HUMAN SECURITY CHALLENGES IN THE BALTIC SEA REGION AND LESSONS FOR THE REPUBLIC OF BULGARIA

Fl. Adm. Prof. DSc Boyan Mednikarov
Assoc.Prof. Dr. Siyana Lutzkanova
Asist. Prof. Yordanka Peteva

Nicola Vaptsarov Naval Academy

Abstract 2

The aggression of the Russian Federation against Ukraine in 2022 has fundamentally transformed the security paradigm, shifting the focus from a state-centric approach to human security. This paper analyzes this shift in the Baltic Sea region - NATO's and the European Union's critical eastern flank - by examining hybrid threats such as disinformation, energy coercion, instrumentalized migration, and infrastructure sabotage, as well as the resilience-oriented „Comprehensive Security" model adopted by states like Finland, Sweden, and Estonia. In contrast, the Bulgarian case highlights primarily internal vulnerabilities, including exposure to cognitive warfare, centralized critical infrastructure, and demographic decline in border regions. The study concludes that investment in human security - education, healthcare, energy independence, and civil protection—constitutes a strategic imperative and a core component of national defense and sovereignty in the 21st century.

Keywords: human security, hybrid threats, comprehensive security, Baltic region, Black Sea region, cognitive warfare, disinformation.

INTRODUCTION

The aggression of the Russian Federation against Ukraine in February 2022 did not merely alter the geopolitical map of Europe; it triggered a tectonic shift in the very understanding of the concept of

„security.” In the Baltic Sea region - the critical northern flank of NATO and the European Union - this transformation is most palpable. Here, the concept of security is undergoing a fundamental evolution, moving beyond the narrow confines of traditional military analysis.

For a long time, the dominant „state-centric” approach, focused on the protection of borders, territorial sovereignty, and military parity, was considered a sufficient guarantor of stability. However, the reality of the war in Ukraine, along with the intensification of hybrid actions by Russia and Belarus, has exposed the shortcomings of this model. When threats manifest not only in the form of tank columns but also through energy coercion, disinformation, instrumentalized migration, and sabotage of critical infrastructure, the state as an institution often proves too slow and cumbersome to respond effectively.

This has necessitated an imperative transition toward a „human-centered” approach (Human Security). This concept, which until recently was primarily discussed within the academic circles of the United Nations, has now become an operational necessity for frontline states - Estonia, Latvia, Lithuania, Poland, and Finland. The focus is shifting from regime survival to the preservation of individual well-being, physical safety, and mental resilience.

Today, security on the Alliance’s eastern flank depends not only on the availability of modern weapons systems but also directly on the resilience of the individual and the capacity of society to function under pressure. When citizens are protected from „fear and want,” they become active components of defense rather than passive victims.

The present study pursues three main objectives:

- To provide a theoretical overview of the concept of human security and its applicability in contemporary conflict.
- To analyze the specific threats in the Baltic region through the lens of the seven dimensions of human security (from economic to environmental).
- To derive critically important lessons for the Republic of Bulgaria. As a state located on another key flank - the Black Sea region - Bulgaria faces similar hybrid challenges but often responds with different, sometimes inadequate, instruments.

An analysis of the Baltic experience - from the Finnish model of „comprehensive security” to Ukrainian decentralization - offers not merely a basis for comparison but a roadmap for the necessary reforms in Bulgaria’s national security system.

I. Theoretical Foundations of the Concept of Human Security

The emergence of the concept of human security represents one of the most significant developments in political science and international relations over the past 30 years. It marks a transition from the protection of state borders to the protection of the people living within them - namely, a shift from a state-centric to a people-centric approach (Kaldor 2007).

1.1. Theoretical Foundations of the Concept

Traditionally, security theories - particularly Realism - focus on state security. Within this framework (Hampson et al. 1998):

- **Referent object:** The state (territory, sovereignty).
- **Primary threat:** Military aggression from other states.
- **Instrument of protection:** Armed forces, nuclear deterrence, and military alliances.

The Theoretical Shift toward Human Security:

The end of the Cold War revealed that, for the average individual, threats rarely originate from a foreign army. Instead, they are associated with hunger, disease, repression, environmental disasters, or civil conflict (Commission on Human Security 2003; Kaldor 2007)

The conceptual foundation of human security was articulated in the 1994 *Human Development Report* of the United Nations Development Programme (UNDP) (United Nations Development Programme 1994). Its principal intellectual architect was the Pakistani economist Mahbub ul Haq. This framework introduced a new focus:

- **Referent object:** The individual (the human being).
- **Primary objective:** Ensuring survival, livelihood, and dignity.

The 1994 report asserts that, for ordinary people, security is not merely the absence of war, but security in everyday life.

The theoretical underpinning initially rests on two fundamental freedoms, as defined by the United Nations and developed by theorists such as Amartya Sen and Mahbub ul Haq (Haq 2008):

1. **Freedom from Fear:**
    - Focuses on protection from violence, including not only war but also ethnic conflict, crime, terrorism, domestic violence, and abuse of power by authorities.
    - **Theoretical argument:** A state cannot be considered secure if its citizens live in constant fear for their lives, even in the absence of an external enemy.
2. **Freedom from Want:**

- Focuses on economic and social security, including access to food, water, healthcare, and shelter.
- **Theoretical argument:** Poverty and inequality act as „silent killers," often claiming more lives than wars and creating conditions for future conflict.

In subsequent UN developments—particularly in Kofi Annan's 2005 report *In Larger Freedom* - a third pillar was added (UN General Assembly 2005):

3. **Freedom to Live in Dignity:**
   - Focuses on the rule of law, human rights, and democratic governance.
   - **Theoretical argument:** It serves as a bridge between security and development. An individual may be well-fed and protected from war, but without a voice, or when subjected to humiliation and discrimination, their „human security" remains incomplete.

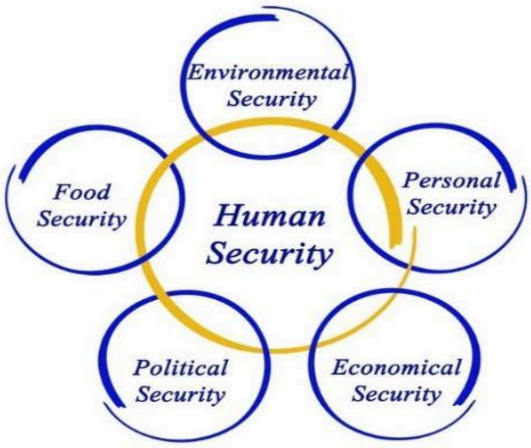


Figure 1

The Seven Dimensions of Human Security

According to the 1994 UNDP report, security is an integrated concept composed of seven interrelated components. The theory posits that a breakdown in one dimension can trigger cascading failures in others (e.g., drought leads to famine, famine to migration, and migration to conflict) (United Nations Development Programme 1994) .

Dimension	Description of Threats
1. Economic Security	Lack of guaranteed basic income, unempl inflation
2. Food Security	Physical and economic access to essential food
3. Health Security	Infectious diseases (pandemics), limited ac healthcare
4. Environmental Security	Pollution, resource depletion, natural disasters
6. Community Security	Loss of traditions, ethnic tensions, discriminati
7. Political Security	Human rights violations, lack of der accountability

Table 1

1.2. Theoretical Schools: Narrow vs. Broad Interpretations

Within academic discourse, an ongoing debate has further developed the concept of human security:

The Narrow School focuses primarily on *freedom from fear*. It is commonly associated with the so-called "Canadian approach" and emphasizes protection from violent threats, such as anti-personnel landmines, small arms proliferation, and the use of child soldiers. Proponents argue that expanding the concept to include issues such as poverty renders it analytically imprecise and overly diffuse (Tadjbakhsh, Chenoy 2006).

The Broad School, by contrast, emphasizes a combination of *freedom from fear* and *freedom from want*. It is associated with the "Japanese approach" and the United Nations, incorporating development as a core component. This perspective maintains that peace and development are mutually reinforcing: there can be no sustainable peace without development, and no development without peace. It further argues that hunger and disease claim far more lives than armed conflict, and that security cannot be meaningfully achieved in conditions of extreme deprivation - even in the absence of war. The interdependence is central: poverty can lead to conflict, while conflict, in turn, deepens poverty (Commission on Human Security 2003; Kaldor 2007).

Comparative Analysis: Traditional vs. Human Security

Characteristic	Traditional Security (Realism)	Human Security
Referent Object	The state (territory, sovereignty)	The individual (people)
Primary Threat	Other states, military aggression	Disease, crime, pollution, hunger
Instruments	Armed forces, nuclear deterrence, alliances	Development, human rights, healthcare systems

Key Actors	Government, military	United Nations, NGOs, civil society, local authorities

Table 2

1.3. Why Is This Concept Necessary Today?

The theoretical strength of human security lies in its capacity to explain contemporary crises more effectively than classical realism:

- **Interdependence:** The security of individuals in one part of the world is increasingly shaped by developments elsewhere (e.g., a virus in one country can become a global pandemic; economic collapse can trigger large-scale migration) (Kaldor 2007).
- **Early Warning:** A human security perspective enables preventive action. The accumulation of deprivation serves as an early indicator of potential future conflict (Commission on Human Security 2003).
- **State Legitimacy:** A state that fails to ensure human security for its citizens loses its legitimacy and becomes a „failed state," turning into a source of regional instability (Янакиев 2018).

1.4. The Link Between Human Security Theory and the Responsibility to Protect (R2P)

The most significant political implication of the human security concept is the redefinition of state sovereignty. In 2005, the United Nations adopted the Responsibility to Protect (R2P) doctrine, based on the following principles:

- **Sovereignty as Responsibility:** Sovereignty is no longer understood as the unrestricted right of a state to act within its territory, but as an obligation to protect its population (UN General Assembly 2005).
- **International Intervention:** When a state is unwilling or unable to guarantee the human security of its citizens - particularly in cases of genocide, war crimes, or ethnic cleansing - the principle of non-intervention is superseded. The international community assumes responsibility to act, initially through peaceful means and, as a last resort, through military intervention (Nations 2012).

1.5. Criticism and the Risk of „Securitization"

- **Critical Perspective:** Despite its humanitarian orientation, the concept has faced criticism, particularly from scholars associated with the Copenhagen School (e.g., Barry Buzan, Ole Wæver). Critics argue that if „everything becomes a matter of security" (ranging from influenza to climate change), the concept risks losing analytical clarity and focus, complicating resource prioritization (Buzan et al. 1998).

- **Risk of Securitization:** There is a concern that social issues (such as migration or healthcare) may be reframed as security threats. Once an issue is securitized, governments may justify extraordinary measures, restrict democratic rights, and bypass public debate under the pretext of urgency (Buzan et al. 1998).

Conclusion

The concept of human security represents not merely a theoretical evolution but a fundamental paradigm shift in international relations. It transforms the traditional understanding of security from a territorial focus (protection of borders) to an existential one (protection of human life and dignity).

In summary, the theoretical significance of the concept can be distilled into three key dimensions:

- **Integrated Approach:** By combining the three core freedoms - freedom from fear, freedom from want, and the freedom to live in dignity - the concept demonstrates that security, development, and human rights are intrinsically interconnected. Sustainable peace cannot exist in societies plagued by poverty, nor can development thrive under conditions of violence.
- **Redefinition of Sovereignty:** Human security provides the normative foundation for the Responsibility to Protect (R2P). State sovereignty is no longer an unconditional right but a responsibility. When a state fails to ensure human security, it risks losing legitimacy, transforming domestic crises into matters of international concern.
- **Balance Between Expansion and Focus:** Despite criticisms regarding the risk of securitizing social issues, contemporary global challenges - such as pandemics, climate change, and migration - underscore the validity of the broader approach. The threats of the 21st century are rarely conventional or military in nature; they are transnational and asymmetric, making a human-centered framework essential for both analysis and prevention.

Ultimately, human security does not replace state security rather, it complements and humanizes it by placing the individual at the center of political decision-making.

2. Challenges and Threats to Human Security in the Baltic Region

Threats in the region are predominantly hybrid in nature, aiming to destabilize everyday life, economic systems, and the psychological well-being of populations, while remaining below the threshold of Article 5 of NATO (Galeotti 2022).

2.1. Situation Analysis in the Region Through the Seven Dimensions of Human Security

2.1.1. Personal and Political Security (Threat: „War in the Shadows”)

In the context of the war in Ukraine, this represents the most active dimension in the region.

- **Existential Threat:** For the populations of the Baltic states, Poland, and Finland, Russian aggression is not an abstract geopolitical issue but a direct threat to physical survival. The analysis reflects the so-called „Bucha effect" - fear is not limited to territorial occupation (state security), but extends to violence, deportation, and torture against individuals (human security).

At times, threats are not overt but are designed to generate a pervasive sense of vulnerability among individuals.

- **Sabotage and Subversion:** During 2024–2025, a series of „accidental" fires have been observed in warehouses, shopping centers (e.g., in Poland), and logistics hubs. Russian intelligence services have reportedly recruited local criminal actors via social media to carry out such acts, rendering the threat internalized and difficult to predict.
- **Instrumentalized Migration:** Belarus and Russia have used migrants from third countries as a tool of pressure, directing them toward the borders of Poland, Lithuania, and Latvia. This creates humanitarian crises in border regions, strains the capacity of border services, and fosters fear and division within local communities. It generates a direct threat to border populations and triggers moral and political dilemmas within societies. States are thus compelled to balance border protection (state security) with humane treatment (human security) (Bankauskaite et al. 2020).
- **Psychological Warfare:** Frequent false bomb threats targeting schools and shopping centers (notably in Lithuania and Estonia) aim to undermine the sense of security in everyday life(Dalsjö et al. 2022; Galeotti 2022).
- **GPS Jamming:** Russia has repeatedly disrupted GPS signals over the Baltic Sea (through jamming and spoofing), often originating from the Kaliningrad region. This poses significant risks to civilian aviation and maritime navigation, constituting a direct threat to passenger safety(Dalsjö et al. 2022).

2.1.2. Community Security (Threat: Erosion of Trust)

This dimension constitutes a primary target of Russian cognitive warfare and is particularly critical for Estonia and Latvia, where significant Russian-speaking minorities reside(HELCOM 2023).

- **Ethnic Polarization:** Russia employs the doctrine of „protection of compatriots" as a pretext for intervention. In Estonia and Latvia, increased pressure is exerted on Russian-speaking minorities through disinformation narratives portraying them as victims of „fascism" or as potential targets of deportation. This fosters enclaves of distrust toward the state and creates potential for internal

unrest. From a state security perspective, such minorities may be framed as a „fifth column". From a human security perspective, however, the priority lies in their integration and economic well-being to reduce susceptibility to propaganda. Baltic states have implemented initiatives such as „Cyber Elves" (volunteer networks countering online disinformation) and have invested in the socioeconomic integration of minorities. Notably, Russian-speaking populations in these countries often enjoy higher levels of human security (income, rights, EU citizenship) than in Russia, which functions as a buffer against hybrid influence.

- **Erosion of the Social Contract:** Disinformation campaigns aim to convince citizens that governments prioritize Ukrainian refugees over their own vulnerable populations, such as pensioners. This directly undermines societal solidarity(Dalsjö et al. 2022).
- **Psychological Fatigue:** The continuous „state of crisis"—from COVID-19 to the war in Ukraine and inflation—generates „threat fatigue," reducing public vigilance and increasing susceptibility to populism or apathy (Galeotti 2022) .

2.1.3. Economic Security and Protection of Critical Infrastructure (Energy and Digital Security) (Threat: Isolation)

The most immediate threat to human security arises from the physical disruption of life-sustaining services, highlighting the tension between economic cost and security imperatives.

- **Energy Desynchronization:** The Baltic states are undergoing a high-risk transition as they disconnect from the Russian-controlled BRELL electricity grid and synchronize with the European network (targeted for 2025). This creates a window of vulnerability to sabotage and potential power outages.
- **Energy Decoupling:** Poland and the Baltic states were among the first to abandon Russian gas and oil. The abrupt cessation of Russian energy supplies led to inflation and heating insecurity in recent winters, producing a short-term economic shock (rising prices, high utility costs). From a human security perspective, "cheap energy" (economic welfare) is not viable if it finances an aggressor that threatens physical survival (freedom from fear). Infrastructure projects such as the LNG terminal in Klaipėda (Lithuania) and the Baltic Pipe (Poland) exemplify investments in human security, ensuring that populations are not left without heating due to political coercion. Similarly, offshore wind development (green transition) represents a long-term solution, though such infrastructure also becomes a potential target for sabotage, necessitating enhanced protection measures(Etzold 2024).

- **Lessons from Ukraine:** Ukraine's resilience has been significantly supported by decentralization. A key lesson for the Baltic region is the development of "energy islands" - hospitals and municipalities equipped with their own renewable energy sources and battery storage, capable of operating independently in the event of central grid failure.
- **Subsea Warfare and Underwater Sabotage:** Incidents involving the Balticconnector gas pipeline and communication cables linking Finland, Estonia, and Sweden highlight the vulnerability of both energy supply and digital connectivity. For modern societies, the loss of electricity or internet access is functionally equivalent to the loss of essential resources such as food.
- **Investment Risk:** The emergence of a „war risk premium" has discouraged foreign investment due to the region's proximity to conflict. This results in slower economic growth and comparatively lower incomes relative to Western Europe.

2.1.4. Environmental and Health Security (The Invisible Threat)

The Baltic Sea is among the most polluted in the world, directly affecting public health and livelihoods.

- **Russian „Shadow Fleet":** Aging, uninsured tankers transport Russian oil while evading sanctions. A potential oil spill would devastate coastal communities for decades.
- **Nuclear risk:** Proximity to Russian nuclear facilities and persistent nuclear rhetoric generate psychosomatic stress and drive precautionary behaviors (e.g., iodine stockpiling).
- **Dumped chemical weapons:** Approximately 40,000 tons of chemical munitions (mustard gas, arsenic) were dumped after World War II near Bornholm and Gotland. Corrosion poses ongoing risks to fisheries and human health.
- **Eutrophication:** Agricultural runoff causes algal blooms and oxygen depletion, creating „dead zones" and reducing fish stocks.

2.1.5. Political Security and Disinformation

Russia actively seeks to undermine trust in democratic institutions.

- **Narratives:** Propaganda portrays governments as „puppets of the United States" and frames support for Ukraine as economically harmful.
- **The Finnish model:** Finland exemplifies „Comprehensive Security," emphasizing nationwide preparedness, media literacy, and crisis response capabilities across all societal levels, thereby enhancing resilience(Bankauskaite et al. 2020).

Conclusion

Human security challenges in the Baltic region are complex and multidimensional. The primary threat is no longer conventional military invasion but a combination of ecological risks, infrastructure sabotage, and societal fragmentation. The objective of such hybrid strategies is to make everyday life insecure, costly, and psychologically destabilizing, thereby pressuring societies into political concessions.

2.2. Lessons for the Baltic States on Human Security

Key lessons for Estonia, Latvia, Lithuania, Poland, and Finland derive from Ukraine's wartime experience and Finland's long-standing Comprehensive Security model (Bankauskaite et al. 2020).
The central shift is from **„the army protects the people"** to **„the people protect the state."**

2.2.1. Decentralization of Critical Services (Lesson from Ukraine)

The war in Ukraine demonstrated that centralized systems are vulnerable targets. Ensuring *freedom from want* during crises requires decentralization of essential services.

- **Energy autonomy:** Communities should rely on local microgrids (solar panels, generators, heat pumps) rather than single large power plants.
- **Key lesson:** Human security in the Baltic region depends on creating decentralized "energy islands" at municipal and household levels to prevent humanitarian crises during system disruptions.

2.2.2. Civil Preparedness and a „Culture of Survival" (Swedish and Finnish Model)

(Valtonen, Branders 2020; Anderson, Gladstone 2018)
Personal security begins with the individual.

- **Public communication:** Sweden's crisis-preparedness guides provide clear, actionable instructions for citizens.
- **Medical literacy:** Widespread first-aid training (e.g., "Stop the Bleed") empowers citizens to respond effectively in emergencies.
- **Information hygiene:** Media literacy across all age groups builds resilience against disinformation.
- **Key lesson:** Baltic societies must move beyond passive reliance on NATO guarantees toward active civic preparedness—ensuring that every citizen knows emergency procedures, maintains basic supplies, and possesses essential survival skills.
- **Population training:** Finland's model integrates national defense education across public, private, and civil sectors, strengthening societal resilience as a whole.

2.2.3. Social Cohesion and Integration (The Lesson from Donbas and Crimea)

This represents one of the most critical lessons in terms of community security. Ukraine's experience since 2014 demonstrated that regions where populations feel economically and culturally isolated from the center become highly vulnerable to hybrid aggression.

- **Application in the Baltic region:** Estonia and Latvia should treat their Russian-speaking minorities not as security threats, but as priority beneficiaries of enhanced human security policies(Etzold 2024).
- **Key lesson:** The most effective defense against "little green men" and separatism is not policing, but inclusion and quality of life. If a Russian speaker in Narva (Estonia) enjoys higher income, better healthcare, and more rights than someone in Ivangorod (Russia), there is little incentive to support an external aggressor.
- **Social cohesion as deterrence:** Ukraine has shown that a strong, unified national identity can be a more powerful deterrent than military force. If an aggressor anticipates fierce civilian resistance, the likelihood of invasion decreases.
- **Policy implication:** Baltic states must continue integrating Russian-speaking minorities not only linguistically, but also economically. Ensuring that these communities associate their human security - jobs, healthcare, dignity - with the Baltic state rather than with Moscow is a top strategic priority.

2.2.4. Digital Resilience and Volunteerism (The Cyber Lesson)

Ukraine has demonstrated the strategic value of civic mobilization and digital capacity.

- **Digital state continuity:** Maintaining public services (e.g., Ukraine's *Diia* platform) even under attack enables citizens to access aid, register damages, and sustain administrative functionality - key elements of economic and political security.
- **Key lesson:** Poland and the Baltic states should establish "digital shelters" for critical data. Estonia's model of maintaining data backups abroad (e.g., in Luxembourg) ensures that citizens' identities and property records remain secure even in the event of occupation or major cyberattacks.
- **Cyber volunteerism:** Volunteer groups (often referred to as "Elves") in the Baltic states actively counter disinformation and hostile online activity, similar to Ukrainian civic cyber initiatives.

2.2.5. The Role of the Private Sector and Supply Chains

The combined lessons of the COVID-19 pandemic and the war in Ukraine show that state reserves alone are insufficient.

- **Retail logistics:** In Ukraine, when state logistics systems faltered, private courier services and supermarket chains ensured the delivery of food and medicine - even to frontline areas.
- **Key lesson:** The human security framework in the Baltic region must integrate major retail chains (such as Rimi, Maxima, and Biedronka) into crisis planning. In practice, these actors - not state reserves -are the primary guarantors of food security.
- **Security of supply:** Governments must maintain strategic reserves of grain, medicine, and fuel sufficient for at least six months of autonomy. This helps prevent panic and ensures "freedom from want."
- **Dual-use infrastructure:** In Helsinki, facilities such as parking structures, metro stations, and swimming pools are designed to function as bomb shelters capable of accommodating the entire population.
- **Rapid repair and resilience:** The Ukrainian experience underscores the need to stockpile industrial spare parts (e.g., transformers, pipelines) and train engineers to operate under crisis conditions, ensuring swift recovery of critical infrastructure.

Summary

The lessons derived from partners outside NATO and from the war in Ukraine are fundamentally transforming the understanding of security in the Baltic region in the following ways:

Comparative Shift: Traditional Understanding vs. Human Security Paradigm

Old Understanding	**New Reality (Human Security)**
Security is based on expensive military equipment.	Security means having a backup generator and water supplies at home.
Information is controlled by the state.	Citizens act as „sensors" who identify and disinformation.
Ethnic minorities are viewed as a risk.	Integrated minorities are resilient against propaganda.
Defense is the responsibility of the military.	Defense is „comprehensive" (Total Defense)—involving everyone from teachers to IT professionals.

Table 3

3. The Role of National Services in the Baltic Region in Support of Human Security

In the spirit of the *Partnership for Peace (PfP)* program and contemporary concepts of comprehensive security, the role of national services in the Baltic region is undergoing a fundamental transformation. These institutions must evolve from coercive structures into providers of „resilience services." Rather than operating in isolation, they function as part of an integrated ecosystem centered

on protecting the individual(Kaldor 2007). Their contributions to human security can be outlined as follows:

3.1. Border Police and Migration Services: Balancers of Security

In the context of hybrid threats—particularly the instrumentalization of migration from Belarus—these services operate on the frontline of ensuring *freedom from fear (Bostan 2025)*.

- **Humane border management:** Beyond deterrence, modern border services incorporate human security components, such as *Vulnerability Assessment Teams*. These units identify victims of human trafficking among migrants, separating them from potential threats. This approach simultaneously protects migrants' human security while safeguarding state borders.
- **Cooperation with Frontex:** Through joint operations (e.g., in Latvia and Lithuania), national services benefit from shared expertise in maintaining human rights standards even during hybrid crisis situations.

3.2. Fire Safety and Civil Protection Services: Environmental and Infrastructure Security

These services guarantee *freedom from want* during crises.

- **Cross-border assistance (RescEU):** Fire services across the Baltic states, Poland, and the Nordic countries operate as a coordinated system. For example, in the event of large-scale wildfires in Sweden, Polish firefighters can be rapidly deployed. This reinforces regional solidarity and public confidence.
- **Public training:** These services increasingly focus on educating citizens and businesses on crisis preparedness—such as ensuring energy independence (generators, water reserves) in the event of attacks on power infrastructure—transforming passive protection into active resilience.

3.3. Police and Public Order Services: Community Security

The emphasis shifts from repression to prevention and social cohesion.

- **Community policing:** In areas with ethnic tensions (e.g., Narva, Estonia), police act as mediators rather than purely enforcement agents. Officers engage with communities, communicate in local languages, and resolve everyday issues before they escalate into political conflicts, thereby reducing the space for hybrid influence.
- **Countering disinformation:** In Finland and Estonia, specialized police units (so-called „web constables") actively monitor social media, debunking false information intended to create panic (e.g., fabricated reports of kidnappings or epidemics).

3.4. Health and Social Services: Psychological Protection

Often underestimated within the security sector, these services are essential for preserving *human dignity*.

- **Psychosocial support:** In the context of war in neighboring regions, social services in Poland and the Baltic states provide crisis psychological assistance not only to refugees but also to local populations experiencing "war anxiety."
- **Integration policies:** Social services play a central role in transforming potential vulnerabilities (e.g., marginalized minorities) into societal assets through language training and employment programs.

3.5. Cybersecurity and IT Agencies: Digital Security

In highly digitalized Baltic societies - particularly Estonia - cybersecurity is equivalent to physical defense.

- **Cyber hygiene:** National cybersecurity centers (CERTs) not only protect government systems but also provide free training to citizens and small businesses on safeguarding personal data and identifying phishing attacks, which frequently accompany hybrid operations. This protects digital identities and financial assets, a key component of economic security (Mednikarov 2022).

Summary: The „Comprehensive Security" Model

Within this partnership-based framework, these services operate under the **Comprehensive Security Model** (Finland) or **Total Defense** (Sweden and the Baltic states). This approach integrates state institutions, the private sector, and civil society into a unified system designed to enhance resilience and safeguard human security.

Transformation of Roles: From Traditional Functions to Human Security Support

Service	Traditional Role	Role in Support of Human Security
Military	Territorial defense	Logistical support during disasters; demining (Humanitarian Mine Action).
Police	Crime investigation	Prevention of radicalization; community mediation.
Civil Protection	Post-disaster response	Public training for survival and preparedness before crises.
Border Guard	Prevention of illegal entry	Identification of trafficking application of a humanitarian Approach.

Table 3

Conclusion: Human security in the Baltic region today represents a synthesis of Finnish preparedness (shelters and reserves), Polish logistical capacity, and Ukrainian adaptability (decentralization and civic mobilization). National services support this model through integrated action, placing the safety and dignity of the individual at the center of their operations.

4. The Application of the Human Security Concept in Bulgaria

The application of the human security concept in Bulgaria reveals a markedly different picture compared to the Baltic states. While the Baltic focus is primarily on external threats and Russian-speaking minorities, Bulgaria's key vulnerabilities stem from internal divisions, inadequate infrastructure, and low institutional trust(*АКТУАЛИЗИРАНА СТРАТЕГИЯ за национална сигурност на Република България* 2018).

4.1. Community Security: Countering „Cognitive Warfare"

Bulgaria is among the most vulnerable EU and NATO members to disinformation. Unlike Estonia, where divisions are largely ethnic, in Bulgaria they are ideological and internal.

- **Diagnosis:** Russian hybrid strategy in Bulgaria aims less at fostering pro-Russian sentiment and more at eroding trust in national institutions and alliances (EU/NATO), directly targeting political security.
- **Solution (Finnish model):** Beyond fact-checking, Bulgaria requires comprehensive media literacy education across all age groups. Human security here implies a "vaccinated" citizenry resistant to manipulation.
- **From disinformation to social paralysis:** Modern cognitive warfare seeks not persuasion but disorientation and apathy, leading to "reflexive control," where citizens make decisions against their own interests.

Policy Proposal: National Digital Media Literacy Program

- **Educational component:** Integrating media literacy across disciplines (history, mathematics, arts).
- **"Digital community centers":** Utilizing Bulgaria's network of cultural centers (chitalishta) to train vulnerable groups, especially the elderly.
- **Strategic communication (pre-bunking):** Proactive exposure of manipulation techniques before disinformation spreads.

4.2. Civil Protection: From „Freedom from Fear" to a "Culture of Preparedness"

Problem: Deficiencies in systems like BG-ALERT and outdated shelter infrastructure highlight critical gaps. Public knowledge of crisis response remains limited.

Application (Swedish model):

- Decentralization of protection - residential buildings should adapt basements into dual-use shelters.
- Shift from passive reliance on the state to active civic preparedness.

Key Measures:

- Legal incentives for maintaining usable shelter spaces.
- Mandatory dual-use infrastructure in new buildings.
- Promotion of personal emergency kits ("GO-bags") as a social norm.

Critical Insight: The "Golden Hour" (first 60 minutes after a crisis) reveals systemic vulnerability—citizens must be self-reliant during this period.

4.3. Energy Security: Decentralization as Protection

Bulgaria's dependence on centralized energy systems (e.g., Kozloduy NPP) creates systemic risk.

- **Lesson from Ukraine:** Survival depends on localized solutions.
- **Application:** Household energy independence (solar panels, micro-generation) should be framed as a national security priority, not just a climate policy.

Even partial autonomy (e.g., 30% of households) significantly increases societal resilience.

4.4. Black Sea Security: Ecology and Livelihoods (Varna and Burgas)

For Bulgaria, the Black Sea is both a security frontier and an economic lifeline.

- **Threat:** Naval mines and pollution from the war in Ukraine endanger tourism, fisheries, and maritime trade.
- A single incident could impact the livelihoods of over 300,000 people.

Integrated Maritime Security Approach:

- **Technological modernization:** Mine countermeasure vessels framed as economic protection tools.
- **Real-time environmental monitoring:** Sensor networks for pollution and radiation detection.
- **Volunteer maritime units:** Engaging local communities as security "sensors."

Security investments must be communicated as safeguarding economic stability, not merely military preparedness.

4.5. Demography and „Security Deserts"

Depopulation in border regions (e.g., Strandzha, Northwestern Bulgaria) creates security vacuums.

- **Risk:** Uninhabited areas facilitate trafficking, illegal migration, and covert operations.
- **Solution:** Re-establish state presence through infrastructure, healthcare, and connectivity.

Key Principle: People are the most effective security sensors—without population, there is no early warning capacity.

Summary: What Can Citizens Do Today?

Human security ultimately shifts responsibility back to the individual. Three practical steps:

1. **Information hygiene:** Verify sources; strong emotional reactions often indicate manipulation.
2. **Personal emergency preparedness:** Maintain supplies for at least 72 hours (water, food, flashlight, radio, cash, first aid kit).
3. **Energy flexibility:** Ensure alternative heating or power options for short-term disruptions (gas stove, wood stove, warm clothes).

Conclusion

The comparative analysis of human security challenges in the Baltic Sea region and their implications for Bulgaria leads to several fundamental conclusions that extend beyond the current geopolitical crisis.

First, it confirms the irreversible transformation of the security paradigm. The war in Ukraine and hybrid aggression against NATO's eastern flank demonstrate that the traditional state-centric (realist) model—focused solely on territorial integrity and military balance—is no longer sufficient. In an era of asymmetric threats, the "center of gravity" of defence is shifting from border protection to safeguarding the functioning of society. Human Security has thus evolved from a humanitarian theory into an operational necessity. A state that cannot ensure "freedom from fear" and "freedom from want" for its citizens loses internal legitimacy and becomes vulnerable to external destabilization, even without direct military intervention.

Second, the Baltic and Nordic experience validates the model of "Comprehensive Security." The lessons from Estonia, Finland, and Poland show that the most effective deterrent against hybrid aggression is a high level of societal resilience. The integration of civilian, private, and military sectors into a unified security ecosystem creates a framework in which every individual—from media literacy teachers to energy engineers—acts as a security stakeholder. This approach transforms vulnerabilities (such as ethnic minorities or energy dependence) into assets through policies of inclusion and decentralization.

Third, for the Republic of Bulgaria, the imperative for change is critical. The analysis shows that while Bulgaria is investing in the modernization of its armed forces (which is unquestionably necessary), it is significantly lagging in the development of the "soft infrastructure" of security. The main deficits are:

- **Cognitive deficit:** Lack of systematic immunity to disinformation, undermining trust in institutions and alliance commitments.
- **Infrastructural deficit:** High centralization of critical services and absence of a culture of autonomy at household and municipal levels.
- **Regional deficit:** Underestimation of demographic collapse and economic decline in border regions as a national security threat.

In conclusion, this study argues for the necessity of a new social contract in the field of security. Security in the 21st century is not a product delivered unilaterally by the state to passive recipients; it is a shared responsibility. The way forward for Bulgaria lies in recognizing that resilience begins with the individual. When citizens are educated to recognize manipulation, prepared for crises, and confident that institutions serve their interests, the state becomes inherently stronger and more resilient.

Therefore, investment in human security - healthcare, education, energy independence, and civil protection—is not a social cost, but the highest form of investment in national sovereignty and the defence capabilities of the Republic of Bulgaria.

References:

ANDERSON, C. and GLADSTONE, R., 2018. Sweden's Cold-War-Era Advice Is Upgraded for Modern Crises. *New York Times*, vol. 167, no. 57970. ISSN 03624331.

BANKAUSKAITE, Dalia et al., 2020. Baltics Left of Bang: Comprehensive Defense in the Baltic States. *Institute For National Strategic Studies*, vol. 307.

BOSTAN, Ayşegül, 2025. Weaponisation of Migration in the Context of Hybrid Warfare Strategies: The Case of Russia-Ukraine War. In: *SECURITY IN EURASIA Threats, Challenges and Opportunities*,

BUZAN, Barry et al., 1998. *Introduction. Security Analysis: Conceptual Apparatus. - Security: A new framework for analysis*. 1998.

COMMISSION ON HUMAN SECURITY, 2003. *Human security now*. Washington, DC.

DALSJÖ, Robert et al., 2022. A Brutal Examination: Russian Military Capability in Light of the Ukraine War. *Survival*, vol. 64, no. 3. ISSN 14682699. Available from: https://doi.org/10.1080/00396338.2022.2078044.

ETZOLD, Tobias, 2024. Small states coalition building in EU policy-making: The cases of the Nordic and Baltic countries. In: *Small States in EU Policy-Making: Strategies, Challenges, Opportunities*,
GALEOTTI, Mark, 2022. *The Weaponisation of Everything: A Field Guide to the New Way of War*.
HAMPSON, Fen Osler et al., 1998. Security: A New Framework for Analysis. *International Journal*, vol. 53, no. 4. ISSN 00207020. Available from: https://doi.org/10.2307/40203739.
HAQ, Khadija, 2008. *Amartya Sen and Mahbub ul Haq: A Friendship that Continues beyond Life*. 2008.
HELCOM, 2023. State of the Baltic Sea. Third HELCOM holistic assessment 2016-2021. *Baltic Sea Environment Proceedings*, vol. n°194. ISSN 0357-2994.
KALDOR, Mary, 2007. *Human security: reflections on globalization and intervention*.
MEDNIKAROV, Boyan, 2022. Cyber Hygiene Issues in the Naval Security Environment. *Information & Security: An International Journal*, vol. 53. ISSN 08615160. Available from: https://doi.org/10.11610/isij.5314.
NATIONS, United, 2012. *UN General Assembly Resolution on The Future we want (adopted on 27 July 2012). Rio de Janeiro, Brazil.* 2012.
TADJBAKHSH, Shahrbanou and CHENOY, Anuradha M., 2006. *Human security: Concepts and implications*.
UN GENERAL ASSEMBLY, 2005. In larger freedom: towards development, security and human rights for all. *Human Rights*, vol. 27078, no. March.
UNITED NATIONS DEVELOPMENT PROGRAMME, 1994. *Human Development Report: New Dimension Of Human Security (1994)*.
VALTONEN, Vesa and BRANDERS, Minna, 2020. Tracing the Finnish Comprehensive Security Model. In: *Nordic Societal Security*,
АКТУАЛИЗИРАНА СТРАТЕГИЯ за национална сигурност на Република България, 2018. . София.
ЯНАКИЕВ, Я., 2018. *Социетална сигурност и устойчивост на българското общество.* . София: Институт за изследване на обществата и знанието, БАН.

Authors business cards:

Boyan Mednikarov- Flotilla Admiral (ret.) Prof.DSc
ORCID iD: 0000-0003-4247-897X
WoS ID: E-3318-2012
Nikola Vaptsarov Naval Academy
9002 Varna, Bulgaria
e-mail: b.mednikarov@nvna.eu

Siyana Lutzkanova- Associate Professor Dr.
ORCID iD: 0000-0003-0530-7397
WoS ID: G-3606-2018

Nikola Vaptsarov Naval Academy
9002 Varna, Bulgaria
e-mail: s.lutzkanova@nvna.eu

Yordanka Peteva – Assistant professor
ORCID iD: 0009-0004-0782-1124
WoS ID: LRT-8404-2024
Nikola Vaptsarov Naval Academy
9002 Varna, Bulgaria
e-mail: ypeteva@nvna.eu