobi: Government Printer.
- Government of Kenya (2009b): *Petition 498*. The High Court of Kenya, Government of Kenya.
- Juppenlatz, Morris (1970): *Cities in Transformation. The Urban Squatter Problem of the Developing World*. St. Lucia, Queensland: University of Queensland Press.
- Kakumu, Owiti A. – Olima, Washington H. A. (2007): The Dynamics and Implications of Residential Segregation in Nairobi. *Habitat International*, 31(1), 87–99. Online: <https://doi.org/10.1016/j.habitatint.2006.04.005>
- KENSUP – UN HABITAT (2004): A study to conduct Kibera socio-economic mapping Participatory Urban Appraisal (PUA) report on main findings Soweto East village.
- KNCHR (2015): Kenyan Commission on Human Rights: A Report Submitted to the High Court of Kenya (Nairobi) by the Kenyan National Commission on Human Rights on the Implementation of Petition No. 304 of 2015. Allocation of housing units in Kibera Soweto East Zone 'A' – Redevelopment project under the Kenya Slum Upgrading Programme.
- Lewis, Oscar (1959): *Five Families. Mexican Case Studies in the Culture of Poverty*. New York: Basic Books.
- Macharia, Kinuthia (1992): Slum Clearance and the Informal Economy. *The Journal of Modern African Studies*, 30(2), 221–236. Online: <https://doi.org/10.1017/S0022278X00010697>
- Magutu, Jerry (1994): The Role of Informal Settlements in Housing the Urban Poor in Nairobi, Kenya. *Ekistics*, 61(366–367), 206–213.
- Meredith, Thomas – MacDonald, Melanie (2017): Community-Supported Slum-Upgrading: Innovations from Kibera, Nairobi, Kenya. *Habitat International*, 60, 1–9. Online: <https://doi.org/10.1016/j.habitatint.2016.12.003>
- Millennium Development Goals Indicators**. [online], MDG Indicators, s. a. Source: [unstats.un.org](http://unstats.un.org) [22.01.2023]

- Ministry of Lands and Housing (2004): Terms of Reference (TOR) and roles for the settlement executive committee (SEC).
- Mitra, Shreya – Mulligan, Joe – Schilling, Janpeter – Harper, Jamilla – Vivekananda, Janani – Krause, Lisa (2017): Developing Risk or Resilience? Effects of Slum Upgrading on the Social Cohesion in Kibera, Nairobi. *Environment & Urbanisation*, 29(1), 103–122. Online: <https://doi.org/10.1177/0956247816689218>
- Muraguri, Leah (2011): Kenyan Government Initiatives in Slum Upgrading. *The East African Review*, 44, 119–127. Online: <https://doi.org/10.4000/eastafrica.534>
- Nairobi News: [Kibera to Get over 3,000 Houses in Slum-Upgrading Project](#). [online], Nairobi News, 21 July 2016. Source: [nairobinews.nation.africa](http://nairobinews.nation.africa) [22.01.2023]
- Obare, Michael (2015): *An Evaluation of Slum Upgrading Schemes in Nairobi County. The Case of Kibera Slums*. Research Project EPM 492.
- Omenya, Alfred – Huchzermeyer, Marie (2006): Slum Upgrading in the Complex Context of Policy Change: The Case of Nairobi. In Huchzermeyer, Marie – Karam, Aly (eds.): *Perpetual Challenge? Informal Settlements at the Local and Policy Level*. Cape Town: Juta–UCT Press. 290–311.
- Otiso, Kefa M. (2003): State, Voluntary and Private Sector Partnerships for Slum Upgrading and Basic Service Delivery in Nairobi City. *Kenya Cities*, 20(4), 221–229. Online: [https://doi.org/10.1016/S0264-2751\(03\)00035-0](https://doi.org/10.1016/S0264-2751(03)00035-0)
- Ottichilo, Wilber (2011): Tracking Regional Growth and Development: The Nairobi Case. In Birch, Eugenie – Wachter, Susan (eds.): *Global Urbanisation*. Philadelphia: University of Pennsylvania Press. 167–171. Online: <https://doi.org/10.9783/9780812204476.167>
- Scuggs, Gregory: [Turning Mud Huts Into Apartment Towers in Nairobi's Biggest Slum](#). [online], Yahoo News, 10 August 2015. Source: [news.yahoo.com](http://news.yahoo.com) [22.01.2023]
- Seger, Martin (1992): Nairobi – egy gyarmati múltú nagyváros szerkezeti tagolódása. *Földrajzi Közlemények*, 156(1–2), 57–68.
- Solymári, Dániel – Kariuki, Edward – Czirják, Ráhel – Tarrósy, István (2020): The Impact of Covid-19 on the Livelihoods of Kenyan Slum Dwellers and the Need for an Integrated Policy Approach. *PLoS ONE*, 17(8). Online: <https://doi.org/10.1371/journal.pone.0271196>
- Solymári, Dániel – Mangera, Janet – Czirják, Ráhel – Tarrósy, István (2021): Overview of Kenyan Government Initiatives in Slum Upgrading: The Case of KENSUP and KISIP Projects. *Hungarian Journal of African Studies*, 15(3), 37–59. Online: <https://doi.org/10.15170/AT.2021.15.3.3>
- Solymári, Dániel (2014): Harcok és távlatok: Kelet-afrikai nyomortelepek ma és holnap. *Afrika Tanulmányok*, 8(2), 5–16.
- Syagga, Paul – Mitullah, Winnie – Karirah-Gitau, Sarah (2001): *Nairobi Situation Analysis*. Joint project of the Government of Kenya and UNCHS Collaborative Nairobi Slum Upgrading Initiative.
- UN HABITAT (2007): [Briefing Note on GOK/UN HABITAT. Kenya Slum Upgrading Programme \(KENSUP\)](#). [online], United Nations Human Settlements Programme, 16–20 April 2007. Source: [preventionweb.net](http://preventionweb.net) [12.01.2023]
- UN HABITAT (2008): *UN HABITAT and the Kenya Slum Upgrading Programme. Strategy Document*. Nairobi: UN HABITAT.
- UN HABITAT (2020): *World Cities Report 2020. The Value of Sustainable Urbanisation*. Nairobi: UN-HABITAT.
- United Nations (2015): *The Millennium Development Goals Report*.

Kazi Mohammad Mahbobor Rahman<sup>1</sup>

# Economic Development under the Authoritarian Military Rule in Thailand and Myanmar: A Survey of Literature<sup>2</sup>

*The literature has been checked in this paper to understand how the contemporary research has answered the questions: How have the military regimes impacted economic development in Thailand and Myanmar, and why has Thailand achieved better economic development than Myanmar under military rule? By surveying major works, this systematic literature review argues that there seems to be limited research focusing on the comparative study of economic development in these two neighbouring countries during the authoritarian military rule. Therefore, an endeavour of a comparative study of these two most similar cases should be initiated to fill this research gap. It will facilitate a new understanding of the impact of military rule as a Cold War and post-Cold War phenomenon on better economic development in Thailand than in Myanmar, along with the causes of this variation.*

**Keywords:** economic development, authoritarian military rule, Myanmar, Thailand, literature survey

## Introduction

Thailand and Myanmar are neighbouring countries with a shared experience of long military authoritarian rule. Despite the similarities between these two countries in experiencing frequent military intervention and governing by military leaders during the Cold World and the post-Cold War periods, they are different in achieving the level of economic development in most of the criteria used to explain the economic performance of a nation. Therefore, a research question has been posed: *How have the military regimes impacted economic development in Thailand and Myanmar, and why has Thailand achieved better economic development than Myanmar under military rule? In order to get the answer to this significant research question, this research initiative surveyed major academic works published since the Second World War.*

To this end, it studies existing literature available on platforms, including Jstor and Google Scholar. Keywords in the phrases as ‘economic development under military rule in Thailand and Myanmar’, ‘economic development under military rule in Thailand’, and ‘economic development under military rule in Myanmar’ have been searched in these platforms and checked in the title of the articles manually. The title of an article that matches one of the phrases of these keywords has been selected for this study. Furthermore,

<sup>1</sup> Associate Professor at the Department of Political Science, University of Dhaka.

<sup>2</sup> The present publication was presented in an oral form at the *II Military Science and Military Art International Conference* at the Ludovika University of Public Service, Budapest, Hungary, on 14 October 2022.

the works that focus on the issues related to the economic development of Thailand and Myanmar during the military rule have also been chosen to review in this endeavour. Due to the limited works available in these two academic platforms on the proposed topic, the above phrasal words have also been searched on other platforms. Based on the theoretical framework of the literature review explained in Aacha and Chetty,<sup>3</sup> this paper is primarily a systematic literature survey and methodologically, it is a most similar case study research based on secondary sources of data.

Many contemporary works have focused on the analysis and assessment of the miracle economic achievement of Thailand. Some works also assess the economic performance of Myanmar as an independent case. However, only a few researchers have taken a comparative study of economic development in Thailand and Myanmar into consideration. Therefore, this research enterprise argues that new research should be initiated to fill up the deficiency in the existing literature.

The primary purpose of this literature survey is to identify the existing literature that focuses on the economic development in Thailand and Myanmar during the military rule and outline the causes of less economic development in Myanmar than the level of economic development in Thailand to find out the research gap in this specific field. A comparative study of economic development in Thailand and Myanmar is significant due to the unique nature of military intervention in this region as both Cold War and post-Cold War phenomena. The objective of this literature review is not to serve as a foundation of a theoretical framework and therefore, the conceptualisations of the key ideas presented in this paper and the theories of existing literature in the stated field of military studies to examine the economic development in the military authoritarian rule have not been analysed.<sup>4</sup> Due to the long period of military reign in both of these countries as a Cold War and the post-Cold War phenomena, a comparative study of these two most similar cases will facilitate a new understanding of the impact of military rule on better economic development in Thailand than in Myanmar and the causes of this variation between these two neighbours.

The first section of this paper analyses the articles that discuss the various issues of both Thailand and Myanmar. The second section analyses the papers that compare the economic development of Thailand with the economic development of Myanmar. In this section, the articles analysing the economic development in Thailand or Myanmar have been explicated. The third section outlines the drivers for Thailand's economic development and underdevelopment in Myanmar. In the fourth section, the economic progress in Thailand and Myanmar during the non-authoritarian regimes has been studied. In the final section, the research gap and the urgency of an initiative of

<sup>3</sup> Aacha, Kinjal – Chetty, Priya: [Different Types of Literature Review Techniques Followed in a Research](#). [online], Project Guru, 15.12.2021. Source: [projectguru.in](#) [24.10.2022].

<sup>4</sup> The author of this paper has written another article to propose a theoretical framework to study the offered research questions that has already presented in the 27<sup>th</sup> World Congress of Political Science 2023 (Buenos Aires, Argentina). The conceptual clarification of the phenomenon required to explore these research questions and the existing theories and the debate to study economic development during the authoritarian rule has been analysed in that article.

a project to compare the economic development during military rule in Thailand and Myanmar have been discussed.

## Areas of academic interest in studying Thailand and Myanmar

Researchers have been interested in studying various areas of academic importance to study Thailand and Myanmar. The literature that focuses on different issues of academic interest in studying Thailand and Myanmar has been explained in this section. One of the earliest works that pays attention to this comparative study is Badgley (1969).<sup>5</sup> Badgley studies the nature of public policies during military rule and finds sharp variation between these countries. According to him, Thai leaders showed their skills in the development process while Myanmar's integration issue and economic problem were irrelevant to Thai development. The leaders of both countries had been concerned with political systems because statehood was at the emerging stage, and the political infrastructure was immature.<sup>6</sup> He explains a comparative scenario of the policymaking process in Thailand and Myanmar during the period of the Cold War of military rule and it does not link the nature of the policymaking process with the economic development of an authoritarian setting.

**Table 1: Major thematic issues of study between Thailand and Myanmar**

List of the works	Thematic issues
Badgley (1969)	The nature of public policies
Hyndman (2002)	Refugee protection and transnational economic integration
Jirattikorn (2016)	Impact of mobile media to transmute the practice of holy men
Gruß (2017)	The financial burden on the migrants
Mizuno (2020)	Labour migration and shift in the garment production

*Source: Compiled by the author.*

In addition to Badgley,<sup>7</sup> some researchers focus on the issues related to Thailand and Myanmar, including the protection of Burmese refugees in Thailand and economic integration between Thailand and Myanmar,<sup>8</sup> the impact of mobile media to recast the practice of holy men migrated from Myanmar to Thailand,<sup>9</sup> financial burden on the migrants from Myanmar to Thailand<sup>10</sup> and labour migration and the shift in the garment production.<sup>11</sup> Hyndman studies the link between the bargaining of the protection

<sup>5</sup> Badgley, John H. (1969): Two Styles of Military Rule: Thailand and Burma. *Government and Opposition*, 4(1), 100–117.

<sup>6</sup> Badgley 1969.

<sup>7</sup> Badgley 1969.

<sup>8</sup> Hyndman, Jennifer (2002): Business and Bludgeon at the Border: A Transnational Political Economy of Human Displacement in Thailand and Burma. *GeoJournal*, 56(1), 39–46.

<sup>9</sup> Jirattikorn, Amporn (2016): Buddhist Holy Man Khruba Bunchum: The Shift in a Millenarian Movement at the Thailand–Myanmar Border. *Sojourn: Journal of Social Issues in Southeast Asia*, 31(2), 377–412.

<sup>10</sup> Gruß, Inga (2017): The Emergence of the Temporary Migrant: Bureaucracies, Legality and Myanmar Migrants in Thailand. *Sojourn: Journal of Social Issues in Southeast Asia*, 32(1), 1–35.

<sup>11</sup> Mizuno, Atsuko (2020): Labour Migration and Relocation of Apparel Production between Thailand and Myanmar. *Journal of Southeast Asian Economies*, 37(2), 181–198.

of Burmese refugees in Thailand and the economic integration between Thailand and Myanmar.<sup>12</sup> According to him, thousands of Burmese people migrated to Thailand due to the oppressive policy of Myanmar's military junta. The economic integration between Thailand and Myanmar depends on bargaining for the protection of these Burmese migrants in Thailand. Jirattikorn studies a holy man who migrated from Myanmar to Thailand.<sup>13</sup> The holy man case explains the impact of mobile media in transfiguring the practice of the holy men, which suggests the necessity of a new approach to studying religious movements. Größ explains the financial burden on the migrant workers from Myanmar to Thailand due to the policies that regulate the national verification process in Thailand.<sup>14</sup> This policy creates an opportunity for migrants to stay in the area of provisional reality that creates an additional financial burden on the migrants from Myanmar in Thailand. Mizuno evaluates the contribution of migrant labourers from Myanmar to Thailand to thrive in the labour-intensive garment industry in Thailand.<sup>15</sup> The increased cost in the labour-intensive garment industry caused the shift of this industry to the neighbouring countries of Thailand.<sup>16</sup>

The above studies are significant in contemporary research that adds value to the existing knowledge to understand the issues of these two countries. They primarily focus on the various aspects of the field of migration study. However, the previous studies do not reflect Thailand and Myanmar's economic development from the perspective of my research question.

## **Economic development in Thailand and Myanmar during the authoritarian military rule**

This paper finds that scholars and researchers have shown their interest in the political-economy issues of Thailand and Myanmar during military rule. However, few comparative research works analyses the economic development of these two political systems focusing on military rule despite the region's unique nature of being a coup-prone area for several decades during the Cold War and post-Cold War periods. The following table shows that no article has been available on the Jstor and Google scholar platforms that directly sketch a comparative study of economic development during military rule in Thailand and Myanmar. More specifically, there has not been any article's title that matches the keywords ('economic development under military rule in Thailand and Myanmar') selected for this comparative research. Only two works have been available on the Google Scholar platform that discusses the issues related to the economic development of both countries. Additionally, there has not been any article on the Jstor platform discussing Thailand's economic development. Seventeen articles have been found in Google Scholar

---

<sup>12</sup> Hyndman 2002.

<sup>13</sup> Jirattikorn 2016.

<sup>14</sup> Größ 2017.

<sup>15</sup> Mizuno 2020.

<sup>16</sup> Mizuno 2020.

that study economic development in Thailand, and seven articles focus on the issues related to the economic development of the Thai nation.

**Table 2: Economic development under the military rule in Thailand and Myanmar: A survey of literature**

Keywords for search	Name of the online platform	Number of literature (out of first 200 articles)
Economic development under military rule in Thailand and Myanmar	Jstor	Nil
		Nil (articles related to economic development)
	Google Scholar	Nil
		2 (articles related to economic development)
Economic development under military rule in Thailand	Jstor	Nil
	Google Scholar	17 (articles match at least with the keywords 'economic development' and 'Thailand')
		7 (articles related to the issues of economic development in Thailand)
Economic development under military rule in Myanmar	Jstor	2
	Google Scholar	24 (articles match at least with the keywords 'economic development' and 'Myanmar')
		15 (articles are on issues related to economic development)

*Source: Compiled by the author.*

Two articles by the Jstor and twenty-four articles by Google scholar have directly studied economic development in Myanmar. Additionally, fifteen articles discuss issues related to economic development in Myanmar. These articles have paid limited attention to specifying the period of military rule to discuss economic development.

The table drawn above has been generated to substantiate the necessity of opening a discussion on the economic development of Thailand and Myanmar during the military rule due to the limited number of works in this area of research interest. In the following sub-sections, some works have been reviewed that study the economic development or the issues related to the economic development during the military rule in Thailand and Myanmar from comparative or specific country perspectives.

### ***Economic development in Thailand and Myanmar: Comparative perspective***

The research works that have studied the issues related to the economic development of Thailand and Myanmar from a comparative perspective have been explained in this section. In this context, one significant work is James (2010).<sup>17</sup> Helen James explores “the economics-politics nexus in Thailand and Myanmar in the context of rent-seeking, revenues from oil and gas resources, and possible political reform.”<sup>18</sup> She finds a more open and participatory society in Thailand than in Myanmar and argues that the emergence of

<sup>17</sup> James, Helen (2010): Resources, Rent-Seeking, and Reform in Thailand and Myanmar (Burma): The Economics-Politics Nexus. *Asian Survey*, 50(2), 426–448.

<sup>18</sup> James 2010: 426.

civil society in Thailand works “toward more open politics and better forms of governance”.<sup>19</sup> Rhoden and Unger study Burmese immigrants’ trend to return home due to the change in the scenario from “military authoritarian regime to civilian rule”.<sup>20</sup> They find “nothing that suggests that Burmese migrants have started to return home in any large numbers”.<sup>21</sup> Instead, they assume a flow of high level of outmigration from Myanmar will continue on the border of Myanmar–Thailand due to the lack of “labor absorbing economic growth” and a deficiency of “a stable political accommodation among the Burmese and the many important ethnic minorities”.<sup>22</sup> Pollock and Aung focus on economic issues to compare Thailand and Myanmar.<sup>23</sup> They study the “economic crisis of migrant workers from Myanmar in Thailand”.

**Table 3: Major thematic issues in comparing economic development in Thailand and Myanmar in the existing literature**

List of the works	Thematic issues
James (2010)	The relationship between economics and politics
Pollock and Aung (2010)	The economic crisis of migrated workers
Rhoden and Unger (2015)	Economics across Myanmar–Thailand Border to explain Burmese return to home

Source: Compiled by the author.

The above works do not directly portray any scenario of comparing the economic progress of Thailand and Myanmar during the military rule and the causes of the higher economic advancement in Thailand than in Myanmar despite the frequent military coups in these neighbours. Let us check what has been happened in the literature regarding the analysis of economic development in the specific cases of Thailand or Myanmar.

### ***Economic development in Thailand***

The works that focus on the study of economic development or the topics related to the economic development of Thailand are Silcock (1967), Von der Mehden (1970), King (1997), Kaosa-ard (1998), Doner and Ramsay (2000), Pathmanand (2001), Sankaewthong (2002), Warr (2007), Doner (2009) Raquiza (2011), Chambers (2013) and Warr (2018, 2019). Silcock studies economic development in Thailand from 1945 to 1965 and finds the importance of introducing western techniques and institutions in the Thai society. He says: “Thais realise, probably more clearly than the people of most less developed countries, that economic progress may demand changes in their social

<sup>19</sup> James 2010: 447.

<sup>20</sup> Rhoden, T. F. – Unger, Danny (2015): No Burmese Returning: Economics Across Myanmar–Thailand Border. *The International Journal of East Asian Studies*, 19(2), 51.

<sup>21</sup> Rhode–Unger 2015.

<sup>22</sup> Rhode–Unger 2015.

<sup>23</sup> Pollock, Jackie – Aung, Soe Lin (2010): Critical Times: Gendered Implications of the Economic Crisis for Migrant Workers from Burma/Myanmar in Thailand. *Gender and Development*, 18(2), 213–227.

customs and political structure...<sup>24</sup> Von der Mehden analyses the military's role in Thai development as a case study to understand "methodological difficulties in the study of military influence upon specific programs."<sup>25</sup> Kaosa-ard examines the policies related to industry, natural resources, tourism and the environment.<sup>26</sup> Additionally, he explores the underlying causes of the failure of institutional maintenance in Thailand. He finds that the failure of governing institutions in some sectors finally caused the sequential financial crises in Thailand. Doner and Ramsay examine the limitation of using the ideas of clientelism, corruption and rent-seeking to explain the transformation of rapid growth into negative growth in Thailand.<sup>27</sup> According to them, it is essential to study the shifting role of political power and the changes in the global economy to understand the role of clientelism, corruption and rent-seeking in the formation of Thai economic problems. They argue that the corruption and rent-seeking contributed to Thai economic difficulties by "hampering Thailand's efforts to improve educational and physical infrastructure" and "undermining the autonomy and oversight capacity of the central bank."<sup>28</sup>

**Table 4: Major thematic issues in the existing literature to study the economic development of Thailand**

List of the work	Thematic issues
Silcock (1967)	Economic development in Thailand from 1945 to 1965
Von der Mehden (1970)	The role of the military in the development of Thailand
King (1997)	Economic slowdown
Kaosa-ard (1998)	Policies related to some sectors of the Thai economy
Doner and Ramsay (2000)	Transformation of rapid growth into negative growth
Pathmanand (2001)	Globalisation and democratic development
Sankaewthong (2002)	Thai's economic integration and military functions
Warr (2007)	Long-term economic performance
Doner (2009)	History of development in Thailand focusing on three sectors
Raquiza (2011)	The political economy of Thailand and the Philippines
Chambers (2013)	Examination of the economic models of Thailand
Warr (2018)	Causes of Thai economic growth and its distribution
Warr (2019)	The failure of Thai economic achievements to reduce poverty

Source: Compiled by the author.

Doner examines the history of development in Thailand, focusing on three sectors, including sugar, textiles and autos.<sup>29</sup> He argues that the upgrade of products depends on institutional capacities. He observes the "factionalised military and fragmented line

<sup>24</sup> Silcock, T. H. (1967): *Thailand, Social and Economic Studies in Development*. Canberra: Australian National University. 289.

<sup>25</sup> Von der Mehden, Fred R. (1970): *The Military and Development in Thailand*. *Administration and Society*, 2(3), 323.

<sup>26</sup> Kaosa-ard, Mingsarn (1998): *Economic Development and Institutional Failures in Thailand*. *TDRI Quarterly Review*, 13(1), 3–11.

<sup>27</sup> Doner, Richard F. – Ramsay, Ansil (2000): *Rent Seeking and Economic Development in Thailand*. In Khan, Mushtaq H. – Jomo, Kwame Sundaram (eds.): *Rents, Rent-Seeking and Economic Development. Theory and Evidence in Asia*. Cambridge: Cambridge University Press. 145–181.

<sup>28</sup> Doner–Ramsay 2000: 170–171.

<sup>29</sup> Doner, Richard F. (2009): *The Politics of Uneven Development. Thailand's Economic Growth in Comparative Perspective*. Cambridge: Cambridge University Press.

ministries [that] translated into pervasive clientelism”, and this clientelism facilitated to strengthen “the property rights” and “small corporatist veto power” served to finance industry in Thailand before the mid-1960s.<sup>30</sup> Antoinette Raquiza produces a historical analysis by comparing the political economy of Thailand and the Philippines to understand the reasons for industrialisation and non-industrialisation in some small developing countries.<sup>31</sup> She argues that the economic consequences of a country is influenced by the institutional set-up of the ruling elites, and the military plays a decisive role in extending their regimes in Thailand. Chambers examines the various models of development applied in Thailand since 1932, focusing on the interactions among these models and the success levels of these models.<sup>32</sup> He also studies the extent of the entrance of partnership in the debate on Thai economic development. Chambers points out that “Thailand’s current development strategy has enabled the country to achieve a relative degree of success in achieving economic growth”.<sup>33</sup> Warr describes various aspects of the economic achievements of Thailand, and based on the evidence, he argues that the Thai economic achievements have failed to reduce not only relative poverty but also absolute poverty.<sup>34</sup> Sankaewthong discusses the “effects of global economic conditions on Thai military function”.<sup>35</sup> His finding is that:

*Thailand’s economic integration into the international economy does not directly affect its military’s functions. Nevertheless, the export-led growth strategy for economic growth since the 1980s has created a middle class and resulted in a shift of political power among domestic actors from the military to the private sector. The role of the middle class in limiting the military’s role in the political arena has been evident since the people’s protest in 1992. According to the change in power of domestic actors, the thesis concludes that the Thai military’s functions in the near future will be less aggressive and involve more compromise with elected politicians. Additionally, the military will readjust its role and mission in Thai society in order to maintain its prerogative. In the author’s point of view, if and only if both serious political instability and a collapse of the Thai market economy are uncontrollable by the existing government, then the Thai people shall demand the Thai military to directly intervene.*<sup>36</sup>

Moreover, there are some research works that focus on the economic issues in Thailand, including the economic decline in 1996,<sup>37</sup> the association between the globalisation and democratic advancement of the Thai nation focusing on the shifting role of armed forces,

<sup>30</sup> Doner 2009: 149.

<sup>31</sup> Raquiza, Antoinette R. (2011): *The Political Economy of Thailand and the Philippines*. London: Routledge.

<sup>32</sup> Chambers, Paul (2013): Economic Guidance and Contestation: An Analysis of Thailand’s Evolving Trajectory of Development. *Journal of Current Southeast Asian Affairs*, 32(1), 81–109.

<sup>33</sup> Chambers 2013: 81.

<sup>34</sup> Warr, Peter (2019): Economic Development of Post-War Thailand. In Chachavalpongpan, Pavin (ed.): *Routledge Handbook of Contemporary Thailand*. London: Routledge.

<sup>35</sup> Sankaewthong, Palagorn: *Effects of Global Economic Conditions on the Thai Military Functions (1980s to Present)*. Master Thesis. [online], Naval Postgraduate School, 2002. Source: calhoun.nps.edu [07.11.2022].

<sup>36</sup> Sankaewthong 2002.

<sup>37</sup> King, Daniel E. (1997): Thailand in 1996: Economic Slowdown Clouds Year. *Asian Survey*, 37(2), 160–166.

civic networks and private sector in the milieu of globalisation,<sup>38</sup> positive and negative impact of outstanding economic achievement of Thailand<sup>39</sup> and the causes of Thai economic growth, its distribution and origin of Asian financial crisis in Thailand.<sup>40</sup>

This country-specific literature informed the researchers of various issues related to economic development in Thailand and the role of governing elites, especially military rulers. It also explains the economic development of Thailand from historical perspectives focusing on various sectors and actors, the military's influence in the development process, the causes and consequences of the economic growth, and the distribution of the economic outcome to reduce poverty. Despite a wider merit of the above-discussed literature, it is not enough to explain the economic development of a nation, especially the Thai nation, from a political economy perspective, i.e. explanation of the economic development of a specific country perspective that may apply to examine the same economy in a similar regime of other nation, as it is posed in the research question of this paper.

### ***Economic development in Myanmar***

There are some works that analyse the economic development in Myanmar, including Maung (1997), Thein (2004), Turnell (2007), Rieffel (2010), International Crisis Group (2012), Chalk (2013), Kikuchi and Masutomo (2019), Miklian (2019) and Oo (2019). Turnell assesses the economic situation of Myanmar after the banking crisis (2001–2002). He outlines that the cause of Myanmar's economic growth is the export of natural gas, and the decline of Burma's economic progress compared to other neighbours is "the excessive hand of the state".<sup>41</sup> Rieffel studies Myanmar's economy considering the election of 2010.<sup>42</sup> He states, "Burma's lagging economic performance – socioeconomic indicators placed it among the world's most impoverished in 2000 – is due to a simmering internal conflict based on ethnic and religious differences".<sup>43</sup> Kikuchi and Masutomo focus on Myanmar's initiative in building financial institutions during the Thein Sein regime since 2011 and Japan's leading role in this initiative.<sup>44</sup> They explore the characteristics of the Southeast Asian financial markets, single out the prerequisites for financial development in Myanmar, focusing on industrialisation and justify Japan's engagement.

---

<sup>38</sup> Pathmanand, Ukrist (2001): Globalisation and Democratic Development in Thailand: The New Path of the Military, Private Sector, and Civil Society. *Contemporary Southeast Asia*, 23(1), 24–42.

<sup>39</sup> Warr, Peter (2007): Long-term Economic Performance in Thailand. *ASEAN Economic Bulletin*, 24(1), 138–163.

<sup>40</sup> Warr, Peter: *Economic Development in Post-war Thailand*. [online], Australian National University, July 2018. Source: [crawford.anu.edu.au](http://crawford.anu.edu.au) [07.11.2022].

<sup>41</sup> Turnell, Sean (2007): Myanmar's Economy in 2006. In Skidmore, Monique – Wilson, Trevor (eds.): *Myanmar. The State, Community and the Environment*. Canberra: ANU Press. 109.

<sup>42</sup> Rieffel, Lex *The Economy of Burma/Myanmar on the Eve of the 2010 Elections*. [online], U.S. Institute of Peace, May 2010. Source: [usip.org](http://usip.org) [22.01.2022].

<sup>43</sup> Rieffel 2010: 1.

<sup>44</sup> Kikuchi, Tomoo – Masutomo, Takehiro: *Financial Development in Myanmar and the Role of Japan*. [online], Rajaratnam School of International Studies, 2019. Source: [rsis.edu.sg](http://rsis.edu.sg) [07.11.2022].

**Table 5: Major thematic issues to study the economic development of Myanmar**

List of the works	Thematic issues
Turnell (2007)	The cause of Myanmar's economic growth and decline of economic progress compared to its neighbours
Rieffel (2010)	A study of Myanmar's economy considering the election of 2010
Kikuchi and Masutomo (2019)	The characteristics of the Southeast Asian financial markets to single out the prerequisites for financial development in Myanmar
Maung (1997)	Economic development under SLORC
Thein (2004)	The economic development during different military regimes from 1948 until 2000
International Crisis Group (2012)	Economic reconstruction
Chalk (2013)	Economic challenges
Miklian (2019)	Myanmar's economy after its opening in 2011
Oo (2019)	The relationship between fiscal policy and the economic growth

Source: Compiled by the author.

Thein analyses the economic development of Myanmar during different military regimes in the last fifty years, from 1948 until 2000.<sup>45</sup> Miklian studies the economy of Myanmar after its opening in 2011 and establishes a theory on “economic opening, development and conflict”.<sup>46</sup> He presents three arguments: 1. international initiative of regulatory reform has limited impact on the reduction of corruption; 2. development is a controversial topic that is not locally conceptualised as a growth of the whole society; and 3. business endeavours intensified ethnic conflict in a fragile state despite a liberal attitude to peacebuilding. Oo studies the economic progress in Myanmar, and he examines the impact of the fiscal deficit on the nominal GDP of Myanmar.<sup>47</sup> His research suggests a significant statistical relationship between the fiscal policy of Myanmar and its economic growth.

Moreover, there are some research works that focus on the challenges due to the reforms in the political, social and economic areas after the opening in 2011 and ASEAN and Australia's assistance in promoting these reforms,<sup>48</sup> the link between the economic and political reforms and the cooperation between the elites and international community to ensure the success of these reforms<sup>49</sup> and economic achievement under the State Law and Order Restoration Council (SLORC) after the coup in 1988 through the reform initiative for opening the door to the rest of the world in Myanmar.<sup>50</sup>

The above works primarily assess the economic progress in Myanmar during the military rule, underscoring the banking crisis, the excessive role of the state, causes of

<sup>45</sup> Thein, Myat (2004): *Economic Development of Myanmar*. Singapore: ISEAS Publishing.

<sup>46</sup> Miklian, Jason (2019): Contextualising and Theorising Economic Development, Local Business and Ethnic Cleansing in Myanmar. *Conflict, Security and Development*, 19(1), 55.

<sup>47</sup> Oo, Lin Tun (2019): The Effect of Fiscal Policy on Economic Growth in Myanmar. *East Asian Community Review*, 2, 101–124.

<sup>48</sup> Chalk, Peter (2013): *On the Path of Change: Political, Economic and Social Challenges for Myanmar*. Australian Strategic Policy Institute.

<sup>49</sup> International Crisis Group: *Myanmar: The Politics of Economic Reform*. [online], International Crisis Group, 2012. Source: crisisgroup.org [07.11.2022].

<sup>50</sup> Maung, Mya (1997): Burma's Economic Performance under Military Rule: An Assessment. *Asian Survey*, 37(6), 503–524.

economic growth and decline, building financial institutions, economic liberalisation, economic and political reforms, internal conflicts due to the ethnic variations and fiscal deficit. These issues are significant to understand the economic performance of Myanmar. However, they have provided a limited indication that may work to compare economic development in a similar nation under military rule, as the research question of this paper points out.

## Driver for higher level of economic development in Thailand than in Myanmar

Due to the lack of the comparative research on the proposed field, the drivers for the better economic advancement in Thailand than in Myanmar have been identified by reviewing the contemporary literature on the economic development in Thailand or Myanmar. Some works that identify the causes of higher economic progress in Thailand have been explained in this section. OECD, the World Bank and the Asian Development Bank review and assess the success story of economic development in Thailand and outline various causes of this success.<sup>51</sup> OECD reviews Thai's economic development trajectory for sixty years and mentions several causes that historically affected the Thai success, including the foreign direct investment flow and its integration into the international trading arrangement.<sup>52</sup> Like OECD, a World Bank report assesses the Thai economic success and finds participation in the global economy and the flow of foreign direct investment as the driver of this success.<sup>53</sup> However, this report adds structural transformation from agriculture to industry and the export-led industry as the causes of Thai's success. The report also suggests that the role of these factors has been diminishing in recent years. In a country diagnostic study, the Asian Development Bank observes the rapid economic growth of Thailand, and it argues that the Thai economy has successfully moved from agriculture to export-oriented manufacturing, and both manufacturing and service industries have shifted from lower end to higher end in the global value chain.<sup>54</sup> Kaosa-ard points out this issue of the Thai economic transformation during the 1980s and 1990s that causes remarkable economic progress.<sup>55</sup> Warr states that the market-oriented development strategy and opening trade and investment to foreigners have been behind the outstanding growth performance since the late 1950s.<sup>56</sup> Additionally, he argues that Thai growth is primarily due to the "investment in physical capital".<sup>57</sup>

---

<sup>51</sup> OECD: *OECD Investment Policy Reviews: Thailand*. [online], OECD Investment Policy Reviews, 2021. Source: oecd.org [07.11.2022]; World Bank: *The World Bank in Thailand*. [online], World Bank, September 2022b. Source: worldbank.org [11.10.2022]; Asian Development Bank: *Thailand, Industrialization and Economic Catch-up, Country Diagnostic Study*. [online], Asian Development Bank, 2015. Source: adb.org [11.11.2022].

<sup>52</sup> OECD 2021.

<sup>53</sup> World Bank 2022b.

<sup>54</sup> Asian Development Bank 2015.

<sup>55</sup> Kaosa-ard 1998.

<sup>56</sup> Warr, Peter (2013): Thailand's Development Strategy and Growth Performance. In Fosu, Augustin K. (ed.): *Achieving Development Success. Strategies and Lessons from the Developing World*. Oxford: Oxford University Press. 72–98.

<sup>57</sup> Warr 2018: 9.

Despite being much lower than Thailand's economic development, Myanmar has achieved a substantial level of economic development. Scholars identify the causes that are primarily responsible for the less economic development in Myanmar. Wong identifies the causes of less economic development in Myanmar since 1948.<sup>58</sup> According to him, "Myanmar never sought to exploit the dynamic comparative advantage of international trade, it failed to encourage the domestic savings; and above all, it also neglected human resources development including entrepreneurship- the single most important factor of the East Asian economic success".<sup>59</sup> Dapice finds the causes of primary economic problems in Myanmar rooted in policy-related issues, including the policy of isolation started in 1962 and the inefficient and crude implementation of the central planning policy in an agrarian society.<sup>60</sup> A survey reports ten causes of economic decline in Myanmar after 2016.

*These are higher taxations and tariffs; restrictions in financing and banking; depreciation of the kyat; unstable economic rules and regulations; lack of market demand; delays in the import and export procedure; increases in local costs and inflation; competition from foreign companies; a lack of skilled human resources; and poor infrastructure.*<sup>61</sup>

Additionally, some authors also identify the regime-type relationship with economic development in the case of Myanmar. Kyi, Findlay, Sundrum, Maung, Nyunt and Oo state that Myanmar's underdevelopment is linked to capturing of political power by the military junta in 1962.<sup>62</sup> Tang and Li focus on the decades-long civil war and the sanctions imposed by the western powers to explain the less economic progress in Myanmar.<sup>63</sup> Soe explains the less economic progress in Myanmar due to the flawed economic liberalisation policies, central planning and macroeconomic imbalances.<sup>64</sup>

The causes of the miracle economic development of Thailand and less economic progress in Myanmar outlined above are the outcome of the scholars' observation from various perspectives to explain either Thailand or Myanmar that have not been used in the above studies as the unit of analysis to produce a comparison of economic progress and economic less progress in two similar military authoritarian settings as sought to explain in the presented research question of this paper. Therefore, it suggests a deficiency in

<sup>58</sup> Wong, John (1997): Why has Myanmar not Developed Like East Asia? *ASEAN Economic Bulletin*, 13(3), 344–358.

<sup>59</sup> Wong 1997: 344.

<sup>60</sup> Dapice, David: *Current Economic Conditions in Myanmar and Options for Sustainable Growth*. [online], Global Development and Environment Institute, 2003. 2. Source: bu.edu [07.11.2022].

<sup>61</sup> Lwin, Nan: *Ten Reasons behind Myanmar's Economic Slump*. [online], The Irrawaddy, 30.08.2018. Source: irrawaddy.com [07.11.2022].

<sup>62</sup> Kyi, et al. (2000): *Economic Development of Burma. A Vision and a Strategy*. The Olaf Palme International Center. A study conducted under the auspices of the Center for Business Research and Development (CBRD), Faculty of Business Administration. Singapore: National University of Singapore.

<sup>63</sup> Tang, Qiming – Li, Meijuan (2021): Analysis of Myanmar's Macroeconomic Development. *E3S Web of Conferences*, 235.

<sup>64</sup> Soe, Tin (2008): Policy Dilemmas and Economic Development: A Case Study of Myanmar Economy in Transition. *Journal of International Cooperation Studies*, 15(3), 1–30.

the existing comparative political economy study literature focusing on the authoritarian settings of Thailand and Myanmar.

## **Economic development in non-authoritarian military regimes in Thailand and Myanmar**

There has been a small segment of non-military authoritarian regimes in Thailand and Myanmar. Although through the democratic revolution in 1932, Thailand started the constitutional democratic monarchy, it has an experience of frequent and prolonged military regimes with the unstable period of democratic reign, including the Thaksin period (2001–2006). In Burma's history, there is almost no record of non-authoritarian regimes except from 1948 to 1958, 1960 to 1962 and 2016 to 2020. Therefore, there has been very little focus on the economic development during the democratic regimes in Thailand and Myanmar in the existing literature.

A World Bank report suggests that the average growth rate of the Thai economy during the boom years (1960–1996) was 7.5%.<sup>65</sup> However, the economy grew at an average rate of 5% during 1999–2005, which covers most of the Thaksin period. According to Dejthumrongwat,<sup>66</sup> 10% of the Thai poor people lost their wealth, while the elites did not lose anything during the Thaksin period. He argues that “Thaksinomics seems to be focusing on consumption – rather than sustainable growth”.<sup>67</sup> Chambers examines the outcomes of the two tracks of Thaksinomics.<sup>68</sup> He finds these tracks beneficial for society. The first track that was initiated to promote the flow of foreign direct investment and enhance the export-oriented labour-intensive industrialisation causes the continuity of boosting of GDP growth. The second track that prioritised the policies for the rural people expanded the economic security of the rural Thais, primarily peasants.

There were three phases of the democratic regime in Myanmar under the leadership of U Nu (1948–1958 and 1960–1962) and Aung San Suu Kyi (2016–2020). U Nu, “a man to whom history afforded a unique opportunity to lead his country to independence, democracy, peace, modernity and welfare”<sup>69</sup> has failed to solve economic problems during his second tenure<sup>70</sup> similar to his first tenure. However, during the last democratic regime (2015–2020) in Myanmar, the World Bank claims that economic growth has declined from 8.5% (2014–2015, democratic restoration) to 7% (2015–2016, after the election).<sup>71</sup> Later, it grew more than 7% annually during the whole democratic period of the National League for Democracy (NLD).<sup>72</sup> Stokke, Vakulchuk and Øverland also report a same

---

<sup>65</sup> World Bank 2022b.

<sup>66</sup> Dejthumrongwat, Panakorn (2014): *Does Thaksinomics Create Sustainable Economic Growth?* City University London, School of Social Science, International Politics Department.

<sup>67</sup> Dejthumrongwat 2014: 16.

<sup>68</sup> Chambers 2013: 81–109.

<sup>69</sup> Walinsky, Louis J. (1965–1966): The Rise and Fall of U Nu. *Pacific Affairs*, 38(3–4), 269–281.

<sup>70</sup> Butwell, Richard (1962): The Four Failures of U Nu's Second Premiership. *Asian Survey*, 2(1), 3–11.

<sup>71</sup> World Bank: *Myanmar Growth Eases Slightly but Remains Robust in 2015–2016*. [online], World Bank, May 2016. Source: [worldbank.org](http://worldbank.org) [14.11.2022].

<sup>72</sup> Thein, Htwe Htwe – Gillan, Michael: *How the Coup Is Destroying Myanmar's Economy?* [online], East Asia Forum, 23.06.2021. Source: [eastasiaforum.org](http://eastasiaforum.org) [14.11.2022].

strong growth rate.<sup>73</sup> In another press release, the World Bank reports that the Myanmar economy has been 18% contracted in 2021 after the military intervention in 2021.<sup>74</sup>

The above works have been limited to studying Thaksinomics in the case of Thailand. The works suggest an economic boom during the non-authoritarian period in Thailand. However, in the case of Myanmar, it shows a mixed reflection of the assessment of the economic performance of Myanmar during the authoritarian and non-authoritarian rule. The assessment in both cases is based on a short period of non-authoritarian rule compared to the longtime authoritarian regimes. Therefore, a study of economic development under non-authoritarian rule has little value compared to a comparative study of economic development during authoritarian rule.

### **Summing Up: Research gap, argument and the need for an urgent follow-up to understand the presented research questions**

Despite the deficiency of this paper in presenting a critical analysis of the existing literature in the field of economic development that focuses on military regimes in Thailand and Myanmar, this literature survey has successfully identified the limitation of the state-of-the-art analysed in the stated field. Since the above discussion on the works based on comparative or single case study shows that the number of works in the various platforms have been limited, this survey substantiates an initial argument that there seems to be that the literature primarily is suffering with a deficiency of comparing the economic development of these two countries focusing on the authoritarian military rule both in the Cold War and post-Cold War periods and consequently, a greater critical analysis of the presented literature has been less significant to identify the research gap in answering the offered research question. The review of the existing works suggests that understanding economic development from a comparative perspective has received little attention from researchers in the military science and engineering field.

Therefore, a new research endeavour is urgent to fill this gap by answering the proposed research question of how the military's rule has impacted the two neighbouring Thai and Myanmar authoritarian settings. Due to the long period of military reign in both of these countries as a Cold War and the post-Cold War phenomena, a comparative study of these two most similar cases will facilitate a new understanding of the impact of military rule on the more economic development in Thailand than in Myanmar.

Additionally, the drivers for economic development outlined in the literature, to some extent, have been outcome based. If an outcome is due to a cause, simultaneously, an absence of this cause in a similar situation will lead to the opposite outcome. Comparing the causes of economic development in the Thai political system, does not necessarily cause the opposite outcome in the political system of Myanmar as it is explained and specified in the literature. Therefore, further research is required to answer the presented

<sup>73</sup> Stokke, Kristian et al. (2018): *Myanmar: A Political Economy Analysis*. Report commissioned by the Norwegian Ministry of Foreign Affairs, Norwegian Institute of International Affairs.

<sup>74</sup> World Bank: *Myanmar Economy Remains Fragile, with Reform Reversals Weakening the Outlook*. [online], World Bank, July 2022a. Source: [worldbank.org](https://www.worldbank.org) [14.11.2022.11].

question of why there is a variation between Thai and Myanmar settings in achieving economic development during the long military rule despite the idea that “every country’s development experience is unique, shaped by its specific history, culture, domestic conditions, and the prevailing international environment”.<sup>75</sup> Based on the Mills method of concomitant variation, one of the purposes of the future research initiative would be building a theory for causal relationships for the economic development in the same situation of authoritarian settings considering the variation in the other socioeconomic context of two political systems.

Finally, this paper’s deficiency in analysing the economic development during the non-military regimes is due to the insignificant period compared to the periods of military regimes in both cases. The present work pays less attention to studying the existing literature focusing on economic development during non-military regimes. There have been substantial periods of non-military regimes in Thailand. However, the history of Myanmar has not been almost beyond military rule. There is no non-authoritarian regime in Myanmar except the period 1948–1958, 1960–1962, and from 2016 to 2020. In the case of Thailand, there have been some segments of non-authoritarian regimes. In all regimes in both Thailand and Myanmar, there have been a substantial level of military influence in political decisions even during the non-military regimes. Therefore, in a limited number of works, the economic development in Myanmar and Thailand has been focused on non-authoritarian political regimes. Due to the long military authoritarian regimes and the influence of military actors in the non-military authoritarian regimes in both cases, it is difficult to clearly separate the economic development in non-authoritarian military regimes in Thailand and Myanmar for this study purpose. Therefore, future researchers should study economic development in Thailand and Myanmar during the authoritarian military rule as both Cold War and post-Cold War phenomena. The incumbent research should focus on authoritarian military rule as a Cold War and Post-Cold War phenomena due to the variations in the nature of the intervention and military governance during these two periods. The post-Cold War phenomenon of military rule is interested in opening the economy, absorbing some democratic values and liberal policies and establishing paralysed institutionalisation of human rights and anti-corruption bodies to mimic the democratic rule.

## REFERENCES

- Aacha, Kinjal – Chetty, Priya: *Different Types of Literature Review Techniques Followed in a Research*. [online], Project Guru, 15.12.2021. Source: projectguru.in [24.10.2022]
- Asian Development Bank (2012): *Myanmar in Transition: Opportunities and Challenges*. [online], Asian Development Bank, 2012. Source: adb.org [07.11.2022]
- Asian Development Bank (2015): *Thailand, Industrialization and Economic Catch-up, Country Diagnostic Study*. [online], Asian Development Bank, 2015. Source: adb.org [11.11.2022]

---

<sup>75</sup> Asian Development Bank: *Myanmar in Transition: Opportunities and Challenges*. [online], Asian Development Bank, 2012. Source: adb.org [07.11.2022].

- Badgley, John H. (1969): Two Styles of Military Rule: Thailand and Burma. *Government and Opposition*, 4(1), 100–117. Online: <https://doi.org/10.1111/j.1477-7053.1969.tb00799.x>
- Butwell, Richard (1962): The Four Failures of U Nu's Second Premiership. *Asian Survey*, 2(1), 3–11. Online: <https://doi.org/10.2307/3023653>
- Chalk, Peter (2013): *On the Path of Change: Political, Economic and Social Challenges for Myanmar*. Australian Strategic Policy Institute.
- Chambers, Paul (2013): Economic Guidance and Contestation: An Analysis of Thailand's Evolving Trajectory of Development. *Journal of Current Southeast Asian Affairs*, 32(1), 81–109. Online: <https://doi.org/10.1177/186810341303200104>
- Dapice, David: *Current Economic Conditions in Myanmar and Options for Sustainable Growth*. [online], Global Development and Environment Institute, 2003. Source: bu.edu [07.11.2022]
- Dejthumrongwat, Panakorn (2014): *Does Thaksinomics Create Sustainable Economic Growth?* City University London, School of Social Science, International Politics Department.
- Doner, Richard. F. (2009): *The Politics of Uneven Development. Thailand's Economic Growth in Comparative Perspective*. Cambridge: Cambridge University Press. Online: <https://doi.org/10.1017/CBO9780511819186>
- Doner, Richard F. – Ramsay, Ansil (2000): Rent Seeking and Economic Development in Thailand. In Khan, Mushtaq H. – Jomo, Kwame Sundaram (eds.): *Rents, Rent-Seeking and Economic Development. Theory and Evidence in Asia*. Cambridge: Cambridge University Press. 145–181. Online: <https://doi.org/10.1017/CBO9781139085052.004>
- Gruß, Inga (2017): The Emergence of the Temporary Migrant: Bureaucracies, Legality and Myanmar Migrants in Thailand. *Sojourn: Journal of Social Issues in Southeast Asia*, 32(1), 1–35. DOI: <https://doi.org/10.1355/sj32-1a>
- Hyndman, Jennifer (2002): Business and Bludgeon at the Border: A Transnational Political Economy of Human Displacement in Thailand and Burma. *GeoJournal*, 56(1), 39–46. Online: <https://doi.org/10.1023/A:1021704918881>
- International Crisis Group: *Myanmar: The Politics of Economic Reform*. [online], International Crisis Group, 2012. Source: crisisgroup.org [07.11.2022]
- James, Helen (2010): Resources, Rent-Seeking, and Reform in Thailand and Myanmar (Burma): The Economics-Politics Nexus. *Asian Survey*, 50(2), 426–448. Online: <https://doi.org/10.1525/as.2010.50.2.426>
- Jirattikorn, Amporn (2016): Buddhist Holy Man Khruba Bunchum: The Shift in a Millenarian Movement at the Thailand–Myanmar Border. *Sojourn: Journal of Social Issues in Southeast Asia*, 31(2), 377–412. Online: <https://doi.org/10.1355/sj31-2a>
- Kaosa-ard, Mingsarn (1998): Economic Development and Institutional Failures in Thailand. *TDR Quarterly Review*, 13(1), 3–11.
- Kikuchi, Tomoo – Masutomo, Takehiro: *Financial Development in Myanmar and the Role of Japan*. [online], Rajaratnam School of International Studies, 2019. Source: rsis.edu.sg [07.11.2022]
- King, Daniel E. (1997): Thailand in 1996: Economic Slowdown Clouds Year. *Asian Survey*, 37(2), 160–166. Online: <https://doi.org/10.2307/2645483>
- Kyi, et al. (2000): *Economic Development of Burma. A Vision and a Strategy*. The Olof Palme International Center. A study conducted under the auspices of the Center for Business Research and Development (CBRD), Faculty of Business Administration. Singapore: National University of Singapore.
- Lwin, Nan: *Ten Reasons behind Myanmar's Economic Slump*. [online], The Irrawaddy, 30.08.2018. Source: irrawaddy.com [07.11.2022]
- Maung, Mya (1997): Burma's Economic Performance under Military Rule: An Assessment. *Asian Survey*, 37(6), 503–524. Online: <https://doi.org/10.2307/2645526>
- Miklian, Jason (2019): Contextualising and Theorising Economic Development, Local Business and Ethnic Cleansing in Myanmar. *Conflict, Security and Development*, 19(1), 55–78. Online: <https://doi.org/10.1080/14678802.2019.1561624>
- Mizuno, Atsuko (2020): Labour Migration and Relocation of Apparel Production between Thailand and Myanmar. *Journal of Southeast Asian Economies*, 37(2), 181–198. Online: <https://doi.org/10.1355/ae37-2d>
- OECD (2021): *OECD Investment Policy Reviews: Thailand*. [online], OECD Investment Policy Reviews, 2021. Source: oecd.org [07.11.2022]

- Oo, Lin Tun (2019): The Effect of Fiscal Policy on Economic Growth in Myanmar. *East Asian Community Review*, 2, 101–124. Online: <https://doi.org/10.1057/s42215-019-00020-6>
- Pathmanand, Ukrist (2001): Globalisation and Democratic Development in Thailand: The New Path of the Military, Private Sector, and Civil Society. *Contemporary Southeast Asia*, 23(1), 24–42.
- Pollock, Jackie – Aung, Soe Lin (2010): Critical Times: Gendered Implications of the Economic Crisis for Migrant Workers from Burma/Myanmar in Thailand. *Gender and Development*, 18(2), 213–227. Online: <https://doi.org/10.1080/13552074.2010.491324>
- Raquiza, Antoinette R. (2011): *The Political Economy of Thailand and the Philippines*. London: Routledge.
- Rhoden, T. F. – Unger, Danny (2015): No Burmese Returning: Economics Across Myanmar–Thailand Border. *The International Journal of East Asian Studies*, 19(2), 51–70.
- Rieffel, Lex: *The Economy of Burma/Myanmar on the Eve of the 2010 Elections*. [online], U.S. Institute of Peace, May 2010. Source: usip.org [22.01.2022]
- Sankaewthong, Palagorn: *Effects of Global Economic Conditions on the Thai Military Functions (1980s to Present)*. Master Thesis. [online], Naval Postgraduate School, 2002. Source: calhoun.nps.edu [07.11.2022]
- Silcock, T. H. (1967): *Thailand, Social and Economic Studies in Development*. Canberra: Australian National University.
- Soe, Tin (2008): Policy Dilemmas and Economic Development: A Case Study of Myanmar Economy in Transition. *Journal of International Cooperation Studies*, 15(3), 1–30.
- Stokke, Kristian – Vakulchuk, Roman – Øverland, Indra (2018): *Myanmar: A Political Economy Analysis*. Report commissioned by the Norwegian Ministry of Foreign Affairs, Norwegian Institute of International Affairs.
- Tang, Qiming – Li, Meijuan (2021): Analysis of Myanmar's Macroeconomic Development. *E3S Web of Conferences*, 235. Online: <https://doi.org/10.1051/e3sconf/202123501022>
- Thein, Htwe Htwe – Gillan, Michael (2021): *How the Coup Is Destroying Myanmar's Economy?* [online], East Asia Forum, 23.06.2021. Source: eastasiaforum.org [14.11.2022]
- Thein, Myat (2004): *Economic Development of Myanmar*. Singapore: ISEAS Publishing. Online: <https://doi.org/10.1355/9789812305251>
- Turnell, Sean (2007): Myanmar's Economy in 2006. In Skidmore, Monique – Wilson, Trevor (eds.): *Myanmar. The State, Community and the Environment*. Canberra: ANU Press. Online: <https://doi.org/10.22459/M.10.2007>
- Von der Mehden, Fred R. (1970): The Military and Development in Thailand. *Administration and Society*, 2(3), 323–340. Online: <https://doi.org/10.1177/009539977000200305>
- Walinsky, Louis J. (1965–1966): The Rise and Fall of U Nu. *Pacific Affairs*, 38(3–4), 269–281. Online: <https://doi.org/10.2307/2754031>
- Warr, Peter (2007): Long-term Economic Performance in Thailand. *ASEAN Economic Bulletin*, 24(1), 138–163.
- Warr, Peter (2013): Thailand's Development Strategy and Growth Performance. In Fosu, Augustin K. (ed.): *Achieving Development Success. Strategies and Lessons from the Developing World*. Oxford: Oxford University Press. 72–98. Online: <https://doi.org/10.1093/acprof:oso/9780199671557.003.0004>
- Warr, Peter (2019): Economic Development of Post-War Thailand. In Chachavalpongpan, Pavin (ed.): *Routledge Handbook of Contemporary Thailand*. London: Routledge. Online: <https://doi.org/10.4324/9781315151328>
- Warr, Peter: *Economic Development in Post-war Thailand*. [online], Australian National University, July 2018. Source: crawford.anu.edu.au [07.11.2022]
- Wong, John (1997): Why has Myanmar not Developed Like East Asia? *ASEAN Economic Bulletin*, 13(3), 344–358.
- World Bank: *Myanmar Growth Eases Slightly but Remains Robust in 2015–2016*. [online], World Bank, May 2016. Source: worldbank.org [14.11.2022.11]
- World Bank: *Myanmar Economy Remains Fragile, with Reform Reversals Weakening the Outlook*. [online], World Bank, July 2022a. Source: worldbank.org [14.11.2022.11]
- World Bank: *The World Bank in Thailand*. [online], World Bank, September 2022b. Source: worldbank.org [11.10.2022]

# Contents

<b>TAMÁS CSIKI VARGA: <i>The Transformation of the European Security Architecture as an Outcome of the Russian Aggression against Ukraine</i></b>	<b>2</b>
<b>JOSÉ LORENZO-PENALVA LUCAS: <i>Conceptual Model for Intentional Change in Violent Extremist Jihadist Organisations</i></b>	<b>4</b>
<b>GÁBOR ANDRÁS PAPP: <i>China's Militarisation and the Indian Ocean</i></b>	<b>20</b>
<b>RÉKA SZOLGA: <i>The Role of the Currently Applicable Water Treaties in Conflict Resolution</i></b>	<b>41</b>
<b>TAMÁS CSIKI VARGA: <i>Enabling Factors of Deepening the Visegrád 4 Defence Cooperation</i></b>	<b>55</b>
<b>PÉTER BALOG: <i>Geospatial Crisis Index – Developing Geospatial Analysis System to Support the Hungarian Defence Forces</i></b>	<b>78</b>
<b>ELENA-ALEXANDRA MAZILU (ALEXANDRESCU): <i>The Necessity of the Process of Modernisation of the Human Resources of the Military System</i></b>	<b>90</b>
<b>ANNA URBANOVICS: <i>Cybersecurity Strategies in the Visegrád Countries – A Cross-Country Analysis</i></b>	<b>100</b>
<b>KRISZTIÁN BENE: <i>Changes in the Composition, Equipment and Tactics of the 1st Foreign Cavalry Regiment of the French Foreign Legion during the Indochina War</i></b>	<b>114</b>
<b>DÁNIEL SOLYMÁRI – RÁHEL CZIRJÁK: <i>Most Current Issues and Perspectives of the Urban Slum Problem in Kenya</i></b>	<b>126</b>
<b>KAZI MOHAMMAD MAHBOBOR RAHMAN: <i>Economic Development under the Authoritarian Military Rule in Thailand and Myanmar: A Survey of Literature</i></b>	<b>144</b>

