

ENHANCING CIVIL RESILIENCE IN THE NORTH ATLANTIC ALLIANCE: STRATEGIC APPROACHES AND CHALLENGES

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Abstract: *In the modern era, warfare has transcended the conventional battlefield. Conflicts are no longer confined to engagements between armed forces but rather encompass entire societies. Civilian populations increasingly find themselves on the front lines, as the growing prevalence of cyberattacks, disinformation campaigns, economic coercion, and disruptions to critical infrastructure underscores the vulnerability of democratic systems to hybrid threats. Within this evolving threat landscape, civil resilience can no longer be considered a complementary asset, it has become a strategic pillar of collective security. Strengthening resilience requires more than national preparedness. It necessitates robust and coordinated mechanisms at the international level. North Atlantic Alliance plays a pivotal role in this endeavour by establishing shared standards, enhancing civil military interoperability, and facilitating the dissemination of best practices among member states. As such, civil resilience is not merely a defensive capability but a fundamental expression of Euro-Atlantic unity and purpose. It reflects both a state's capacity to function under duress and the Alliance's ability to provide a cohesive, timely, and effective response to 21st century security challenges.*

Keywords: civil resilience, North Atlantic Alliance, civil-military cooperation, hybrid threats, crisis management

1. Introduction

Over the past two decades, the character of conflict has undergone a significant reconceptualization. Traditional state-on-state warfare, characterized by direct military engagements, has been increasingly supplemented by hybrid threats: complex, multi-domain operations designed to destabilize societies without triggering conventional hostilities. Consequently, modern security planning has refocused on civilian domains, with societal infrastructure, public services, and communication systems becoming critical targets in the contemporary threat environment.

Amid this shift, civil resilience has emerged

as a central strategic priority. It refers to the ability of a society to prepare for, absorb, adapt to, and recover from disruptive events, including armed attacks, cyber incidents, disinformation campaigns, and large-scale systemic crises. Unlike traditional emergency planning, civil resilience emphasizes interinstitutional coordination, societal preparedness, and the preservation of core state functions under conditions of sustained stress [1].

Civilian systems - once considered secondary to defence - now represent strategic pressure points. State and non-state adversaries increasingly employ cyber tools, manipulate information environments, and exploit economic

dependencies to achieve strategic effects without resorting to open conflict. In this context, a state's military effectiveness is no longer sufficient unless it is underpinned by robust civil infrastructure and institutional adaptability [3].

Recognizing this evolution, NATO has integrated civil preparedness and resilience into its collective defence framework. Key instruments such as the NATO Strategic Concept (2022) and the Baseline Requirements for National Resilience emphasize the need for robust civilian systems to ensure operational readiness, enable timely crisis response, and maintain Allied cohesion in the face of sustained and multidimensional threats.

The *figure* below provides a structured synthesis of the concept of civil resilience

as developed throughout this chapter. Positioned at the intersection between security policy and societal functionality, civil resilience is presented here as a strategic prerequisite for national survival and collective defence. The diagram highlights four interrelated dimensions:

- the strategic justification for integrating civil resilience into NATO doctrine,
 - the core components that define its scope,
 - the operational qualities that characterize its implementation, and
 - the strategic effects it generates in deterring and responding to hybrid threats.
- This framework serves as a conceptual foundation for the analyses that follow and illustrates the growing relevance of civilian systems within the contemporary security landscape.



Figure 1: Civil Resilience: Strategic Pillar of Modern Security

1.1. The Transformation of Conflict in the 21st Century

If in the past conflicts were traditionally fought between armed forces with the declared aim of conquering territory or achieving military victory over an adversarial state, the paradigm of war has shifted radically in the 21st century [2]. The modern adversary is no longer focused on the occupation of cities, but rather on disrupting their internal functioning, using unconventional and often unattributable

instruments.

A central concept in the analysis of contemporary conflict is that of hybrid warfare - a form of aggression that combines conventional military force with asymmetric tactics, disinformation, cyberattacks, and economic pressure [3].

Classical authors such as Frank Hoffman have argued that hybrid conflict is not simply the simultaneous use of different methods, but rather their integration into a coherent, long-term strategy of attrition. At

the European level, strategic frameworks such as the EU Cybersecurity Strategy (2020) and the Joint Framework on Countering Hybrid Threats (2016) further reinforce this conceptual foundation [5].

For example, the NATO Strategic Concept (2022) emphasizes that the Alliance faces “multiple forms of hybrid warfare,” identifying resilience as a key instrument of collective defense [6]. Similarly, the European Centre of Excellence for Countering Hybrid Threats (Hybrid CoE) highlights the particular vulnerability of Western democracies due to their reliance on digital infrastructure, societal transparency, and economic interdependence.

The tools employed in hybrid conflict are diverse and often difficult to attribute with certainty. These include:

- strategic disinformation (via social media, news platforms, and influence operations);
- cyberattacks targeting critical infrastructure (electricity, water, transport systems);
- energy blackmail and economic constraint (e.g., the weaponization of gas dependency or logistical supply chains).

1.2. Civilian Systems as Targets in Hybrid Warfare

In the context of hybrid warfare, civilian systems have become deliberate and strategic targets, not merely collateral damage. Modern adversaries understand that undermining a state's stability can be more effectively achieved by disrupting civilian life and infrastructure than by engaging in direct military confrontation.

Hybrid actors aim to exploit the vulnerabilities inherent to open, democratic societies - such as transparency, reliance on digital infrastructure, and the free flow of information. Instead of striking military bases, attackers may focus on critical infrastructure. A successful cyberattack against a hospital or airport can cause national-level disruption, erode public confidence, and delay state response mechanisms.

Beyond physical systems, the information environment itself becomes a target. Disinformation campaigns, fake news, and manipulated media are deployed to fuel social division, reduce institutional credibility, and polarize public opinion. These actions are often low-cost, anonymous, and difficult to attribute, which increases their strategic appeal to both state and non-state actors.

What makes these attacks particularly effective is their cumulative and psychological impact. They target the civilian population directly, bypassing traditional defense structures, and seek to create a sense of uncertainty, fatigue, and helplessness. As a result, the front lines of modern conflict are now found in city streets, hospitals, public services, and online platforms [3].

This shift underscores the necessity of enhanced civil resilience, as the civilian sector is no longer peripheral in times of crisis - it is central to both the vulnerability and the defense posture of any modern state.

1.3. Concept and Importance of Civil Resilience

As civilian systems have become central targets in hybrid warfare, the concept of civil resilience has emerged as a key strategic imperative for both national security and collective defense.

Unlike traditional defense measures, which are predominantly military in nature, civil resilience is multi-sectoral and society oriented. It encompasses a wide range of civilian functions, including:

- the continuity of government and decision-making.
 - the protection of critical infrastructure and essential services.
 - the ability of the population to absorb shocks and continue functioning under stress.
- What distinguishes civil resilience is its proactive character. It is not limited to response and recovery, but also includes preparedness, redundancy, and flexibility - qualities that allow a society to absorb attacks or crises without systemic failure.

The relevance of civil resilience has been strongly reaffirmed in strategic documents such as the NATO Strategic Concept (2022), where resilience is defined as “a national and collective responsibility across the Alliance” and considered essential to deterrence and defense. Moreover, The Third Article of the North Atlantic Treaty obliges each member state to “maintain and develop its individual and collective capacity to resist armed attack”. In nowadays context, this includes not only military strength, but also societal robustness and institutional stability [6]. In hybrid conflict scenarios, the first wave of impact often hits civilian domains - power grids, healthcare systems, supply chains, digital platforms - well before any formal military response is activated. Therefore, civil resilience is not simply a complementary function to defense - it is a prerequisite for national survival and operational readiness in a complex and unpredictable threat environment.

1.4. Research Questions and Methodology

This paper aims to analyse the role and implications of NATO in strengthening the civil response capacities of its member states in the context of challenges posed by hybrid warfare and the transformation of civil resilience into a central pillar of Euro-Atlantic security.

To guide the analysis and structure the scientific inquiry, a series of research questions have been formulated, each addressing key dimensions of the topic.

The *first question* seeks to clarify how NATO conceptualizes civil resilience and supports its development in the face of emerging hybrid threats - marked by an increasingly complex mix of cyber pressure, disinformation, and economic or energy leverage.

The *second question* explores the institutional and operational mechanisms through which coordination is achieved between the Alliance and national levels, particularly regarding the effective management of civil resilience in crisis situations.

Finally, the *third question* examines the extent to which NATO can influence national civil preparedness policies while upholding the principle of state sovereignty - a core value that governs relations within the Alliance.

Together, these questions provide a clear analytical framework for examining NATO’s strategic role in enhancing civilian capacities to address contemporary threats.

2. Civil Resilience in the North Atlantic Alliance: Strategic and Operational Challenges

Although NATO has firmly anchored civil resilience within its collective defense posture, turning strategic intent into operational reality across all member states remains a complex and uneven process. The diversity of national structures, capabilities, and politics will often result in fragmented implementation of shared resilience standards. A key challenge lies in the *structural and doctrinal disparities* among allies. While countries like Finland and Norway have adopted integrated “Total Defence” models, where civilian and military planning are seamlessly aligned other NATO members retain compartmentalized systems with weak interagency coordination. This asymmetry reduces the Alliance’s overall cohesion in times of crisis.

Another significant limitation stems from the *lack of interoperable communication platforms and shared situational awareness tools*. Without robust civil-military data-sharing systems, decision-making becomes siloed and delayed, particularly during transnational emergencies or hybrid attacks. Legal restrictions in some countries further hinder the involvement of armed forces in supporting civilian authorities during peacetime contingencies.

From a *logistics perspective*, the Alliance’s ability to sustain military operations is closely tied to the resilience of civilian infrastructure, especially transportation networks, fuel supply systems, and communication grids. NATO-led exercises, including *Steadfast Defender*, have

repeatedly exposed bottlenecks in cross-border transport, regulatory inconsistencies, and insufficient investment in dual-use infrastructure [8].

Lastly, *limited public awareness and engagement* undermine the societal layer of resilience. While NATO emphasizes a “whole-of-society” approach, resilience often remains a technocratic issue managed by a small circle of institutional actors. Cultivating a culture of preparedness and societal participation in resilience-building is a long-term but necessary endeavor.

Civil resilience, as conceptualized within the Alliance’s strategic framework, derives its legitimacy from The Third Article of the

North Atlantic Treaty, which commits member states to maintain and develop the capacity to resist armed aggression.. Today, this obligation encompasses the ability of national societies to sustain core functions and recover rapidly in the face of both military and non-military disruptions.

To operationalize this concept, NATO has established a doctrine centered on *seven Baseline Requirements for National Resilience*, formalized during the *2016 Warsaw Summit*. These requirements serve as a set of non-binding but essential guidelines that each member is encouraged to meet [9]:



Figure 2: NATO Baseline Requirements for National Resilience

2.1. Civil Resilience in North Atlantic Alliance Doctrine

The previous diagram highlights the seven baseline requirements for national resilience, as defined by NATO. At the center lies the core concept: national resilience, from which the seven essential domains branch out. Each segment represents a strategic capability that a state must possess in order to effectively withstand hybrid threats, disasters, or conflicts.

For example, ensuring the continuity of government and critical services provides political stability, while civil communications, energy, and transportation must remain functional under stress. The ability to manage refugee flows, secure access to food and water, and provide full medical response form the social backbone of resilience. Together, these components

strengthen a nation's ability to respond to, withstand, and recover from any type of crisis.

2.2. Managing Civil Resilience at National Level: Structures and Responsibilities

North Atlantic Alliance manages civil resilience through a complex and structured institutional framework designed to integrate national preparedness efforts into a coherent Allied capability. At the core of this framework lies the *Civil Emergency Planning Committee (CEPC)*, NATO’s senior advisory body for civil preparedness, composed of national representatives from all member states. The CEPC coordinates the development of policies and guidelines aimed at protecting civilian populations, securing critical infrastructure, and supporting the continuity of government during crises.

Civil-military interoperability is further enhanced through the work of the *NATO Civil-Military Cooperation Centre of Excellence (CIMIC CoE)*, which develops training, operational guidance, and best practices to facilitate effective collaboration between civilian and military actors in crisis contexts [10].

2.3. Logistics and Supply Chain Resilience in NATO's Civil Preparedness Framework

One of the key but often overlooked aspects of NATO's civil resilience strategy lies in the effectiveness of logistics systems, the stability of supply chains, and the infrastructure required for timely delivery of essential goods. In situations of crisis, the continuous provision of vital resources—such as food, water, energy, and medical supplies—is indispensable for both the functionality of civilian life and the support of military efforts. The growing interdependence between civilian and defense logistics increases the likelihood that a disruption in one area will cascade into the other [7].

Resilience in this domain is heavily dependent on well-coordinated logistics frameworks that involve both civil and military stakeholders, as well as on reliable transport networks and flexible procurement solutions. NATO's guidelines on civil transportation highlight the need for member states to secure and maintain access to critical logistical corridors, even under crisis conditions, and to ensure that dual-use infrastructure can be mobilized effectively when needed.

At the same time, recent findings underscore the importance of digital tools in strengthening supply chain resilience. Through technologies that enable real-time tracking, adaptive planning, and transparent information flow, digital supply chain systems enhance a nation's capacity to respond swiftly to disruption and reestablish critical routes.

Additionally, Minculete's work on operational logistics points out that modernization is not limited to

technological upgrades, but also includes improving institutional coordination and the responsiveness of supply mechanisms in dynamic environments [8].

This integrated approach has been increasingly tested in NATO-wide exercises like *Steadfast Defender* and *CMX*, where participating nations simulate high-pressure logistical operations. These simulations assess how well national systems can allocate resources, manage emergency distribution, and secure transportation under adverse conditions. Such drills provide not only operational feedback but also strategic insight into the Alliance's overall resilience posture.

3. Bridging Asymmetries in NATO Resilience

Despite the establishment of a comprehensive conceptual and normative framework for civil preparedness, significant asymmetries continue to persist among NATO member states in terms of operationalization, institutional integration, and resource allocation. These structural discrepancies are primarily rooted in divergent national threat perceptions, uneven levels of institutional maturity, differing governance architectures, and varying degrees of civil-military integration.

States with limited strategic depth or those recently integrated into the Alliance frequently encounter systemic constraints that impede full alignment with NATO's Baseline Requirements. For instance, the Baltic states Estonia, Latvia, and Lithuania while demonstrating strong political commitment to NATO, face critical limitations such as geographic exposure to the Russian border, constrained military depth, and underdeveloped infrastructure for strategic mobility. Additionally, their cyber infrastructures remain vulnerable, as exemplified by the large-scale cyberattacks on *Estonia in 2007*, which exposed gaps in national-level digital resilience and the need for robust civil-military coordination in the cyber domain.

In contrast, member states that have institutionalized the “Total Defence” approach most notably *Finland and Norway* exhibit a higher degree of intersectoral cohesion and resilience readiness across both civil and military domains.

To address these disparities, a multidimensional approach is required, combining enhanced national political will with targeted assistance from NATO’s specialized mechanisms. Initiatives such as the Resilience Advisory Support Team (RAST), targeted funding instruments, and expanded access to multinational exercises (e.g., CMX, Steadfast Defender) serve as critical enablers for institutional capacity-building. Such initiatives are particularly relevant for supporting the eastern and southern flanks of the Alliance, where vulnerabilities are more pronounced [11].

In addition, the development and deployment of interoperable digital platforms for real-time situational awareness and resource coordination remain imperative. While NATO has advocated for a federated information infrastructure to ensure secure data exchange during crises, the uneven uptake and implementation of such systems compromise the efficiency of transnational coordination.

4. Conclusions

As the security environment continues to evolve, the importance of civil resilience as a foundational element of collective defense becomes increasingly apparent. Within the North Atlantic framework, civil preparedness is no longer a complementary objective but a strategic necessity, *embedded in formal requirements and supported by a growing network of institutional mechanisms*. Through planning instruments, dedicated committees, and joint simulations, the Alliance has articulated a coherent vision for resilience that spans both national sovereignty and multilateral cooperation.

The experience of various member states reveals, however, that translating this

strategic vision into operational effectiveness remains uneven. *Structural differences, such as the degree of civil-military integration or the maturity of national emergency systems, continue to influence the depth and consistency of implementation*. Countries with more integrated planning traditions tend to demonstrate greater alignment with the Alliance’s resilience objectives, while others encounter systemic limitations rooted in governance, infrastructure, or resource allocation.

Nonetheless, several concrete practices have emerged as critical to strengthening resilience across the Alliance. *These include the institutionalization of cross-sectoral coordination, the development of digital situational awareness platforms, and the expansion of multilateral assistance programs targeting under-resourced regions*. Such practices not only improve the capacity of individual states to respond to disruptions but also reinforce the collective readiness of the Alliance.

In essence, civil resilience reflects the Alliance’s ability to act with unity, credibility, and foresight. Addressing internal disparities and building a shared culture of preparedness will be decisive in enhancing the responsiveness and adaptability of member states. *As hybrid threats intensify and vulnerabilities become increasingly interconnected, resilience must evolve into both a strategic mindset and a practical tool for navigating uncertainty*.

This study examined the evolving approach of the North Atlantic Treaty Organization to civil resilience, highlighting disparities in implementation across member states and exploring strategies to improve coherence within the Alliance. The findings reaffirm that civil resilience is no longer a secondary consideration but has become a fundamental pillar of collective security. It reflects not only the preparedness of individual nations but also a unified commitment to societal robustness, civil-military synergy, and institutional flexibility in response to hybrid and multi-

domain threats. Ultimately, the strength of the Alliance's civil resilience will not be measured solely by formal frameworks or strategic

declarations, but by its capacity to adapt, integrate, and act decisively in the face of adversity.

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