Sodobni vojaški izzivi

Contemporary Military Challenges

Znanstveno-strokovna publikacija Slovenske vojske

ISSN 2463-9575
2024 – 26/št. 3

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA OBRAMBO
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UDK 355.5(479.4)(055)
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GENERALŠTAB SLOVENSKE VOJSKE

Izdajatelj Publisher	Generalštab Slovenske vojske General Staff of the Slovenian Armed Forces
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Oblikovanje Design	Skupina Opus Design
Grafični prelom Graphics	Jurko Starc
Tisk Print	Silveco, d.o.o.
ISSN	2232-2825 (tiskana različica/print version) 2463-9575 (spletna različica/online version)
Naklada Edition	300 izvodov/copies Izhaja štirikrat na leto/Four issues per year
Revija je dostopna na spletni strani Publication web page	https://sciendo.com/journal/CMC https://sciendo.com/journal/CMC
E-naslov uredništva Editorial staff´s email	svi-cmc@mors.si

Publikacija je uvrščena v bibliografsko zbirko podatkov COBISS.SI, Crossref, Military and Government Collection, EBSCO in Air University Library Index in Military Periodicals.

The publication is indexed in bibliography databases COBISS.SI, Crossref, Military and Government Collection, EBSCO and Air University Library Index in Military Periodicals.

SODOBNO VOJSKOVANJE

»Za sodobno vojskovanje so značilne zabrisane meje med državnim in nedržavnim, javnim in zasebnim, prikritim in odkritim, konvencionalnim in nekonvencionalnim, bojiščem in zaledjem, domačim in tujim ter mirom in vojno.«

Vojaška strategija Republike Slovenije (24. april 2024)

MODERN WARFARE

»Modern warfare is characterized by a blurring of the boundaries between the state and the non-state, the public and the private, the covert and the overt, the conventional and the non-conventional, the front and rear areas, the domestic and the foreign, and war and peace themselves.«

Military Strategy of the Republic of Slovenia (24 April 2024)

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Liliana Brožič

DOI: 10.2478/cmc-2024-0016

UVODNIK

SODOBNO VOJSKOVANJE

Uvod

Sodobno vojskovanje je v zadnjih dveh letih in pol povsem zapolnilo pozornost nacionalne in svetovne javnosti. Prevladujeta predvsem dve vojni območji, ponovni izbruh sovražnosti na Bližnjem vzhodu in ruska agresija nad Ukrajino. Za obe je značilno, da so svetovna javnost in njene organizacije povsem nemočne v iskanju rešitev, s katerimi bi jim uspelo vsaj začasno, če ne trajno, zaustaviti spopade in organizirati različne procese v podporo iskanju diplomatskih in mednarodnih rešitev.

Vpletene strani se delijo na tiste, ki si nikakor ne morejo pomagati same, in na tiste, ki ne upoštevajo mednarodnih dogovorov, mednarodnega prava, človekovih pravic in številnih drugih svetovnonazorskih in demokratičnih postulatov.

Generalna skupščina Združenih narodov (ZN) je septembra 2024 potrdila predlog nezavezujoče resolucije, ki v skladu z mnenjem Meddržavnega sodišča v Haagu zahteva konec izraelske okupacije palestinskih ozemelj v enem letu. Za resolucijo je glasovalo 124 od 193 članic ZN, vzdržalo se jih je 43, proti pa jih je bilo 14. Novi predsednik Generalne skupščine Philemon Yang pa je dejal, da sta Generalna skupščina in Varnostni svet ZN dolžna končati nezakonito prisotnost Izraela na zasedenih palestinskih ozemljih ter da je treba zagotoviti vladavino prava in pravičnost (Delo, 2024). Kako to doseči, še ni znano.

1 NOVI NAČINI VOJSKOVANJA

Medtem ko mednarodna skupnost išče diplomatske, mednarodnopravne in mirovne rešitve, se sodobno vojskovanje v praksi ves čas razvija, izpopolnjuje in dobiva nove razsežnosti. Izkušnje z uporabo turških brezpilotnih zrakoplovov v Siriji, Libiji, Gorskem Karabahu in Ukrajini kažejo, da so taki sistemi zelo učinkoviti in prinašajo pomembno novost v teorijo in prakso vojskovanja (Besenyő in Málnássy, 2024).

V začetku leta 2023 je iz Rusije presenetila vest, da je bil razlog za obsežen raketni napad Makejevke v ukrajinskem Donbasu povečana uporaba mobilnih telefonov, ki so jih ruski vojaki uporabili ob prehodu iz starega v novo leto. To naj bi omogočilo ukrajinski strani, da je določila koordinate lokacije vojaškega osebja za raketni napad (N1 SLO, 2024).

Septembra 2024 so mediji poročali o pozivnikih, ki jih je razneslo v času, ko so jih uporabljali pripadniki Hezbolaha, kar je povzročilo smrtne žrtve. V nadaljevanju pa je razneslo tudi ročne radijske postaje v uporabi te iste teroristične skupine (MMC, 2024a).

Iz Ukrajine dnevno poročajo o žrtvah in izpopolnjenih oblikah bojevanja z brezpilotnimi zrakoplovi, ki povzročajo vedno večjo škodo. V Zaporožju so na primer samo v eni noči našteli 22 takih zrakoplovov, ruska stran pa je objavila vest, da je bilo ukrajinskih zrakoplovov 125 (MMC, 2024b).

Med pomembnimi dejavniki v vojskovanju je zagotovo hibridno vojskovanje, ki poteka v kibernetskem prostoru. Ta način vojskovanja ni nov. Kot pravi Štrucl, je v uporabi že dlje, vendar je največje razsežnosti dosegel v obdobju pred ruskim vojaškim napadom na Ukrajino (Štrucl, 2022) in se še vedno intenzivno razvija.

V sodobnih spopadih se tako ne uporabljajo samo klasične oblike bojevanja z najnovejšo opremo in oborožitvijo (Šlebir, 2022), ampak tudi povsem novi načini, kako v največji možni meri čim bolj škodovati sovražniku. Pri tem si tisti, ki bijejo bitko, močno prizadevajo, da bi čim bolj izključili neposredno udeležbo človeških virov, ki jih poskušajo nadomestiti z različnimi napravami in povezavami med njimi.

Naučene lekcije nas spodbujajo, da se moramo na sodobno vojskovanje ustrezno odzvati. Ne samo v smislu, da bomo pripravljeni na take in podobne novosti, ampak tudi da bomo na sodobnem vojskovališču imeli ustrezno strateško prednost.

Kako to prednost doseči, v svojem poročilu ugotavlja Mario Draghi. Pri prepoznavanju ukrepov za večjo konkurenčnost Evropske unije se je osredotočil na povsem novo evropsko varnostno okolje, na pomembnost premostitve inovacijske vrzeli, na skupno razogljičenje in konkurenčni načrt, na povečano varnost in zmanjševanje odvisnosti od drugih, na povečanje finančnih investicij in krepitev upravljanja. Znotraj teh vsebinskih sklopov se je osredotočil tudi na pomen krepitve evropske obrambne industrije, brez katere ni mogoče zagotavljati varnosti in obrambe Evropske unije (Draghi, 2024).

Med pomembne dejavnike pri zagotavljanju evropske varnosti sodi tudi področje evropske vojaške mobilnosti, za katero Fiott meni, da bi se morali bolj osredotočiti na njen logistični vidik. Napredek na tem področju lahko po njegovem mnenju pomembno prispeva k prednosti pri sodobnem vojskovanju (Fiott, 2024).

2 SODOBNO VOJSKOVANJE Z VIDIKA AVTORJEV

Chinedu Simplicius Udeh v prispevku *Nigerijske oborožene sile in protigverilske operacije v Severovzhodni Nigeriji: ocena stanja* analizira dolgotrajne operacije nigerijskih oboroženih sil proti terorističnim in uporniškim skupinam, kot sta Boko Haram in Zahodnoafriška provinca Islamske države. Prispevek temelji na analizi dokumentov in terenski raziskavi.

V prispevku *Gospodar zračnega prostora – zmagovalec* avtorja **Matic Bališ** in **Vladimir Prebilič** izhajata iz predpostavke, da je obvladovanje zračnega prostora temeljni pogoj za zmago v vojni, saj omogoča večjo svobodo in učinkovitost pri izvajanju vojaških nalog. Med rusko ofenzivo na Ukrajino je bilo pričakovati, da bo Rusija zagotovila zračno prevlado, vendar se to ni zgodilo, kar je pomembno vplivalo na potek vojne v Ukrajini.

Uravnoteženje zahtev po pripravljenosti vojske in varstva okolja je ključno za uspešno upravljanje okoljskega vidika civilno-vojaških razmerij. V prispevku *Okoljski vidik civilno-vojaških razmerij: priložnosti in izzivi za Slovensko vojsko* so **Silvo Grčar, Andrej Sotlar** in **Katja Eman** raziskali stališča poveljnikov enot Slovenske vojske. Ta odražajo pozitivno ekološko naravnanost, pri čemer objektivno zaznavajo določene vplive vojaških dejavnosti na okolje.

Svetovni prvaki v usposabljanju: zapleteno razmerje Nemčije z vojaškimi silami za specialno delovanje je prispevek **Anne M. Gielas,** v katerem avtorica proučuje primere skrajno desničarskega ekstremizma v nemškem poveljstvu specialnih sil kopenske vojske, ki se že več let uvrščajo na naslovnice mednarodnih medijev. Ogorčenje javnosti v Nemčiji in zahteva po spremembah sta ponudila priložnost za prestrukturiranje ne le teh, temveč vseh nemških vojaških sil za specialno delovanje.

Palestinska militantna skupina Hamas je 7. oktobra 2023 začela obsežno skupno ofenzivo proti Izraelu. Hkrati s kinetičnimi napadi so različni akterji kibernetskih groženj, ki jih pripisujejo Hamasu, Hezbolahu, Iranu in Rusiji, sprožili kibernetske napade na izraelske informacijske sisteme v komercialnih, industrijskih in vladnih sektorjih. **Tal Pavel** analizira kibernetske napade in izraelske protiukrepe na področju kibernetske varnosti v prispevku *Izogibanje »digitalnemu 7. oktobru«: študija o kibernetskem vojskovanju proti Izraelu med vojno oktobra 2023.*

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sciendo

Sodobni vojaški izzivi, 2024 – 26/št. 3
Contemporary Military Challenges, 2024 – 26/No. 3

Liliana Brožič

DOI: 10.2478/cmc-2024-0017

EDITORIAL

MODERN WARFARE

Introduction

In the last two and a half years, modern warfare has completely captured the attention of the national and global public. Two war zones in particular, the renewed outbreak of hostilities in the Middle East and the Russian aggression against Ukraine, have dominated. Both are characterised by the fact that the world public and its organizations have been completely helpless in their search for solutions that would succeed, at least temporarily if not permanently, in stopping the fighting and in organizing the various processes in support of the search for diplomatic and international solutions.

The parties involved are divided into those who have no way of helping themselves and those who do not respect international agreements, international law, human rights and many other world-view and democratic postulates.

In September 2024, the UN General Assembly approved a non-binding draft resolution calling for an end to the Israeli occupation of the Palestinian territories within one year, in line with the opinion of the International Court of Justice in The Hague. The resolution was supported by 124 of the 193 UN members, 43 abstained and 14 voted against. According to the new President of the General Assembly, Philemon Yang, the General Assembly and the UN Security Council have an obligation to end Israel's unlawful presence in the Occupied Palestinian Territory and to ensure justice and the rule of law (UN, 2024). The way to achieve this is not yet known.

1 NEW WAYS OF WARFARE

While the international community seeks diplomatic, international law-related and peacekeeping solutions, modern warfare in practice is constantly evolving, refining and taking on new dimensions. The experience of the use of Turkish drones in Syria, Libya, Nagorno-Karabakh and Ukraine shows that such systems are highly effective

and bring important innovations to the theory and practice of warfare (Besenyő and Málnássy, 2024).

In early 2023, Russia was surprised to learn that a large-scale missile attack by Makiivka in the Ukrainian region of Donbas was the reason for the increased use of mobile phones by Russian soldiers on the New Year's eve. This allegedly allowed the Ukrainian side to locate and pinpoint the coordinates of the location of the military personnel for the missile attack (BBC, 2024a).

In September 2024, the media reported that the pagers exploded while Hezbollah members were using them, causing fatalities. Further, hand-held radios used by the Hezbollah have also exploded (BBC, 2024b).

Daily reports from Ukraine show casualties and sophisticated forms of drone warfare causing increasing damage. In Zaporizhzhia, 22 such drones were counted in only one night, while the Russian side reported 125 Ukrainian drones (Reuters, 2024).

One of the important factors in warfare is certainly the hybrid warfare taking place in cyberspace. This type of warfare is not new. According to Štrucl (2022), it has been in use for a long time. It has, however, reached its greatest proportions in the period before the Russian military attack on Ukraine and is still developing intensively.

Modern warfare thus uses not only classical forms of warfare with the latest weapons and equipment (Šlebir, 2022), but also entirely new ways of harming the enemy as much as possible. In doing so, those fighting the battle are working hard to minimizethe direct involvement of human resources, which they are trying to replace with various devices and links between them.

Lessons learned encourage us to respond appropriately to modern warfare. Not only in the sense of being prepared for such and similar innovations, but also to have the right strategic edge in the modern theatre of war.

How to gain the edge is the focus of Mario Draghi's report, which, in order to make Europe more competitive, focuses on the entirely new European environment in which it finds itself, on the importance of closing its innovation gap, on its common decarbonisation and its competitive agenda, on its increased security and reduced dependence on others, on its increased financial investment and on its strengthened governance. Within these themes, it also focuses on the importance of strengthening Europe's defence industry, without which its security and defence cannot be guaranteed (Draghi, 2024).

One of the important factors in ensuring Europe's security is European mobility, an area where Fiott (2024) believes we should focus more on the logistical aspect. Advances in this area, in his view, can make a significant contribution to the advantages of modern warfare.

2 MODERN WARFARE FROM THE AUTHORS' PERSPECTIVE

Chinedu Simplicius Udeh in his article *Nigerian military and counter-insurgency operations in North-East Nigeria: an assessment* provides an analysis of the Nigerian Armed Forces' long-standing operations against terrorist and insurgent groups such as Boko Haram and the West African Province of the Islamic State. The paper is based on document analysis and field research.

The article *Airspace Master - A Winner* by **Matic Balič** and **Vladimir Prebilič** is based on the premise that airspace mastery is a prerequisite for winning a war, as it allows military tasks to be carried out with greater freedom and efficiency. During the Russian offensive on Ukraine, there was an expectation that Russia would secure air superiority, but this did not happen, which had a significant impact on the course of the war in Ukraine.

Balancing the requirements of military readiness and environmental protection is key to the successful management of the environmental aspect of civil-military relations. In the paper titled *The environmental aspect of civil-military relations: opportunities and challenges for the Slovenian Armed Forces*, **Silvo Grčar**, **Andrej Sotlar** and **Katja Eman** explore the views of SAF unit commanders. These reflect a positive ecological attitude, objectively perceiving certain impacts of military activities on the environment.

World champions in training: Germany's difficult relationship with its military special operations forces is an article by **Anna M. Gielas**, which examines examples of far-right extremism in the German Army's Special Forces Command that have been making international headlines for several years. The public outrage in Germany and the demand for change have provided an opportunity to restructure not only these, but all German military special operations forces.

On 7 October 2023, the Palestinian militant group Hamas launched a major joint offensive against Israel. In parallel with the kinetic attacks, various cyber threat actors attributed to Hamas, Hezbollah, Iran and Russia launched cyber attacks against Israeli IT systems in the commercial, industrial and government sectors. **Tal Pavel** analyses cyber-attacks and Israeli counter-measures in the field of cyber-security in his article *Avoiding a "Digital 7 October": a study on cyberwarfare against Israel during the October 2023 war*.

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DOI: 10.2478/cmc-2024-0018

NIGERIJSKE OBOROŽENE SILE IN PROTIGVERILSKE OPERACIJE V SEVEROVZHODNI NIGERIJI: OCENA STANJA

NIGERIAN MILITARY AND COUNTER-INSURGENCY OPERATIONS IN NORTH-EAST NIGERIA: AN ASSESSMENT

Povzetek Prispevek analizira dolgotrajne operacije nigerijskih oboroženih sil proti terorističnim in uporniškim skupinam, kot sta Boko Haram in Zahodnoafriška provinca Islamske države. Nigerijske oborožene (AFN) sile so v boju proti tem grožnjam uporabljale tako kinetične kot nekinetične ukrepe, vendar kljub njihovim prizadevanjem in uspehom negotovost še naprej ogroža vzpostavitev miru v državi. V tem prispevku, ki temelji na pregledu dokumentov in terenski raziskavi, so analizirani izzivi, s katerimi se spoprijemajo AFN, med drugim neustrezno orožje in oprema, vprašanja človekovih pravic, posttravmatske stresne motnje in slaba sinergija med agencijami. Za reševanje nastale situacije je v članku predstavljenih nekaj predlogov, kako bi se tem izzivom lahko izognili.

Ključne besede ***Nigerijske oborožene sile, gverila, varnostna negotovost, protigverila.***

Abstract This paper analyses the Nigerian military's protracted counter-insurgency operations against terrorist and insurgent groups such as Boko Haram and Islamic State West Africa Province. To counter these threats the Armed Forces of Nigeria (AFN) have been deploying both kinetic and non-kinetic measures to curb the insecurity, but despite their efforts and successes insecurity continues to undermine peace development in the country. This paper, based on desk research and a field survey, analyses the challenges faced by the AFN, which include inadequate weaponry and equipment, human rights concerns, post-traumatic stress disorder, and poor interagency synergy, among other things. To this end, the paper provides some insights into what could be done to obviate these challenges.

Key words ***Nigerian military, insurgency, insecurity, counter insurgency.***

Introduction

"About 1.1 million lives could be lost by 2030, if the insurgency ravaging Nigeria's North-East region continues" (United Nations Development Programme [UNDP], 2021a); "The humanitarian crisis in North-East Nigeria remained one of the most complex humanitarian crises in the world" (United Nations Office for Coordination of Humanitarian Affairs [UN-OCHA]; 2021b).

These statements by the UNDP and the UN-OCHA capture the human security implications of the insurgency and insecurity in the North-East region of Nigeria, and the urgent need to push back and defeat it. Security is a first order priority and a necessary condition for the well-being of the people and the development of a country. As aptly noted by McNamara (1968), security is not military hardware, although it may include it; security is not military force, although it may involve it; and security is not traditional military activity; though it may encompass it. Security is development, and without development, there can be no security. The legitimacy of any government is predicated on the degree to which the security of the citizens is guaranteed. Simply put, security is freedom from danger, attacks and harmful threats to the individual or the nation.

Nigeria's 1999 Constitution, as amended in Section 14 (2) (b), states that "the security and welfare of the people shall be the primary purpose of government" (Federal Republic of Nigeria [FRN], 1999). This ultimately saddles the Nigerian government at all levels with the responsibility of safeguarding the lives, property and welfare of Nigerians against internal and external threats. Paradoxically, Nigeria is confronted and challenged by a seemingly intractable epidemic of insecurity such as insurgency, kidnapping, banditry, militancy, separatist agitations, ritual killings and other forms of criminality from north to south and east to west. These security challenges have dire consequences for Nigeria's territorial integrity, security and national development.

One geo-political zone which has witnessed protracted insurgency, terrorism, banditry and other forms of criminality is the North-East, comprising the states of Adamawa, Bauchi, Borno, Gombe, Taraba and Yobe. These states have unique, cross-cutting security challenges, but are particularly plagued by terrorism and insurgency waged by Boko Haram and Islamic State West Africa Province (ISWAP). It is believed that the insecurity emanating from the North-East zone has criminal domino effects across other geo-political zones in the north, particularly the North-West and North Central regions where banditry and kidnapping have become rampant, as well as in the southern belt of the country, where kidnapping, violent agitation and militancy challenge the capacity of the state to maintain law and order. Broadly speaking, Nigeria's security challenges are driven by multiple causes and some commonalities such as ideological grievances, corruption and bad governance, weak security sector capacity, and socio-economic and political deprivation, as well as the proliferation of Small Arms and Light Weapons (SALWs), among others.

The activities of the insurgent groups in the North-East region have caused the worst humanitarian crisis in the history of Nigeria. As reported by the UNDP, Boko Haram and its splinter group ISWAP have sustained a conflict against the Nigerian state that has now lasted over a decade, causing over 35,000 deaths (350,000 when second-order effects are counted) and left over 2 million internally displaced people (United Nations Development Programme [UNDP], 2021a). Similarly, the North-East Development Commission [NEDC] (2023) reports that 14.8 million people have been displaced in the North-East due to the insurgency. The insurgency and criminality in the North-East have adversely impacted infrastructure, education, the healthcare system, the economy and the livelihoods of the people. For instance, the over 10 years of violence in the region has left 45% of all health facilities and an estimated 75% of all water and sanitation infrastructure destroyed. More than 2.9 million children have been denied access to education (Brechenmacher, 2019). The 2016 Report on the North-East Nigeria Recovery and Peace Building Assessment (RPBA) on the crisis in the North-East Region, produced by the FGN, the World Bank, the United Nations (UN) and the European Union (EU), shows that property worth US$9 billion has been destroyed due to the insecurity and insurgency in the region (Vanguard, 2016a). There are several other socio-economic, political, psychological, environmental and human security consequences of the insecurity in the North-East of Nigeria.

The underlying causes of the insecurity in the North-East have revolved around history, climate and environmental issues, poverty, illiteracy, religious extremism, prolonged socio-economic neglect, poor governance and corruption (Udeh, 2022). There is also an external dimension to the problem, given the fact that some of the states in the region share international borders with Cameroon, Chad and Niger. These are countries plagued by their own internal contradictions and security challenges. Indeed, the creation of insecurity in Nigeria's North-East is a product of cross-cutting sociopolitical, socioeconomic and sociocultural factors. Some of the factors that explain the protracted nature of the insecurity in the North-East include the absence of the state, poverty, illiteracy, poor management of the forest, and overstretched security forces (Udeh, 2022). Any result-oriented response to insecurity must incorporate all the causative factors.

Strategic analysis of the remote and immediate causes of insecurity in the North-East of Nigeria has largely inspired the responses of the Federal Government of Nigeria (FGN) through its civil and military authorities, as well as the international community. The responses have been a hybrid of kinetic and non-kinetic measures such as military/security operations, efforts at deradicalization, and the socioeconomic rejuvenation of the region.

The Nigerian government's military-oriented and non-kinetic responses have achieved limited success in stemming insecurity and criminality in the North-East. While the Nigerian military has substantially succeeded in decimating Boko Haram/ISWAP's leadership and its rank and file, the group has proven to be adaptive and

resilient as they continue to attack soft targets. Mitigating insecurity will require a deep understanding of its drivers and the dynamics, together with the motivations and capabilities of various strategic actors. It is also pertinent to underline and understand the regional dimension of the crisis in the North-East, which adds additional complexity to its insecurity.

The Armed Forces of Nigeria, comprising the Nigerian Army, Nigerian Navy and Nigerian Air Force, have been deployed to North-East Nigeria to counter insurgency and other violent extremist activities in the area. There have been some successes, and also certain challenges confronting the Nigerian military in defeating Boko Haram and ISWAP insurgents.

This paper is primarily based on desk research and a field survey to some of the states in the North-East, including Adamawa, Borno, Yobe, Bauchi and Gombe. It adopts a qualitative research design, utilizing key informant interviews conducted with sources including security operatives, academia, civil society organizations and focus group engagements with selected individuals. The paper covers the operational definition of key terms, the geo-strategic importance of North-East Nigeria, and the roots of the insurgency and insecurity there. Thereafter, the paper discusses the national and international efforts towards countering insurgency and insecurity in North-East Nigeria, the key challenges facing the Nigerian military, future trends of insecurity in Nigeria, and strategies to boost the role of the Nigerian military in counter-insurgency.

1 OPERATIONAL DEFINITION OF KEY TERMS

1.1 Security

Security in its simplest form means freedom from or resilience against real or potential harm or threats from internal or external environments. It is the feeling of being safe and protected, as well as the feeling of freedom from danger, fear, anxiety, aggression and violation. It is about safeguarding individuals and a country from harmful threats. As noted by Meerts (2018, p 1) the concept of security entails a state of being free from danger or threats, including war, unemployment, illness or accidents.

1.2 Insecurity

The term insecurity denotes an atmosphere or state of mind characterized by self-doubt and vulnerability. According to the American Psychological Association (2018), insecurity is a feeling of inadequacy, a lack of self-confidence, and an inability to cope, accompanied by general uncertainty and anxiety about one's goals, abilities or relationships with others. For the purpose of this paper, insecurity is defined as any situation that encourages instability, crime, underdevelopment and deterioration in the well-being and quality of life of a people, or implies a threat to a nation's integrity and sovereignty.

1.3 National Security

A broad definition of national security entails the totality of all efforts taken to protect the territorial integrity and cherished values of a nation, improve the living standards of its people, provide security and the freedom of its citizens from all forms of anxiety and threats to life and property, and ensure their safety from natural or manmade disasters. It comprises the ability of a country to neutralize or degrade acts that could threaten the safety and well-being of the people or even undermine its capacity to maintain law and order (Peters, 2003).

1.4 Human Security

Human security is a people-centric and multifaceted understanding of the notion of security. The traditional concept of national security has been challenged by scholars arguing that the proper referent object for security should be at the human rather than national level. Hence, human security denotes the protection of the vital core of all human lives in ways that enhance human freedoms and fulfilment. It means protecting people from economic, food, health, political, personal, environmental, community, spiritual and emotional threats which degrade their quality of life and well-being (UNDP, 1994).

1.5 Insurgency

Insurgency is an organized resistance movement that uses subversion, sabotage and armed conflict to achieve its aims. According to Nigeria's National Counter Terrorism Strategy (2016 Revised, p 1) insurgency means "an organized armed struggle by a group aimed at weakening the authority of the Federal Republic of Nigeria in order to force a political change through the propagation of extremist ideology, under the guise of politico-economic marginalization".

1.6 Counter-Insurgency

Counter-insurgency is the use of all elements of national power, including military, psychological, diplomatic, information, economic, political and intelligence operations, to defeat an insurgency. A successful counter-insurgency operation requires a synchronization of multiple lines of effort, including diplomatic, information, military and economic, through a whole nation or society approach. Counter-insurgency is "the range of military, political and socio-economic measures adopted by a State in response to the outbreak of insurgency" (Federal Republic of Nigeria, NACTEST, 2016, p 1). It is important to note that the acquisition of real-time and actionable intelligence is necessary and core to successful counter-insurgency and insecurity in Nigeria in general, and the States in the North-East zone in particular, in order to uproot the causes of the conflict and threats.

2 THE ROOTS OF INSURGENCY AND INSECURITY IN THE NORTH-EAST

The roots of the problem which has caused and sustained the activities of BH/ISWAP terrorists in Nigeria will be considered in the light of the stance of the government regarding implementing of the Sharia Law, establishing an Islamic State and abolishing Western education. These will be discussed subsequently.

2.1 Non-Implementation of Sharia Law

The evolution of BH/ISWAP was rooted in the partial implementation and adoption of the contested Sharia law in 12 Northern states in the country, beginning in 2000 (Agbiboa, 2015). There have been attempts to enforce its full implementation since the Maitatsine riots of the 1980s (Okoro, 2014). To BH/ISWAP insurgents, this has been their cry to the government; to declare the full implementation of Sharia Law (Boas, 2012). Accordingly, BH/ISWAP's origin and activities are a clear display and means of venting their anger with regard to the non-implementation of Sharia Law in the 12 Northern states of Nigeria (Buah and Adelakun, 2009). The non-implementation of Sharia Law is considered one of the roots of the problem which has caused and sustained the activities of BH/ISWAP terrorists in Nigeria.

2.2 Ungoverned Spaces

Ungoverned spaces are territories within a state where the government's presence is not felt by the people. Large portions of the states in the North-East region are forested with little or no government presence, thereby becoming a safe haven for insurgency. In particular, the extensive Sambisa and Alagarno forests have become major hideouts for terrorists. According to the 2019 Ibrahim Index of African Governance (IIAG), which rates countries with regard to security, rule of law, and human and economic development, Nigeria was ranked 45th of 54 countries which were below the African average of 48 points (MO Ibrahim Foundation, 2020). This implies a threat to national security in the country. Hence, ungoverned spaces pose a serious challenge to the efforts to curb terrorism in the North-East region and towards enhanced national security in Nigeria.

2.3 Religious Indoctrination

The BH/ISWAP terrorists hold extreme religious ideologies, which they use as the basis for committing their heinous crimes. The terrorists erroneously view Western education as the cause of weak governance, poverty, unemployment, corruption and rejection in North-East Nigeria (Thurston, 2016). Instead, they believe that the practice of Sharia Law would engender the much-desired socioeconomic development. Accordingly, the rise of BH/ISWAP is embedded in Islamic fundamentalism, which they use to justify their actions; the group aims to promote Sharia law and create an Islamic state in Northern Nigeria (Akinola, 2015). As a result, it has waged war on any group or western idea which they believe is against Islam (Adelaja, Labo and Penar, 2018). It has been advocated that the misinterpretation of religious teaching is the

leading factor influencing the adoption of extreme religious views, especially among youths in northern Nigeria (Onuoha, 2014). Njoku (2020) asserted that there was no threat of punishment for BH/ISWAP fighters because they had been brainwashed to believe that death is a reward, so they looked forward to it. Thus, BH/ISWAP have been completely misguided into holding a perverted view of religious ideology which impacts negatively on national security.

2.4 Socioeconomic Problems

In North-East Nigeria there is a common perception that violent extremism is a direct consequence of the poor socioeconomic condition of the country. In this regard, Usman (2015) argued that poverty, low literacy level and unemployment are the driving forces behind the insurgency and insecurity in Nigeria. The current unemployment rate of 33.3% leaves a large number of youths disengaged and without the skills to engage in any meaningful economic endeavour. This has made it easy for them to be manipulated and recruited by BH/ISWAP terrorists. Thus, the vicious cycle of poverty and unemployment makes it easy for people to be recruited into BH/ISWAP.

2.5 Porous Borders and Uncontrolled Migration

The North-East region accounts for one-third of Nigeria's 1,497km international land border with Chad, the Republic of the Niger and Cameroon. This large expanse of land is loosely regulated, as communities along the border share cultural, religious and historical ties, among others. In addition, there are about 1400 illegal land border crossings in Nigeria, with only 84 approved land border posts (Ajaja, 2021). Thus, the poorly manned Nigerian borders provide unhindered access to SALW and criminal groups from the Sahel Region into Nigeria. In 2016, the United Nations (UN) Centre for Peace and Disarmament revealed that there were about 500 million assorted firearms in West Africa. It further stated that about 350 million of these arms, amounting to 70%, had been smuggled through Nigeria's porous borders (Vanguard, 2016b). The large number of firearms has continued to pose threats to national security. Furthermore, according to the Civil Society Legislative Advocacy Centre (CSLAC), the influx of foreign fighters into Nigeria through its porous borders significantly contributes to insecurity (Nzeshi, 2021). In addition, about 500 villages and 13,000 hectares of land have been devastated, while about 2,835 people were killed between 2011 and 2020 as a result of terrorism, kidnapping and other crimes orchestrated through the porous borders (Ojewale, 2021). Thus, border porosity, which is a direct consequence of ineffective border control, is inimical to the efforts towards curbing insecurity in the North-East and, by extension, in Nigeria.

2.6 Demographic Pressures and Climatic Change

The shrinking of Lake Chad from 22,000 km2 in 1960 to about 3000 km2 in 2000 resulted in the loss of livelihood for farmers, fishermen and others who depended on the lake for survival (Gao et al., 2011). Leke and Leke (2019) indicated that deforestation and desertification have continued to degrade the soil, with about

40% of arable land lost, particularly in North-East Nigeria. Furthermore, Nigeria's population increased from 186 million to 201 million between 2016 and 2019, indicating an increase of 15 million, of which northern Nigeria accounted for 10 million (National Bureau of Statistics, 2020). There has therefore been a significant decline in the natural agricultural resources in the North-East to cater for the increasing population, which is largely youthful. Thus, demographic pressure and climate change form part of the roots of insurgency in the North-East.

2.7 Geography and Regional Dynamics

The geographical location of the North-East region of Nigeria, and the proximity of Nigeria to fragile neighbouring countries such as Cameroon, Chad and Niger, have also exposed Nigeria to regional insecurity. For instance, Niger is bounded on the north-west by Algeria, on the north-east by Libya, on the east by Chad and on the west by Burkina Faso and Mali. Most of these countries are enmeshed in conflict and insurgency, with dire consequences for Niger and her Nigerian neighbour. Foreign fighters from Libya and Mali flow freely into Niger and by extension into the North-East of Nigeria, carrying SALWs and violent extremist ideologies. Chad shares borders with Cameroon, the Central African Republic (CAR), Libya and Sudan, and these countries are also embroiled in conflicts and insecurity with spillover effects.

Having underlined some of the root causes of insecurity in the North-East region, it is important to examine some of the national and international responses to the menace.

3 NATIONAL AND INTERNATIONAL EFFORTS IN COUNTERING INSURGENCY AND INSECURITY IN NORTH-EAST NIGERIA

The national and international efforts in mitigating insecurity in the North-East have been both kinetic and non-kinetic. These are discussed below, beginning with the kinetic efforts.

3.1 Kinetic Efforts

The Federal Government of Nigeria (FGN) has launched several military operations such as ZAMAN LAFIYA, LAFIYA DOLE and HADIN KAI. In addition, the Nigerian Army (NA) established the 7th Division in Maiduguri and several super-camps across the North-East to address the situation. The Nigerian Navy (NN) deployed its Special Boat Services to the Lake Chad region, while the Nigerian Air Force (NAF) deployed platforms in support of the surface forces. The efforts of the military are supported by other security agencies deployed in the North-East to address the situation, and the Nigerian forces collaborate with the Multinational Joint Task Force (MNJTF) operating on the fringes of Lake Chad to restore peace and security to the region (Abdullahi, 2023). These kinetic efforts, although helpful in normalizing the security situation in the North-East Nigeria, do not address the

root causes of the conflict, and are therefore not sufficient to address terrorism and insurgency.

According to the International Crisis Group [ICG] (2021), the Nigerian military has essentially adopted a better defensive posture, regrouping its troops in "super-camps" in various northern Borno localities. This move has reduced military losses, but also allowed ISWAP to tighten its grip on other portions of rural Borno. The Nigerian authorities have stepped up military operations against ISWAP. The offensive, along with improvements in intelligence, surveillance and airborne reconnaissance capacity, and better coordination between air and ground forces, has escalated pressure on ISWAP and prevented large-scale jihadist attacks on garrison towns. In the past few months, Super Tucano, F-17 and other aircraft have repeatedly hit ISWAP fighters as they gathered to launch raids or struck them as they returned.

Due to the increased military pressure, ISWAP has adapted its tactics accordingly, dropping its large-scale attacks to evade the air raids and focusing on mounting roadblocks to kidnap and kill state officials, hitting military convoys with ambushes and improvised explosive devices, and using artillery fire against garrisons (International Crisis Group, 2021). Despite the successes of the kinetic efforts, the FGN and other well-meaning stakeholders acknowledge that military operations are not enough to defeat ISWAP, and have introduced other measures to defeat insurgency and insecurity in the north-eastern flank of the country. It is important to underline the need for deepened non-kinetic approaches by both military and civil organizations in order to unlock the adversaries' Centre of Gravity (COG).

3.2 Non-Kinetic Efforts

The FGN has introduced non-kinetic measures to curb insecurity in the North-East region. These include the enactment of legal, policy and institutional frameworks such as the National Defence Policy 2017, the Terrorism Prevention Act, the National Counter Terrorism Strategy (NACTEST), the National Security Strategy (NSS) 2019, the National Cyber Security Policy and Strategy, the Economic Recovery and Growth Plan, and the National Development Plan 2021-2025, and the establishment of the North-East Development Commission (NEDC), among others. The NEDC is the focal organization charged with the responsibility of assessing, coordinating, harmonizing and reporting on all intervention programmes and initiatives by the FGN or any of its MDAs, States and other Development Partners. It is mandated with the responsibility of receiving and managing funds allocated by the FGN and international donors for the resettlement, rehabilitation, integration and construction of roads, houses and business premises of victims of insurgency and terrorism, as well as for tackling the menace of poverty, illiteracy, ecological problems and any other related environmental or developmental challenges in the North-East states (NEDC; n.d.). The NEDC has intervened in health and humanitarian areas, agriculture, Information and Communication Technology (ICT), and housing, among others. For instance, the NEDC has established ICT Resource Centres in each of the six states of the North-East in order to improve access to information technology in

the region. Despite the modest achievements of the NEDC since its establishment, the challenge of developing an integrated and sustainable master plan and funding remains existential for the Commission. It is also important to ensure the transparent, accountable and judicious use of the received funds to ensure durable peace and security in the North-East.

The FGN employed the services of the Intergovernmental Action Group against Money Laundering in West Africa (GIABA) to stifle the financial sources of the insurgents (GIABA, n.d.). Terrorist financing had enabled BH/ISWAP to perpetrate over 281 attacks, kill over 21,345 people, destroy property worth over US$5.9 billion, and displace more than 2 million people between 2015 and 2019 (de Montclos, 2019). In addition, BH/ISWAP carried out about 81 Improvised Explosive Device (IED) attacks and killed about 145 people during the first quarter of 2022 (Haruna, 2022; Akpan, 2022). In June 2024, Boko Haram carried out some deadly suicide bombings in Borno State, targeting wedding and funeral ceremonies. A Nigerian Army spokesperson, Major General Edward Buba, said the attacks were cowardly and meant to project an image of strength to cover their (Boko Haram's) weakness and decline (Reuters, July 2, 2024). The insurgent groups left Nigeria ranked 8th of 92 countries in the Global Terrorism Index (GTI) 2022, indicating the high rate of terrorist activities in Nigeria (GTI, 2022). There have been continued activities of BH/ISWAP in Nigeria, particularly in the North-East, due to the inadequate government presence and a large pool of disengaged youths. The resulting insecurity and loss of life and property impinges on national security. Operation Safe Corridor (OSC) is a small-scale defector programme established in 2016 for repentant Boko Haram fighters to reintegrate into civilian life. The OSC is a home-grown programme designed by the Nigerian government. The programme has achieved some degree of success by reintegrating several repentant BH members, although it has faced resistance from some quarters who believe that instead of rewarding the repentant BH fighters, they should be made to face the law and sanctioned appropriately. The OSC still needs a great deal of support from both the government and other stakeholders for it to serve its purpose and help mitigate insecurity in the North-East region.

At the end of 2019 there were 74 identified organizations working in the North-East, including 6 UN agencies plus OCHA and IOM, 28 INGOs, and 33 Nigerian national and local NGOs. Of the six states in the North-East, the bulk of the operational aid presence is concentrated in the three states of Borno, Adamawa and Yobe (the BAY States), where the Nigerian government has declared a state of emergency (Abdullahi, Daniel 'personal communication', February 2024). These three states, and Borno in particular, are the epicentre of the conflict and contain the most people in need of aid. The other three north-eastern states of Bauchi, Gombe and Taraba also have needs, however, and there is evidence that the true scope of the conflict extends at least to Gombe and Bauchi. There are also several other non-kinetic lines of effort, including political, environmental, informational and economic endeavours, among

others, designed to mitigate insecurity and promote peace building in the North-East region.

4 KEY CHALLENGES TO THE NIGERIAN MILITARY IN CURBING INSURGENCY AND INSECURITY IN NORTH-EAST NIGERIA

Some of the identified key challenges which complicate the Nigerian military's war against insecurity in the North-East region include the uncoordinated response by both government and international actors, weak regional cooperation, poor border management, the proliferation of SALW, and poor governance. These are adumbrated further below.

The responses to the insurgency and insecurity in the North-East have been encouraging, and they are helping to stem the tide of insecurity in the region. However, uncoordinated responses still exist between the FGN on the one hand, and international partners on the other, in the implementation of programmes such as the OSC and Safe School Initiatives (Okereke, 2023). This paper has also underlined the need to ramp up regional cooperation between Nigeria and its neighbouring countries such as Cameroon, Chad and Niger. Poor border management has made the Nigerian borders porous for the free entry of people, goods and services. Keeping in mind the ECOWAS Protocol of Free Movement of Goods and Persons, Nigeria must scale up its border management to arrest insecurity in the North-East. The proliferation of SALWs poses a serious challenge to curbing insecurity; the wide circulation of SALWs in the region fuels insecurity and empowers criminal groups to continue to challenge the country's monopoly in the use of instruments of violence.

Poor governance over years in the North-East has created a large army of unemployed youth and promoted poverty, illiteracy and socioeconomic underdevelopment in the region. The North-East has the largest number of people living in poverty in Nigeria. Unemployment is rife in the states and infrastructural deficits stare the states in the face. Addressing bad governance will be a right step towards curbing insecurity, insurgency and banditry in the North-East region of Nigeria.

5 FUTURE TRENDS OF INSECURITY IN NORTH-EAST NIGERIA

To develop effective strategies to counter the insecurity in the region, it is crucial that planners and decision-makers not only understand the current state of the conflict but also have a sense of how the conflict is evolving. An examination of the current conflict trends and an analysis of how contemporary insurgencies and modern African internal conflicts end suggest several plausible scenarios for the evolution of the insecurity in the NE. Here we present three possible futures, from the most likely to the least likely. In preparing these scenarios, it has been assumed that the Nigerian government and military's current, predominantly kinetic, approach to combating insecurity in the NE will remain, for the most part, unchanged in the near term,

and that non-kinetic efforts dealing with the micro, meso and macro triggers of the insurgency will be increased.

5.1 A Transformation to Criminality or a New War

According to Mao Zedong (2010), guerilla warfare without a political front and strong links to the population is nothing but "roving banditry." As Boko Haram enjoys so little grassroots or external support, because it has so far failed to provide an ideological catalyst to mobilize discontent and focus it on achievable objectives, and because it has also failed to develop a mechanism to administer territory, it is probable that over time the group will metamorphose into a criminal or terrorist organization without a territory or a home base. Banditry as we have it in the North-West is not unconnected to this evolution. Other factors that support this scenario include the fact that the insurgency is heavily outmatched by a strong Armed Forces of Nigeria (AFN) which, on multiple occasions, has shown the capacity to decimate the group and which enjoys strong international support, including from its neighbours, who wish to close their borders and eradicate Boko Haram sanctuaries in their territories. Once the insurgency has been severely weakened, it is also likely that the Nigerian government will fail to reconcile with surviving hardcore militants, opening up the possibility that they continue as a criminal or terrorist group.

5.2 Expansion and Secession

Because of its extreme tactics, in its current form Boko Haram/ISAWP enjoys little or no public support. It has not been able to mobilize large segments of the population, and instead recruits support from a single ethnic group and from young, unemployed men who are mainly interested in financial rewards. Nevertheless, the conditions in NE Nigeria are ripe for an expansion of the conflagration. The Muslim population's frustration with the government overall and the continued poverty and economic disparity, together with disenchantment with mainstream Islamic leaders, has created an environment in which radical, fundamentalist movements are among the only groups left with some authority. If Boko Haram experiences a change in leadership or reforms its violent tactics, and if the government and northern elites fail to address the root causes and grievances in the NE, it is possible that the insurgency could attain significant grassroots support, as it did prior to 2009. If this happens, the conflict could spread outside the zone to the whole of Muslim-dominated Nigeria, thereby deepening religious and regional fault lines and threatening national unity and stability. If the Muslim majority in the north were mobilized in support of Boko Haram's objectives, it is possible that the north could attempt to break away in a secessionist bid to create an Islamic state.

5.3 Fracture and Co-option

Without additional internal or external support, Boko Haram has little chance of achieving any sort of military victory in the short to mid-term. This is because the group itself is reportedly already highly fragmented and its leadership is divisive. Thus, it is possible that Boko Haram could break into more factions and some groups

could become susceptible to co-option by the state over time. Factions within the insurgency have already attempted to enter into negotiations with the Nigerian government. If the conflict evolves into a strategic stalemate, it could be possible to influence the belligerents against continued fighting. If the insurgency were to splinter, it is likely that the die-hard elements of Boko Haram would either devolve into a criminal or terrorist organization or would be decisively defeated by the AFN.

These plausible scenarios are expected to guide and inform military and non-military strategies to defeat Boko Haram and other splinter terrorist groups in North-East Nigeria, such as Jama'tu Ahlis Sunna Lidda'awati wal-Jihad (JAS) and ISWAP. It must be noted that JAS has gained ground in the intra-jihadist fighting in North-East Nigeria, halting the previous momentum of ISWAP. According to ICG (2024), in the course of 2023 JAS took most of the islands in Lake Chad which ISWAP had controlled. This development calls for a new strategy by the Nigerian military and the governments of Lake Chad Basin Region.

6 STRATEGIES TO IMPROVE THE ROLE OF THE NIGERIAN MILITARY IN COUNTERING INSURGENCY AND INSECURITY IN NIGERIA

Success in curbing the insurgency and insecurity in the North-East requires a grand strategy which defines the peace sought, intelligently combining diplomacy, the economy, military actions, and social and information operations. The FGN could adopt a comprehensive whole-nation grand strategy to guide lower-level activities. There is need for unwavering political will in support of violent COIN operations by the Nigerian military. The strategy needs to take into account the adversary and its mutating nature; in this case, it needs to be relevant to the nature of the Boko Haram insurgency. Broadly speaking, the following strategies could be adopted by the Nigerian military and government to deliver effective counter insurgency operation:

6.1 Adopt an Optimized Subordinate Military Strategy

This involves creating smaller fighting units, and devolving authority to independent battlefield commanders and employing specialized guerilla units alongside conventional infantry. To fight an insurgency, conventional armies must adopt some of the guerrilla strategies of their enemies, including small formations, deep penetration into hostile territory, and hit-and-run surprise attacks. The AFN could use small, highly trained, mobile groups to infiltrate the Boko Haram/ISWAP front lines. These could comprise 4-man teams to attack high-value targets, provide real-time intelligence, and disrupt Boko Haram/ISWAP's lines of resupply and communications. The military teams must be well-trained and authorized to call in precision air, artillery, and mortar attacks on Boko Haram/ISWAP locations and fighting teams.

6.2 Increase the Capacity of the Armed Forces of Nigeria

Increasing the AFN's budget by 35% for the next 10 years (2024-2034) would shore up their capability and equipment as they engage in internal security operations all over the nation. Professionalism cannot be achieved in the AFN if they are not well-funded and resourced. Nigeria's annual defence budget is rather a pittance compared to the enormous responsibility the military are meant to take on. The capacity of the AFN needs to be increased in terms of recruitment of personnel and training to fit the contemporary security challenges in the North-East and in Nigeria in general. The capacity issues of the AFN in terms of funding, training, equipment and welfare, among others, must be addressed for robust counter-insurgency operations. More personnel need to be added to the AFN Special Forces, together with deepening intelligence gathering and utilization as leveraging emerging technologies.

6.3 Diplomatic and Financial Isolation of the Insurgents

The government needs to erode one additional key pillar of Boko Haram's strength — their support overseas. Boko Haram/ISWAP/JAS have been effective at defining themselves as fighting for a just Islamic state in the eyes of the Muslim world, influencing the public narrative through media activities. The loss of foreign support and international legitimacy would play a pivotal role in Boko Haram's loss of legitimacy at home. It would also render fundraising more difficult. Increased counter-terrorist financing is urgent. In this regard, the Nigerian military could leverage its Defence Attache System all over the world to build a counter narrative against these insurgents, especially among the Islamic nations. The use of diplomatic and financial isolation would assist the Nigerian military in securing a sustainable victory over these insurgents and jihadists.

6.4 Ramp up International Cooperation with Strategic Countries

Nigeria needs to deepen her cooperation with countries such as the US, the UK, France, Canada, Russia, India and Pakistan. These countries are great powers with capable military forces. France is isolated here because of its influence over Nigeria's strategic neighbourhood. Nigeria needs to engage more with France in order to secure the cooperation of countries such as Cameroon and Chad in the fight against terrorism and insurgency. The FGN and the military need to effectively harness the defence attachés to win more international cooperation for the Nigerian military in the areas of modern equipment, intelligence collection and sharing, training and other tangible and intangible support.

6.5 A Closer Working Relationship with Nigeria's Contiguous/Strategic Neighbours

There is a need for Nigeria to deepen engagement with her strategic neighbours such as the Republic of Benin, Chad, Cameroon, and Niger. These countries are pivotal to Nigeria's security. In addition, the Nigerian military needs to deepen its engagement with the armed forces of countries sharing borders with Nigeria, not just through

the MNJTF but also through other engagements such as sports, intelligence sharing, joint training and other social activities that could bring them together.

6.6 Addressing Poverty, Unemployment and Infrastructure Deficit

Addressing poverty, unemployment, illiteracy and the infrastructure deficit in the North-East is a necessary condition to boosting security in the region. In this regard, the NEDC, the states' governments, the organized private sector, civil society organizations and international partners need to deepen their collaboration to create an enabling environment to attract investment and industrialization into the North-East region of Nigeria. The military needs to find creative ways to support these non-kinetic efforts, because they could serve as force multipliers. The Nigerian military could be engaged in infrastructure construction, the provision of education through its well-established education corps, and assistance in healthcare delivery; these are areas where the Nigerian military has developed expertise and competencies.

6.7 Strengthening the Capacity of the Police

The need to strengthen the capacity of the NPF as the lead agency in internal security cannot be overstressed. The Nigeria Police Force (NPF) needs new training, modern policing equipment and systems to build their capacity to face contemporary security challenges. The mindset of NPF personnel must be re-tuned to focus on a human and community security policing strategy. More recruitment of degree holders into the NPF is need in the next 5-10 years. In addition, the issue of the State Police needs to be revisited and constitutionally accommodated to empower communities to police themselves. Until the NPF's capacity to maintain law and order is ramped up, the Nigerian military will continue to be overstretched and operationally ineffective. The assist the NPF, the Nigerian military could support them with training, intelligence, and other necessary support which would help the police to function optimally.

6.8 Deepening Intelligence Gathering and Management

Deepening bilateral and multilateral intelligence gathering with countries such as Cameroon, Chad and Nigeria is a necessary requirement to prevent and defeat insurgency and insecurity in the North-East. In this regard, the National Intelligence Agency (NIA) and Defence Intelligence Agency (DIA) need to recalibrate their intelligence operations with these countries. Furthermore, the fight against insurgency, banditry and insecurity needs to be seen as an intelligence-based operation. The NIA and DIA need to go the extra mile to ensure that Nigeria's neighbours on the north-eastern flank do not support terrorists and insurgents. Accordingly, there is need to strengthen regional and extra-regional intelligence cooperation.

Conclusion

This paper analyses the role of the Nigerian military in countering insurgency and insecurity in Nigeria's North-East and considers the factors/triggers of insecurity in the region and the broader consequences of insecurity for both the well-being of the people and national development. The paper discusses the role of the Nigerian military in curbing insecurity in the North-East, largely from a kinetic point of view,

while also underlining the point that the Nigerian military is equally rendering non-kinetic support to the government in moving towards a sustainable defeat of insurgency in the region. We have established that the general security situation in the north-eastern states has been precarious and volatile since 2009, when Boko Haram launched an insurgent campaign against the Nigerian state. The insurgent groups which seek to establish an Islamic caliphate are not relenting, despite the efforts made by government to defeat them. The kinetic and non-kinetic endeavours so far have brought limited success, hence the need to recalibrate the efforts to defeat the insurgents and other violent non-state actors, bearing in mind that fighting insurgency is not an overnight thing; it takes time and resources, as well as demanding a whole-society effort, to defeat it.

It is believed that the rising spate of kidnapping and armed banditry in the North-West and North Central zones of Nigeria are being perpetuated by some of the insurgent fighters from the North-East and/or their collaborators. Based on the analysis presented in this paper, it could be concluded that the conflict in the North-East is most accurately viewed as a counter-insurgency problem, rather than a pure counter-terrorism problem. Boko Haram and ISWAP are major regional insurgent groups with local, national and regional political objectives, and this fact needs to be well appreciated in order to defeat their campaign against the Nigerian state. Insecurity in the North-East has been driven by a number of underlying contextual factors and proximate causes, including poor governance, elite's delinquency and extreme socioeconomic inequality, porous borders, resource grabbing and control, among others.

The combination of the three factors of adopting a strategic objective matched to the adversary, using a grand strategy that focuses the whole nation on this objective, and adopting an optimized, subordinate military strategy are some of the ways to curb insecurity in North-East Nigeria. For the Nigerian military to decisively overcome insurgency and violent extremism in the North-East it is imperative to mitigate its systemic challenges of poor equipment holding, inadequate manpower capacity, low level of technology augmentation, and budgetary constraints. Even when the capacity of the Nigerian military is sufficiently engineered, the need for good governance, poverty reduction and job creation cannot be harped on enough. This report offers some recommendations for mitigating the level of security in the North-East.

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DOI: 10.2478/cmc-2024-0019

GOSPODAR ZRAČNEGA PROSTORA – ZMAGOVALEC?

AIRSPACE MASTER - A WINNER?

Povzetek Konvencionalno razumevanje sodobnega vojskovanja izhaja iz prepričanja, da je obvladovanje zračnega prostora temeljni pogoj za zmago v vojni, saj omogoča izvajanje vojaških nalog z večjo svobodo in učinkovitostjo. Z nadziranjem zračnega prostora je ustvarjen neoviran dostop do vseh operativnih domen, kar vpliva na premike ter prilagajanje taktičnim situacijam. Vojna v zraku hkrati predvideva spoprijemanje ofenzivne in defenzivne komponente, pri čemer lahko prav prevlada v zraku bistveno vpliva na obrambne zmogljivosti zračne obrambe. Med rusko ofenzivo na Ukrajino je bilo pričakovanje, da bo Rusija zagotovila zračno prevlado, vendar se to ni zgodilo, kar je pomembno vplivalo na potek vojne v Ukrajini.

Ključne besede ***Vojna v zraku, zračna obramba, Ruska federacija, Ukrajina.***

Abstract The conventional understanding of modern warfare is based on the belief that control of airspace is a fundamental prerequisite for winning a war, as it allows military tasks to be carried out with greater freedom and efficiency. By controlling the airspace, forces gain unimpeded access to all operational domains, allowing movement and adaptation to tactical situations. At the same time, air warfare involves a clash between offensive and defensive components, and air supremacy can have a significant impact on the defensive capabilities of air defence. During the Russian invasion of Ukraine, it was expected that Russia would gain air supremacy; however, it did not happen, and this had a significant impact on the course of the war in Ukraine itself.

Key words ***War in the air, air defence, Russian Federation, Ukraine.***

Uvod

Po več kot dveh letih vojne v Ukrajini potekajo tudi boji nad Ukrajino, s čimer zmagovalec še ni določen. Pred 24. februarjem 2022 je večina zahodne javnosti pričakovala, da bo Ruska federacija (RF) s svojo drugo največjo floto vojnega letalstva uspela hitro vzpostaviti prevlado v zraku nad Ukrajino, kar naj bi pomembno vplivalo na kopenske operacije RF in tako odločilo o zmagovalcu. Vojno letalstvo RF je načrtovalo hitro in učinkovito uničenje ukrajinske protizračne obrambe, kar bi omogočilo uporabo obsežne flote bojnih in transportnih helikopterjev, s katerimi bi podprli napredovanje specialnih in padalskih enot globlje na ukrajinskem ozemlju (Sankaran, 2023).

Na podlagi premoči pred spopadom v korist RF so vojaški analitiki že pred začetkom invazije na Ukrajino pričakovali zlom obrambnih zmogljivosti Ukrajine in posledično nezmožnost dolgotrajne obrambe svojega zračnega prostora (Massicot, 2022). Zgodilo se je nekaj povsem drugega – nizala so se poročila o visokih izgubah vojnega letalstva RF (Cohen, 2022).

Zračna dimenzija vojskovanja v Ukrajini je postregla z mešanico uporabe različno dovršenega orožja in oborožitvenih sistemov. Od uporabe strateških bombnikov, ki so bili zasnovani med hladno vojno z namenom izvajanja izstrelitev jedrskega orožja, do uporabe poceni komercialnih brezpilotnih letalskih sistemov (Jones, 2023), križanja in sožitja zahodne in sovjetske tehnologije ob izstrelitvi izjemno tehnološko dovršenih manevrirnih raket Storm Shadow na sovjetskem letalu SU-24 in vse do uvedbe ameriških raket AIM-7 Sparrow (Payne, 2023) in RIM-7 Sea Sparrow v ukrajinske sisteme zračne obrambe BUK zaradi pomanjkanja streliva za sisteme ruskega in sovjetskega izvora (Newdick in Rogoway, 2023).

V Ukrajino se je v zadnjem letu steklo veliko različnih zahodnih sistemov zračne obrambe, od zastarelih in že upokojenih sistemov Hawk do zelo dovršenih sistemov, kot so sistemi Patriot PAC-3, IRIS-T, SAMP/T in NASAMS, ki dosegajo odlične rezultate pri prestrezanju ruskih zračnih groženj od raket Kinžal do zastarelih sovjetskih raket Kh-22 in brezpilotnih letalnih sistemov (Romanenko, 2023). Z najavo donacije letal F-16 in raket dolgega dosega ATACMS[1] pa lahko spopad v zraku vstopi v novo fazo bojevanja.

Namen članka je pobliže predstaviti in analizirati zračno vojno v Ukrajini, predstaviti ključne izzive, s katerimi se spoprijema ukrajinska zračna obramba, opredeliti nekatere pomembne oborožitvene sisteme, ki so bistveni na strateški ravni, in predstaviti dogajanje v evropskem prostoru, ki je začelo potekati kot posledica izkušenj, pridobljenih na ukrajinskem bojišču.

Avtorja v članku razvijata tezo, da je obvladovanje zračnega prostora ključno za sodobno vojskovanje, pri čemer uporabljata Ukrajino kot primer, kako lahko

[1] *Army Tactical Missile System (ATACMS) oziroma vojaški taktični raketni sistem je serija mobilnih balističnih raket zrak-zemlja kratkega dosega (CSIS, n.d.).*

inovativna uporaba tehnologije in prilagodljivost v obrambi omogočita državi, da se učinkovito upre tehnološko in številčno zmožnejšemu nasprotniku. V članku je opisano in analizirano dogajanje med 24. februarjem 2022 in koncem leta 2023. Glavni raziskovalni metodi v članku sta deskriptivna in analitična. Temeljita na analizi primarnih in sekundarnih virov, kot so poročila, strategije, strokovni članki in analize strokovnjakov ter raziskovalnih svetovalnih skupin. Teoretična podlaga za raziskovanje pa je teorija zračne prevlade in premoči.

Raziskava se izvaja v obdobju aktivnih spopadov, kar predstavlja omejitev do zanesljivih podatkov in informacij. Sočasno s trajanjem vojne poteka informacijska vojna in učinek megle vojne (angl. the fog of war).

1 ZRAČNA PREVLADA IN PREMOČ

Vse od druge svetovne vojne je najpomembnejša za vojskujočo stran prevlada v zraku, saj ob odsotnosti zračne prevlade taktične in strateške možnosti hitro postanejo omejene predvsem za ofenzivno stran. Eden prvih teoretikov, ki je prepoznal pomen zračne prevlade, je bil Giulio Douhet, ki je postavil temelje teorije, ki postavlja v ospredje nadzor zraka oziroma zračnega prostora (angl. command of the air). Zračno prevlado je opredelil kot položaj, ki onemogoča sovražniku sposobnost letenja, hkrati pa jo sam ohrani. Trdil je, da bo stran, ki bo dosegla ta cilj, zmagala v vojni oziroma si bo zagotovila več možnosti za zmage (Deaile, 2022).

Medtem ko je Douhetova teorija postavila temelje za razumevanje pomena zračne prevlade, kar je postalo ključno vodilo vojaških strategij v nadaljnjih oboroženih konfliktih, polkovnik Phillip S. Meilinger opiše zračno premoč kot najpomembnejši dejavnik, ki odloča o izidu sodobne konvencionalne vojne. Trdi, da so vojaške operacije na kopnem, morju ali v zraku izjemno težke, če ne nemogoče, za stran, ki ne nadzoruje neba. Po njegovih besedah je zračna premoč sredstvo za dosego cilja, ki obsega poškodovanje, uničenje ali drugačne vplive na sovražnika. Meni tudi, da mora biti zračna premoč poveljnikova glavna prednostna naloga (Meilinger, 2016, str. 46–47).

John Warden zagovarja uporabo zračnih sil na operativni in strateški ravni, pri čemer trdi, da je neposreden napad na sovražnikovo vodstvo najučinkovitejši. Razvil je koncept petih obročev, ki predstavlja model za identifikacijo ključnih točk osredotočenja in ranljivosti v sistemu. Vsak izmed petih obročev predstavlja določeno raven in element v sistemu:

- prvi obroč: vodstvo in poveljstvo;
- drugi obroč: temeljni organski elementi brez katerih sistem ne more obstajati, kot so na primer vojaške in civilne zmogljivosti;
- tretji obroč: kritična infrastruktura;
- četrti obroč: populacija, ki vključuje človeške vire sistema;
- peti obroč: bojni mehanizem, ki vključuje razpoložljive vojaške sile.

Warden poudarja pomen osredotočanja na sovražnikovo strukturo vodenja, pri čemer se lahko napadi na druge obroče izvajajo posredno zaradi vpliva na notranji, prvi obroč (Fedok, 1995, str. 23–30).

Vsaka stopnja sistema ali obroč velja za enega izmed sovražnikovih gravitacijskih centrov. Zamisel Wardenovih petih obročev je bila napad na vsakega izmed obročev, da bi ohromili sovražnikove sile, kar je cilj, znan tudi kot fizična paraliza (Fedok, 1995, str. 23–30).

V raziskavi Saundersa in Souve iz leta 2020 *Air superiority and battlefield victory* je predstavljena prva kvantitativna analiza povezave med zračno premočjo in izidi na bojišču. Ugotovljeno je bilo, da zračna premoč bistveno izboljša verjetnost države za zmago v bitki in celotni vojni. Analiza podatkov o konvencionalnih vojnah med letoma 1932 in 2003 kaže, da je zračna premoč boljši napovednik zmage v vojni kot drugi znani dejavniki, kot so uporaba sodobnih oborožitvenih sistemov, tip režima, civilno-vojaški odnosi in splošna vojaška moč. Raziskava tako poudarja kritično vlogo zračne premoči v sodobnem bojevanju in predlaga, da bi morale države, ki se lahko znajdejo v konvencionalnih vojnah, vlagati v zračne sile in zračno obrambo (Saunders in Souva, 2020).

Zanimivi faktor, ki ga raziskava izpostavlja, je, da zračna premoč služi kot kritičen množitelj sile, ki lahko kompenzira druge morebitne pomanjkljivosti v vojaški moči ali strategiji, kar nakazuje, da je zračna premoč lahko odločilna tudi v situacijah, v katerih je nasprotnik v drugih vidikih močnejši, kar poudarja njeno strateško vrednost v sodobnem vojskovanju. Prav tako ugotavlja, da zračna premoč ne samo, da izboljša taktično učinkovitost lastnih sil, temveč tudi demoralizira sovražnikove sile, kar vodi v zmanjšanje njihove bojne učinkovitosti in volje do nadaljevanja boja. Psihološki učinek pa lahko odločilno vpliva na izid vojne, še preden se odločilne bitke zares odvijejo (Saunders in Souva, 2020).

2 POTEK VOJNE V ZRAKU

Zračna komponenta bojevanja v vojni v Ukrajini se je v obdobju trajanja vojne močno spremenila. Ob začetku invazije na Ukrajino je vojno letalstvo RF doživelo relativno največje uspehe in imelo največjo svobodo delovanja v ukrajinskem zračnem prostoru. V prvih dneh vojne je RF na podlagi pridobljenih obveščevalnih podatkov uspela uničiti velik del obrambne infrastrukture, kot so stacionarni sistemi zračne obrambe, poveljniški centri, letalske baze in skladišča streliva. RF je za namene operacij v Ukrajini namenila 350 modernih lovcev, kar je približno trikratnik ukrajinskega letalstva. V prvih 48 urah bojev je ruska stran z elektronskim bojevanjem in fizičnim uničenjem vsaj začasno nevtralizirala 75 odstotkov vseh ukrajinskih stacionarnih sistemov zračne obrambe, vendar je v istem obdobju bilo uničenih le deset odstotkov mobilnih sistemov zračne obrambe (Zabrodskyi in drugi, 2022, str. 24). Učinkovito elektronsko bojevanje ruske strani v prvih dneh spopadov, ki je še dodatno onesposobilo ukrajinske sisteme zračne obrambe, je prisililo

Ukrajino v zaščito svojega zračnega prostora z uporabo letalstva. Po postopni vzpostavitvi delovanja ukrajinskih sistemov zračne obrambe pa so ti zagotavljali zaščito zračnega prostora v koordinaciji z letalstvom (Bronk in drugi, 2022, str. 7). Medtem je ukrajinsko letalstvo opravljalo operacije, od bojnih zračnih patrulj (CAP) in prestrezanja do napadalnih udarov na ruske cilje. Pri varovanju zračnega prostora je letalstvo delovalo v parih z letali Mig-29, pri čemer so se večkrat znašli v zračnih spopadih proti številčnejšemu ruskemu letalstvu, kljub temu pa so uspeli zadati izgube ruski strani. Napadalni udari so bili osredotočeni na ruske konvoje z uporabo letal SU-24, SU-25, helikopterjev Mi-24 in Mi-8 ter brezpilotnih letalnih sistemov Bajraktar TB2. Sčasoma je delovanje ukrajinskega letalstva postalo težavnejše zaradi boljšega ruskega situacijskega zavedanja, ki je bilo doseženo z uporabo ruskih letal za zgodnje opozarjanje A-50 in močnega elektronskega bojevanja. Ukrajinsko letalstvo je posledično izgubilo zmožnost delovanja na nekaterih delih okupiranega ozemlja (Zabrodskyi in drugi, 2022, str. 29–30).

Ruska stran se je spoprijemala s težavami pri zadevanju mobilnih tarč zaradi zapletenega procesa odkrivanja in uničevanja ciljev. Obveščevalni podatki, pridobljeni od človeških virov, so bili posredovani v strateško poveljniško strukturo »Akacija« v Moskvi, ki je cilje nato integrirala v naslednji 24-urni načrt napada na ravni poveljniških centrov vojaškega okrožja. Ti so bili nato dodeljeni enotam, ki so bile predvidene za napad. Postopek je trajal vsaj 48 ur za samo izvedbo napada. Tovrstno izvajanje operacij je mogoče oceniti kot neracionalno in neučinkovito, saj je RF uporabljala drage manevrirne rakete proti mobilnim ciljem, ki so pred napadom že zapustili lokacijo. Nezmožnost sledenja mobilnosti ukrajinskih enot je pokazala omejenost RF in njenih zmogljivosti za obveščevalno dejavnost, nadzor in izvidovanje (ISR) ter učinkovitost njihovega sistema poveljevanja in nadzora (Bronk in drugi, 2022, str. 24, 27–28).

V začetnih dneh je bilo vojno letalstvo RF zmožno delovati do 300 kilometrov v notranjosti Ukrajine in izvajati lete vse do višine 9000 metrov. Cilji so bili označeni s pomočjo letal Su-24MR, ki so vsak dan letela vzdolž ukrajinsko-ruske meje. Ruska stran je sprva precej uspešno locirala in določala ukrajinske vojaške tarče, vendar je bila manj uspešna pri izvajanju napadov na te cilje. Večina napadov je bila izvedena z nevodenimi bombami FAB-500 in OFAB-250. Napadi so le v 25 odstotkih vključevali formacijo dveh ali več letal, nikoli pa ne več kot šestih letal (Bronk in drugi, 2022, str. 8). Ruska uporaba helikopterjev na začetku spopadov je temeljila na agresivnem uničevanju ukrajinskih enot, predvsem žive sile, oklepnih vozil in artilerije. Večino nočnih misij so izvedli s helikopterji KA-52, ki so bolje opremljeni za nočno delovanje. V prvih dneh bojev so ruski helikopterji uspeli delovati do 50 km v notranjost ukrajinskega ozemlja, predvsem ob napadu na letališče Hostomel in v bitki za Kijev, vendar so bili zelo dovzetni za sestrelitve sistemov MANPADS[2] (Bronk in drugi, 2022, str. 21). Ena izmed večjih pomanjkljivosti ruske strani je bila

[2] *Man-Portable Air Defense Systems (MANPADS) oziroma prenosni sistemi zračne obrambe so izstrelki zemlja–zrak, ki jih lahko proti letalom izstreli posameznik ali manjša skupina ljudi (Arms Control Association, 2023).*

slaba ocena bojne škode, ki se je večinoma opirala na potrditve pilotov v kombinaciji z obveščevalnimi podatki, kar je posledično pomenilo veliko ranljivost glede prevar, saj so Ukrajinci z uspešnimi triki, kot so lažna sporočila o uničenih tarčah, zavajali rusko stran, da je verjela navedbam (Bronk in drugi, 2022, str. 8).

Po začetni fazi spopadov, v katerih je vojno letalstvo RF delovalo najsvobodneje, je uporaba zračnih sil na obeh straneh postajala vse manj agresivna. Zaradi vzpostavitve delovanja ukrajinskih sistemov zračne obrambe, ki so na začetku spopadov bili začasno onesposobljeni zaradi neorganiziranosti in elektronskega bojevanja, je velik del ozemlja Ukrajine postal prenevaren za letenje. Delovanje vojnega letalstva RF je bilo omejeno zgolj na delovanje v bližini frontne črte, večinoma z odmetavanjem nevodenega streliva in letenjem blizu tlom za izogib sestrelitve z radarsko vodenimi raketami zemlja–zrak. Ukrajinska stran je v prvih tednih vojne pridobila velike količine sistemov MANPADS, ki so bili razdeljeni večini enot na kontaktni črti. Zasičenost fronte črte z omenjenimi sistemi pa je predstavljala nevarnost za nizko leteče helikopterje in letala. Drugi način uporabe vojnega letalstva RF je bilo izstreljevanje manevrirnih raket iz strateških bombnikov iz zračnega prostora RF (Bronk in drugi, 2022, str. 14–16).

Sistemi zračne obrambe Ukrajine so se izkazali za uspešne, saj so preprečevali letenje vojnemu letalstvu RF v ukrajinskem zračnem prostoru. Sistemi Buk so bili zaradi večje mobilnosti uporabljeni za zaščito enot, medtem ko so bili sistemi S-300 uporabljeni za zaščito kritične infrastrukture. Novo dinamiko v konfliktu je prinesla uporaba protiradarskih raket AGM-88 HARM[3], ki jih je podaril Zahod septembra 2022. Ukrajina je ob uporabi omenjenih raket uspela začasno onemogočiti zračno obrambo RF na nekaterih delih fronte, kar je omogočilo uporabo brezpilotnih letalnih sistemov Bajraktar TB2. Ruski sistemi zračne obrambe so bili uničeni ali drugače onemogočeni v zadostni meri, da so ranljivi sistemi omejeno začeli izvajati polete v bližini fronte (Global Defense Corp, 2022).

2.1 Taktična uporaba vojnega letalstva RF

Vojno letalstvo RF se je pri branjenju svojega zračnega prostora in okupiranega ozemlja zanašalo na tehnološko prednost svojih radarjev in raket. Ukrajinsko-rusko fronta je bila razdeljena na osem območij, na vsakem izmed njih pa so v parih delovali lovci Su-35 ali prestrezniki MiG-31M. Namen teh patrulj je bil zagotoviti stalno prisotnost za preprečevanje morebitnega ogrožanja ukrajinskih letal. Letala so imela nalogo izvajati CAP za zaščito ruskih položajev in odvračanje ukrajinskih napadalnih letal. Vendar se zaradi majhne flote zračnih tankerjev v ruski vojski lovci niso mogli zanašati na podporo zračnih tankerjev, katerih prednostna naloga je podpora strateškemu bombništvu, posledično pa je vsaka misija CAP omogočala le do dveurno letenje. Za ukrajinske sile so še posebej problematični prestrezniki

[3] *AGM-88 High-Speed Anti-Radiation Missile (HARM) oziroma hitra protiradiacijska raketa, katere glavna naloga je zaznavanje elektronskih oddajanj, ki prihajajo iz radarskih sistemov zemlja-zrak in njihovo uničevanje (Air and Space Force Magazine, n.d.).*

MiG-31BM, oboroženi z raketami zrak–zrak R-37M dolgega dosega, za katere so značilni visoka hitrost, velik efektivni doseg in iskalnik, ki je izdelan za napade na cilje na nizki višini, zaradi česar se ji ukrajinska letala težko izognejo. Poleg tega lahko MiG-31BM zaradi svoje zmogljivosti in velike operativne višine ogrožajo ukrajinska letala v bližini frontne črte z varne razdalje, daleč zunaj dosega ukrajinske obrambe (Bronk in drugi, 2022, str. 18).

Ruska zračna podpora je v podporo svojim kopenskim enotam večinoma uporabljale letala SU-25. Glavna težava, s katero so se spoprijemali, je bila omejena dostopnost do orodij za označevanje ciljev, ki bi omogočili uporabo precizno vodenega orožja. Edina vrsta letal, zmožna izvajati precizne udare z vodenim orožjem, so letala SU-34. Kljub temu so bila v času konfliktov letala SU-34 pogosto opažena pri uporabi nevodenega orožja za bombardiranje, kar lahko nakazuje njihovo pomanjkanje (Bronk, 2023, str. 9–10).

2.2 Vloga in vpliv brezpilotnih letalnih sistemov

V oboroženem spopadu je ena izmed redkih prednosti napadalca element presenečenja, ki ga uspe uporabiti v svojo korist. Ob razširjeni uporabi brezpilotnih letalnih sistemov vzdolž celotne frontne črte na obeh straneh pa se element presenečenja izjemno težko doseže, kar posledično vpliva tudi na dinamiko in uspešnost bojev (Bershidsky, 2023).

Z nezmožnostjo po dosegu zračne premoči na bojišču so se enote prav tako morale prilagodi na zanašanje na orožje daljšega dosega, kot so artilerija, uporaba različnih vrst raket in brezpilotnih letalnih sistemov. Medtem ko je v prvih dneh in tednih vojne Ukrajina izkoristila neorganiziranost ruskih enot in je z brezpilotnimi letalnimi sistemi Bajraktar TB2 uspela uspešno motiti in uničevati njihove logistične povezave, je zračni prostor hitro postal prenevaren za njihovo neomejeno delovanje. Med vsem obdobjem spopadov se je način uporabe brezpilotnih letalnih sistemov prilagajal razmeram na bojišču in dostopnosti ter razširjenosti drugih oborožitvenih sistemov (Witt, 2022).

Septembra 2022 so se na bojišču množično pojavili iranski brezpilotni letalni sistemi Šahed-136, ki so zasnovani za uničevanje stacionarnih tarč. Nova ruska strategija je vključevala sočasno uporabo manevrirnih, balističnih raket in brezpilotnih letalnih sistemov Šahed-136. Več kot polovica brezpilotnih letalnih sistemov in raket je ukrajinska zračna obramba sestrelila, vendar so tisti, ki so prebili obrambo, povzročili resno škodo in več civilnih žrtev. Od 10. oktobra je Ukrajina doživela več dnevnih valov napadov z brezpilotnimi letalnimi sistemi Šahed-136 na električne podpostaje in operativne centre za nadzor infrastrukture ter objekte po večjem delu države. Večina brezpilotnih letalnih sistemov Šahed-136 je bila sestreljena, vendar se je zaradi prestrezanja začela manjšati tudi zaloga ukrajinskih raket za zračno obrambo. Ukrajina je morala premakniti več sistemov zračne obrambe s frontne črte v bližino mest za njihovo zaščito (Bronk in drugi 2022, str. 34). Ob začetku uporabe

zahodnih sistemov zračne obrambe in adaptaciji na te vrste napadov se je uspešnost njihove sestrelitve izjemno povečala (Associated Press, 2022).

Pomembna vloga, ki so jo prevzeli brezpilotni letalni sistemi, je zaradi cenovne učinkovitosti v nasprotju z nekaterimi vrstami tradicionalnega oborožitvenega sistema nadomeščanje in dopolnjevanje artilerije na bojišču. Vojna v Ukrajini je izčrpala svetovne zaloge streliva in prisilila obe strani k racionalnejši uporabi razpoložljivih sredstev za dosego ciljev (Goodwin, 2023), s čimer se spreminja taktična situacija na bojišču.

V tem kontekstu so to nalogo prevzeli manjši in pogosto komercialno dostopni brezpilotni letalni sistemi, ki so s predelavami sposobni odmetavati strelivo ali pa so uporabljeni kot udarni sistemi na taktični ravni in omogočajo izvajanje natančnih napadov na cilje z minimalnim tveganjem za enote na tleh, prav tako pa omogočajo posameznim enotam izvajanje napadov na sovražnikova oporišča, vozila in enote, ne da bi morali vstopiti v neposreden stik s sovražnikom (Melkozerova, 2023).

Strateška uporaba brezpilotnih letalnih sistemov pa je njihova uporaba v napadih dolgega dosega na cilje visoke pomembnosti ali pa zgolj kot sredstvo za izčrpavanje zračne obrambe, večinoma globoko za frontno črto.

S trajanjem konflikta se je močno spremenila sestava napadalnih sredstev v ruskih napadih. V primerjavi z zgodnejšimi fazami ruske zračne kampanje se je sestava napadov premaknila od dragih sistemov, kot so rakete, proti cenejšim sistemom, kot so Šahed-136. V prvih treh mesecih leta 2023 so Šahed-136 predstavljali približno 40 odstotkov vseh izstreljenih sredstev dolgega dosega na Ukrajino, medtem ko se je odstotek aprila 2023 povečal na 61 odstotkov (Williams, 2023). Podobnega pristopa za napade globoko za frontno črto se je začela posluževati tudi Ukrajina, ki se je odzvala z razvojem brezpilotnih letalnih sistemov, kot so Mugin-5, UJ-22 Airborne in UJ-26 Beaver, ki imajo doseg tudi do 1000 kilometrov (HISutton, 2024).

2.3 Sabotaže in asimetrično bojevanje

Ob že omenjenem dejstvu, da je vojno letalstvo RF sposobnejše tako v tehnološkem kot številčnem smislu, je začela Ukrajina izvajati asimetrično bojevanje in sabotaže za oslabitev vojaških zmogljivosti sovražnika in njegovega vojnega letalstva.

Eden izmed napadov, ki naj bi se ga Ukrajina poslužila, je bil napad na vojaško oporišče Soltsy-2 južno od Sankt Peterburga. Napad naj bi bil po podatkih obrambnega ministrstva RF povzročen z kvadrokopterjem, pri tem pa je bilo uničeno letalo TU-22M3. Kmalu po napadu je bilo letališče izpraznjeno in preostala letala so bila premaknjena na oddaljena letališča, kar nakazuje na efekt, ki ga lahko povzroči skrbno načrtovana operacija ali pa zgolj pojav nevarnosti, kar pa vpliva na prihodnje preventivno delovanje sovražnika (Baker, 2023).

Naslednja ukrajinska trditev o uspešni sabotaži letališča v zaledju naj bi se zgodila v bližini Kurska, ki je od meje z Ukrajino oddaljen okoli 140 kilometrov in kjer naj bi Ukrajini uspelo poškodovati večje število letal ter sistemov zračne obrambe. Napad naj bi bil izveden s kartonskimi brezpilotnimi letalnimi sistemi, dobavljenimi iz Avstralije, oddaljenost letališča od ukrajinske meje pa nakazuje na verjetno potrebo po infiltraciji sabotažnih enot čez rusko-ukrajinsko mejo za dosego uspešnega lansiranja brezpilotnih letalnih sistemov (Jankowicz, 2023). Ukrajinskim tajnim službam naj bi prav tako uspelo delovati globoko v ruskem zaledju in v nekaj primerih z eksplozivom uničiti več transportnih letal in helikopterjev tudi v neposredni bližini Moskve (Khrebet, 2023).

Delovanje pa ni omejeno zgolj na Rusijo. Na spletu so se prav tako pojavili videi, ki prikazujejo pristanek kvadrokopterja na anteni ruskega letala A-50, stacioniranega v Belorusiji (Powis, 2023). Še ena uspešna akcija, ki so jo izvedle ukrajinske tajne službe, je bila prebeg ruskega pilota skupaj s helikopterjem Mi-8 na ukrajinsko stran. Prebeg je bil skrbno organiziran in je predhodno vključeval tudi pobeg družine ruskega pilota v Ukrajino. Helikopter je na poletu tovoril rezervne dele za letala, ki jih ima v svoji floti tudi Ukrajina (Mazurenko, 2023).

Uspehi teh operacij ne le prikazujejo zmožnost Ukrajine za globoko infiltracijo, temveč tudi prisilijo Rusijo v defenzivo in preventivne ukrepe, kar dodatno potrjuje učinkovitost asimetričnega bojevanja in sabotaž kot ključnih elementov ukrajinske vojaške strategije za degradacijo sposobnosti vojnega letalstva RF.

3 IZZIVI UKRAJINSKE ZRAČNE OBRAMBE

Na začetku aprila 2023 so se na spletu pojavili domnevni ameriški tajni dokumenti, ki naj bi nastali 23. februarja 2023 in nam dajejo bližji vpogled v izzive, s katerimi se spoprijema ukrajinska zračna obramba. Prikazujejo tudi mogoče dejavnike, ki bi lahko vplivali na prevzem pobude vojnega letalstva RF v ukrajinskem zračnem prostoru (Cooper in drugi, 2023). V medijih se pojavljajo špekulacije, ali so dokumenti, ki so prišli v javnost, resnični ali so zgolj del širše informacijske vojne. Ob predpostavki, da je večina informacij z objavljenih dokumentov resnična, lahko razberemo, da se je Ukrajina že februarja 2023 spoprijemala s kritičnim pomanjkanjem raket za sisteme S-300 in Buk. Ukrajina naj bi med oblikovanjem dokumenta imela po ocenah 421 raket za sisteme S-300P, katerih predvidena mesečna poraba je 180 raket in 111 raket za sisteme Buk, katerih mesečna poraba naj bi bila 69 raket, prav tako naj bi imela Ukrajina 55 raket za sistem S-300V, ki se od navadnega sistema S-300 razlikuje po tem, da je namenjen predvsem raketni obrambi, njegova mesečna poraba raket pa je ocenjena na 20 na mesec (Cooper in drugi, 2023).

Sistema S-300 in Buk naj bi zagotavljala pretežni del vse ukrajinske protizračne obrambe v tistem obdobju na srednje in dolge razdalje ter nad 6000 metrov višine. Ukrajina naj bi imela 25 baterij sistemov S-300P, kar pomeni, da je povprečna količina izstreljenih raket na mesec sedem na baterijo, ter 50 sistemov Buk s povprečno ena

do dve izstreljeni raketi iz posamičnega sistema. Precej majhen obseg izstrelitev je dovolj, da je vojno letalstvo RF prisiljeno na letenje blizu tlom, kar pa poveča grožnjo sistemov MANPADS. Ob nespremenjeni intenzivnosti uporabe naj bi po omenjenih ocenah Ukrajina ostala brez raket za sistema S-300 in Buk okvirno že maja 2023 (Cooper in drugi, 2023b).

Ukrajini naj bi preostala še sistema S-125 in S-200, ki pa sta zastarela in nemobilna. Ukrajina je aprila 2023 pridobila prve dobave sistemov Patriot iz Nemčije in ZDA ter maja sistem SAMP/T (Pavilas, 2023). Sistema sta strateško pomembna, saj lahko prestrezata tudi balistične rakete. Po predstavljenih informacijah so preostali zahodni sistemi zračne obrambe, kot so NASAMS, HAWK, Iris-T, Crotale in Spada/Aspide, na voljo v še nezadostnih količinah in ne bi mogli nadomestiti vseh sedanjih sistemov S-300 in Buk, ko in če ti ostanejo brez raket za svoje delovanje (Cooper in drugi, 2023). Težava, ki se pojavlja za ukrajinsko zračno obrambo in je navedena v dokumentih, je delovanja sistemov na velikih višinah. Sistema S-300P in Buk lahko pokrivata zračni prostor vse do višine 27 km, kar preprečuje visokoletečim izvidniškim letalom, bombnikom in lovcem dostop v zračni prostor (Military Today, n. d.).

Večina sistemov zračne obrambe z Zahoda so bili sistemi kratkega dosega, katerih učinkovita višina delovanja je manjša od sistemov Buk in S-300. Predsednik Zelenski je v preteklosti med drugim omenil, da so bili nekateri sistemi, ki so jih donirale evropske države, slabo delujoči in stari. Poudaril je, da Ukrajina potrebuje vsaj 20 baterij sistemov Patriot, kar je primerljivo s številom baterij sistema S-300, ki naj bi jih imela Ukrajina (Zitser, 2023). Posledice, ki bi nastale ob izpraznjenih zalogah raket za sedanje ukrajinske sisteme zračne obrambe in ob nezadostnih dobavah zahodnih sistemov srednjega in dolgega dometa zračne obrambe, bi vplivale na branjenje zračnega prostora. Vojno letalstvo RF bi lahko spet vstopalo v ukrajinski zračni prostor, saj ta ne bi bil več tako obsežno branjen. Ruske sile bi lahko izvajale bombardiranja z velikih višin in bi svobodneje delovale ob fronti. Veliko prednost pa bi RF pridobila ob večji aktivnosti svojih izvidniških platform. Izvidniška letala so bila do zdaj omejena na izvajanje letov v bližini meje in vzdolž fronte črte, niso pa bila sposobna izvajanja letov znotraj ukrajinskega zračnega prostora (Bronk in drugi, 2022, str. 8, 12).

4 POMEN NEKATERIH KLJUČNIH SISTEMOV

Ukrajini se je treba zaradi pomanjkanja raket dolgega dosega in zastarelega vojaškega letalstva, ki je bilo v obdobju spopadov še močno zdesetkano, zanašati na improvizacijo. Medtem ko je ruska stran zmožna zadevati cilje na ozemlju celotne Ukrajine, je bila Ukrajina dolgo zmožna napasti cilje v globino zgolj okoli 80 kilometrov z uporabo raket GMLRS za sisteme HIMARS[4] in vodenih bomb

[4] *High Mobility Artillery Rocket System (HIMARS) oziroma artilerijski raketni sistem visoke mobilnosti, nameščen na tovornjaku, ki lahko zaporedoma izstreli do šest raket (Army Technology, 2023).*

JDAM-ER (Capaccio, 2023). Nekateri sistemi, ki jih je Ukrajina uspela domiselno uporabiti za napade na dolge razdalje, so sovjetski brezpilotni letalni sistemi TU-141. Primer tega brezpilotnega letalnega sistema je med drugim zašel s poti in strmoglavil v bližini Zagreba (Delauney, 2023). Drugi sistem, ki ga Ukrajina uporablja za napade, je S-200, ki je bil zasnovan za zračno obrambo v 60. letih prejšnjega stoletja, vendar se zdaj uporablja tudi za napade na kopenske cilje (Reuters, 2023b).

Ukrajina je začela v drugi polovici leta 2023 vse intenzivneje uporabljati kombinacijo različnih sistemov, od brezpilotnega letalnega sistema do prirejenih raket zemlja–zrak za napade na vojaške tarče. Napadi so bili večinoma usmerjeni k degradaciji zmogljivosti zračne obrambe in vojnega letalstva RF (Nilsen, 2023).

4.1 Pomen donacij raket dolgega dosega Storm Shadow/SCALP-EG

Eno izmed največjih strateških sprememb je povzročila dobava manevrirnih raket Storm Shadow/ SCALP-EG za Ukrajino maja 2023. Rakete so izdelane s ciljem po čim manjši radarski zaznavnosti in imajo v izvozni različici doseg 250 km, kar pomeni, da je v doseg raket postavljen velik del okupiranega ozemlja Ukrajine. Rakete imajo večjo odpornost na elektronsko motenje, saj so vodene po sistemu GPS, z inercialno navigacijo in digitalnim zemljevidom terena (Roblin, 2023). Uporabljali so jih v več odmevnih napadih na cilje visoke pomembnosti. Ukrajinci so razvili sofisticirane in večstopenjske kompleksne napade na položaje RF za čim boljši izkoristek raket, in sicer v kombinirani uporabi brezpilotnih letalnih sistemov, raket S-200, raket Neptun in Storm Shadow/SCALP-EG (Syngaivska, 2023).

V enem izmed najodmevnejših napadov na črnomorsko floto je Ukrajina uporabila kombinacijo različnih vrst orožja. Napad se je zgodil 13. septembra 2023 in v njem so Ukrajinci uspeli uničiti podmornico Rostov na Donu ter amfibijsko ladjo Minsk, ki sta bili v suhem doku v Sevastopolu. Napad se je začel z množičnim napadom pomorskih brezpilotnikov kamikaz na ladjo v Črnem morju z namenom preusmeriti pozornost. Istočasno so Ukrajinci proti Sevastopolu izstrelili več raket S-200. Rakete so bile uporabljene za identifikacijo sistemov zračne obrambe. Ko so bile prestrežene, so Ukrajinci uporabili več protiradarskih raket za uničenje sistemov protizračne obrambe na območju napadov. Nazadnje, ko so bili sistemi protizračne obrambe nevtralizirani, so bile uporabljene rakete Storm Shadow/SCALP-EG, ki so zadele cilj in uničile podmornico ter amfibijsko ladjo. Napad je pomenil tako simbolično kot resnično zmago, saj je prikazal slabosti zračne obrambe RF, prav tako pa je uničil eno izmed redkih amfibijskih ladij v črnomorski floti, ki bi sicer postale ključne ob morebitnem uničenju Kerškega mostu, saj bi bile uporabljene za oskrbovanje krimskega polotoka (Reporting from Ukraine, 2023). Na bojišču so se prav tako pojavile raketne vabe, katerih namen je zmesti sovražnikovo zračno obrambo (Altman in drugi, 2023).

Napadi z raketami Storm Shadow/SCALP-EG se osredotočajo na ciljanje poveljniških mest, mostov, skladišč orožja in drugih strateških ciljev za frontno črto, kar izdatno otežuje logistiko RF. Najodmevnejši napad se je zgodil na poveljstvo črnomorske

flote na Krimu, v katerem naj bi bil po trditvah ubit poveljnik (Picheta in Gigova, 2023). Največja težava, ki se pojavi pri omenjenih raketah, je njihova dostopnost, saj jih je v Združenem kraljestvu in Franciji premalo, da bi jih lahko v večjem številu donirali Ukrajini (The Wall Street Journal, 2023).

Prav veliko pomanjkanje zadostnega števila raket sili obe strani v kombinacijo naprednih in manj naprednih sredstev za napade v zaledju. Ukrajina se je s povečanjem proizvodnje lastnih brezpilotnih letalnih sistemov dolgega dosega začela posluževati masivnejših napadov na ruske cilje v zaledju, poleg tega pa je začela izvajati inovativne napade, kot so na primer izstreljevanje raket Brimstone-2 iz hitrih čolnov v bližini Krima na sistem zračne obrambe (Defense Express, 2023), uporaba protiladijskih raket Neptun, raket zračne obrambe S-200 na letališča in kopenske cilje (Dangwal, 2023). Pri uporabi raket Storm Shadow/SCALP-EG je bistveno, da so te uporabljene večinoma zgolj v kombinaciji z drugimi sredstvi, kar zahteva zelo previdno in skrbno načrtovano upravljanje. Z naborom in kombinacijo drugih ukre pov pa je mogoče zagotoviti, da te dragocene rakete niso prestrežene.

4.2 Pomen donacije letal F-16 Ukrajini

Ena izmed odmevnejših novic v zadnjem času je dovoljenje ZDA Nizozemski, Danski in Norveški za izvoz letal F-16 v Ukrajino (The Economic Times, 2023). Ukrajina je prvič izrazila željo po letalih že marca 2022, pozneje pa so se pozivi po donaciji letal le še stopnjevali, še posebej v luči vse večjih izgub med ukrajinskimi letali. Vidno potrjene izgube ukrajinskih letal so do sredine septembra znašale 71 letal (Oryx, 2022). Delno so bile izgube oblažene z donacijo letal bivših držav Varšavskega pakta, ki so še vedno imele v svojih vrstah letala sovjetske proizvodnje (Reuters, 2023c).

Medtem ko se na drugih področjih asimetrija med RF in Ukrajino zmanjšuje, recimo v primeru kopenske vojske, je asimetrija med obema letalstvoma močno vidna in prisotna. Rusko je številčno in tehnološko veliko naprednejše in bolje oboroženo kot ukrajinsko. Ukrajinsko letalstvo, ki je zaradi visoko intenzivne uporabe v skoraj gverilskem tipu bojevanja v letu in pol bojevanja, močno izčrpano, nujno potrebuje dodatne zrakoplove za nadomestitev izgub in nadaljnje zoperstavljanje RF. Eno izmed ključnih letal v ukrajinskem inventarju je sovjetsko letalo SU-24, katerega flota je pred vojno štela vsega skupaj 23 letal, izmed teh je bilo devet izvidniških izvedenk letala. Dokumentirane izgube letala SU-24 od začetka vojne znašajo 17 primerov, kar pomeni, da je operativnih le še nekaj primerkov letala (Oryx, 2022). Z dobavo zahodnih manevrirnih raket Storm Shadow/SCALP-EG za Ukrajino, ki za izstrelitev potrebujejo nosilno letalo, so letala SU-24 postala nepogrešljiva, saj so edina v ukrajinskem inventarju, ki lahko izstreljujejo omenjeni raketi (Axe, 2023).

RF se nedvomno trudi uničiti še nekaj preostalih letečih primerkov letala. V tem pogledu je potreba po nadomestitvi letal, ki bi bila zmožna izstreljevati rakete Storm Shadow/SCALP-EG, še pomembnejša. Prav v tem pogledu omenjeni primanjkljaj zapolnjujejo letala F-16, ki predstavljajo eno izmed najštevilčnejše proizvedenih

zahodnih letal četrte generacije. V dolgem obdobju proizvodnje je število izvedenk letala veliko, med seboj pa se močno razlikujejo po zmogljivosti. Letala, ki naj bi jih Ukrajina dobila, bodo prišla iz upokojene flote Nizozemske, Danske in Norveške, ki pa je stara in je bila posodobljena na standard F-16AM/BM Block 20 MLU (Mid-Life Update), kar jih po zmogljivosti približa izvedenki F-16C/D Block 50/52. Posodobitev vključuje posodobitev radarja in omogoča letalom uporabo aktivno vodenih radarskih raket zrak–zrak. Letala naj bi predstavljala pomembno posodobitev v primerjavi s sedanjo ukrajinsko floto letal, vendar vseeno naj ne bi bila na tehnološki ravni primerljiva z najnaprednejšimi ruskimi letali (Jennings, 2023).

Pri vprašanju donacije letal F-16 je treba vzeti v ozir število načrtovanih donacij, časovnico donacij ter nenazadnje človeški faktor oziroma usposobljenost pilotov in vzdrževalnega osebja. Letala so lahko koristna za Ukrajino na več področjih. Prvo področje je večja integracija zahodnega že doniranega orožja, ki omogoča omejeno uporabo, kot so na primer rakete AGM-88 HARM, ki v sedanji uporabi v kombinaciji s sovjetskimi tipi letal omogočajo uporabo samo enega izmed treh različnih funkcij delovanja rakete. Ob uporabi raket AGM-88 HARM skupaj z letali F-16 bi lahko Ukrajina izkoristila ves njihove zmožnosti. Naslednja prednost bi bila povečanje flote, sposobne za lansiranje raket Storm Shadow/SCALP-EG, v prihodnosti pa tudi nemških raket Taurus, ki še niso integrirane za uporabo na letalih F-16. Integracija bi bila hitrejša ter lažja na zahodno letalo kot sovjetsko, pri čemer bi bilo mogoče tudi uporabljati ameriške manevrirne rakete AGM-158 JASSM, ki se za razliko od drugih prej omenjenih še vedno aktivno proizvajajo in niso omejene na majhen inventar. Druge možnosti, ki bi jih omogočila uporaba letal F-16, bi vključevale uporabo zmogljivejših raket zrak-zrak in lažjo uporabo natančno vodenih bomb JDAM (Tannehill, 2023).

Učinkovita uporaba letal zahteva tudi usposobljene pilote. Tipična doba urjenja pilota letala F-16 naj bi trajala približno leto dni (Schaeffer in Deley, 2023), kar postavlja načrte o nekajmesečnem urjenju pod velik vprašaj. Pri usposabljanju Ukrajincev na zahodne tipe tankov lahko opazimo, da so v danem času bili usposobljeni samo za najosnovnejše znanje in veščine (Brady, 2023).

Največja prednost, ki jo bo predvidena dobava letal F-16 prinesla Ukrajini, pa bo vzdrževanje operativnosti letalstva, ki bi ob neprejemu zahodnih letal počasi in vztrajno postajalo vse manj operativno, tako zaradi izgub kot pomanjkanja rezervnih delov za sedanja letala. Učinkovitost letal bo bistveno odvisna od časovnice dobav in usposobljenosti posadk. Na podlagi primerov iz preteklosti lahko vidimo, da so bile dobave orožja Ukrajini za kritične sisteme pogosto počasnejše od obljub. Ukrajinci bodo verjetno na začetku, še posebej ob počasni dobavi letal, ta uporabljali zelo previdno in premišljeno izbirali trenutke za njihovo uporabo, kar bo njihov učinek omejilo. Večja učinkovitost letal bi bila lahko opažena v srednjeročnem časovnem obdobju, ko bi bili piloti dovolj usposobljeni in bi bilo število dobavljenih letal zadostno, da na operativno sposobnost letalstva ne bi vplivalo še, ko bi bil velik del letal v procesu popravil in vzdrževanja.

4.3 Pomen donacij raket ATACMS

Rakete dolgega dosega torej omogočajo ukrajinski strani uničevanja tarč visoke pomembnosti globoko v zaledju za frontno črto. V tem pogledu bi lahko letala F-16 kot nosilci raket dolgega dosega postala zelo uporabna. Drugo orožje, ki bi prineslo veliko prednost ukrajinski strani, bi bile rakete ATACMS. Rakete ATACMS imajo pred raketami Storm Shadow/SCALP-EG pomembno prednost, saj za izstrelitev ne potrebujejo nosilnega letala, ker so izstreljene iz samovoznih večcevnih raketometov, kot sta HIMARS in M270, ki jih ukrajinska stran že uporablja. Uporaba teh raket bi pomenila, da bi ukrajinska stran lahko letala posvetila drugim nalogam, poleg tega sta sistema HIMARS in M270 težje sledljiva in bi lahko izstreljevala rakete bližje frontni črti, kar bi omogočilo daljši doseg raket. RF lahko predvideva izstrelitve raket Storm Shadow/SCALP-EG, ko zaznajo v zraku letala SU-24. ZDA se nagibajo k dobavi raket s kasetnimi bombami, ki pa imajo nekatere pomanjkljivosti in prednosti, odvisno od načina njihove uporabe. Ob uničevanju močno zaščitenih tarč so rakete s kasetnimi bombami neučinkovite, vendar bi se lahko izkazale za ključne ob uporabi na tarče, kot so koncentracija žive sile in letališča (Schwartz in Miller, 2023). Ciljanje letališč globlje v zaledju s kasetnimi bombami bi omogočilo, da bi bilo uničenih veliko letal in helikopterjev, kar bi prisililo vojno letalstvo RF v prerazporeditev letal zunaj dosega raket, ki imajo sicer doseg 300 kilometrov. To pa bi vplivalo na vrsto uporabe nekaterih helikopterjev, saj bi jih bojni doseg že omejeval, posledično bi otežilo logistične povezave in ofenzivne sposobnosti. Prva poročila, ki nakazujejo uporabo raket ATACMS, so se pojavila 17. oktobra 2023, ko je Ukrajina izvedla dva napada z različico M39 oziroma ATACMS Block 1. Ta ima doseg »samo« 165, in ne 300 km, kot nekatere druge različice, vendar ima večjo bojno glavo, ki vsebuje 950 enot podstreliva M74 (Trevithick in Rogoway, 2023).

Napada sta bila osredotočena na letališči v zaledju in uničeno je bilo večje število helikopterjev, skladišč orožja in lanserjev za sisteme zračne obrambe. Označili so ju kot najbolj črn dan za vojno letalstvo RF od začetka vojne, predvsem zaradi izgub, ki so bile povzročene s helikopterjem KA-52, ki je pomemben predvsem pri podpori kopenskih enot. Poleg tega je bilo v napadu uničeno tudi skladišče orožja (Sanger in drugi, 2023).

5 PRIMERJAVA AKTIVNOSTI VOJNIH LETALSTEV V KONFLIKTIH

Zračna premoč naj bi v sodobnih konfliktih bistveno izboljšala možnosti za zmago na bojišču, prav tako je boljši napovednik zmage v vojni kot drugi dejavniki (Saunders in Souva, 2020). Ukrajinski strani je kljub drugačnim pričakovanjem uspelo preprečiti rusko zračno premoč, hkrati pa je tudi sama ne dosega. Na bojišču trenutno poteka zračna pariteta, kar nakazuje tudi aktivnost vojaškega letalstva obeh strani.

Med Natovo zračno kampanjo nad Jugoslavijo so zavezniške sile v 78 dneh izvedle 38.000 poletov, izmed katerih je bilo 10.484 udarnih letov, kar okvirno pomeni 435

poletov na dan (Nato, 2022). V zalivski vojni, ki je trajala 199 dni, so zavezniške sile opravile 116.000 letov, kar predstavlja približno 580 poletov na dan.

Vojno letalstvo RF naj bi po ocenah ob začetku vojne v Ukrajini izvajalo okoli 140 poletov na dan (Bronk in drugi, 2022, str. 7). Do sredine marca leta 2022 naj bi se povprečno število letov v povprečju dvignilo na približno 200 letov na dan. Večina letal med svojim letom naj ne bi nikoli vstopila v ukrajinski zračni prostor, prav tako pa je tudi ukrajinsko letalstvo nesposobno prodora v ruski zračni prostor. Število letov v primerjavi z leti ukrajinskega letalstva naj bi bilo za približno 20-krat višje. Rusko delovanje se je osredotočalo na bojno patruljiranje in izstreljevanje manevrirnih raket zunaj frontne črte (Copp, 2022). Februarja 2023 je obrambno ministrstvo Združenega kraljestva poročalo, da naj bi se rusko število dnevnih poletov gibalo okoli števila 200 poletov na dan (Ministry of Defence of the United Kingdom, 2023).

Če predpostavljamo, da je povprečno število letov 200 na dan, lahko sklepamo, da je bilo od začetka vojne do konca leta 2023 opravljenih približno 135.000 bojnih letov, kar pomeni, da je intenzivnost zračne kampanje manjša kot v predhodno omenjenih konfliktih, prav tako pa je Ukrajina po velikosti zračnega prostora mnogo večja. Neaktivnost letalstva lahko nakazuje na njegovo nezmožnost delovanja v dobro varovanem zračnem prostoru.

Pomembnejšo vlogo v vojni za razliko od drugih konfliktov so prevzeli brezpilotni letalni sistemi, ki izvajajo in nadomeščajo nekatere druge sisteme. Uporabljeni so kot nadomeščanje vodenih izstrelkov, podpora enotam na tleh, sredstvo za izvajanje globinskih napadov, sredstvo za izvidovanje in sredstvo za situacijsko zavedanje. Za razliko od preteklih konfliktov je intenzivnost njihove uporabe bistveno večja, kar nakazuje tudi načrt Ukrajine po proizvodnji milijona enot brezpilotnih letalnih sistemov leta 2024 (Reuters, 2023d).

6 KAJ NAS UČI BOJ ZA PREVLADO V ZRAKU?

Vojna v Ukrajini je bila prelomni trenutek za Evropo, saj je prva konvencionalna vojna na stari celini po drugi svetovni vojni. Vojna je razkrila in razgalila tudi nekatera kritična področja, ki so ostala zanemarjena zlasti v lažnem občutku varnosti, ki jo je večina zahodne Evrope dobila ob razpadu Sovjetske zveze in z vstopom v Nato. Prvo je podcenjevanje potreb po zalogah streliva, ki bi bile nujne za vojskovanje v konvencionalnih spopadih. Zaloge streliva so bile kritične že pred več kot desetletjem v posredovanju Nata v Libiji, ko sta predvsem Francija in Združeno Kraljestvo po nekaj tednih zračne kampanje izčrpala svoje zaloge natančno vodenega streliva (DeYoung in Jaffe, 2011).

Z začetkom vojne v Ukrajini pa se je pokazala tudi potreba po krepitvi evropske zračne obrambe, v katero Evropa v zadnjem obdobju ni vlagala. Pomembnost učinkovite večplastne zračne obrambe, ki je zmožna prestrezati veliko različnih vrst zračnih groženj, se izkazuje za ključno med masovnimi zračnimi napadi, ki

jih doživlja Ukrajina. Po dveh letih spopadov je mogoče skleniti, da so nekateri deli Ukrajine, predvsem okolica Kijeva, ena izmed najbolj varovanih zračnih prostorov na svetu. Ukrajina se spoprijema z mešanico zračnih groženj, od poceni in nesofticiranih brezpilotnih letalnih sistemov, protiladijskih raket, manevrirnih raket, balističnih raket, protiletalskih raket, prirejenih za napade na kopenske cilje, pa vse do najnaprednejših ruskih hiperzvočnih raket Kinžal (Mitchell, 2023). Močna zračna obramba v okolici Kijeva je uspešno ubranila mesto, v katerem je center politične in gospodarske moči države.

Rusija v napadih proti Ukrajini pogosto izstreli kombinacijo prej naštetih izstrelkov iz številnih različnih položajev z namenom težjega prestrezanja napadov. Zaradi velikega števila različnih vrst napadalnih sredstev se Ukrajina poleg potrebe po prestrezanju groženj spoprijema tudi z dilemo in potrebo po identificiranju vrste zračne grožnje in z odločitvijo, katero sredstvo bo uporabila za njeno prestrezanje. Ukrajina se večinoma dobro spoprijema s prestrezanjem brezpilotnih letalnih sistemov in manevrirnih raket. Problem, s katerim se Ukrajina srečuje, je zagotavljanje zadostne pokritosti svojega zračnega prostora s sistemoma dolgega dosega Patriot in SAMP/T, ki sta zmožna prestrezati tudi dva tipa raket, s katerimi se Ukrajina najtežje spoprijema, in sicer balistične rakete in nadzvočne protiladijske rakete (Aleksandrov, 2023).

Primeri, ki nakazujejo na pomanjkljivo evropsko protizračno obrambo, so bili marca 2022, ko je brezpilotni letalni sistem, ki je letel z območja Ukrajine in je uspel prečkati teritorij več evropskih držav, ki so prav tako Natove članice, strmoglavil v bližini Zagreba. Brezpilotnik je letel na višini 1000 metrov in je vseboval eksploziv (Reuters, 2022). Strmoglavil je 20 kilometrov od slovenske jedrske elektrarne Krško in razkril večletni rezultat zanemarjanja vlaganj v protizračno obrambo držav. Nekateri drugi primeri, ki zahtevajo okrepitev protizračne obrambe, so padec manevrirne rakete na Poljsko, ki je bila odkrita v gozdu nekaj mesecev pozneje (Reuters, 2023a), in padci ruskih brezpilotnih letalnih sistemov v Romuniji, ki so zgrešili cilje v ukrajinskem pristanišču v bližini meje med Ukrajino in Romunijo (Higgins, 2023).

Zadnji dogodki v povezavi z vojno v Ukrajini so vzbudili pobude po večjem vlaganju sredstev v oborožene sile. Ena izmed najambicioznejših držav v tem primeru je vsekakor Poljska, ki s svojim spinom vlaganj v oborožene sile povečuje svoje zmogljivosti na vseh področjih. Izstopa predvsem nakup 12 najnaprednejših zemeljskih radarjev LTAMDS, kupljenih od ZDA, ki so bili tudi prvič prodani v tujino. Pogodba je vredna 15,5 milijarde dolarjev in vključuje še nakup 48 lanserjev za sistem Patriot, kar predstavlja šest baterij sistema (Głowacki, 2023). ZDA so prav tako odobrile mogočo prodajo integriranega bojnega poveljniškega sistema protizračne in raketne obrambe (angl. Integrated Air and Missile Defense Combat Command System) v vrednosti štirih milijard dolarjev, katerega namen je integrirati in upravljati različne senzorje in orožje, ki prvotno niso bili zasnovani za skupno delovanje (Dubois, 2023). Naslednji poljski nakup vključuje nakup izstrelitvenih platform za rakete kratkega in srednjega dosega MBDA CAMM (Dubois, 2023).

Poleg vse naštetega bo Poljska kupila še dodatne enote brezpilotnih letalnih in protiladijskih sistemov (Adamowski, 2023).

Druga pomembna krepitev evropskega zračnega prostora je skupni projekt evropskega zračnega ščita (angl. European Sky Shield), v katerega je vključenih 18 držav. Projekt temelji na večplastnem kritju zračnega prostora, in sicer s sistemi srednjega dosega IRIS-T, sistemi dolgega dosega Patriot in sistemom zelo dolgega sistema Arrow 3, ki pokriva zračni prostor vse do eksosfere in ima doseg do 2400 kilometrov (Wachs, 2023). Največji izziv, s katerim se bodo spoprijele zračne obrambe v prihodnosti, je masovna uporaba brezpilotnih letalnih sistemov v napadih. Zaradi njihove dostopnosti in majhne radarske zaznavnosti (angl. radar cross section) se izziv pojavi pri njihovem učinkovitem prestrezanju (Cureton, 2023). Sistemi zračne obrambe, ki temeljijo na izstreljevanju prestreznih raket, se morajo spoprijeti z oviro po zadostnem številu prestreznih raket pri masovnih napadih kot tudi po cenovni neučinkovitosti uporabe sofisticiranih in dragih raket.

Nekateri sistemi, ki so se izkazali za zelo učinkovite pri spoprijemanju z novo grožnjo, ki jo predstavljajo brezpilotni letalni sistemi, je nemški sistem Gepard, ki dosega zelo dobre rezultate pri spoprijemanju z brezpilotnimi letalnimi sistemi v Ukrajini. Sistem ima dva 30-milimetrska topa in je zelo učinkovit proti nizko letečim tarčam. Samovozni protiletalski sistemi se izkazujejo za ključne pri njihovem sestreljevanju (Marinero, 2023). Druga vrsta sistemov, ki še ni množično sprejeta v operativno uporabo, so visokoenergetski laserji za uničevanje ciljev. Velika prednost laserjev je, da strošek za posamezno sestrelitev tarče znaša nekaj evrov in ima neomejeno število uporabe, dokler je dovolj električne energije. V zadnji zaostritvi razmer med Palestino in Izraelom oktobra 2023 naj bi Izrael uporabil visokoenergetski laser Iron Beam za prestrezanje raket, ki jih je izstrelil Hamas (Hollings, 2023).

Ena izmed glavnih metod boja proti brezpilotnim letalnim sistemom so elektromagnetne motnje, ki preprečujejo komunikacijo med brezpilotnimi letalnimi sistemi in njegovim operaterjem. Ustvarijo se z oddajanjem močnih signalov na frekvencah, ki jih brezpilotni letalni sistemi uporabljajo za komunikacijo, kar povzroči izgubo nadzora. Naprednejši sistemi lahko izvajajo tudi »spoofing«, pri čemer se lažni signali uporabljajo za zavajanje brezpilotnih letalnih sistemov, da ti sledijo napačnim navigacijskim ukazom. Tako se brezpilotni letalni sistem usmeri stran od občutljivih območij (Mozur in Krolik, 2023).

Zaključek

Teorija o zračni premoči predpostavlja, da je nadzor nad zračnim prostorom ključen za uspeh v sodobnih oboroženih konfliktih. Neuspeh pri doseganju zračne prevlade v Ukrajini kaže na pomembne spremembe v naravi sodobnega vojskovanja, pri katerem tradicionalne metode morda niso več zadostne za njeno dosego, kar se kaže tudi v vojni v Ukrajini. Velike ofenzivne akcije niso več mogoče zaradi nezmožnosti po zadostni podpori iz zraka, istočasno pa je bojišče z množico brezpilotnih letalnih sistemov postalo transparentno in onemogoča elemente presenečenja. Premiki na bojišču so postali predvidljivi in hitro zaznani. Obe strani se poslužujeta napadov v

zaledje s ciljem po uničevanju tarč visoke pomembnosti, kot so poveljniški centri, kritična infrastruktura in uničevanje vojaških zmogljivosti, pri tem pa so pomembno vlogo prevzeli brezpilotni letalni sistemi. Zračna obramba je na obeh straneh po skoraj dveh letih vojne še vedno močna, kar zmanjšuje učinek teh napadov.

Pomembno je, da se zavedamo kompleksnosti sodobnih zračnih groženj, ki zahtevajo napredno in večplastno zračno obrambo. Izzivi, ki jih prinašajo različne vrste zračnega orožja in intenzivnost njihove uporabe, prikazujejo potrebo po nenehnem vzdrževanju in izpopolnjevanju obrambnih zmogljivosti. V Ukrajini smo opazili, kako pomembno je imeti dovolj zalog streliva za sisteme zračne obrambe, saj obe strani izčrpavata nasprotnikovo zračno obrambo.

Prestrezanje kombinacije velikega števila poceni napadalnih sredstev skupaj s prestrezanjem naprednih napadalnih sredstev je izziv, zlasti zaradi omejenih količin dragih prestreznih raket in kompleksnosti napadov, s čimer se spoprijema zračna obramba. Izkušnje iz Ukrajine nas učijo krhkosti zračne obrambe tudi z incidenti v evropskem zračnem prostoru, vključno z vstopom brezpilotnih letalnih sistemov in raket z bojišč v Ukrajini.

Zračna obramba in nadzor nad zračnim prostorom ostajata ključna za ohranjanje varnosti in suverenosti držav, poleg tega pa sta tudi pogoj za dosego uspehov na bojišču.

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Avtorja opozarjata, da je lahko situacija zaradi hitro spreminjajočih razmer na bojišču drugačna, kot je bila v času pisanja članka.

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DOI: 10.2478/cmc-2024-0020

OKOLJSKI VIDIK CIVILNO-VOJAŠKIH RAZMERIJ: PRILOŽNOSTI IN IZZIVI ZA SLOVENSKO VOJSKO

THE ENVIRONMENTAL ASPECT OF CIVIL-MILITARY RELATIONS: OPPORTUNITIES AND CHALLENGES FOR THE SLOVENIAN ARMED FORCES

Povzetek Ugotovitve raziskav javnega mnenja potrjujejo visoko ekološko ozaveščenost državljanov Slovenije, ki je rezultat poudarjenega pomena vrednote zdravega okolja. Uravnoteženje zahtev po pripravljenosti vojske in varstva okolja je ključno za uspešno upravljanje okoljskega vidika civilno-vojaških razmerij. Ministrstvo za obrambo poudarja pomen varstva okolja, medtem ko so dejavnosti Slovenske vojske regulirane z okoljsko zakonodajo, notranjimi predpisi in Natovimi zavezniškimi doktrinami. Stališča poveljnikov enot Slovenske vojske odražajo pozitivno ekološko naravnanost, pri čemer objektivno zaznavajo določene vplive vojaških dejavnosti na okolje, kot tudi nekatere priložnosti za dobro sodelovanje z lokalno skupnostjo.

Ključne besede ***Civilno-vojaška razmerja, Slovenska vojska, vojaške dejavnosti, okoljski vplivi, varstvo okolja, ekološka ozaveščenost.***

Abstract The findings of public opinion surveys confirm the high environmental awareness of the citizens of Slovenia, which is the result of the emphasized importance of the value of a healthy environment. Balancing military readiness requirements and environmental protection is key to successfully managing the environmental aspect of civil-military relations. The Ministry of Defence emphasizes the importance of environmental protection, while the activities of the Slovenian Armed Forces are regulated by environmental legislation, internal regulations and doctrines of the NATO alliance. The attitudes of the unit commanders of the Slovenian Armed Forces reflect a positive environmental orientation, whereby they objectively perceive certain impacts of military activities on the environment and also some opportunities for good cooperation with the local community.

Key words ***Civil-military relations, Slovenian Armed Forces, military activities, environmental impacts, environmental protection, environmental awareness.***

Uvod

Civilno-vojaška razmerja so dinamična in se spreminjajo pod vplivom notranjih in zunanjih dejavnikov (zgodovinska vloga oboroženih sil, značilnosti družbe, spreminjajoče se mednarodno okolje) (Joó, 1996). Tudi v demokratičnih ureditvah civilno-vojaška razmerja niso nespremenljiva kategorija, temveč stalno prizadevanje za ohranitev civilnega nadzora nad oboroženimi silami. Da bi ohranila podporo javnosti, vojska izpolnjuje funkcionalni in družbeni imperativ, medtem ko legitimnost krepi, če z javnostjo deli podobne vrednote, kulturne norme in ideologijo (Jelušič, 1997). Posebni izzivi v postmaterialistični družbi so prevladovanje individualizma, izginjanje tradicionalnih vrednot in državljanske zavesti ter nezaupanje v institucije (Manigart, 1998), pri čemer nastaja kulturni razkorak med družbo in vojsko (Feaver in Kohn, 2001; Moskos, 2000; Shields, 2015). Civilno-vojaška razmerja so področje nenehnih trenj med civilno družbo in oboroženimi silami, ki z neustreznim pristopom k reševanju preraščajo v konflikt (Furlan, 2018).

Področje civilno-vojaških razmerij vključuje vse interakcije med oboroženimi silami in družbo (področnimi resorji), pri čemer se odpirajo nova področja raziskovanja vsebine civilno-vojaških razmerij (Pion-Berlin idr., 2024). Hong (2008) prepoznava potrebo po redefiniranju civilno-vojaških razmerij, v katerih ima civilna družba večje zahteve in pričakovanja od vojske oziroma ta ni več prepoznana zgolj kot izjemna družbena institucija. Civilno-vojaška razmerja vključujejo različne vidike (ekonomskega, finančnega, tehnološkega, kulturnega, družbenega, političnega) (Kümmel, 2002), pri čemer oborožene sile vzpostavljajo tudi razmerje z naravnim okoljem, tj. vojaško-okoljsko razmerje (angl. military-environmental relations) (Light, 2014). Oborožene sile tako vzpostavljajo specifično civilno-vojaško-okoljsko razmerje, ki se nanaša na skupno reševanje aktualnih okoljskih vprašanj (Lee Jenni idr., 2015). Uspešnost reševanja okoljskih vprašanj (okoljskih vidikov) namreč prispeva k uspešnosti izvajanja vojaških poslanstev, ugledu vojaške institucije in okoljski varnosti (vključno z varnostjo lastnih sil) (Neuhauser, 2015; Smit in Henrico, 2022). Uravnotežena civilno-vojaška razmerja (vključno z vojaško-okoljskim) so pomembna zlasti v obdobju konvergiranja vrednot civilne družbe in vojaške institucije (Dandeker, 1990; Kiss, 1999; Kotnik-Dvojmoč, 2000; Garb, 2009), ko je izzvana skupna vrednota zdravega okolja. Približevanje vojaških vrednot tistim v civilnem okolju vključuje prvino trajnostnega upravljanja okolja, s čimer se krepijo tudi civilno-vojaška razmerja. V tej zvezi je pomembno ohraniti odprtost vojaške organizacije za akademsko raziskovanje, eksploatacijo novih znanj (vključno s tistimi na področju varstva okolja) in javno dostopnost okoljskih podatkov (rezultati monitoringa, študij, investicij, izdatkov), medtem ko izobraževanje s področja varstva okolja vpliva na višjo ekološko ozaveščenost pripadnikov oboroženih sil (Smit, 2020). S tem opredeljujemo tudi okoljski vidik civilno-vojaških razmerij, ki ga uvrščamo na področje vojaške sociologije kot prepoznavne smeri preučevanja civilno-vojaških razmerij.

Demokratični model civilnega nadzora nad oboroženimi silami (Joó, 1996) vključuje elemente, kot so ustavna določila (temeljna razmerja med državo in oboroženimi silami), zakonodajna vloga parlamenta na področju obrambe, hierarhična

odgovornost vojske civilnemu organu javne uprave (minister za obrambo), obstoj strokovne in apolitične vojaške organizacije, ločitev odgovornosti civilnih avtoritet in vojaške stroke, obstoj razvite demokratične družbe (institucij, vrednot), ki je sposobna učinkovito reševati družbene konflikte in v kateri obstaja širši družbeni konsenz o vlogi in nalogah oboroženih sil, in obstoj vojaške akademske skupnosti, ki je sposobna sodelovati v javnih razpravah s področja obrambe in varnosti (Joó, 1996). Potem ko je bila Republika Slovenija že globoko v obdobju tranzicije k popolni demokraciji, je Bebler (2005) ugotavljal, da civilno-vojaška razmerja v Republiki Sloveniji še nimajo značilnosti stabilnega razmerja. Zaznamovali so jih predvsem vprašljiva učinkovitost norm, upravljanje razmerij, neopredeljeno politično vodstvo ter šibka vojaška avtonomija, javni interes za obrambne zadeve in podpora oboroženim silam. Tudi pozneje je Furlan (2015) v povezavi s civilno-vojaškimi razmerji kritično ugotavljal, da je Slovenska vojska podvržena pretiranemu političnemu nadzoru, kar negativno vpliva na razvoj strokovne vojaške avtonomije. V obdobju zadnjih 20 let se v Republiki Sloveniji v povezavi z okoljskimi vprašanji intenzivira problematika statusa osrednjega vadišča Poček pri Postojni. Primer vadišča uvrščamo na področje okoljskega vidika civilno-vojaških razmerij, s čimer se v časovni perspektivi ponovno potrjuje ugotovitev, da Republika Slovenija ne izkazuje nekaterih značilnosti stabilnih civilno-vojaških razmerij, ki so skupna sodobnim demokratičnim ureditvam.

Vojaška organizacija ni popolnoma izolirana od civilne družbe. Vojska svoje dejavnosti izvaja v naravnem okolju, ki si ga deli s civilno družbo, zato ima tudi na področju varstva okolja nekatere odgovornosti. Dodaten razlog za odgovornost vojaške organizacije za trajnostno upravljanje okolja so obsežne (znatne) površine, ki jih vojska upravlja. Vojska pa je v paradoksalnem položaju ob dejstvu, da je njena temeljna dejavnost destruktivna za okolje (najbolj izraženo v vojnem času) oziroma so pričakovani nekateri učinki uporabe oborožitve, sredstev in vojaških dejavnosti na okolje. Slovenska vojska je deklarativno okoljsko odgovorna organizacija, pri čemer je del odgovornosti na Ministrstvu za obrambo, ki je politični odločevalec, upravlja nepremičnine in določa investicije, medtem ko je Slovenska vojska (u)porabnik dodeljenih virov. Vojska s svojo avtonomnostjo sicer lahko spodbuja ekološko ozaveščenost pripadnikov na vseh ravneh, upošteva okoljske predpise, obvešča javnost in vzpostavlja komunikacijo z njo ter regulira izbiro lokacij, intenzivnost in vsebino usposabljanja. Zaradi realnih dejavnikov omejevanja vojaškega usposabljanja (angl. encroachment) (urbanizacija, souporaba zračnega prostora, naravovarstvena območja ipd.) (Van Antwerp, 2001) si oborožene sile v splošnem prizadevajo za večjo ekskluzivnost (angl. exemptions) iz okoljske zakonodaje iz razlogov, da ta omejuje usposabljanje in posledično zagotavljanje pripravljenosti (Bearden, 2007), kar pa oborožene sile v praksi težko utemeljijo (Government Accountability Office [GAO], 2006). Tovrstne okoljske izjeme za področje obrambe so pravzaprav vsebinsko pomanjkljivo definirane oziroma se je izkazalo, da v primeru celovite presoje vplivov pravno niso vzdržale enostranske razlage določila. Zato je ustrezneje, da se ohranja uravnoteženje zahtev po vojaškem usposabljanju in varstvu okolja, kar je mogoče doseči z doslednim izvajanjem zakonskih in notranjih

okoljskih predpisov (ukrepov, preprečevanj, sanacije) in investiranjem v sodobno vojaško infrastrukturo, ki upošteva okoljski vidik (trajnost, zmanjševanje vplivov, ohranitev stanja vrst in habitatov).

1 NAMEN

Višja raven ekološke ozaveščenosti med državljani Republike Slovenije vpliva na okoljski vidik civilno-vojaških razmerij, ki se izraža tudi z zahtevami po prilagoditvi oboroženih sil okoljevarstveni zakonodaji oziroma delnim omejevanjem mirnodobnih vojaških dejavnosti. Tudi v Republiki Sloveniji obstaja dolgotrajno nasprotovanje lokalnega prebivalstva obratovanju največjega vojaškega vadišča Slovenske vojske Poček pri Postojni. Vadišče je sicer strateškega ali ključnega pomena za vojaško usposabljanje in zagotavljanje pripravljenosti Slovenske vojske ter izvajanja mednarodnega vojaškega sodelovanja. Zato ima strateški pomen tudi uspešno upravljanje okoljskega vidika civilno-vojaških razmerij. Pomen področja varstva okolja (angl. environmental protection) je prav tako izražen v doktrinarnih dokumentih vojaškega zavezništva Nato (angl. NATO, North Atlantic Treaty Organization) (dejavnik krepitve sil, vpliv na uspešnost operacij, okoljska varnost). V zvezi s tem so nas zanimala stališča (usmerjenost, samozaznavanje) poveljnikov nekaterih enot Slovenske vojske na taktični in operativni ravni o vplivu mirnodobnih vojaških dejavnosti na okolje oziroma ali njihova stališča odražajo pozitivno ekološko naravnanost Nata. Drugi namen prispevka je predstaviti, kako predstavniki lokalne skupnosti zaznavajo mirnodobne vojaške dejavnosti v smislu vpliva na okolje oziroma katere so tiste kategorije, pri katerih lahko sodelujoči subjekti (Slovenska vojska, Ministrstvo za obrambo, občine) na tem področju vzajemno okrepijo koeksistenco (sodelovanje, prisotnost) v lokalnem okolju. Tretji namen pa je prispevati v nabor vojaškostrokovne literature o okoljski dimenziji mirnodobnih vojaških dejavnosti in možnosti za izvajanje uravnotežene t. i. obrambno-okoljske politike, ki bo v korist vseh sodelujočih subjektov (lokalne skupnosti, Slovenske vojske, Ministrstva za obrambo, države). Po analizi člankov v vojaškostrokovnih publikacijah namreč ugotavljamo nizko število vsebinsko relevantnih prispevkov. V obdobju od leta 1999 do 2022 je skupno izšlo 79 številk revije Sodobni vojaški izzivi. V istem obdobju je bilo v publikaciji objavljenih več kot 580 člankov, od tega jih je bilo pet (v večletnem razmiku) povezanih z raziskovalno tematiko (ali 0,8 %), 25 člankov (ali 4,2 %) pa manj neposredno povezanih z raziskovalno tematiko. V obdobju od leta 2002 do 2022 je v reviji Vojaškošolski zbornik skupno izšlo 17 številk. V istem obdobju je bilo v publikaciji objavljenih več kot 130 člankov, od tega sta bila zgolj dva (v večletnem razmiku) povezana z raziskovalno tematiko (ali 1,4 %), trije (ali 2,2 %) pa manj neposredno povezani z raziskovalno tematiko.

2 METODOLOGIJA IN RAZISKOVALNA VPRAŠANJA

V obdobju od 15. 6. 2021 do 2. 3. 2022 smo opravili skupno 20 delno strukturiranih intervjujev s poveljniki nekaterih enot Slovenske vojske na taktični in operativni

ravni, pri čemer smo sledili organizacijski strukturi Slovenske vojske iz leta 2020. Med 19. 5. 2021 in 4. 7. 2022 smo opravili tudi pet delno strukturiranih intervjujev, in sicer z župani občin Moravče, Pivka in Postojna, predsednikom krajevne skupnosti Prestranek in dekanom Fakultete za organizacijske vede Univerze v Mariboru. Zanimala so nas stališča poveljnikov enot Slovenske vojske, poznavalcev problematike in predstavnikov lokalne skupnosti, ali nekatere mirnodobne dejavnosti oboroženih sil zaznavajo kot vir ogrožanja okolja. Prek odgovorov na pripravljena vprašanja smo pridobili stališča sogovornikov, kako zaznavajo naravno okolje v povezavi z mirnodobnimi vojaškimi dejavnostmi, kolikšen pomen namenjajo reševanju okoljskih vprašanj in s kakšnimi težavami se srečujejo pri reševanju le-teh. V intervju s poveljniki enot Slovenske vojske in predstavniki lokalne skupnosti so bila med drugim vključena vprašanja: 1) Ali menite, da nekatere mirnodobne dejavnosti oboroženih sil v Republiki Sloveniji ogrožajo okolje? 2) Če menite, da ga, za katere mirnodobne vojaške dejavnosti gre? in 3) Ali zaznavate trenja oziroma nasprotovanja, v povezavi z varovanjem okolja, med civilno družbo in Slovensko vojsko, in če jih, na katerih področjih? Odgovore, pridobljene v intervjujih s poveljniki, smo zapisali v parafrizirani obliki in jih analizirali s postopkom kodiranja po Glaserju in Straussu (Mesec, 1989). Kodirane pojme za posamezno vprašanje, vključeno v intervju, smo na podlagi sorodnosti združili v prepoznavne kategorije. V analizi intervjujev z župani občin in dekanom Fakultete za organizacijske vede Univerze v Mariboru smo uporabili metodo ekspliciranja pomena. Dele besedila v posamezni temi smo kodirali s pojmi in v komentarju eksplicirali njihov pomen.

3 OPREDELITEV POJMA OKOLJA

Okolje vključuje naravno, kulturno in družbeno okolje, medtem ko se v ožjem smislu za okolje smatra le naravno okolje (Mihalič, 1993). Okolje je sestav živega okolja (biotski dejavniki), neživega okolja (abiotski dejavniki), družbeno okoljskih dejavnikov in skupnih okoljskih zadev (Macarol, 1993). Okolje vključuje interakcije med naravnimi viri, kulturno dediščino in značilnostmi pokrajine (Commision of the European Communities [COM], 1993). Naravni del okolja vključuje živi (flora, favna vključno z mikroorganizmi in človekom) in neživi del (geološke strukture) (Butinar idr., 2020). Zakon o varstvu okolja (»Zakon o varstvu okolja (ZVO-2)«, 2022) okolje definira kot »... del narave, kamor seže ali bi lahko segel vpliv človekovega delovanja. Deli okolja so mineralne surovine, tla, voda, zrak, živalske in rastlinske vrste, vključno z njihovim genskim materialom. Posebni deli okolja so deli okolja, ki imajo koristno vlogo za drug del okolja ali javnost; to so vode in tla ter s predpisi o ohranjanju narave posebej določene mednarodno varovane in zavarovane prosto živeče rastlinske in živalske vrste ..., njihovi habitati in habitatni tipi, ki se prednostno ohranjajo v ugodnem stanju, ter naravne vrednote po predpisih o ohranjanju narave« (»ZVO-2«, 2022, 3. člen). Doktrina za varstvo okolja med vojaškimi aktivnostmi pod vodstvom Nata okolje opredeli kot tisto, v katerem deluje vojaška organizacija »... vključno z zrakom, vodo, zemljo, naravnimi viri, rastlinstvom in živalstvom, človekom in odnosi med njimi«. (Ministrstvo za obrambo [MORS, 2013], str. A-2). Naravno okolje vključuje grajene strukture ter naravne in kulturne vire (Department

of the Army, 2015), medtem ko vojaško okolje (angl. military environment) vključuje biofizično, družbeno, kulturno in ekonomsko okolje, v katerem vojska izvaja svoje naloge (Smit in Henrico, 2022).

4 EKOLOŠKA NARAVNANOST ZAVEZNIŠTVA IN INTEGRACIJA DOLOČIL V SLOVENSKO VOJSKO

Zavezništvo Nato med drugimi grožnjami varnosti prepoznava tudi okoljske grožnje (angl. eco-threats) (Sanden in Bachmann, 2013). Prizadeva si za manjši vpliv vojaških dejavnosti na okolje in za zaščito sil pred varnostnimi izzivi iz okolja in v koncept nacionalne varnosti vključuje tudi varnost naravnega okolja (Prebilič in Oder, 2004). V razmerju do okolja Nato ločeno definira zaščito okolja in okoljsko varnost (North Atlantic Treaty Organization [NATO], 2019). V razmerju do okolja zavezništvo med drugim izvaja različne dejavnosti (zaščita okolja pred škodljivimi vplivi vojaških operacij, spodbujanje uporabe okolju prijaznejših praks med usposabljanjem in operacijami, prilagajanje vojaških zmogljivosti škodljivim nevarnim vplivom okolja, priprava in odziv na naravne in druge nesreče, prepoznavanje vplivov klimatskih sprememb, izobraževanje častnikov o vseh vidikih okoljskih izzivov, izboljšanje energetske učinkovitosti in neodvisnosti od fosilnih goriv, izgradnja okolju prijazne infrastrukture ipd.) (NATO, 2019). Natova zavezniška doktrina za varstvo okolja med vojaškimi operacijami določa, da se vsebine varstva okolja pragmatično vključujejo v programe vojaškega usposabljanja (Nato Standardization Office [NSO], 2018a, 5. pogl.). Cilji okoljskega izobraževanja so integracija ekološke (energetske) ozaveščenosti v vojaško izobraževanje posameznika na vseh ravneh, pri čemer odgovornost na področju varstva okolja narašča z višjim položajem v vojaški hierarhiji. Poveljniki skrbijo za integracijo ukrepov varstva okolja in ekološke ozaveščenosti v dnevno vojaško rutino, medtem ko okoljsko izobraževanje vključuje področja varstva okolja, trajnostne rabe virov (vključno z ohranjanjem naravne in kulturne dediščine) in okoljske politike (nacionalna, politika države gostiteljice, zavezništva, mednarodni sporazumi). Zavezništvo Nato operacije izvaja z upoštevanjem določil mednarodnega (vojno pravo, človekove pravice, kazensko, okoljsko, pomorsko pravo) in nacionalnega prava. Upravljanje okoljskih tveganj je integrirano v proces načrtovanja operacij (NSO, 2018a). Okoljska škoda je neizogibna posledica vojaških operacij, pri čemer z okoljskim načrtovanjem zmanjšujemo okoljske posledice tako, da to ne vpliva na doseganje operativnih ciljev. Doseganje teh je primarna odgovornost poveljnikov, pri čemer smiselno sledijo okoljskim usmeritvam (ocenjevanje vpliva vojaških aktivnosti na okolje, značilnosti okolja). Po doktrini okoljska odgovornost poveljnikov med drugim vključuje spodbujanje ekološke ozaveščenosti, določanje dolžnosti, okoljsko načrtovanje, zagotavljanje skladnosti delovanja z okoljskimi predpisi, smotrno porabo virov in preprečevanje onesnaženja (preventivni ukrepi, sanacija) (NSO, 2018a). Pooblaščenci za varstvo okolja so strokovnjaki, ki poveljniku svetujejo in predlagajo ukrepe za varstvo okolja. Gre namreč za specifično področje (zahteva strokovna znanja), ki z ustreznim pristopom prispeva k uspehu vojaške operacije (Department of the Army, 2015; NSO, 2018a).

S polnopravnim članstvom Republike Slovenije v Natu so bila tudi v Slovensko vojsko postopoma uvedena določila zavezništva o upoštevanju okoljskih vidikov delovanja. Varstvo okolja urejajo standardizacijski dogovori zavezništva (angl. standardization agreement) (NSO, 2013, 2018a, 2019, 2020, 2022a, 2024), ki jih je Ministrstvo za obrambo kot Slovenski vojaški standard implementiralo v organizacijsko enoto (MORS, 2013, 2013a, 2013b, 2014, 2015, 2016, 2016a) in za izvrševanje katerih so odgovorni poveljniki v mednarodnih aktivnostih. Konkretnejši organizacijski ukrepi varstva okolja v Slovenski vojski so določeni z direktivo in ukazi, medtem ko so področno urejeni s standardnimi postopki, pri čemer so določila o varstvu okolja na streliščih in poligonih opredeljena s samostojnim standardnim postopkom (GŠSV, 2020). Direktiva o varstvu okolja v Slovenski vojski (GŠSV, 2017) določa organiziranost, odgovornost, pristojnost in naloge za izvajanje ukrepov varstva okolja (vključno z zavezniškimi enotami), pri čemer določila direktive temeljijo na nacionalni okoljski zakonodaji. Pravila službe v Slovenski vojski določajo tudi nekatere naloge in odgovornosti poveljnikov vojašnic (»Pravila službe v Slovenski vojski (PSSV)«, 2009, t. 169, 170, 171, 210), medtem ko je varstvo okolja urejeno s predpisi in akti poveljevanja, ki določajo »... organiziranost, pristojnost, odgovornost in naloge poveljstev, enot in zavodov na vseh ravneh poveljevanja; dejavnosti, postopke in ukrepe za varovanje okolja pri uporabi vojaških nepremičnin; okoljsko usposabljanje pripadnikov Slovenske vojske; sodelovanje pri izvajanju ukrepov varstva okolja v mednarodnih operacijah in misijah« (»PSSV«, 2009, 210. t.). Poveljniki in vsi pripadniki Slovenske vojske so dolžni izvrševati ukaze, vključno s tistimi, ki določajo izvrševanje ukrepov varstva okolja, medtem ko poveljujoči nadzoruje izvrševanje povelj (»Zakon o obrambi (ZObr)«, 2004, 43. člen), pri čemer je pripadnik v primeru zavrnitve (neizvršitve) ukaza disciplinsko, kazensko ali odškodninsko odgovoren, sankcija pa ima lahko pravne posledice (»ZObr«, 2004, 56. in 57. člen).

5 VPLIV MIRNODOBNIH VOJAŠKIH DEJAVNOSTI NA OKOLJE

Vpliv vojaških dejavnosti na okolje v splošnem pomeni zmogljivost vojske, da v mirnodobnem in vojnem času znatno vpliva na zrak, zemljo in vodo (Matthews idr., 2003). Različne discipline (ekologija, medicina, biologija, toksikologija itn.) so na svojem področju preučevanja že potrdile določene škodljive učinke mirnodobnih dejavnosti na okolje. Za škodljive vplive (posledice) mirnodobnih vojaških dejavnosti na okolje štejemo škodljive učinke (emisijske, fizične, kemične, biološke, radiološke, energetske), preseganje mejnih vrednosti v določenih komponentah okolja, obsežno in znatno okoljsko škodo, ekološko kriminaliteto in povzročitev kakršne koli oblike okoljske nepravičnosti. Mirnodobne vojaške dejavnosti so raznolike in tudi njihovi vplivi na okolje so raznoliki (v spektru od zanemarljivih do ogrožajočih). V različnih študijah so predmet preučevanja vplivi (učinki) vojaškega prometa na okolje (Prosser idr., 2000; Vennik, 2019), toksičnost nitroaromatičnih spojin (Lima idr., 2011; Martel idr., 2008), toksičnost težkih kovin (McDiarmid idr., 2011; Balali-Mood idr., 2021), hrupne obremenitve (Fish in Scharre, 2018; Rodríguez-Artiles idr., 2019), radiološko onesnaženje (Yamamoto idr., 2010; Prăvălie, 2014), onesnaženje

z neeksplodiranimi sredstvi (Baršienė idr., 2014; Beck idr., 2018), infrastrukturno onesnaženje (Lawrence idr., 2015; Miller; 2019) in druge obremenitve okolja. Javna dostopnost rezultatov izvedenih raziskav o vplivih vojaških dejavnosti na okolje je namreč pomembna za ohranjanje znanja ter zagotavljanje sredstev in pomoči vojaškim objektom s podobnimi okoljskimi problemi (Ricci idr., 2012).

Področje varstva okolja je izjemno raznoliko in zahteva sodelovanje strokovnih služb ter specifičen pristop k ugotavljanju negativnih vplivov in povzročene okoljske škode. Potrditve vpliva se morajo tako vselej opirati na rezultate monitoringa v posameznih komponentah okolja in ugotavljati glede na določila okoljske zakonodaje in področnih mejnih vrednosti. Pri tem prepoznavamo, katere so vojaške dejavnosti z obremenilnim učinkom na okolje ter kakšni so učinki teh na del okolja (segment, populacija, zdravje). Zato je treba opredeliti vsaj nekatere temeljne pojme. Tako je ekološka integriteta (angl. environmental integrity) stanje, v katerem je zagotovljena regenerativna sposobnost ekosistemov (Hecker, 2011). Pri tem ocenjujemo prag (angl. treshold) regenerativne kapacitete ekosistemov, s katerim so presežene razpoložljivosti ekosistemskih storitev. Toksičnost (akutna, kronična) je stopnja, do katere substanca (toksin ali strup) škodi človeku ali živali, običajno zaradi dolgotrajne ali ponavljajoče se izpostavljenosti (RxList, 2024). Posledice izpostavljenosti so odvisne od različnih dejavnikov, ki vključujejo koncentracijo, trajanje, pot vnosa, prisotnost drugih kemikalij in individualne značilnosti. Kontaminant je vsaka fizična, kemična, biološka ali radiološka snov v zraku, vodi, zemlji ali biološki snovi, ki ima škodljiv učinek na rastline in živali (Environmental Protection Agency [EPA], 2024). Ekotoksična mejna vrednost (angl. exotoxicological benchmark) je numerična vrednost koncentracije kontaminanta v abiotičnem mediju (zemlji, vodi, sedimentu), v rastlinah ali živalih, nad katero je povzročena škoda. Kontaminacija se nanaša na medij, ki vsebuje kontaminante v koncentracijah nad vrednostjo, ki ne pomeni tveganja za zdravje (EPA, 2008). Pri tem je pomemben način vstopa (angl. pathway) v receptor, pri čemer ločimo zrak (plini, emisije), kosovni odpadki (stroji, zgradbe, rezervoarji), podtalnica (vodonosniki), izcedne vode (površinska, meteorna, filtrirana voda), tekoči odpadki (rezervoarji, zbiralniki, sodi, zajetja), ostanki (pepel, obdelovanje), sedimenti (vodni nanosi), blato (odpadne vode), trdni odpadki (smeti, katrani), zemlja (višje in globlje plasti) in površinske vode (močvirja, jezera, potoki, ribniki) (EPA, 2008). Bioakumulacija je proces prehajanja kemičnih snovi v rastlinje in živali bodisi z neposredno izpostavljenostjo kontaminiranemu mediju (zemlja, sediment, voda) bodisi posredno z zaužitjem kontaminirane hrane (EPA, 2024).

Natova zavezniška doktrina za varstvo okolja predpostavlja 1) onesnaženje vode (površinske vode, podtalnica) kot posledica razlitja (sanitarne vode, goriva), erozije, gradbenih posegov, premikov vozil, izpustov nevarnih snovi, 2) onesnaženje zraka kot posledica emisij (vozil, zrakoplovov, plovil, odprtih sežigalnic, pirotehničnih sredstev), 3) onesnaženje zemlje kot posledica razlitja (goriva, maziva, nevarnih materialov) in izpustov onesnažene vode, 4) hrup kot posledica vojaške dejavnosti (vpliv v mirnodobnem času na ljudi in živali), 5) vplive na mokrišča in biodiverziteto ter 6) ogrožanje naravne in kulturne dediščine (NSO, 2018a). Onesnaženje vode

je lahko posledica neustreznega ravnanja s pesticidi (ali uporabe pesticidov) ter nevarnimi, komunalnimi in medicinskimi odpadki. Okoljski vidik predpostavlja okoljski medij in povezano tveganje (dejavnost) (Department of the Army, 2015), ki vključuje zrak (emisije vozil in opreme, požari, zapraševanje, čistila, barve, hladilni plin ipd.), arheološka območja (manever, gradbeni posegi, odstranitev, poškodovanje), hrup (nizki preleti, nočne dejavnosti, bližina naselij, promet, manever, eksplozije, pok, vibracije, večje vaje), ogrožene vrste (manever, učinki eksplozij, čas gnezdenja, vznemirjanje vrst, nevarni materiali, odsotnost sanacije, deforestacija, škoda v obalnih vodah), zemlja (manever, fizične poškodbe, odsotnost sanacije, erozija, gradbeni posegi, požari, občutljiva ekološka območja) in vode (pretakanje goriva, nevarni odpadki, erozija, izsuševanje, prečkanje vodotokov, pranje, odsotnost sanacije).

6 ZAZNAVANJE VPLIVA MIRNODOBNIH VOJAŠKIH DEJAVNOSTI NA OKOLJE

Z vprašanji smo želeli ugotoviti stališča poveljnikov enot Slovenske vojske o mirnodobnih vojaških dejavnostih in škodljivih vplivih na okolje. Pri vprašanju Ali menite, da nekatere mirnodobne dejavnosti oboroženih sil v Republiki Sloveniji ogrožajo okolje? smo na podlagi odgovorov oblikovali devet kategorij. Po mnenju poveljnikov Slovenska vojska dejavnosti izvaja skladno z veljavno nacionalno zakonodajo (vključno z okoljsko) in izhajajočimi predpisi, internimi okoljskimi predpisi in določili doktrin zavezništva, kar minimizira možnost namerne povzročitve okoljske škode. Grožnjo okolju, ki je posledica vojaških dejavnosti, ločijo glede na stopnjo ogrožanja, čas, obseg in zmogljivost vojske, dejavnosti in specifično kontaminacijo. V primerjavi s civilnimi organizacijami in panogami, vojska ne ogroža okolja bistveno bolj oziroma je na tem področju zgledna organizacija. Vojska je v primerjavi s preteklim obdobjem (30 let in več) bistveno bolj ekološko ozaveščena, pri čemer so se spremenile tudi nekatere prakse varstva okolja. V intrainstitucionalni primerjavi Slovenska vojska pravzaprav prispeva k varstvu okolja, čeprav poveljniki prepoznavajo nekatera realna okoljska tveganja vojaških dejavnosti. Vojaško pripravljenost je mogoče zagotavljati hkrati z varstvom okolja, kar pa zahteva investicije v sodobno vojaško infrastrukturo, ki upošteva tudi okoljski vidik. Kategorije stališč poveljnikov enot Slovenske vojske o vplivu mirnodobnih vojaških dejavnosti na okolje predstavljamo na sliki 1.

Slika 1: Kategorije stališč poveljnikov enot Slovenske vojske o vplivu mirnodobnih vojaških dejavnosti na okolje

Preventivna dejavnost za zmanjševanje vplivov na okolje vključuje ustrezno skladiščenje nevarnih sredstev, obveščanje reševalnih služb, sodobno infrastrukturo (skladišča, delavnice, vadišča, strelišča), tehnične preglede, meritve, prepoved uporabe nedovoljenih sredstev, uporabo lovilcev in zadrževalnikov, sanacijo, zbiranje, ločevanje in strokoven odvoz odpadkov, uporabo kemičnih sanitarij, nadzorovano uporabo sevalnih sistemov, redne remonte, vzdrževanje tehnike in omejevanje uporabe zvočno intenzivnih sistemov. Vojska uporablja določena območja (državna, javna, vpoklicana zemljišča) in infrastrukturo in ima torej omejene alternative. Prav tako ima omejen vpliv na specifične reliefne, geografske, hidrološke in meteorološke značilnosti okolja, v katerem deluje. Ugotovimo, da poveljniki enot Slovenske vojske objektivno zaznavajo nekatera tveganja (posledice) vojaških dejavnosti na okolje ter pomen preventivne dejavnosti. Takšna ekološka naravnanost je pozitivna in ne odstopa od določil doktrin zavezništva (področje varstva okolja, okoljska varnost). Očitno je, da vojaška institucija zaznava širok spekter vojaških dejavnosti z vplivom na okolje, kar izhaja iz strokovnega poznavanja področja in ima potencial, da se eksploatira v smeri preprečevanja, omejevanja in zmanjševanja okolju škodljive (obremenilne) vojaške dejavnosti. Stališča poveljnikov enot Slovenske vojske o vplivih mirnodobnih vojaških dejavnosti na okolje podrobneje predstavljamo na sliki 2.

Slika 2: Stališča poveljnikov enot Slovenske vojske o vplivih mirnodobnih vojaških dejavnosti na okolje

Intrainstitucionalna primerjava

- Obremenitev okolja v praksi vpoklicev zemljišč je manjša v primerjavi z izvajanjem vojaškega usposabljanja na vadiščih in streliščih, kjer se usposabljanje izvaja dlje časa in pogosteje;
- obremenjenost okolja je večja na območjih, kjer so koncentrirana usposabljanja in streljanja, v primerjavi s tistimi, ki niso namenjena tovrstnim dejavnostim in so tako nekako zaščitena in kjer je opaziti izredno biodiverziteto;
- tako so urejena tudi obsežna vadišča v tujini, kjer je na zaščitenih območjih mogoče opaziti izredno število različne divjadi, ki se je prilagodila;
- Slovenska vojska je v primerjavi z nekaterimi zahodnimi in jugovzhodnimi državami zgleden primer urejenosti področja varstva okolja;
- vpliv dejavnosti Slovenske vojske na okolje je manjši, kot je bil vpliv nekdanje Jugoslovanske ljudske armade.

Prepoznana tveganja

- Možnost, da se med usposabljanjem zgodijo dogodki z okoljsko škodo ali dogodki omejenega onesnaženja (razlitje goriva in olj, nesreče);
- nekatere dejavnosti lahko potencialno ogrozijo ali pomenijo tveganje za okolje;
- če se kratkoročno ali dolgoročno prepustimo stihiji, se lahko zgodijo izredni dogodki vključno z okoljskimi.

Primerjava s preteklim obdobjem

- Začetni odpor med pripadniki do uvajanja okoljskih predpisov pozneje postane vsakdanja in stalna praksa, nekaj običajnega in rutina;
- med pripadniki vojske je bistveno večja okoljska ozaveščenost v primerjavi s tisto iz preteklosti, še posebno v primerjavi z obdobjem izpred 30 let;
- v preteklosti se je izvajalo več streljanj kot zdaj, izobraženost o varstvu okolja je bila na nižji ravni;
- v začetku uvajanja so bile nekatere težave, potreben je bil miselni preskok.

Zagotavljanje pogojev za doseganje pripravljenosti

- Treba je organizirati usposabljanje na realističen način, podoben bojnim razmeram;
- vojska se mora usposabljati, da bi ohranila določeno stopnjo pripravljenosti;
- vojska se mora usposabljati tudi na terenu (ne samo na trenažerjih) in se vsaj enkrat na leto preizkusiti na večji vojaški vaji;
- če želimo usposobljeno vojsko, se ta mora usposabljati, kar pa ima določen vpliv na okolje;
- upravljanje obnovljene in sodobne infrastrukture (primer letališča) izboljšuje pogoje za usposabljanje in povečuje reputacijo vojske (gostovanje sodobnih letal zavezništva);
- postopki, povezani s pridobivanjem soglasij (arheološka najdišča na območju objektov v prenovi), upočasnjujejo zagotavljanje pogojev.

Dejstva negativnega vpliva

- Vojska ne izvaja dejavnosti, da bi namerno ogrožala okolje;
- dejavnosti vojske so imanentno povezane z onesnaževanjem;
- vojska brez hrupa in onesnaženja do neke mere ne obstaja;
- čeprav imamo visoke standarde, dogodke lahko predvidimo, ne moremo pa jih preprečiti;
- vplivi vojaških dejavnosti so v mejah dovoljenih standardov;
- zavedanje, da vojska povzroča določeno škodo, vendar si prizadeva, da je ta čim manjša in čim prej sanirana;
- varovanje okolja je pomembno, vendar mora biti uravnoteženo z vojaškim usposabljanjem;
- vojska je odprta do okoljskih vprašanj;
- vojska nima vpliva na povzročanje hrupa, razen omejevanja in občasnega izvajanja hrupnih dejavnosti;
- ker se na vadiščih zadržuje številna in raznovrstna divjad, je težko trditi, da vojaške dejavnosti negativno vplivajo na naravo;
- z doslednim izvajanjem ukrepov varstva okolja zmanjšujemo skupni negativni vpliv na okolje, ki pa ga ni mogoče povsem odpraviti.

Preventivna dejavnost

- Vse dejavnosti, ki prispevajo k zmanjševanju negativnih vplivov na okolje (zbiranje odpadne vode, pobiranje tulcev, sanacija, doseganje standardov in predpisov ipd.);
- zmogljivost za podporo terenskih usposabljanj (ustrezna infrastruktura, urejenost lokacij, namenska sredstva);
- načrtovanje ukrepov varstva okolja in vključenost v ukaze za posamezne naloge;
- pregled zemljišča in ocena okoljskega vidika; namenske enote za varstvo okolja;
- dosegljivost gradiva za varstvo okolja;
- investicije v okoljsko vzdržno infrastrukturo;
- sodelovanje s civilnimi službami v primeru okoljskih dogodkov;
- uporaba simulatorjev;
- vključenost varstva okolja v letno preverjanje pripravljenosti.

Stopnja ogrožanja okolja

- Glede na stopnjo ogrožanja (ne ogrožajo okolja; v splošnem ne ogrožajo; glede na rezultate meritev nimajo ogrožujočega vpliva; ne ogrožajo, a imajo določen vpliv);
- glede na čas (dolgoročno imajo določen vpliv; trenutno nimajo znatnega vpliva);
- glede na obseg in zmogljivost vojske (ni tako velika, da bi ogrožala);
- glede na določene dejavnosti (ki lahko imajo največji vpliv; običajno vojaško usposabljanje nima vpliva);
- glede na specifično kontaminacijo (hrup);
- glede na vpliv (ima svojevrsten vpliv; dejavnosti z znatnim vplivom);
- vojska ne povzroča večje škode.

Pogojenost delovanja z zakonodajo in predpisi

- Vojaške dejavnosti se izvajajo na podlagi zakonodaje;
- vojaške dejavnosti se izvajajo skladno z zakonodajo in predpisi (vključno z okoljsko);
- vojska pri izvajanju dejavnosti upošteva okoljsko zakonodajo ter izhajajoče predpise in ukaze;
- pripadniki morajo spoštovati določila ukazov o varovanju okolja; okoljske standarde zavezništva;
- pri vseh okoljskih predpisih, ki jih morajo upoštevati v Slovenski vojski, ne more nastati namerna okoljska škoda ali kaznivo dejanje zoper okolje.

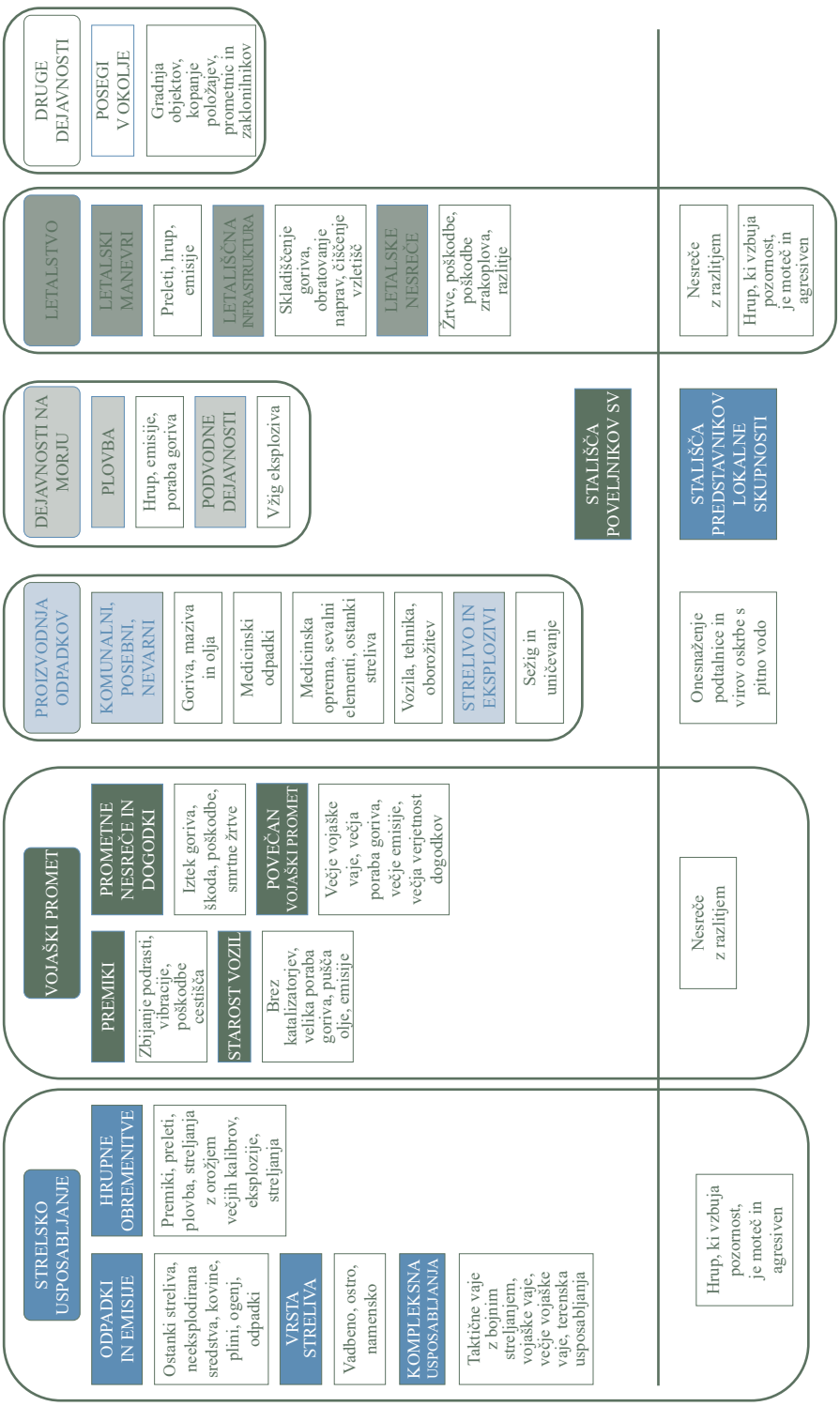
Primerjava z drugimi subjekti

- V primerjavi z drugimi organizacijami v smislu ogrožanja okolja (ne ogroža bistveno bolj; ne bolj kot druga javna podjetja; več kot določena in manj kot druga; vsaka dejavnost ima določen vpliv);
- v primerjavi z državami, v katerih se izvajajo vojaške operacije in je področje okolja slabše urejeno (krizne razmere);
- v primerjavi z drugimi organizacijami na področju varstva okolja je vojska vzorčna, zgledna, odgovorna in bolj dosledna organizacija;
- na ravni posameznega pripadnika vojske so nekateri postopki samoumevni, ker je večja tudi ekološka ozaveščenost v civilnem okolju.

Od sogovornikov smo želeli izvedeti, katere mirnodobne vojaške dejavnosti štejejo za najbolj okoljsko obremenilne. Pri vprašanju Če menite, da nekatere mirnodobne dejavnosti oboroženih sil v Republiki Sloveniji ogrožajo okolje, za katere dejavnosti gre? smo na podlagi odgovorov oblikovali šest kategorij, in sicer 1) strelsko usposabljanje, 2) vojaški promet, 3) proizvodnja odpadkov, 4) dejavnosti na morju, 5) letalstvo in 6) druge dejavnosti. Po stališčih poveljnikov imajo izrazitejši vpliv na okolje strelska usposabljanja, zvočna kontaminacija, kompleksna usposabljanja in uporaba različnih vrst streliva ter vojaški promet (premiki težjih vozil, stara vozila, nesreče in dogodki, povečan vojaški promet). Med vojaško dejavnostjo nastajajo določeni odpadki (komunalni, posebni, nevarni). Specifični odpadki so embalaža, ostanki streliva, medicinski odpadki, medicinska oprema, vojaška tehnika, sevalni elementi in neeksplodirana sredstva. Posebna obremenitev za okolje so dejavnosti na poligonu za uničevanje streliva in eksplozivnih sredstev. Dejavnosti na morju vključujejo plovbo in dejavnosti podvodnih potapljačev s specifičnimi obremenitvami na morsko in obalno okolje. Z letalstvom so povezane hrupne obremenitve (predvsem vzpenjanje zrakoplovov, streljanja, odmetavanje bomb), emisije, onesnaženje z gorivi (skladiščenje, pretakanje), tveganja obratovanja letališčne infrastrukture, letalske nesreče (žrtve, razlitja, vžig eksploziva, poškodbe zrakoplova). Med druge dejavnosti z vplivom na okolje uvrščamo fizične posege v okolje (gradnja vojaških objektov). Stališča poveljnikov enot Slovenske vojske in predstavnikov lokalne skupnosti o vojaških dejavnostih z največjim obremenilnim vplivom na okolje predstavljamo na sliki 3.

7 ZAZNAVANJE TRENJ IN PRILOŽNOSTI ZA SODELOVANJE NA PODROČJU VARSTVA OKOLJA

Zanimalo nas je, ali poveljniki enot Slovenske vojske zaznavajo morebitna trenja v razmerjih z lokalno skupnostjo na področju varstva okolja. Za trenja štejemo morebitna nesoglasja, nasprotovanja ali konfliktna razmerja med Slovensko vojsko v nekem okolju ter med lokalno skupnostjo (prebivalstvom, civilnimi iniciativami, interesnimi združenji, institucijami ipd.) v povezavi z varstvom okolja. Z analizo odgovorov poveljnikov na vprašanje Ali zaznavate trenja oziroma nasprotovanja, v povezavi z varovanjem okolja, med civilno družbo in Slovensko vojsko? smo oblikovali štiri kategorije, in sicer 1) nezaznavanje ali zanemarljivo zaznavanje trenj, 2) pričakovana nasprotovanja, 3) verjetna nasprotovanja in 4) zaznavanje dobrega sodelovanja (odsotnost trenj). Pri opravljanju svojih dejavnosti poveljniki ne zaznavajo nasprotovanj ali zaznavajo le nekatera, ki se pojavljajo v medijih, vendar nimajo vpliva na običajno sodelovanje s civilno skupnostjo v praksi. Zaznavajo predvsem trenja s civilnimi institucijami (pridobivanje soglasij) in omejitvami, ki izhajajo iz okoljskih predpisov. Pričakovana trenja so tista, ki izhajajo iz neposrednih vplivov vojaških dejavnosti na okolje in prebivalstvo (hrup, vojaški promet, omejevanje dostopa). Verjetna nasprotovanja so tista, ki so manj utemeljena, posledica negativne medijske kampanje, ekonomskega interesa, krepitve političnega vpliva, organiziranja civilne iniciative, specifičnih interesov, nezaupanja, neustrezne



Slika 3: Stališča poveljnikov enot Slovenske vojske in predstavnikov lokalne skupnosti o vojaških dejavnosti z največjim obremenilnim vplivom na okolje

primerjave vojske, spregledanja drugih škodljivih dejavnosti (kmetijstvo, industrija, promet), nesprejemanje vojske ali splošno protivojaško razpoloženje. Zaznavanje dobrega sodelovanja z lokalno skupnostjo pa opisuje primere dobre prakse. Poveljniki zaznavajo dobro (učinkovito, uspešno) sodelovanje z lokalno skupnostjo, ki se kaže v dobrih praksah (vpoklici zemljišč, civilno-vojaško sodelovanje, redno informiranje, prikaz zmogljivosti, skupni projekti in investicije, souporaba vojaške infrastrukture, prilagodljivo načrtovanje vojaških dejavnosti, prikazne vaje), navajenost na prisotnost vojske (dolgotrajna prisotnost, povezanost), pobude za večjo prisotnost vojske in zavedanje obrambnega pomena (usposabljanja, strateškega območja, zgodovinske, kulturne in obrambne vloge vojske). Predstavniki lokalne skupnosti zaznavajo določena trenja, ki smo jih razvrstili na 1) neutemeljene razloge, 2) različne razloge za nasprotovanje (sodelovanje) in 3) tista v domeni Ministrstva za obrambo. Po mnenju predstavnikov lokalne skupnosti je vojska na Postojnskem prisotna že dolgo in prebivalstvo je navajeno. Čeprav je vojske manj v primerjavi s preteklim obdobjem, so prebivalci glede vojaških aktivnosti nezadovoljni predvsem zaradi prisotnosti tujih oboroženih sil. Večja prisotnost vojske vzbuja pozornost in nezadovoljstvo dela javnosti. Vir nezadovoljstva je sprejemanje državnega načrta za vadišče, pri čemer se Ministrstvo za obrambo problematike vadišča loteva nekoliko nerodno. Ljudje so nezaupljivi iz bojazni, da bodo ponovno izigrani. Zamere pri ljudeh je namreč težko sanirati na hitro ali z denarjem. Nekateri razlogi za nezadovoljstvo so pretirani in primer tega je, da želijo nekateri zgolj izraziti nezadovoljstvo, a ga ne utemeljijo. Poseben dejavnik je potencial turizma v regiji, širjenje naselij in naraščanje števila prebivalstva na vplivnem območju vadišča. Predstavniki lokalne skupnosti kot dobro (pozitivno) sodelovanje zaznavajo informiranost, ogled zmogljivosti (usposobljenost, oprema), ki lahko v mirnodobnem času koristi tudi civilnemu prebivalstvu (dvonamenska uporaba), in navajenost na dolgotrajno prisotnost vojske. Zaznana trenja med lokalno skupnostjo in Slovensko vojsko na področju vpliva vojaških dejavnosti na okolje so predstavljena na sliki 4.

8 JAVNOMNENJSKE RAZISKAVE O OKOLJU IN ANALIZA STALIŠČ PREDSTAVNIKOV LOKALNE SKUPNOSTI

Sodobno varnostno okolje predpostavlja ekonomska, družbena, kulturna, politična in vojaška tveganja, ki izhajajo tudi iz družbenega razmerja z naravnim okoljem (United Nations Environmental Programme [UNEP], 2019). Dejavniki okoljskih sprememb so naraščanje populacije, urbanizacija, ekonomski in tehnološki razvoj in klimatske spremembe (Banuri idr., 2019), medtem ko je onesnaženje okolja posledica rudarstva, industrije, vojaških dejavnosti, kmetijstva, kemičnega onesnaženja in nereguliranega ravnanja z odpadki (Rodríguez-Eugenio idr., 2018). Posledično je ohranitev naravnega okolja postala vrednota, kar se izraža z razpravami o vključevanju pravice do zdravega okolja med temeljne človekove pravice (Human Rights Council [UNEP] (2018) in uresničevanjem ciljev trajnostnega razvoja (United Nations General Assembly [UNGA], 2015).

Slika 4: Zaznana trenja in priložnosti za sodelovanje na področju varstva okolja

Po rezultatih raziskav javnega mnenja stališča anketiranih slovenskih državljanov odražajo visoko raven ekološke ozaveščenosti (pri nekaterih vprašanjih tudi nad evropskim povprečjem). V raziskavi evropskega javnega mnenja o okolju iz leta 2019 (Eurobarometer, 2020) so anketirani Slovenci menili, da je zaščita okolja zelo pomembna (65 %) in dokaj pomembna (30 %). Pri vprašanju o najpomembnejših okoljskih problemih so se opredelili za naraščanje odpadkov (63 %), klimatske spremembe (37 %), onesnaževanje zraka (47 %) ter onesnaženje rek, jezer in podtalnice (36 %). V raziskavi Slovensko javno mnenje iz leta 2021 (Hafner-Fink idr., 2021) so se anketirani opredelili, kako jih skrbijo problemi okolja na lestvici od 1 do 5 (pri čemer je vrednost 1 – sploh me ne skrbijo, 5 – zelo me skrbijo), in sicer za 5 (51,2 %), 4 (28,4 %) in 3 (15 %). V isti raziskavi so anketirani o okoljskih problemih menili, da so za Slovenijo pomembni onesnaženje zraka (17,3 %), klimatske spremembe (15,9 %), odlaganje gospodinjskih odpadkov (15,5 %) in onesnaženje vode (14,8 %). Anketirani so menili, da je onesnaževanje slovenskih rek, jezer in potokov za okolje zelo nevarno (42,6 %), srednje nevarno (19,6 %) in izjemno nevarno (32,4 %) (Hafner-Fink idr., 2021). Po analizi raziskav Slovensko javno mnenje iz leta 2011 in 2020 o okolju so državljani Republike Slovenije v splošnem zaskrbljeni glede okoljskih problemov v državi, vendar ti ne vplivajo na kakovost življenja, zdravje, prehrano in varnost (Malešič, 2023). Prav tako ne povezujejo nadnacionalnih okoljskih problemov (klimatske spremembe, okoljski terorizem, okoljski begunci ipd.) z lastno varnostjo. Nasprotno pa je prebivalstvo bolj zaskrbljeno zaradi okoljskih problemov, ki vplivajo na kakovost življenja na lokalni ravni.

Od predstavnikov lokalne skupnosti smo želeli pridobiti stališča, ali menijo, da nekatere mirnodobne vojaške dejavnosti ogrožajo okolje. Pri vprašanjih Ali menite, da nekatere mirnodobne dejavnosti oboroženih sil v Republiki Sloveniji ogrožajo okolje? in Če menite, da ga, za katere dejavnosti gre? smo odgovore povzeli v obliki komentarja. Na temo o splošnem zaznavanju mirnodobnih dejavnosti oboroženih sil je izraženo sprejemanje dejstva o prisotnosti vojske v nekem okolju. Mirnodobne dejavnosti vojske v splošnem namreč ne ogrožajo okolja nič bolj kot nekatere druge gospodarske dejavnosti. Bližina vojaške dejavnosti ima določen vpliv na okolje in prebivalstvo. Vojska se glede na družbeno vlogo in namen nekje mora usposabljati. Vojaška organizacija je sicer izpostavljena določenim političnim pritiskom, vključno s tistimi na okoljskem področju. Dobro sodelovanje s Slovensko vojsko se kaže z investicijami v javno infrastrukturo in podporo lokalnim projektom. Aktivnosti za krepitev zaupanja med lokalno skupnostjo in Slovensko vojsko so tudi ohranjanje kontaktov in komunikacije, predstavitve aktivnosti, vrste streljanj in vrste streliva, ki se uporablja, ter načrtov in ukrepov za varovanje okolja.

Predstavniki lokalne skupnosti in poznavalci problematike, glede na število sodelujočih v intervjuju (župani občin Postojna, Pivka in Moravče, predsednik Krajevne skupnosti Prestranek, dekan Fakultete za organizacijske vede Univerze v Mariboru), manj elaborirano zaznavajo vsebino vojaških dejavnosti, ki ogrožajo okolje. Predvsem so menili, da je hrup, ki ga povzročajo vojaške dejavnosti (preleti

letal, streljanja z večjimi kalibri), agresiven, moteč in obremenilen. Tveganja izhajajo predvsem iz vojaškega prometa (nesreče, razlitja), geoloških značilnosti terena (kras, vodonosnik) in onesnaženja podtalnice. V primeru razlitja je onesnaženje podtalnice, ki napaja zajetja za oskrbo s pitno vodo, v praksi nemogoče preprečiti. Prepoznavajo tudi druge dejavnike tveganja, kot so avtocestni, regionalni, železniški in tovorni promet ter druge gospodarske panoge. Zaznane vojaške dejavnosti z negativnim (ogrožajočim) vplivom na okolje so maloštevilne in vsebinsko manj raznolike (zreducirane na hrup in skrb za pitno vodo) ter temeljijo na ugotovitvah akademskih študij in znanih rezultatih obratovalnega monitoringa.

Pomenljiva so tudi stališča poznavalcev okoljske problematike vojaških dejavnosti in predstavnikov občin, ki niso izpostavljene vplivom vojaških dejavnosti. Okoljski odtis, ki ga proizvaja vojska, izhaja iz njene temeljne dejavnosti, ki je zakonsko določena, pri čemer ne moremo trditi, da gre za namerno uničevanje okolja, saj so okoljevarstveni predpisi v Slovenski vojski natančno določeni (I. Podbregar, intervju 30. 11. 2021). To področje je v vojski še bolj urejeno v primerjavi z nekaterimi civilnimi organizacijami in gospodarskimi družbami. Sredstva, ki se občinam namenjajo iz obrambnega proračuna, se porabljajo za investicije v načrtovane projekte, od katerih ima korist tudi lokalna skupnost. Ključno je tudi strateško komuniciranje med Ministrstvom za obrambo, Slovensko vojsko in lokalno družbo s poudarkom na okoljskem vidiku civilno-vojaških razmerij. Med družbenim zaznavanjem vojaških dejavnosti z vplivom na okolje ter med realnostjo nastaja prostor, ki v negotovosti in pomanjkanju informacij med prebivalstvom lahko formira vojski nenaklonjena stališča. Pragmatična rešitev se nakazuje tudi v preoblikovanju obrambnih in notranjevarnostnih struktur, ki bi svoje naloge izvajale še bolj v korist civilne družbe, medtem ko bi umeščenost vojske v družbo izboljšali z vpeljavo javno-zasebnega partnerstva. Predstavniki občin zunaj vpliva vojaških dejavnosti menijo, da mora država z resno obrambno politiko in vojsko tej zagotoviti pogoje za usposabljanje in s tem primerne poligone (M. Balažic, intervju 4. 7. 2022). Zaželeno je, da so poligoni na primernih lokacijah, ki niso posebno moteče za okolje in prebivalstvo. V Republiki Sloveniji ni evidentnih dogodkov, pri katerih bi vojska povzročila večjo okoljsko škodo. Če bodo na vojaških poligonih nastali ekološki problemi, pa se pričakuje, da bo vojska sodelovala pri sanaciji nastale škode. Vpliv vojaških dejavnosti na okolje je sicer manjši v primerjavi z industrijskimi panogami, v katerih se okoljski predpisi izvajajo manj dosledno. Ne nazadnje marsikatera lokalna skupnost v državi nosi določeno skupno ekološko obremenitev, ki obsega tudi mirnodobne vojaške dejavnosti (strelišča, poligoni).

Sklep

Civilno-vojaška razmerja so dinamična, pri čemer gre za stalno iskanje ravnotežja, da bi sodelujoči subjekti uspešno razreševali trenja in preprečevali razvoj konfliktov. Vsebina civilno-vojaških razmerij ni enoznačna, temveč se spreminja v času. Pravzaprav prepoznavamo različne vsebine civilno-vojaških razmerij, ki jim pridružujemo tudi okoljsko dimenzijo. Okoljski vidik civilno-vojaških razmerij ima izrazito vlogo v obdobju krepitve vrednot postmodernizma, višje ekološke ozaveščenosti državljanov, večjih zahtev do vojske na okoljskem področju in

prepoznavanju določenih negativnih vplivov mirnodobnih vojaških dejavnosti na okolje. Kot navedeno, okoljski vidik civilno-vojaških razmerij predpostavlja specifičen pristop k reševanju okoljskih vprašanj, da bi sodelujoči subjekti (Ministrstvo za obrambo, Slovenska vojska, politični odločevalci, lokalna skupnost) ohranili ravnotežje med zahtevami po varstvu okolja in zagotavljanju vojaške pripravljenosti. Z vidika varstva okolja in zmanjševanja negativnih vplivov vojaške dejavnosti na okolje so obetajoča določila okoljskega vidika vključena v Resolucijo o splošnem dolgoročnem programu razvoja in opremljanja Slovenske vojske do leta 2040 (MORS, 2023). Resolucija predvideva posodobitev in gradnjo nove vojaške infrastrukture (strelišča, skladišča, namestitvene kapacitete) vključno z energetsko sanacijo. Energetska in okoljska prilagoditev vojaške infrastrukture bo izvedena sistematično in geografsko enakomerno z vključevanjem v lokalno okolje. Osrednje vadišče Slovenske vojske po resoluciji ostaja na Počku pri Postojni, pri čemer bo posodobljeno, prilagojeno potrebam sodobnih oboroženih sil in vidiku varovanja okolja. Po resoluciji je ključna obnova vadišč in strelišč, pri čemer so predvidene investicije v izgradnjo dodatnih notranjih strelišč in simulatorjev. Poček pri Postojni ostaja osrednje in najpomembnejše vadišče za vojaško usposabljanje poveljstev in enot Slovenske vojske in delno za izvajanje mednarodnega vojaškega sodelovanja, ki izhaja iz obveznosti članstva v Natu.

Sodelujoči poveljniki enot Slovenske vojske izražajo objektivno in pozitivno stališče do pomena in izvajanja ukrepov varstva okolja ter zmanjševanja negativnega vpliva vojaških dejavnosti na okolje. V splošnem so stališča poveljnikov do varstva okolja med izvajanjem mirnodobnih vojaških dejavnosti skladna z določili Natovih notranjih organizacijskih predpisov in zavezniških doktrinarnih dokumentov. Poveljniki enot Slovenske vojske dokaj objektivno in vsebinsko podrobneje opisujejo mirnodobne vojaške dejavnosti z največjim obremenilnim vplivom na okolje. To pripisujemo ekspertizi poveljnikov in poznavanju učinkov vojaških dejavnosti. Nasprotno predstavniki lokalne skupnosti manj elaborirano zaznavajo vojaške dejavnosti s škodljivim vplivom na okolje. Najpogosteje navajajo hrup (streljanja, vojaški promet), razlitja in tveganja za onesnaženje virov pitne vode. Ugotovitev pripisujemo dejstvu, da so navedene okoljske obremenitve persistenten del javnega mnenja, nepoznavanju vsebine vojaških dejavnosti in nizkemu številu sodelujočih predstavnikov lokalne skupnosti in poznavalcev v raziskavi. Sicer sodelujoči predstavniki lokalne skupnosti izražajo nekatera objektivna (zmerna) stališča glede okoljskega vidika civilno-vojaških razmerij. Tako poveljniki enot Slovenske vojske kot sodelujoči predstavniki lokalne skupnosti in poznavalci problematike pri izvajanju vojaških dejavnosti, v povezavi z okoljskim področjem, zaznavajo primere dobre prakse in določena nasprotovanja lokalne skupnosti. V tej zvezi velja izpostaviti okrepitev dobrih praks (povezanost s prebivalstvom, zgodovinska prisotnost in povezanost z vojsko, informiranje, učinkovitost enot za civilno-vojaško sodelovanje, souporaba vojaške infrastrukture in izplačevanje nadomestil, investicije v lokalno infrastrukturo, prilagodljivo načrtovanje vojaških dejavnosti, prikazne vaje, splošna zaželena prisotnost vojske, promocija projektov, ki upoštevajo okoljski vidik) ter aktivno prizadevanje za zmanjšanje negativnega vpliva tistih vojaških

dejavnosti na okolje, ki so najbolj obremenilne in moteče za lokalno prebivalstvo ali vir medsebojnega nezaupanja (hrup, dejavnosti v nočnem času, nezaupanje v verodostojnost meritev izbranih parametrov, prisotnost tujih oboroženih sil). Na mestu je tudi pobuda za revizijo tistih mirnodobnih vojaških dejavnosti, ki glede na intenziteto vpliva, obseg in frekvenco izvajanja ni združljiva z nekaterimi družbeno-geografskimi in naravnimi dejavniki na območju dosedanjega osrednjega vadišča Slovenske vojske.

V primeru vadišča Poček namreč obstajajo nekateri dejavniki (širitev naselij, razvoj turizma, značilnosti terena), ki niso združljivi s trenutno vsebino in obsegom vojaških dejavnosti na vadišču. Iz tega razloga je ključna uravnotežena politika, predvsem na strani Ministrstva za obrambo, ki bo upoštevala tako zahteve okoljske zakonodaje kot zahteve za zagotavljanje pripravljenosti Slovenske vojske. Skrb za ohranitev in trajnostno uporabo naravnega okolja je utemeljena z večjo ekološko ozaveščenostjo družbe, lokalnega prebivalstva in pripadnikov oboroženih sil. Iz tega razloga se je okrepil tudi pomen okoljskega vidika civilno-vojaških razmerij in pomen strateške komunikacije Ministrstva za obrambo in Slovenske vojske z lokalnimi oblastmi na okoljskem področju. Ne gre namreč prezreti dejstva, da je bil prav okoljski vidik povod za poznejšo zamenjavo v vojaškem vodstvu, kar negativno vpliva na ugled in zaupanje v vojaško institucijo. Neuspešno (nerodno) reševanje primera vadišča Poček lahko vodi v domino učinek predvsem pri drugih odprtih vojaških streliščih v Republiki Sloveniji, pri katerih okoljski vidik civilno-vojaških razmerij še ni obravnavan na akademski ravni. Izziv ostaja tudi možnost potenciranja protivojaškega razpoloženja na družbeni ravni in posledično upad podpore javnosti za uresničevanje ciljev nacionalnovarnostnega sistema Republike Slovenije.

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DOI: 10.2478/cmc-2024-0021

SVETOVNI PRVAKI V USPOSABLJANJU: ZAPLETENO RAZMERJE NEMČIJE Z VOJAŠKIMI SILAMI ZA SPECIALNO DELOVANJE

WORLD CHAMPIONS IN TRAINING: GERMANY'S DIFFICULT RELATIONSHIP WITH ITS MILITARY SPECIAL OPERATIONS FORCES

Povzetek Primeri skrajno desničarskega ekstremizma v nemškem poveljstvu specialnih sil kopenske vojske (Kommando Spezialkräfte Heer, KSK) se že več let uvrščajo na naslovnice mednarodnih medijev. Ogorčenje nemške javnosti in zahteva po spremembah sta ponudila priložnost za prestrukturiranje ne le KSK, temveč vseh nemških vojaških sil za specialno delovanje (GERSOF). Pričujoči prispevek zagovarja, da je celovita prenova potrebna zaradi številnih izzivov, s katerimi se spoprijemajo GERSOF, vendar je bil zagon izgubljen zaradi odnosov med nemško vlado in ključnimi deležniki, vključno z mediji. Prispevek na podlagi teorije akterjev in omrežij raziskuje te zapletene odnose in ponazarja, zakaj je vlada zapravila priložnosti za okrepitev GERSOF kot elementa nacionalne varnosti in za ponovno potrditev zavezanosti zaveznikom.

Ključne besede ***GERSOF, Kommando Spezialkräfte Heer, Kommando Spezialkräfte Marine, Nemčija, Natove sile za specialno delovanje.***

Abstract Incidents of far-right extremism in the German Kommando Spezialkräfte Heer (KSK) have captured international headlines for years. The public outcry in Germany and the demand for change offered an opportunity to restructure not only the KSK but all German Military Special Operations Forces (GERSOF). This article contends that a substantial overhaul is necessary due to the numerous challenges that GERSOF face, but that momentum was lost due to the relations between the German government and key stakeholders, including the media. Informed by the Actor-Network Theory, the article explores these intricate relations, illustrating why the government squandered the opportunities to strengthen GERSOF as an element of national security and to reaffirm its commitment to its allies.

Key words ***German Special Operations Forces, Kommando Spezialkräfte Heer, Kommando Spezialkräfte Marine, Germany, NATO Special Operations Forces.***

Introduction

The scandals broke in the spring of 2017, when German media uncovered far-right sympathies and extremism within the Kommando Spezialkräfte Heer (KSK). Several media outlets and public figures called for the disbandment of the Special Operation Force, which did not happen. Instead, three years later, then-Secretary of Defence Annegret Kramp-Karrenbauer introduced a catalogue of sixty reform measures to the public. These measures addressed key elements of the KSK, such as selection, training, career development and command-and-control (Bundesministerium der Verteidigung, 2021a). Despite the number and scope of these actions, they were, in fact, quite modest in scale. Marie-Agnes Strack-Zimmermann, then-chair of the German Parliament's Defence Committee, was among the few who—in keeping with the adage "never let a crisis go to waste"—had envisioned a more comprehensive transformation of the German Military Special Operations Forces (GERSOF). She criticised the restrained nature of the sixty measures and preferred a GERSOF overhaul which would have centralised them under the Ministry of Defence and the Inspector General, instead of allowing them to remain within their respective military services (Strack-Zimmermann, 2020; Szymanski, 2021).

This article contends that integrating GERSOF under the Ministry would have been beneficial both nationally and internationally. Nationally, it would have addressed several significant challenges faced by GERSOF. Internationally, it could have signalled support and commitment to numerous allies. Ultimately, the article suggests that the KSK scandals were a missed opportunity, and offers insights into why the German government opted for moderate rather than comprehensive reforms. To do so, it discusses the intricate relations between the government and its key stakeholders, which include the public, the media and the parliament, all of whom would have condemned any governmental initiatives perceived as empowering GERSOF.

It may be argued that redesigning the KSK, or the broader GERSOF, in a manner that would strengthen their influence on Germany's national security was inappropriate, given that some KSK personnel exhibited criminal, undemocratic and downright repulsive behaviours. However, in line with its commitment to national and collective defence (Ministry of Defence, 2023), the government could have reformed the KSK and GERSOF in a manner similar to the approaches taken by Germany's neighbouring countries and the wider European community. During the 2010s, Belgium, the Netherlands and Denmark established Special Operations Commands (SOCOMs) (Tjepkema, 2018). Poland elevated its military SOF to a military branch (Pawlikowicz, 2023). Similarly, other European nations, including Estonia and Norway, have created SOF entities (Mattelaer, 2016). Mattelaer rightly noted that "[a]cross Europe strategic-level SOF-structures have boomed" (2016, p 1). The establishment of Russia's SOCOM in 2013 likely spurred some of these governments to bolster their SOF (Baker et al., 2023). Some European countries were also motivated by financial considerations, with scholars commenting on the trend to downsize conventional armies yet to invest in the restructuring of SOF capabilities (Asklund Johnsen & Højstrup Christensen, 2016). Combining SOF "under a single, unified structure is about keeping up with international best practices and fostering

that capability with the highest return on investment in a context of austerity" (Mattelaer, 2016, p 8). Germany and its military SOF did not join these security developments, and it remains among the smaller number of countries which have not "structured their SOF appropriately, in organizational terms, to fully optimize their employment and development" (Goh, 2011, p 2). The case of GERSOF stands apart from the still ongoing trend seen elsewhere, for instance in Ireland, where the Army Ranger Wing is undergoing restructuring, and in Sweden, the newest member of the North Atlantic Treaty Organization (NATO) (Gallagher, 2023; Clark, 2024).

NATO has been adamant about improving the functionality of SOF since the mid-2000s, particularly in the realm of command and control (Goh, 2011; Taylor, 2011; Tjepkema, 2018). In 2006, the NATO SOF Coordination Center was established and, by 2010, had grown into the NATO Special Operations Headquarters (NSHQ), with participation from all NATO members and several NATO partner nations (North Atlantic Treaty Organization, 2024). As the NATO SOF continued to evolve—in 2023, NSHQ became the Allied Special Operations Forces Command to synchronise with other NATO Theatre Component Commands—Germany received multiple direct and indirect encouragements to optimise GERSOF. For instance, Admiral (ret.) William McRaven, then-commander of the United States (U.S.) SOCOM, launched the global SOF network, geared towards closer and more effective cooperative security (Robinson et al., 2018). Another initiative was the SOF institution-building advisory approach developed by NATO, in collaboration with SOCOM Europe, in 2016. It was designated to "support specific NATO Allies and select partners in their development of special operations command (SOCOM)-like structures" (Stringer, 2023, p 76). Given NATO's urging, the need to reform the KSK following the scandals offered the German government not only an opportunity to reorganise GERSOF in line with its European neighbours, but also to signal its support and commitment to its numerous NATO allies. Thus, Germany's decision not to capitalise on the KSK crisis represents a missed opportunity at both the national and international level.

To better understand the government's decision, this article takes a relational approach. It is broadly informed by the Actor-Network Theory, namely the understanding that "The actor network is reducible neither to an actor alone nor to a network ... An actor network is simultaneously an actor whose activity is networking heterogeneous elements and a network that is able to redefine and transform what it is made of" (Callon, 1987, p 93). The German government is interpreted as an actor constituted, enabled and constrained through its heterogeneous relations with the public, the media and the parliament. This approach helps to contextualise GERSOF within the complex interactions and entanglements between the three key stakeholders and the German government, suggesting why the latter did not pursue comprehensive modifications of its military SOF. An in-depth analysis of the government's intricate reasons would easily exceed the scope of this paper. Therefore, the article adopts an approach aligned with Cordella and Shaikh, who note that "[b]y limiting the level or focus of the investigation it is possible to study and understand some of the relationships that are shaping both actors and the relational networks" (2003, p 4).

To tame the complexity underlying the current topic, the article primarily pursues the goal of bringing-into-relation rather than explaining specific mechanisms behind the government's decision. Consequently, the article outlines rather than defines the respective relations, entanglements and interactions. This approach aligns with the scholarship of, for example, Norton Wise, and his concept of pursuing understanding instead of explanation as a means to address social complexity (Wise et al., 2004).

The methodological approach of making the article exploratory rather than explanatory is particularly suitable given the scarcity of scholarship on GERSOF and the numerous scholarly gaps the article confronts—all the more so, considering that the existing studies on GERSOF are largely outdated. In 2007, Timo Noetzel and Benjamin Schreer provided a crucial overview of the military and political context of GERSOF. However, their work predates the introduction of the Kommando Spezialkräfte Marine (KSM) in 2014, the most recent configuration of the German combat swimmers. The same holds true for Lars Werner's excellent 2013 enquiry into the organisational architecture of GERSOF. Werner's criticism of the limited influence of GERSOF at the strategic military level remains valid today, as this article will demonstrate. More recently, military historian Martin Rink (2022) offered an in-depth analysis of the KSK formation in the 1990s. Using archival primary sources, Rink discussed some of the military, governmental and public challenges and repercussions that the KSK faced during its establishment and early years. The scepticism towards GERSOF that Rink describes in his work is still prevalent today, as the current article will suggest.

The article consists of two parts. The first part begins with an introduction of GERSOF, including the KSK's far-right scandals, and moves on to a discussion of the challenges they experience, suggesting how they might have benefitted from a centralising restructuring. In the second part, the article turns to the critical stance of the public and the media towards GERSOF, then proceeds to outline how the parliament uses GERSOF as a pawn to question and criticise the government. In doing so, the second part presents what Wise termed "conditions of possibility" or—more appropriately in the current case—"conditions of limited possibility" for the German government, which resulted in a crisis gone to waste (Wise, 2004).

1 THE GERSOF

The KSM comprises approximately 400 personnel, while the KSK has a staff of between 1,200 and 1,500 (Geiger & Forkert, 2022; Mgb, 2024). The count of operators is significantly lower, namely in the low three-digit range for both the KSM and KSK combined (Geiger & Forkert, 2022; Berbner, 2022). International scholars predominantly focus on the KSK, particularly following the emergence of the far-right scandals. This attention often leads to the neglect of the German Combat Swimmers (Kampfschwimmer). They date back to 1958, and the first Combat Swimmers Company (Kampfschwimmer-Kompanie) formed in 1964 (Mathe, 2018). This year, on 11 July 2024, the German Combat Swimmers officially celebrated their

60th anniversary (Freytag, 2024). Despite their long history, they have not faced any public allegations of far-right extremism.

The Combat Swimmers' younger sibling, the KSK, has been operational since 1996. An internationally circulating narrative suggests that the KSK was founded in response to events during the 1994 Rwandan genocide, when German citizens had to be evacuated by the Belgian SOF due to the Germans' lack of suitable SOF capabilities. However, Rink's recent examination of archival sources suggests that as early as 1992 the German parliament and the secretary of defence were "well aware that the Bundeswehr was in some need for [sic] Special Operations Forces," with initial plans for what would become the KSK already in place by 1993, prior to the events in Rwanda (Rink, 2022, pp 166–7). Thus, the prevalent international narrative about the KSK's foundation should be treated with caution. Indeed, the Bundeswehr command has stated that the Germans in Rwanda could have been rescued by German military forces with units "already on stand-by to deploy to Africa as quickly as possible" (Busch, 2020, p 57). Ultimately, the events in Rwanda likely made it easier to persuade critics of the need for another military special operations capability.

As a maritime SOF, the KSM traditionally views bodies of water as areas of activities and combat, whereas the KSK more commonly uses them for transport. However, the KSM and the KSK share a spectrum of capabilities. These include responding to high-jackings and hostage rescues (in-extremis capabilities) as well as providing military assistance, special reconnaissance, counter-terrorism and conducting covert operations such as sabotage (Bundeswehr: Navy Special Operations Forces Command 2024; Bundeswehr: Special Operations Forces, 2024). Since 2016, the KSM and the KSK have maintained close collaboration with a squadron of the German Air Force, specifically the 4th Squadron of the 64th Helicopter Wing (Bundesministerium der Verteidigung, 2021b). Furthermore, both the KSM and the KSK rely on numerous support elements. According to an older source, these enablers constitute up to 80% of the KSK (Noetzel & Schreer, 2007). Among GERSOF enthusiasts, both the KSM and the KSK are generally considered "Tier-1" SOF, denoting the high level of their capabilities. However, the official tier system originated with the USSOF and refers to differences in command-and-control structures, rather than SOF capabilities. Tier-1 and Tier-2 forces have distinct chains of command. Due to the differences between the U.S. and German SOFs, applying the two tier-system to the latter offers little value for understanding them.

Serving under the ethos of German democracy, GERSOF personnel are expected to be "personality and conscienceguided [sic] individuals" (Behnke, 2022, p 189). According to Bundeswehr doctrine, GERSOF members, regarded as "citizens in uniform," are required to rigorously uphold and continuously defend the German constitution (Grundgesetz) (Behnke, 2022, p 189). However, the KSK has been embroiled in far-right misconduct since its formation in the 1990s (Hock & Schweppe, 2020). At that time, its personnel maintained close ties with Wehrmacht veterans, regularly inviting them to the KSK garrison in Calw (Rose, 2009). In the early

2000s, then-KSK commander Reinhard Günzel declared that the KSK's historical roots lay with the Brandenburger, an elite Wehrmacht division (Rose, 2009). "From my troops, I expect discipline akin to that of the Spartans, the Romans or the Waffen SS," Günzel stated (Rose, 2009, p 91). Some KSK personnel also exhibited right-wing ideologies during the 2000s, notably when they created and displayed insignia suggestive of the Wehrmacht Afrika Korps during their deployment to Afghanistan (Rose, 2009).

The far-right problem was not effectively addressed in the 2000s, and the extremist sympathies persisted into the 2010s. In 2015, a KSK officer and trainer began establishing a network of chat groups under the alias Hannibal. These chats were mainly used to discuss the consequences of Germany's refugee policy and potential civil war scenarios (Hock & Schweppe, 2020). At least two other KSK soldiers were involved (Hock & Schweppe, 2020). The network extended beyond an online presence: Hannibal founded the so-called Uniter Network as a non-profit organization which started out as "a network of active and former members of special forces from federal and state level police" and expanded to include individuals outside the specialized professions (Flade, 2021, p 4). In-depth investigations into Uniter revealed Hannibal's attempts to build "a right-wing prepper network" (Erb, 2020; Erb et al., 2020). An investigation against Hannibal launched in 2017.

In April 2017, a farewell party for the commander of the 2nd KSK company made the news because it included company members listening to far-right rock music and performing the Nazi salute (Grabler, Leiffels & Jolmes, 2017). Both the gesture and the use of other NSDAP party symbols are illegal in Germany. Listening to far-right music can also be deemed illegal under certain circumstances, and Bundeswehr personnel found engaging in this activity typically face investigations (Oppel et al., 2022). Other aspects of the farewell party added to the general criticism, including the hiring of a female escort for the departing commander and the tossing of a pig's head (Grabler et al., 2017; ZEIT, 2017). In May 2020, police raided the home of a member of the 2nd company who had been with the KSK since 2001. The authorities secured weapons, explosives, ammunition and numerous Nazi memorabilia (Schweppe, 2020a; ZEIT, 2020; Schaaf, 2023).

From 2017 until 2021, around 50 KSK personnel were investigated for far-right extremism (Hock & Schweppe, 2020; ZEIT Online, dpa & sls, 2021; Wehrbeauftragte des Bundestages, 2024). Depending on the figures used for KSK personnel, this represents about 3-4% of all KSK members, which may seem like a limited issue, especially if these individuals could be easily replaced. However, if the 50 or so KSK personnel were active SOF operators, the far-right problem would represent a more pronounced security concern, also because there may not have been any operators to replace them with, potentially increasing security vulnerabilities. The more comprehensive the reorganization of the KSK would have been, the higher the probability of breaking up the far-right ideologies and traditions that had festered in the KSK since its establishment.

2 GERSOF'S INTRA-MILITARY CHALLENGES

Instead of a unified command structure with joint oversight, the Army and Navy hold the stewardship of the KSK and the KSM, respectively. The KSK falls under the Army's Rapid Forces Division (Division Schnelle Kräfte), which comprises approximately 20,000 soldiers in light and highly mobile infantry (Bundeswehr: Division Schnelle Kräfte 2024). The German Army showcases the KSK as its "best trained soldiers," emphasising the force's in-extremis capabilities (Bundeswehr Service Bund, 2024). The KSM is integrated into Flotilla 1 (Einsatzflottille 1), one of the German Navy's three principal formations, which also includes corvettes, submarines, reconnaissance ships, minehunters and the naval infantry (Bundeswehr: Deutsche Marine: Flotilla 1, 2024). These units primarily focus on littoral operations, yet the KSM is adept at operating globally across various environments, including the desert.

The responsibility of the services over their respective SOF extends beyond mere administrative duties. They must ensure their SOF's operational readiness. This includes tasks such as education and training, human resources management, and material procurement. However, both branches face significant challenges in fulfilling these responsibilities. Notably, the German Kampfschwimmer lack their own swimming facility and have relied on the availability of other military pools, as their designated facility has been under construction for fourteen years and remains incomplete (Wehrbeauftragte des Bundestages, 2022; Frank, 2023; Wehrbeauftragte des Bundestages, 2023). The KSM have also encountered difficulties in obtaining essential medical equipment (Wehrbeauftragte des Bundestages, 2022). Meanwhile, the KSK highlights the scarcity of resources more generally, noting that it has managed the training and "workload of a brigade, but has [only] been equipped like a battalion" for decades (Generalinspekteur der Bundeswehr, 2021, p 30).

GERSOF's equipment challenges are not only caused by the Army and the Navy but are also rooted in the Bundeswehr's inefficient procurement system (Wohlgethan & Specht, 2023). For instance, similar to the long-awaited swimming hall, the KSM has been waiting for new rigid-hull inflatable boats (RHIBs) for years. The absence of these boats significantly impacts not only training, but also teaching (Wehrbeauftragte des Bundestages, 2023). The Bundeswehr's procurement department initially outlined a set of requirements for RHIBs that the German industry deemed technologically unfeasible (Masala, 2023). Following a revision of the requirements, the delivery of the new boats to the KSM is now anticipated by 2025 or 2026 (Deutscher Bundestag, 2023). The underlying issue is the inadequate communication between the Bundeswehr's procurement staff and the individual service branches, in this case the Navy (Masala, 2023).

This situation contrasts starkly with the ambitious plans that the government has for GERSOF. In the coming years, Germany intends to contribute the second-largest contingent of special military forces to NATO, trailing only the U.S. (Flade & Pinkert,

2022; Autorenteam Kommando Spezialkräfte, 2024). To achieve this, GERSOF will need to undergo significant expansion. The KSM will grow to contribute a second Special Operations Maritime Task Group (SOMTG) to NATO, post-2028, a third SOMTG is planned (Sünkler, 2023). This expansion requires the KSM to increase its personnel from 400 to 600, necessitating substantial structural adjustments, as outlined in the KSM2023+ plan initiated in April 2023 (Sünkler, 2023; Weisswange, 2023). This plan includes the formation of two new units: a Special Operations Boat Company and a Support Company. A KSM training centre will replace the current training group (Gruppe Ausbildung). This is not the first major transformation for the Kampfschwimmer. Their history has been characterized by organizational dynamism and adaptability, with structural changes taking place in the 1990s and 1980s (Mathe, 2018). More recently, the German Combat Swimmers were an element of the Naval Specialized Forces (Verband der Spezialisierten Einsatzkräfte Marine) alongside boarding units, clearance divers and other units (Mathe, 2018). They became an independent formation in 2014, when the KSM was established. The force's recent leadership experience during Mission Gazelle in Niger—"the largest SOF operation of the Bundeswehr in terms of the size of the task force to date"— will likely aid in managing and optimizing the growth in personnel in the years to come (Bundeswehr Journal, 2023).

Arguably the most pressing challenge currently facing both the KSM and the KSK is the persistent difficulty in finding suitable candidates. As of May 2022, only about 83% of the military positions in the KSK were filled (Flade & Pinkert, 2022). The proportion of filled operator positions was significantly lower, at approximately 67% (Flade & Pinkert, 2022). As recently as in January and March 2024, the KSK reported problems attracting enough suitable candidates (Buckenmaier, 2024; Mgb, 2024). This recruitment challenge has been an ongoing issue since the KSK's inception (Michelis, 2010). The government's response to this problem has been inadequate. German policymakers exhibit a contradictory stance, committing GERSOF to more significant roles within NATO, while failing to furnish the force with the necessary resources, infrastructure and other forms of support. By integrating and unifying the service-specific SOF capabilities into a joint capability within the German Ministry of Defence (Bundesministerium der Verteidigung), an organizational restructuring could have mitigated some of the KSK's and the KSM's problems. This approach would have allowed GERSOF to consolidate their resources, exert more influence in the procurement process, and eliminate unnecessary functional redundancies.

Prior to the implementation of the KSK reform catalogue, the highest military authority for both the KSM and the KSK within the Ministry of Defence was Section SE I 5, situated in the military intelligence department. Due to its limited authority, this section was unable to provide significant long-term stewardship to GERSOF. Its role at the military-strategic level primarily involved issuing recommendations on special operations and advising on SOF to other staff elements within the Ministry (Werner, 2013). An advantage of SE I 5 was that it provided a clear point of access to GERSOF at the military-strategic level. This changed with the introduction of the

KSK reforms. As of July 2024, the Ministry's organigram indicates that GERSOF are now represented in three of the Ministry's departments: (1) the Department of Military Strategy, Deployment and Operations (Abteilung Militärstrategie, Einsatz und Operationen), (2) the Department of Planning (Abteilung Planung) and (3) the Department of Armament (Abteilung Rüstung) (Organisationsplan BMVg, 2024). This current organizational structure places GERSOF in a more compartmentalized, hierarchical and procedural organizational environment than before—a situation typically cautioned against (Goh, 2011; Svendsen, 2014; Dalgaard-Nielsen, 2017). The organizational fragmentation contrasts with the European trend towards centralizing SOF at the military-strategic level, and is likely to further impede GERSOF jointness and readiness while perpetuating previous difficulties.

Moreover, the new organizational set-up separates GERSOF from the military intelligence elements to which SE I 5 belonged. This separation may result in the suboptimal utilization of SOF capabilities, particularly in securing intelligence relevant to national interests and security. Additionally, it further isolates the German SOF from their counterparts in other European countries. In Italy, for instance, intelligence agencies have increasingly been working closer with the SOF (Moon, 2018).

The current organizational structure also leads to a closer cooperation between GERSOF and their conventional counterparts, which may create additional challenges. SOF are perceived as non-hierarchical, less bureaucratic and prone to bending rules, often displaying a lack of respect for higher-ranking officers and other authorities (Dalgaard-Nielsen & Falster Holm, 2019). Conventional forces are, in many ways, the opposite of SOF, and may find fault with SOF's mindset and values. Historically, this has led to a less efficient and effective cooperation while increasing the risk of conventionalizing SOF through tasks and processes unsuited for them (Cohen, 1978; Clancy, 2001; King & White, 2017; McIntosh, 2022; Gielas, 2024).

3 THE PUBLIC PERCEPTION OF GERSOF

During the investigations of 2017 and the following years, the sentiment that Germany might not need the KSK and, by extension, GERSOF as a whole, emerged in some segments of German society (Deutsche Friedensgesellschaft, 2021). At times, hostility towards the military SOF overshadowed the discussion about the future of the force (Redaktionsnetzwerk Deutschland, 2021). Some members of the German parliament (Bundestag) vocally expressed their adversarial views, contending that Kramp-Karrenbauer, along with the government, failed to recognize "the fact that the special force, established in 1996, operates as an insular barracked men's club, significantly detached from any democratic control" (Deutscher Bundestag, 2022, p 2). These parliamentarians questioned whether the KSK was reformable at all. Additionally, various media outlets and public figures voiced scepticism about the continued existence of the KSK (Heyer, 2021; LabourNet, 2023).

The situation was compounded by earlier experiences with the KSK, particularly during its deployments to Afghanistan following the events of 9/11 (Deutscher Bundestag, 2010; Schaaf, 2023). These missions were the most publicized KSK operations to date. Political decision-makers sent 100 KSK operators to Afghanistan in 2001, and the force remained there, with fluctuating numbers, until the evacuation operations in Kabul in 2021 (Ehrhart, 2011; Berbner, 2022; Uzulis, 2024). The involvement of the Kampfschwimmer in Afghanistan remains unclear (Schaaf, 2023). The newspaper Tagesspiegel reported, "Targeted killings by Bundeswehr SOF have definitely been ruled out by the Ministry of Defence. However, the Bundeswehr's KSK have been deployed to eliminate networks of extremists" (Müller, 2010). The KSK was temporarily embedded in the U.S. command-and-control structure and participated in several engagements against Taliban and al-Qaeda forces, including the Battle of Tora Bora and Operation Anaconda (Bleibohm, 2014). The operations of the KSK were the object of permanent suspicion and speculation. German politicians and national security experts fuelled public speculation about potential human-rights abuses in Afghanistan, including Winfried Nachtwei, who noted that GERSOF personnel were "out of reach of parliamentary control" (Nachtwei, 2011, p 207; Fröhling, 2008; Rose, 2009). Resisting public examination, the KSK appeared "a priori illegal and immoral" to the German public, which values transparency and openness as the hallmarks of a healthy democratic society (Horn, 2012, p 112).

The public's distrust and scepticism have not been limited to GERSOF but generally apply to the Bundeswehr as a whole. According to some experts, these attitudes are rooted in Germany's experiences during the Second World War (Müller, 2022; Biggs, 2023). The international press frequently quotes Bundeswehr personnel with statements such as, "A lot of Germans think of us as murderers. They hate us. And those that don't hate us couldn't care less about us" (Barkin, 2019). Germans generally pride themselves on their democratic values and generally like to view themselves as a "largely civilian and peaceful society" (Masala, 2023, p 13).

The KSK fighting alongside the USA in Afghanistan appeared to significantly diverge from the typical German self-perception. The situation was particularly complex because it marked the first time since the Second World War that German soldiers were involved in high-intensity combat (Bleibohm, 2014; Schulze & Beucker, 2016). The Germans envisioned a very different involvement in Afghanistan. Discussing the situation in and around Kunduz, former Inspector General Harald Kujat encapsulated how most Germans would have preferred Bundeswehr's engagement in Afghanistan: "[I]n contrast to the South, the conditions there were stable and the prospects for success good. A limited deployment, a calm region, no war – just reconstruction; that is something for the Bundeswehr" (Bleibohm, 2014, p 52).

The German public, especially critics of the SOF, viewed their scepticism towards the KSK as justified when media outlets reported on the case of Murat Kurnaz in 2006. Kurnaz, a Turkish citizen born in Germany, accused a KSK operator of mistreatment in an Afghan detention camp (Deutscher Bundestag, 2008). The Bundestag conducted

an investigation but found no evidence of abuse (Löwenstein, 2011). However, the media covered the case extensively over a span of two years, and again when Kurnaz published a book about the events, which became a bestseller (Buchreport, 2007). The prolonged media attention reinforced the belief among some segments of the German public that the KSK might be using its secrecy to conceal misconduct and abuse. The relationship between German society and the SOF further deteriorated due to the far-right incidents in 2017.

The media-based dialogue between GERSOF and the public is notably limited. Rare television airtime remains underutilized. For instance, when a former KSM commander appeared on a popular German talk show, the discussion did not address the civil-SOF relationship or KSM's contributions to national security; instead, the focus was on the rigorous training of the combat swimmers. The general lack of engagement in meaningful dialogue perpetuates the estrangement between the German public and one of its most complex national security instruments. The overall strained civil-military relations were a central reason why Angela Merkel's government was more invested in avoiding further public disapproval than reforming GERSOF in a manner that would allow them to fulfil their responsibilities more effectively, both within and outside NATO.

4 GERSOF AND THE POLITICAL DECISION-MAKERS

The German government generally seems reluctant to deploy the KSK and the KSM for missions beyond those endorsed by NATO, the European Union and the United Nations. In an interview with the German daily Frankfurter Allgemeine Zeitung, a member of the KSK noted, "We are world champions in training" (Hemicker, 2020). Following a visit to Calw, where the KSK is stationed, and conducting interviews with its personnel, a journalist from the weekly Die Zeit commented, "The German elite soldiers hardly ever fight" (Berbner, 2022; Schaaf, 2023). This observation was echoed by yet another media report stating that the "deployment load of the KSK ... has been low" (Flade & Pinkert, 2022). Concerns about potential backlash from the media and the public—coupled with criticism from the Bundestag—make the government hesitant to deploy SOF, especially fearing the repercussions of failed special operations.

Additionally, decision-makers seem to have low confidence in the military force. According to a KSK soldier, this is because "[t]he KSK lacks a Mogadishu"—a reference to the 1977 hijacking of the Lufthansa Boeing Landshut (Hemicker, 2020). During this incident, the German police SOF, Grenzschutzgruppe 9 (GSG 9), rescued the hostages, thereby cementing their positive reputation among the German public and political elites (Hemicker, 2020). In contrast, the KSK remains the government's last resort option rather than a first-choice instrument for national security.

The KSM has encountered similar situations, for instance during a hostage crisis in 2009, when Somali pirates seized control of the German freighter Hansa-Stavanger.

On 5 April 2009, a Combat Swimmer Task Force assembled at their home base in Eckernförde and set out for Mombasa, Kenya. From there, they continued to the frigate Mecklenburg-Vorpommern. As one source reported on the rapid deployment:

Immediately after arrival at the airport of Mombasa, personal equipment was reduced to a minimum so that the [parachute] jump was feasible and an emergency access capability was immediately guaranteed; weapons, ammunition, radio, a few spare batteries, night vision equipment, ballistic protection. Five of the jumpers were snipers … In the evening hours of April 7, 2009, we reached our DOP [drop-off point] ... A short time later, we were standing on the deck of the Mecklenburg-Vorpommern, which would become our home for the next five weeks (Weisswange, 2022).

From the time of the alert to the time of their arrival in the area of operation, it took the Combat Swimmers 54 hours and positioned them for an in-extremis operation. The German legal framework ensures the legality of military SOF operations to end hostage situations outside Germany's borders, particularly in conflict and war zones (Busch, 2020). However, rivalry between different ministries sparked a debate over whether the military or police SOF should resolve the hostage situation (Busch, 2020). Ultimately, the German government opted against deploying any SOF and chose to pay a ransom. Given the seeming underutilization of both the KSM and the KSK, and the perception of the KSK as a source of recurring problems, it would have been challenging for the government to justify an organizational scale-up for GERSOF rather than the KSK's down-regulation following the scandals.

The relationship between GERSOF and the parliament is similarly complex. The KSK and the KSM do not provide sufficient subject-matter expertise to the Bundestag. Instead, they face recurring challenges from both the left and right wings of parliament. In the wake of the KSK scandals, members of the Left Party parliamentary group called for the disbandment not only of the implicated 2nd KSK company, but also the entire KSK (Schweppe, 2020b; Lücking, 2021; Käppner & Szymanski, 2021). Another issue for GERSOF is the support from the right-wing party Alternative für Deutschland (AfD). The AfD parliamentarians have criticized the manner in which the investigations into the KSK were conducted, particularly condemning the actions of the Military Counterintelligence Service, which they regarded as "an attack on [the] human dignity" of the KSK personnel (Deutscher Bundestag, 2021, p 1). Such support from the AfD might inadvertently reinforce public perception of the force as aligning with right-wing ideology, making it increasingly difficult for the government to strengthen and invest in GERSOF in the same way as other European states do with their SOF.

For German parliamentarians across the political spectrum, GERSOF offer a means to question and, in some cases, potentially discredit the government. In the past, Bundestag members have criticized the administration for making GERSOF a "force of the executive and not an integral part of a parliamentary army" (Rose, 2009, p 74).

More recently, the KSM's military assistance mission in Niger, known as Mission Gazelle, sparked a power-struggle debate. This mission took place in the context of the European Union's Training Mission in Mali, which had received Bundestag approval. Consequently, the government authorized Mission Gazelle without seeking explicit permission from parliament. The government justified its decision by defining the KSM's mission not as a deployment of armed forces where 'soldiers of the Bundeswehr are involved in armed operations or an involvement in an armed operation is to be expected' (Seyffarth, 2018, p 20). In essence, the government did not anticipate KSM to become involved in violent incidents. According to legal scholars, the government's approach was correct, and no Bundestag authorization for Gazelle was required (Busch, 2020). However, after the Ministry of Defence published details about the mission, some Bundestag members criticized the government in the German media (Busch, 2020). These parliamentarians pointed out the significant risk of terrorist attacks and ambushes faced by the KSM soldiers in Niger, referencing past incidents such as the Tongo Tongo ambush where U.S. Army Special Forces operators lost their lives (Hunt Friend, 2018). The parliamentarians argued that an armed confrontation could realistically be expected. Following a publicized debate, the German government officially submitted a request to the Bundestag to authorize the KSM mission retrospectively, which the Bundestag ultimately did (Gebauer & von Hammerstein, 2019; Carstens, 2019; Johnson, 2019; Forkert, 2020; RedaktionsNetzwerk Deutschland, 2020). Because GERSOF are closely associated with the risk of such mediatized power struggles between the government and the parliament, the former is more likely to avoid both explicit support and organizational upgrades of GERSOF.

Conclusion

The KSK scandals made changes necessary, generating momentum for a structural reorganization of GERSOF. This paper has argued that the situation presented the German government with an important opportunity: organizational restructuring could have prevented redundant capabilities and competition among the KSM and the KSK, enhanced their interoperability, facilitated an efficient division of labour, and allowed them to pool resources. Thus, a comprehensive overhaul could have addressed pressing challenges and would have fostered the effective long-term stewardship of GERSOF, including their firmer integration into the military portfolio and the national security strategy. Additionally, it would have aligned GERSOF with other European countries and NATO's SOF initiatives, signalling Germany's commitment to collective defence. However, the media's, parliament's and public perception of the KSK specifically and GERSOF in general over the last roughly twenty-five years reverberated along the heterogenous, relational strands and shaped the German government's preference for moderate reforms. As instruments of national security, SOF "require careful attention and political calibration" (Mattelaer, 2016, p 3). Influenced by its key stakeholders, the German government has not demonstrated such nuanced management. GERSOF have been underutilized and chronically neglected.

According to special warfare lore, a SOF operator encircled by adversaries thinks, "Great, I have surrounded them from within!" Let us stay with such unconventional thinking for a moment. Last year, GERSOF had only one point of access to the Ministry of Defence, now it has three. As part of the sixty measures, they are now overseen by a Special Forces Advisory Board under the direction of the Inspector General, meaning that the highest echelon of the Bundeswehr, which previously may have seldom considered the KSK and KSM, may now do so routinely (Deutscher Bundestag, 2022). In other words, while the German government did not perceive the KSK scandals as an opportunity, GERSOF may view them as such, for better or worse.

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DOI: 10.2478/cmc-2024-0022

IZOGIBANJE »DIGITALNEMU 7. OKTOBRU«: ŠTUDIJA O KIBERNETSKEM VOJSKOVANJU PROTI IZRAELU MED VOJNO OKTOBRA 2023

AVOIDING A 'DIGITAL 7 OCTOBER': A STUDY ON CYBERWARFARE AGAINST ISRAEL DURING THE OCTOBER 2023 WAR

Povzetek Palestinska militantna skupina Hamas je 7. oktobra 2023 začela obsežno skupno ofenzivo proti Izraelu. Hkrati s kinetičnimi napadi so različni povzročitelji kibernetskih groženj, ki jih pripisujejo Hamasu, Hezbolahu, Iranu in Rusiji, sprožili kibernetske napade na izraelske informacijske sisteme v komercialnem, industrijskem in vladnem sektorju. Ta prispevek analizira te kibernetske napade in izraelske protiukrepe na področju kibernetske varnosti. Čeprav je Izrael sicer vzdržal napad kibernetskega napadalca »digitalni 7. oktober«, ključne ugotovitve kažejo na to, da lahko tovrstni napadi znatno vplivajo na različne institucije in jim povzročijo škodo ter da je treba tako v Izraelu kot po svetu temeljito spremeniti opredelitev kibernetske obrambe in odpornosti, zlasti kar zadeva civilno družbo in infrastrukturo.

Ključne besede ***Izrael, Hamas, kibernetsko vojskovanje, kibernetska varnost, hibridno vojskovanje.***

Abstract On 7 October, 2023, the Palestinian militant group Hamas launched a massive combined offensive against Israel. Concurrent with the kinetic attacks, various cyber threat actors attributed to Hamas, Hezbollah, Iran, and Russia initiated cyberattacks targeting Israeli information systems across commercial, industrial, and governmental sectors. This paper analyses these cyberattacks, as well as Israel's cybersecurity countermeasures. Key findings indicate that while Israel was able to withstand the »Digital 7 October« onslaught from cyber attacker, the attacks demonstrated the potential to significantly impact and damage different institutions; the need for a fundamental shift in defining cyber defence and resilience, especially regarding the civil society and infrastructure, in Israel and worldwide.

Key words ***Israel, Hamas, cyber warfare, cyber security, hybrid warfare.***

Introduction

„The potential for the next Pearl Harbor could very well be a cyber-attack".
(Leon Panetta, CIA Director, 11 February 2011) (ABC News, 2011)

On 7 October 2023, at 06:30 local time, Hamas launched a comprehensive attack, simultaneously firing thousands of rockets toward populated villages deep within Israel and launching waves of massive invasion and raids on the towns and villages near the Gaza border, resulting in a massacre in which 1,200 civilians and soldiers were killed and 250 living and dead hostages were abducted to Gaza. The massacre led to an ongoing Israel Defense Forces (IDF) war in Gaza, named „Operation Iron Swords".

Just minutes after the Hamas raid, a massive and ongoing cyberattack targeted the computer systems and websites of Israeli commercial and industrial companies, governmental agencies and institutions (Kahan, 2023c). These cyberattacks continued with diverse intensity, scope, duration, complexity and success rates, carried out by around a hundred different cyber actors, mainly Iranian-backed cyber actors („Agrius", „CyberAv3ngers", „Adl Ali") with Hamas („Gaza Cybergang") and Hezbollah („Lebanese Cedar") collaboration, and Russian-affiliated groups („Killnet" and „Anonymous Sudan"). In addition to these were „Team_Insane_Pakistan" and „The Mysterious" groups, „Black Cyber Army" and „Anon Ghost", among others, most of them anti-Israeli and pro-Palestinian groups (Check Point Research, 2023; CYFIRMA, 2023; Kahan, 2023f; Meyran, 2023; Milenkoski, 2023; Mimran, 2023; Recorded Future, 2023; Wullman, 2023; Andriani, 2024). The cyber-attacks had two goals: to steal sensitive information, including personally identifiable information and intellectual property, and to cause significant damage and destruction by deleting data and harming critical operational systems.

This research aims to analyse both the cyberattacks targeted at Israel from 7 October 2023 onwards and the countermeasures put in place, by examining various publications in Hebrew and English published by local and foreign media outlets and governmental agencies, including the Israel National Cyber Directorate (INCD). Even though the Directorate's website has versions in English, Arabic, Russian, French, Spanish, and Hebrew, only some publications are available in English. For example, the Israel Internet Association's survey of March 2023 revealed that just 1% of the INCD web pages were available in Arabic (14 pages translated into Arabic, of 1,572 in Hebrew), and only 5% in the survey of January 2024 (The Israel Internet Association (ISOC-IL), 2023b, 2024). For this reason, the Hebrew version of the relevant publications was used in those cases.

The research goals are as follows: (1) to analyse the cyberattacks imposed on Israel from 7 October 2023, their types and perpetrators, and the damage and implications; (2) to analyse the official Israeli countermeasures and recommendations, mainly from the INCD; and (3) to analyse the lessons that should be learned in Israel and worldwide.

The research employs a qualitative research method, based on public analyses and reports by various international and local cyber security research corporations and Israeli governmental institutions and NGOs, to analyse the cyber threats and attacks on Israel during the conflict from October 2023 onwards.

The limitations of this research are (1) reliance on public analyses and reports due to the lack of access to classified information – this means that the study's scope is limited to publicly known incidents and may not cover covert operations or unreported attacks; (2) challenges in attributing cyber-attacks and separating fact from potential disinformation campaigns; (3) the study's scope is limited to the time after October 2023, so the availability of data is limited to a specific short timeframe – future studies will have a broader time perspective; (4) geopolitical factors and state involvement can lead to biases or blind spots in reporting/analysis.

1 CYBER THREATS

1.1 Cyberwarfare

During the war, cyber-attacks and operations were aimed at two main targets: machines (computerized systems) and human beings (media consumers). The cyber-attacks may target either information technology to leak and destroy data and for website defacement, or operation technology to damage and destroy operating systems of infrastructure, companies and organizations, in addition to different online influences and psychological operations against Israeli citizens and internet users to generate and disseminate Fake News and even attempts to engage them in online spying against their own country.

The INCD stated in a report, published at the end of December 2023, that the offensive cyber activity against Israel during the fighting in Gaza gradually intensified (Israel National Cyber Directorate, 2023j). The attacks evolved from simple ones, such as the defacement of websites and theft of information, to more sophisticated and targeted ones aimed at harming organizations which were primarily critical infrastructures. These attacks were intended to disrupt and damage activity and create a wide-ranging effect by attacking companies which act as a supply chain for numerous organizations. The cyber-attacks included DDoS attacks[1] (including against Israel's government website system at gov.il, a day after the Hamas raid). In most cases, the disturbances had only minor effects, if any, in addition to website defacement[2],

[1] *"A denial of service technique that uses numerous hosts to perform the attack." (National Institute of Standards and Technology (NIST), no date a)*

[2] *"Defacement (also website or web defacement) is an attack on a website that alters its visual appearance or informational content. Often, cybercriminals add messages of a social, religious or political nature, or swear words and other text that is unrelated to the subject of the site. Defacement can be described as graffiti in electronic form. People who deface websites are called defacers." (Kaspersky IT Encyclopedia, no date)*

phishing attacks[3], leaks and deletion of information, and even use of malware by Hamas (BiBi-Linux wiper) against Israel with „capabilities that resemble that of an advanced cyber weapon“ (Bestuzhev, 2023; Check Point Research, 2023; Kahan, 2023d, 2023a, 2023e; Yoachimik and Pacheco, 2023).

Gil Shwed, founder and CEO of Check Point, has asserted an 18% increase in cyber-attacks on Israel since the beginning of the war, with most of the attacks aimed at government agencies, marking a jump of 52% in attacks on government websites. Most of these were „not very sophisticated“. He reported that the number of ransomware attacks were double that of the previous year, which included „slightly more sophisticated“ attacks perpetrated by „close to a hundred Iranian, Russian and other groups which attack at the same time“ (Shulman, 2023).

On 16 November 2023, „Cyber Toufan Al-Aqsa“ claimed responsibility for one of the most prominent attacks during the war on Gaza, one which had sustained implications, targeting Signature-IT, an Israeli website hosting and online shopping solutions company. In their written statement, the attackers claimed to have been able to steal data files totalling approximately 16 GB, and to have wiped and destroyed over one thousand servers and critical databases belonging to over 150 victims, among them leading commercial and industrial companies and governmental institutions and ministries, while disrupting their online activity (Security Joes, 2023; Pines, 2024). Among a dozen others, the Israel State Archives was targeted with devastating and evident implications. Since the attack, the following message has been displayed on both versions, English and Hebrew, of the website: „The company that hosts the website of the Israel State Archives has undergone a cyber-attack. Unfortunately, the attack has disrupted the services enabling you to search the site and to view archival material“ (Israel State Archives, no date). Indeed, for at least three months, any search on the web for any document has led the user to the same error page.

On 1 December 2023, the US and Israel‘s security and cyber authorities announced that the Iranian Government Islamic Revolutionary Guard Corps (IRGC) affiliated cyber actors, CyberAv3ngers, had published „both legitimate and false claims“ of attacks against Israeli systems in the water, energy, shipping, and distribution sectors between 18 September and 30 October 2023. A claim of responsibility from 18 October argued that over 50 servers, security cameras, and smart city management systems in Israel had been compromised, but the „majority of these claims were proven false“. Another wave of attacks began on 22 November 2023, with compromising default credentials in the Israeli company Unitronics’ devices used in control and automation systems, indicating that these attacks had already affected several states across the US (Cybersecurity & Infrastructure Security Agency (CISA), 2023; Israel National Cyber Directorate, 2023b).

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[3] *“A technique for attempting to acquire sensitive data, such as bank account numbers, through a fraudulent solicitation in email or on a web site, in which the perpetrator masquerades as a legitimate business or reputable person.” (National Institute of Standards and Technology (NIST), no date b)*

On 18 December 2023, the INCD reported on a combined attempt by Iran and Hezbollah to disrupt Ziv hospital's operations. The directorate's statement declared that the orchestrated attack „ultimately failed", but at the end of the third (of five) paragraph, the statement admits: „However, the attackers managed to extract private data stored in the hospital's systems" (Israel National Cyber Directorate, 2023i). Indeed, local media outlets reported the hacker's claim of possessing „over 500 gigabytes of information, including 700,000 medical documents, among which 100,000 pertain to the IDF", and shared screenshots of medical documents dating back to 2022 (Ben Shushan, 2023).

The waves of cyber-attacks on Israel harmed a wide range of targets from various sectors. Local media outlets indicated that the computer systems of the municipality of Elad had been hacked: „the attackers succeeded in disrupting the communication systems but not extracting information" (Kolodetsky, 2024). The websites of two relief groups providing aid to Israel and Gaza were also under cyber-attack (Siddiqui, 2023). Ono Academic College was attacked by a hacker group named „Malek Team", where „approximately 250,000 records, including sensitive student information, were targeted in the attack, „putting the privacy and security of its students at risk (Israeli Financial Insider, 2023; Mann, 2023b). The Israeli daily The Jerusalem Post was targeted by multiple cyberattacks the day after the Hamas onslaught (Hindustan Times, 2023).

1.2 Cyber Espionage

During the Gaza war, several reports indicated various online attempts by Iran and its affiliates to gather information and intelligence on relevant local assets.

Between November 2023 and January 2024, the Israel Security Agency (ISA) and the Israeli Defense Forces (IDF) uncovered and thwarted Hamas and Iranian attempts to recruit Israelis and extract sensitive information from IDF soldiers over various social media platforms, including Telegram and Instagram, and to carry out spying missions in favour of Iran, including assassination, in exchange for money, while also exacerbating social divisions in Israel. The agency indicated that since the beginning of the war, it had identified that „the activity efforts of Iranian security forces have greatly intensified, while using digital space for the purposes of intimidation, conveying messages or advancing terror activity" (Ben Kimon, 2023; CTech, 2023; Fabian, 2024; Zitun, 2024).

In December 2023 the INCD reported on cyber-attacks against web and security cameras (CCTV), aimed at damaging the ability to use this equipment to maintain the required security of physical space, and as attempts to gather intelligence from the areas observed by these cameras (Israel National Cyber Directorate, 2023d).

1.3 Influence Operations

Alongside the offensive cyber-attacks, there has been evidence of numerous online attempts at information warfare, mainly by Hamas, using old and new media to generate fake news. Some has been disguised as coming from local, right-wing, politically-motivated Israeli actors, but also some of the fake news and conspiratory theories have really been circulated by local, right-wing, politically-motivated Israeli actors, with and without sophisticated technology (IDF, no date; Ring, 2023).

AI – The Israel Internet Association has indicated that most distributed fake news has included images and content already published and reused during the war, in some cases images allegedly of Palestinians, mainly children wounded or in poverty, and fake social network profiles and pages generated by Artificial Intelligence (AI) as part of pro-Palestinian information warfare. In this regard, Israeli research from February 2024 revealed pro-Palestinian usage of AI to produce fake Hebrew messages using Chat GPT, to be disseminated in Hebrew channels on social media (Mann, 2023a; The Israel Internet Association (ISOC-IL), 2023a; Abu Ali Express, 2024a; Shwartz Altshuler and Yasur, 2024).

Fake News – Israeli research has unveiled fake reports of conspiracy theories of „the Enemy Within", allegedly an internal betrayal of the Israeli political and military establishment which supposedly cooperated with Hamas to enable the unbearable catastrophe aimed at undermining and overthrowing the Israeli prime minister and its right-wing government. These conspiracies were produced by both external and internal actors, disseminated from marginal Telegram channels into the Israeli mainstream, and echoed by local right-wing politicians (BZ, 2023; Czerny, 2024b).

A fake report published on 11 January 2024, in Hebrew, allegedly about three 8200 unit officers being killed in Iran's missile attack on Erbil in Iraq, was posted on a probably fabricated website under the name of the „Jerusalem Times" (Abu Ali Express, 2024b). In addition, during the war pro-Palestinian hackers released a leaked file on 6.5 million Israelis, which had already been stolen and published in 2021 (Kahan, 2023g).

Harassment – Online activities involving harassment and intimidation have served as a primary method of influence to instil fear, uncertainty and doubt (Irwin, 1998) among Israelis during the war. A week after Hamas' raid and the beginning of the war, pro-Palestinian hackers disseminated an impersonated rocket alert application (RedAlert) on the Google Play Store. The same was reported in August 2018 when Hamas tried to take control of cellular devices and enable tracking and outgoing calls (Melman, 2018). Others exploited a vulnerability in another application (Red Alert: Israel) and sent fake alerts to some app users, including a message that a „nuclear bomb is coming" (Cluley, 2023; Darché et al., 2023).

As part of the cyber-attack on the Israeli company Signature-IT, the attackers managed to gain access to mailing lists „stored on the company's servers, through which they

distributed SMS messages and emails with hateful messages to thousands of Israelis" by spoofing the email address so it looked as if it had been sent from signature-it.com (Kabir, 2023; see also Pines, 2024). Another online psychological influence operation was reported at the end of October 2023, while many Israelis reported „disturbing video and audio calls on WhatsApp" from unknown numbers, which immediately disconnected. Fake messages and links were sent to the smartphones, emails and digital platforms of Israeli users, officials and government ministers, with the justice minister claiming to have received over 40,000 such messages (Eichner, 2023b, 2023a; Ifargan, 2023; Kahan, 2023b). The INCD believed that the calls and messages originated from Hamas supporters, and did not cause any damage to phones nor gain unauthorized access (Walla!, 2023).

Another method of influence was to display harassing messages publicly. In one case, a hacked billboard displayed the Palestinian flag, and in another, pro-Palestinian Turkish hackers targeted Israeli cinema advertising screens, projecting threatening messages in Hebrew and offensive 7 October massacre images (Check Point Research, 2023; I24NEWS, 2023; Kutub, 2024).

Anti-Israel Content – Various social media and platforms, such as Telegram and TikTok, were flooded with anti-Israeli content by Hamas supporters, while TikTok denied pushing pro-Palestinian content and allegedly failed to remove thousands of videos supporting terrorism (Eichner, 2023c; Reuters, 2023; Zohar, 2023), Telegram partially blocked Hamas channels, some of which posed as pro-Israel channels scams for donations (Kahan, 2023h; Mann, 2023c).

Domestic Influence – Several local researchers unveiled a „poison machine", an online, local, right-wing, politically-motivated campaign aimed at influencing the regional general public in favour of the current government; creating constant incitement against political opponents and gatekeepers, such as the media and the judiciary law enforcement, the public service and the security establishment; inciting parts of Israeli society against each other, including by opposing and undermining the protests against the government, among them the families of those kidnapped and taken to Gaza; and demanding the Israeli government act for their immediate release, including by releasing Hamas prisoners (BZ, 2023; Shem Ur, 2023; Agari, 2024a, 2024b; Czerny, 2024b; Fake Reporter, 2024).

A unique phenomenon was revealed and reported in January 2024, in which Israelis tried persistently to modify the Hebrew version of Wikipedia's articles about events and local military officers, political figures and groups regarded as affiliated to the left wing of Israeli politics, in order to put the blame and responsibility for the Hamas attack on them, alongside modification attempts of Wikipedia's article about right-wing ministers and political figures to minimize their blame and responsibility for the catastrophe under the pretext of „removing marginal information", with an attempt to emphasize their alleged contribution to preventing and minimizing it (Czerny, 2024a).

Another domestic influence operation against Israelis was reported on 12 December 2023, claiming the IDF Operations Directorate's Influencing Department, which is responsible for psychological warfare operations against the enemy and foreign audiences, operated a Telegram channel called ‚72 Virgins – Uncensored' which targeted Israeli audiences with „exclusive content from the Gaza strip" including „the bodies of Hamas terrorists". A military official denied the reports, admitting on 4 February 2024 that „its staff was behind the graphic Gaza Telegram channel" (Kubovich, 2023, 2024).

1.4 Cryptocurrencies and Online Crowdfunding

Terrorist organizations, Hamas among them, use the internet and social media as a platform to raise funds for their terrorist operations, including through cryptocurrencies (Monroe, 2023). The US Deputy Treasury Secretary, Wally Adeyemo, stated that „cryptocurrencies are still used by terrorist groups like Hamas, but their use is limited compared to more traditional alternatives" (Binance News, 2023).

Over the years, the National Bureau for Counter-Terror Financing of Israel (NBCTF) has seized millions of ILS (the new Israeli shekel) worth hundreds of cryptocurrency digital wallets linked to Hamas (National Bureau for Counter Terror Financing of Israel, 2021, 2022b, 2022a, 2023a), the Quds force, a branch of Iran's Islamic Revolutionary Guard Corps, and Hezbollah (National Bureau for Counter Terror Financing of Israel, 2023b). During the war in Gaza, reports have indicated that Hamas allegedly used cryptocurrencies to receive financial support from Iran while evading detection (Berwick and Talley, 2023). The NBCTF published a list of „ongoing crowd-funding campaigns run by Hamas and other terrorist designated entities", indicating that „since the outbreak of the „Swords of Iron" war, there has been a significant increase in the scope of online crowdfunding campaigns„ (National Bureau for Counter Terror Financing of Israel, no date).

Over 100 Hamas-linked cryptocurrency accounts on Binance, the world's largest cryptocurrency exchange, accounting for about half of all crypto activity, have been closed since 7 October 2023, which has led to the largest settlements in history, with a leadership change and fine of over 4.3 Billion USD on Binance for not guarding against money laundering. It „failed to implement safety programs aimed at preventing suspicious transactions" to Hamas, the Palestinian Islamic Jihad, Al Qaeda and the Islamic State of Iraq and Syria (ISIS) (Binance Blog, 2023; Bushard, 2023; Harty and Sutton, 2023; United States Department of Justice, 2023; US Department of the Treasury, 2023; Versprille, 2023).

However, there are claims that Israel failed to halt Hamas' cryptocurrency fundraising which meant that „in certain instances, action was taken only after 7 October, by which point the majority of the funds had already been withdrawn" (Czerny, 2023).

2 ISRAEL'S COUNTERMEASURES

To confront these cyberattacks, the INCD issued several general recommendations for the public (Israel National Cyber Directorate, 2023o) and small and medium businesses on how to mitigate malicious online activities (Israel National Cyber Directorate, 2023p), alongside specific recommendations, mainly in Hebrew. The directorate launched a campaign to „empower citizens in discerning fake news and enhancing online security amid the rising prevalence of digital disinformation" (Israel National Cyber Directorate, 2023e), alongside a similar campaign by the Israel Internet Association (The Israel Internet Association (ISOC-IL), no date); guidelines about warning signs for hacked social media accounts (Israel National Cyber Directorate, 2023f); how to recognize and avoid phishing (Israel National Cyber Directorate, 2023g, 2023h); a recommendation to replace webcam passwords immediately (Israel National Cyber Directorate, 2023m);, and how to protect children from improper online material (Israel National Cyber Directorate, 2023r), including during online distance learning (Israel National Cyber Directorate, 2023k). In addition, the INCD issued several cyber warnings about Iranian cyber-attacks (Israel National Cyber Directorate, 2023t, 2023c), a planned phishing attack (Israel National Cyber Directorate, 2023q) and reports summarizing the cyber-attacks during the war (Israel National Cyber Directorate, 2023d).

The INCD has launched several initiatives to improve local and national cyber resilience, such as the TITAN project (Team for Information Threat Analysis and Neutralization) „to generate the sharing of technical information in a rapid and reciprocal manner between all parties involved in order to maximise the realisation of the collective ability of the community to identify and prevent cyber-attacks as early as possible" (Israel National Cyber Directorate, 2024); a marketplace of cyber defence solutions by local vendors, free of charge for a limited time (Israel National Cyber Directorate, 2023l, 2023n); a working group to confront fake news (Israel National Cyber Directorate, 2023s), and a forum for the cyber events Incidents Response service local providers (Israel National Cyber Directorate, 2023a).

On 26 December 2023, the Knesset (Israeli Parliament) approved a temporary provision for a seven-month „Bill authorising Cyber Directorate, Israeli Security Agency and Director of Security of the Defense Establishment to instruct digital or storage service supplier to take measures to detect, prevent, or contain cyber-attack", aiming to „provide an effective response for coping with the challenges the State of Israel faces in the cyber field". It authorized the INCD, when faced with a cyber-attack, „to instruct the attacked [digital or storage service supplier] to take measures to detect, prevent, or contain the attack" (The Knesset, 2023).

Conclusion

The ground invasions of Israeli villages by Hamas terrorists on 7 October 2023 were accompanied by days and weeks of cyber-attacks on Israeli digital assets, which caused some damage, mainly to information technology, at least in terms of stolen information, alongside various information operations.

The first days and weeks of the war marked an intensification of the quantity and quality of cyber offensive activities across Israel and demonstrated the blending of kinetic and non-kinetic means of warfare into a ‚hybrid warfare', with various and contradictory motivations, and actors aiming to leverage cyberspace as an added battlefield to harm Israel's critical information and operation systems and create chaos, and to tear Israeli society apart by spreading fake news and conspiracy theories by external and even internal political actors, including nation state-based cyber-actors and more than a hundred pro-Palestinian cyber groups, hacktivists, cybercriminals and cyber-terrorists, and even Israeli politically-motivated fake news and conspiracy theory originators and distributors.

Similar to the physical military dimension, Israel is seen as a regional and even a global cyber power, mainly in the light of its capabilities in technology development, intelligence and offensive uses of cyber tools. However, Israel must conduct a reassessment and a strategic conceptual change relating to the cyber protection of its digital and physical assets. Although this round of cyber-attacks and operations did not have as much critical damage and impact as the physical attacks, the cyber-attacks and online influence operations demonstrated the need to redefine concepts such as „cyber power" and „cyber resilience" of states and organizations.

A future ‚Digital 7 October' could include cyber onslaughts by various cyber actors, with diverse motivations and levels of sophistication, carrying out ‚hybrid warfare', which could affect information systems by leaking sensitive information or destroying the system itself and other vital infrastructure, alongside influence operations to manipulate the general population according to the attackers' agenda, and even cyber espionage operations. An alarming conclusion is the involvement of local politically motivated actors in generating and disseminating fake news and conspiracy theories which can find their way from the margins to mainstream media outlets, alongside attempts to rewrite history by the manipulation of Wikipedia articles.

We must avoid a ‚Digital 7 October' in Israel and worldwide, as it could have consequences many times more severe, since cyber-attacks on vital infrastructure and information systems can yield tangible, kinetic outcomes that disrupt local operations and can lead to extensive chaos and collateral damage in a modern state. Preparedness should include not only technological means and capabilities, but also a comprehensive perspective of cyber capabilities and the resilience of the private and government sectors. Bruce Schneier stated in April 2000 that „security is a process, not a product. Products provide some protection, but the only way to effectively do business in an insecure world is to put processes in place that recognise the inherent insecurity in the products. The trick is to reduce your risk of exposure regardless of the products or patches" (Schneier, 2000).

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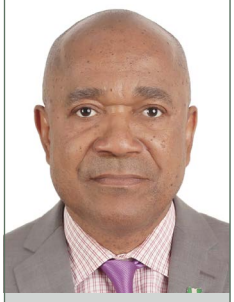
Liliana Brožič

Izred. prof. dr. Liliana Brožič je doktorirala na Fakulteti za državne in evropske študije Nove univerze. Na Ministrstvu za obrambo Republike Slovenije je zaposlena od leta 1996. Delala je na področjih obveščevalnovarnostne dejavnosti, kadrov, vojaškega izobraževanja in usposabljanja ter odnosov z javnostmi. Od leta 2009 je urednica Sodobnih vojaških izzivov. Od leta 2022 je vodja Oddelka za vojaško tehnologijo, raziskave in razvoj. Dodatno je zaposlena kot dekanja na Fakulteti za državne in evropske študije. Habilitirana je na področju varnostnih študij.

Assoc. Prof. Liliana Brožič, PhD, *holds a PhD from the Faculty of Government and European Studies of the New University. She has worked at the Ministry of Defence of the Republic of Slovenia since 1996 in the fields of intelligence and security, human resources, military education and training, and public relations. Since 2009, she has been the editor of the Contemporary Military Challenges. Since 2022, she has been Head of the Military Technology, Research and Development Section. She also works as Dean of the Faculty of Government and European Studies. She holds a habilitation in Security Studies.*



Chinedu Simplicius Udeh

Dr. Chinedu Simplicius Udeh je diplomiral iz političnih ved na Univerzi v Kalabarju, magistriral iz političnih ved na Univerzi v Lagosu in doktoriral iz mednarodnih odnosov na Univerzi v Abuji, vse v Nigeriji. Zaposlen je kot vodilni uslužbenec in glavni raziskovalec na Nacionalnem obrambnem kolidžu v Nigeriji. Je gostujoči izredni profesor na Oddelku za politologijo in mednarodne odnose na Univerzi Nil v Nigeriji. Raziskovalno se ukvarja z obrambno ekonomijo, nacionalno in mednarodno varnostjo, nadzorom orožja in razorožitvijo ter uporništvom.

Chinedu Simplicius Udeh, PhD, *holds a Bachelor of Science degree in Political Science from University of Calabar, an MSc in Political Science from the University of Lagos, and a PhD in International Relations from University of Abuja, all in Nigeria. He works as a Directing Staff and Principal Research Fellow at the National Defence College, Nigeria. He is a visiting Associate Professor in the Department of Political Science and International Relations, Nile University of Nigeria. His research interests are in the fields of defence economics, national and international security, arms control and disarmament, as well as insurgency.*

Matic Bališ

Matic Bališ je magister obramboslovja, leta 2023 je magistriral na Fakulteti za družbene vede. Njegova magistrska naloga ima naslov Analiza ruske zračne prevlade na primeru invazije na Ukrajino. Zaposlen je kot svetovalec na Ministrstvu za obrambo Republike Slovenije. Njegova področja zanimanja so geopolitika, preučevanje konfliktov in oborožitveni sistemi. Je član mladinske sekcije Evro-atlantskega sveta Slovenije.

Matic Bališ *has a Master's degree in Defence Studies, obtained in 2023 at the Faculty of Social Sciences. His Master's thesis was entitled 'An Analysis of Russian Air Superiority in the Case of the Invasion of Ukraine'. He is employed as an adviser at the Ministry of Defence of the Republic of Slovenia. His areas of interest are geopolitics, conflict studies and weapons systems. He is a member of the Youth Section of the Euro-Atlantic Council of Slovenia.*

Vladimir Prebilič

Dr. Vladimir Prebilič je izredni profesor na Katedri za obramboslovje Fakultete za družbene vede Univerze v Ljubljani. Na dodiplomskem študiju predava predmete Vojaška zgodovina, Obramboslovna geografija in Temelji EU ter na podiplomski stopnji Geopolitiko. Njegove raziskovalne teme so sodobno državljanstvo, patriotizem, vojaška zgodovina in lokalna samouprava. Njegova osebna bibliografija obsega 545 bibliografskih enot; med njimi je avtor več kot 70 člankov in sedmih knjig. .

Vladimir Prebilič, PhD, *is an Associate Professor at the Department of Defence Studies in the Faculty of Social Sciences of the University of Ljubljana. He lectures in Military History, Defence Geography and the Basics of the EU at the undergraduate level, and in Geopolitics at the postgraduate level. His research topics include contemporary citizenship, patriotism, military history and local self-government. His body of work comprises 545 items; among them he is the author of more than 70 articles and 7 books.*

Silvo Grčar

Silvo Grčar je univ. dipl. pol. (smer Obramboslovje), mag. varstvoslovja (modul Obveščevalno-varnostna dejavnost) in doktorski študent na Fakulteti za varnostne vede Univerze v Mariboru, zaposlen v Slovenski vojski. Njegovi raziskovalni interesi vključujejo ekološko kriminologijo, okoljsko varnost, nacionalno in mednarodno varnost, obramboslovje in nacionalno varnostni sistem.

Silvo Grčar *has a B. POL. SC. (Defence Studies) and M. A. in Criminal Justice and Security Programme (Module: Intelligence and Security Activity) and is a Ph. D. student at the Faculty of Criminal Justice and Security, University of Maribor, and in active service at Slovenian Armed Forces. His research interests include green criminology, environmental security, national and international security, defense studies, and the national security system. He combines his professional experience with research interests.*

Andrej Sotlar

Dr. Andrej Sotlar je redni profesor za varnostne vede na Fakulteti za varnostne vede Univerze v Mariboru. Njegovi raziskovalni interesi vključujejo področja nacionalne varnosti, pluralne policijske dejavnosti in zasebnega varstva. V zadnjem desetletju je sodeloval pri raziskovalnih projektih s področja varnosti v lokalnih skupnostih, urbane varnosti, pluralne policijske dejavnosti, radikalizacije in ekstremizma, zasebnega varovanja, detektivske dejavnosti in občinskega redarstva.

Andrej Sotlar, PhD, *is a full professor of security sciences at the Faculty of Criminal Justice and Security, University of Maribor. His research interests include national security, plural policing, and private security. In the last ten years, he has participated in research projects in the field of security and safety in local communities, urban security, plural policing, radicalization and extremism, private security, private detective activity, and municipal policing.*

Katja Eman

Dr. Katja Eman je izredna profesorica za kriminologijo na Fakulteti za varnostne vede Univerze v Mariboru. Njeni raziskovalni interesi vključujejo kriminologijo – zlasti ekološko in ruralno kriminologijo –, viktimologijo, penologijo, preprečevanje kriminalitete in kartiranje kriminalitete. V okviru študija na področju ekološke kriminologije je (so) avtorica publikacij o kriminaliteti in kazenskem pravosodju, vključno z žrtvami kriminalitete na splošno in žrtvami ekološke kriminalitete. V zadnjem desetletju je sodelovala pri različnih nacionalnih in evropskih raziskovalnih projektih.

Katja Eman, PhD, *is an Associate Professor of Criminology at the Faculty of Criminal Justice and Security, University of Maribor. Her research interests include criminology – especially green and rural criminology – victimology, penology, crime prevention, and crime mapping. She has (co) authored publications on crime and criminal justice, including crime victims in general and victims of environmental crime, as part of her studies in the field of green criminology. In the past decade, she participated in different national and European research projects.*

Dr. Anna M. Gielas je doktorirala iz zgodovine na Univerzi St Andrews (Združeno kraljestvo), pred kratkim pa je bila individualna štipendistka Marie Skłodowska-Curie na Univerzi Cambridge (Združeno kraljestvo). Pridobila je tudi magisterij iz političnih ved, trenutno pa pripravlja drugo doktorsko disertacijo, ki se osredotoča na vojaške sile za specialne operacije (vojne študije).

Anna M. Gielas, PhD, *holds a PhD in the History of Science from the University of St Andrews (UK) and, most recently, was as a Marie Skłodowska-Curie Actions Individual Fellow at the University of Cambridge (UK). She also earned a Master's degree in Political Science and is currently working on her second doctoral thesis, which focuses on military special operations forces (War Studies).*

Tal Pavel

Dr. Tal Pavel je doktoriral iz bližnjevzhodnih študij na Univerzi Bar-Ilan v Izraelu (disertacija: »Spremembe vladnih omejitev uporabe interneta v Siriji, Egiptu, Savdski Arabiji in Združenih arabskih emiratih med letoma 2002 in 2005«). Je docent, raziskovalec in govornik v Izraelu in po svetu, specializiran za geopolitične vidike kibernetske varnosti - stične točke med mednarodnimi odnosi, politologijo in kibernetskim prostorom. Ti vključujejo kibernetske konflikte, kibernetsko vojno, kibernetske grožnje, kibernetske akterje nacionalnih držav, kibernetsko diplomacijo, kibernetski terorizem in hektivizem.

Tal Pavel, PhD, *holds a PhD in Middle Eastern Studies from Bar-Ilan University, Israel (Dissertation: »Changes in Governmental Restrictions over the Use of the Internet in Syria, Egypt, Saudi Arabia and the United Arab Emirates between 2002 and 2005«). He is an assistant professor, researcher, and speaker in Israel and worldwide, specializing in the geopolitical aspects of cybersecurity – the tangent lines between international relations, political science, and cyberspace. These include cybered-conflicts, cyber warfare, cyber threats, nation-state cyber actors, cyber diplomacy, cyber terrorism, and hacktivism.*

Navodila za avtorje

Instructions to authors

NAVODILA ZA AVTORJE

Vsebinska navodila

Splošno

Sodobni vojaški izzivi je interdisciplinarna znanstveno-strokovna publikacija, ki objavlja prispevke o aktualnih temah, raziskavah, znanstvenih in strokovnih razpravah, tehničnih ali družboslovnih analizah z varnostnega, obrambnega in vojaškega področja ter recenzije znanstvenih in strokovnih monografij (prikaz knjige).

Vsebina

Objavljamo prispevke v slovenskem jeziku s povzetki, prevedenimi v angleški jezik, in po odločitvi uredniškega odbora prispevke v angleškem jeziku s povzetki, prevedenimi v slovenski jezik.
Objavljamo prispevke, ki še niso bili objavljeni ali poslani v objavo drugi reviji. Pisec je odgovoren za vse morebitne kršitve avtorskih pravic. Če je bil prispevek že natisnjen drugje, poslan v objavo ali predstavljen na strokovni konferenci, naj to avtor sporoči uredniku in pridobi soglasje založnika (če je treba) ter navede razloge za ponovno objavo.
Objava prispevka je brezplačna.

Tehnična navodila

Omejitve dolžine prispevkov

Prispevki naj obsegajo 16 strani oziroma 30.000 znakov s presledki (avtorska pola), izjemoma najmanj 8 strani oziroma 15.000 znakov ali največ 24 strani oziroma 45.000 znakov.
Recenzija znanstvene in strokovne monografije (prikaz knjige) naj obsega največ 3.000 znakov s presledki.

Recenzije

Prispevki se recenzirajo. Recenzija je anonimna. Glede na oceno recenzentov uredniški odbor ali urednik prispevek sprejme, če je treba, zahteva popravke ali ga zavrne. Pripombe recenzentov avtor vnese v prispevek.
Zaradi anonimnega recenzentskega postopka je treba prvo stran in vsebino oblikovati tako, da identiteta avtorja ni prepoznavna.
Avtor ob naslovu prispevka napiše, v katero kategorijo po njegovem mnenju in glede na klasifikacijo v COBISS, spada njegov prispevek. Klasifikacija je dostopna na spletni strani revije in pri odgovornem uredniku. Končno klasifikacijo določi uredniški odbor.

Lektoriranje

Lektoriranje besedil zagotavlja OE, pristojna za založniško dejavnost. Lektorirana besedila se avtorizirajo.

Navajanje avtorjev prispevka

Navajanje avtorjev je skrajno zgoraj, levo poravnano.
Primer:
Ime 1 Priimek 1,
Ime 2 Priimek 2

Naslov prispevka

Navedbi avtorjev sledi naslov prispevka. Črke v naslovu so velike 16 pik, natisnjene krepko, besedilo naslova pa poravnano na sredini.

Povzetek

Prispevku mora biti dodan povzetek, ki obsega največ 800 znakov (10 vrstic). Povzetek naj na kratko opredeli temo prispevka, predvsem naj povzame rezultate in ugotovitve. Splošne ugotovitve in misli ne spadajo v povzetek, temveč v uvod.

Povzetek v angleščini

Avtorji morajo oddati tudi prevod povzetka v angleščino. Tudi za prevod povzetka velja omejitev do 800 znakov (10 vrstic).

Ključne besede

Ključne besede (3–5, tudi v angleškem jeziku) naj bodo natisnjene krepko in z obojestransko poravnavo besedila.

Besedilo

Avtorji naj oddajo svoje prispevke na papirju formata A4, s presledkom med vrsticami 1,5 in velikostjo črk 12 pik Arial. Na zgornjem in spodnjem robu naj bo do besedila približno 3 cm, levi rob naj bo širok 2 cm, desni pa 4 cm. Na vsaki strani je tako približno 30 vrstic s približno 62 znaki. Besedilo naj bo obojestransko poravnano, brez umikov na začetku odstavka.

Kratka predstavitev avtorjev

Avtorji morajo pripraviti kratko predstavitev svojega strokovnega oziroma znanstvenega dela. Predstavitev naj ne presega 600 znakov s presledki (10 vrstic, 80 besed). Avtorji naj besedilo umestijo na konec prispevka po navedeni literaturi.

Strukturiranje besedila

Posamezna poglavja v besedilu naj bodo ločena s samostojnimi podnaslovi in ustrezno oštevilčena (členitev največ na 4 ravni).
Primer:
1 Uvod
2 Naslov poglavja (1. raven)
2.1 Podnaslov (2. raven)
2.1.1 Podnaslov (3. raven)
2.1.1.1 Podnaslov (4. raven)

Oblikovanje seznama literature

V seznamu literature je treba po abecednem redu navesti le avtorje, na katere se sklicujete v prispevku, celotna oznaka vira pa mora biti skladna s **harvardskim načinom navajanja**. Če je avtorjev več, navedemo vse, kot so navedeni na izvirnem delu.

Primeri:

a) knjiga:

Priimek, ime (začetnica imena), letnica. *Naslov dela*. Kraj: Založba.

Na primer: Urlich, W., 1983. *Critical Heuristics of Social Planning*. Chicago: University of Chicago Press.

b) zbornik:

Samson, C., 1970. Problems of information studies in history. S. Stone, ur. *Humanities information research*. Sheffield: CRUS, 1980, str. 44–68. Pri posameznih člankih v zbornikih na koncu posameznega vira navedemo strani, na katerih je članek, na primer:

c) članek v reviji

Kolega, N., 2006. Slovenian coast sea flood risk. Acta geographica Slovenica. 46-2, str. 143–167.

Navajanje virov z interneta

Vse reference se začenjajo enako kot pri natisnjenih virih, le da običajnemu delu sledi še podatek o tem, kje na internetu je bil dokument dobljen in kdaj. Podatek o tem, kdaj je bil dokument dobljen, je pomemben zaradi pogostega spreminjanja www okolja.

Primer:

Urlich, W., 1983. *Critical Heuristics of Social Planning*. Chicago: University of Chicago Press, str. 45–100. http://www.mors.si/index.php?id=213, 17. 10. 2008.

Pri navajanju zanimivih internetnih naslovov v besedilu (ne gre za navajanje posebnega dokumenta) zadošča navedba naslova (http://www.vpvs.uni-lj.si). Posebna referenca na koncu besedila v tem primeru ni potrebna.

Sklicevanje na vire

Pri sklicevanju na vire med besedilom navedite priimek avtorja, letnico izdaje in stran. *Primer:* … (Smith, 1997, str. 12) …

Če dobesedno navajate del besedila, ga ustrezno označite z narekovaji, v oklepaju pa poleg avtorja in letnice navedite stran besedila, iz katerega ste navajali.

Primer: … (Smith, 1997, str. 15) …

Pri povzemanju drugega avtorja napišemo besedilo brez narekovajev, v oklepaju pa napišemo, da gre za povzeto besedilo. *Primer*: (po Smith, 1997, str. 15). Če avtorja navajamo v besedilu, v oklepaju navedemo samo letnico izida in stran (1997, str. 15).

Slike, diagrami in tabele

Slike, diagrami in tabele v prispevku naj bodo v posebej pripravljenih datotekah, ki omogočajo lektorske popravke. V besedilu mora biti jasno označeno mesto, kamor je treba vnesti sliko. Skupna dolžina prispevka ne sme preseči dane omejitve.

Če avtor iz tehničnih razlogov grafičnih dodatkov ne more oddati v elektronski obliki, je izjemoma sprejemljivo, da slike priloži besedilu. Avtor mora v tem primeru na zadnjo stran slike napisati zaporedno številko in naslov, v besedilu pa pustiti dovolj prostora zanjo. Prav tako mora biti besedilo opremljeno z naslovom in številčenjem slike. Diagrami se štejejo kot slike.

Vse slike in tabele se številčijo. Številčenje poteka enotno in ni povezano s številčenjem poglavij. Naslov slike je naveden pod sliko, naslov tabele pa nad tabelo. Navadno je v besedilu navedeno vsaj eno sklicevanje na sliko ali tabelo. Sklic na sliko ali tabelo je: ... (slika 5) ... (tabela 2) ...

Primer slike:

Slika 5: Naslov slike

Primer tabele:

Tabela 2: Naslov tabele

Opombe pod črto

Številčenje opomb pod črto je neodvisno od strukture besedila in se v vsakem prispevku začne s številko 1. Posebej opozarjamo avtorje, da so opombe pod črto namenjene pojasnjevanju misli, zapisanih v besedilu, in ne navajanju literature.

Kratice

Kratice naj bodo dodane v oklepaju, ko se okrajšana beseda prvič uporabi, zato posebnih seznamov kratic ne dodajamo. Za kratico ali izraz v angleškem jeziku napišemo najprej slovensko ustreznico, v oklepaju pa angleški izvirnik in morebitno angleško kratico.

Format zapisa prispevka

Uredniški odbor sprejema prispevke, napisane z urejevalnikom besedil MS Word, izjemoma tudi v besedilnem zapisu (text only).

Naslov avtorja

Prispevkom naj bosta dodana avtorjeva naslov in internetni naslov ali telefonska številka, na katerih bo dosegljiv uredniškemu odboru.

Kako poslati prispevek

Na naslov uredništva ali članov uredniškega odbora je treba poslati elektronsko različico prispevka.

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Uredniški odbor avtorju pisno potrdi prejetje prispevka.

Korekture

Avtor opravi korekture svojega prispevka v treh dneh.

Naslov uredniškega odbora

Ministrstvo za obrambo
Generalštab Slovenske vojske
Sodobni vojaški izzivi
Uredniški odbor
Vojkova cesta 55
1000 Ljubljana
Slovenija

Elektronski naslov uredništva:
svi-cmc@mors.si

Prispevkov, ki ne bodo urejeni skladno s tem navodilom, uredniški odbor ne bo sprejemal.

INSTRUCTIONS FOR THE AUTHORS OF PAPERS FOR THE CONTEMPORARY MILITARY CHALLENGES

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The Contemporary Military Challenges is an interdisciplinary scientific expert magazine, which publishes papers on current topics, researches, scientific and expert discussions, technical or social sciences analysis from the security, defence and military field, as well as overviews of professional and science monographs (book reviews).

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The translation of the papers or abstracts is provided by the organizational unit competent for translation or the School of Foreign Languages, DDETC.

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The authors' name should be written in the upper left corner, aligned left.
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The title of the paper is written below the listed authors. The letters in the address are bold with font size 16. The text of the address is centrally aligned.

Abstract

The paper should have an abstract of a maximum 800 characters with spaces. The abstract should present the topic of the paper in short, particularly the results and the findings. General findings and reflections do not belong in the abstract, but rather in the introduction.

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The authors must also submit the translation of the abstract into English. The translation of the abstract is likewise limited to a maximum of 900 characters with spaces (12 lines).

Key words

Key words (3-5 also in the English language) should be bold with a justified text alignment.

Text

The authors should submit their papers on a A4 paper format, with a 1,5 line spacing written in Arial and with font size 12. At the upper and the bottom edge, there should be approx. 3 cm of space, the left margin should be 2 cm wide and the right margin 4 cm. Each page consists of approx. 30 lines with 62 characters. The text should have a justified alignment, without indents at the beginning of the paragraphs.

A brief presentation of the authors

The authors must prepare a brief presentation of their expert or scientific work. The presentation should not exceed 600 characters (10 lines, 80 words). These texts should be placed at the end of the paper, after the cited literature.
The author's photo should be at least 600 kb or 200 dpi in size.

Text structuring

Individual chapters should be separated with independent subtitles and adequately numbered.
Example:
1 Introduction
2 Title of the chapter (1st level)
2.1 Subtitle (2nd level)
2.1.1 Subtitle (3rd level)
2.1.1.1 Subtitle (4th level)

Referencing

In the bibliography only the authors of the references you refer to in the paper have to be listed alphabetically. The entire reference has to be in compliance with the **Harvard referencing style**.

Example:

Surname, name (can also be the initial of the name), year. *Title of the work.* Place. Publishing House.

Example A:

Urlich, W., 1983. *Critical Heuristics of Social Planning*. Chicago: University of Chicago Press.

At certain papers published in a collection of papers, at the end of each reference a page on which the paper can be found is indicated.

Example B:

Urlich, W., 1983. *Critical Heuristics of Social Planning*. Chicago: University of Chicago Press. pp. 45-100.

Referencing internet sources

All references start the same way as the references for the printed sources, only that the usual part is followed by the information about the internet page on which the document was found as well as the date on which it was found. The information on the time the document was taken off the internet is important because the WWW environment constantly changes.

Example C:

Urlich, W., 1983. *Critical Heuristics of Social Planning*. Chicago: University of Chicago Press. p. 45-100. http://www.mors.si/index.php?id=213, 17 October 2008.

When referencing interesting WWW pages in the text (not citing an individual document) it is enough to state only the internet address (http://www.vpvs.uni-lj.si). A separate reference at the end of the text is therefore not necessary.

More on the Harvard referencing style in the A Guide to the Harvard System of Referencing, 2007; http://libweb.anglia.ac.uk/referencing/harvard.thm#1.3, 16 May 2007.

Citing

When citing sources in the text, indicate only the surname of the author and the year of publication. *Example*: ..... (Smith, 1997) …

If you cite the text literary, that part should be adequately marked »text«…after which you state the exact page of the text in which the cited text is written.

Example: …(Smith, 1997, p 15) …

Figures, diagrams, tables

Figures, diagrams and tables in the paper should be prepared in separate files that allow proofreading corrections. The place in the text where the picture should be inserted must be clearly indicated. The total length of the paper must not surpass the given limitation.

If the author cannot submit the graphical supplements in the electronic form due to technical reasons, it is exceptionally acceptable to enclose the figures to the text. In this case the author must write a sequence number and a title on the back of each picture and leave enough space in the text for it. The text must likewise contain the title and the sequence number of the figure. Diagrams are considered figures.

All figures and tables are numbered. The numbering is not uniform and not linked with the numbering of the chapters. The title of the figure is listed beneath it and the title of the table is listed above it.

As a rule at least one reference to a figure or a table must be in the paper.

Reference to a figure or a table is: … (figure 5) …… (table 2) ……

Example of a figure:

Figure 5: Title of the figure

Example of a table:

Table 2: Title of the table

Footnotes

Numbering footnotes is individual form the structure of the text and starts with the number 1 in each paper. We want to stress that the footnotes are intended for explaining thoughts written in the text and not for referencing literature.

Abbreviations

When used for the first time, the abbreviations in the text must be explained in parenthesis, for which reason non additional list of abbreviations is needed. If the abbreviations or terms are written in English, we have to write the appropriate Slovenian term with the English original and possibly the English abbreviation in the parenthesis.

Format type of the paper

The editorial board accepts only the texts written with a MS Word text editor and only exceptionally texts in the text only format.

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Each paper should include the author's ORCID, address, e-mail and a telephone number, so the editorial board could reach him or her.

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