DOI: 10.53477/1842-9904-25-33

HOST NATION SUPPORT AND CIVIL - MILITARY INFRASTRUCTURE COOPERATION IN NATO OPERATIONS

Maria Niamh BRATCOVICI*

The evolving security landscape in Europe, characterised by renewed conventional military threats along NATO's Eastern Flank, has placed unprecedented demands on Host Nation Support (HNS) frameworks and the infrastructure systems that underpin them. This paper examines the intersection of civil engineering capabilities and military operational requirements within the context of NATO collective defence, arguing that effective HNS depends not merely on legal and political agreements between Allied nations, but critically on the physical capacity and technical readiness of civilian infrastructure to support large-scale force projection and sustainment. The paper further explores best practices in civil-military engineering cooperation drawn from Poland, Romania, and the Baltic states, identifying governance models and institutional mechanisms through which defence engineering requirements can be systematically embedded into national infrastructure planning cycles. The findings suggest that bridging the gap between civilian engineering standards and NATO operational thresholds necessitates a formalised, multi-stakeholder framework integrating military engineers, national infrastructure agencies, and Allied planners at both the strategic and technical levels.

Keywords**:** *Host Nation Support; NATO Military Mobility; civil-military cooperation; critical infrastructure; collective defence; Eastern Europe; STANAG (Standardisation Agreement); force projection; infrastructure resilience; defence engineering.*

* ***Maria Niamh BRATCOVICI, Eng., MA in Protection of Critical Infrastructure, "Carol I" National Defence University, Bucharest, Romania.***
E-mail: bratcovicimaria@gmail.com

Introduction

The re-emergence of high-intensity conventional military threats along NATO's Eastern Flank has fundamentally altered the strategic calculus of collective defence in Europe. The war in Ukraine, coupled with sustained geopolitical instability in the Black Sea and Baltic regions, has shifted Allied planning from expeditionary crisis management toward large-scale territorial defence and rapid reinforcement. In this renewed strategic environment, Host Nation Support (HNS) has regained central importance as a cornerstone of NATO's operational readiness and force projection architecture.Traditionally, HNS has been conceptualised primarily as a legal and political framework governing the provision of support by a host nation to Allied forces operating on its territory. It encompasses agreements related to logistics, movement coordination, access to facilities, and sustainment services. However, this doctrinal understanding often underestimates a critical dimension: the physical capacity of national infrastructure systems to absorb, sustain, and enable the deployment of large, high-readiness forces under crisis conditions. Legal agreements and political commitments cannot compensate for bridges that cannot bear heavy armoured vehicles, rail networks unable to accommodate military rolling stock, or ports lacking sufficient throughput capacity.

This paper argues that effective Host Nation Support is fundamentally an infrastructure capability issue. The credibility of NATO's collective defence posture depends not only on force availability and political cohesion, but also on the technical readiness and resilience of civilian infrastructure networks. Roads, railways, airfields, energy grids, storage facilities, and communication systems constitute the material backbone of reinforcement operations.

Without systematic alignment between civilian engineering standards and NATO operational thresholds, such as those embedded in STANAG (Standardization Agreement) frameworks, HNS remains declaratory rather than executable, particularly in an environment where NATO increasingly emphasises resilience, military mobility, and critical infrastructure protection as core elements of collective defence (NATO, Strategic Concept. 2022) (NATO, NATO Resilience Symposium Report 2023.).

The study therefore examines the intersection of civil engineering capacity and military operational requirements within the context of NATO operations on the Eastern Flank. It explores how governance mechanisms, institutional coordination models, and planning cycles can embed defence engineering requirements into national infrastructure development strategies. Drawing on examples from Poland, Romania, and the Baltic states, the paper identifies both structural gaps and emerging best practices in civil-military cooperation.

By reframing Host Nation Support as a question of infrastructure governance and technical preparedness, this research contributes to the broader debate on

military mobility and resilience in Europe. It posits that bridging the divide between civilian infrastructure planning and NATO force projection requirements is essential to sustaining deterrence credibility and ensuring that reinforcement commitments translate into operational reality. In an era defined by compressed warning times and high-tempo deployments, infrastructure readiness is inseparable from strategic readiness.

1. The Strategic Evolution of Host Nation Support in NATO Operations

The operational credibility of NATO's collective defence posture rests not solely on force availability or political cohesion, but on the structural capacity of Allied territories to enable rapid reinforcement. As the Alliance reorients toward territorial defence in response to renewed conventional threats, the enabling mechanisms that sustain multinational operations have gained heightened strategic relevance. Among these mechanisms, Host Nation Support (HNS) functions as a critical interface between national sovereignty and collective security (Evans 2022). However, HNS is frequently interpreted through a narrow administrative lens, emphasising legal agreements, diplomatic coordination, and logistical facilitation. Such an interpretation risks obscuring the material foundations upon which effective support depends. In contemporary high-tempo conflict scenarios, where deployment timelines are compressed and operational friction must be minimised, the decisive variable is not the existence of agreements, but the readiness of infrastructure systems to operationalise them.

Accordingly, this chapter examines the strategic evolution of Host Nation Support within NATO doctrine, tracing its transformation from an expeditionary support framework to a core enabler of large-scale force projection. By analysing both its conceptual foundations and its operational implications on the Eastern Flank, the discussion establishes the premise that HNS must be understood as an infrastructure-dependent capability embedded within national engineering and governance structures (Council 2025).

1.1. Conceptual Foundations of Host Nation Support

At its most fundamental level, Host Nation Support denotes the civil and military assistance provided by a nation to Allied or coalition forces that are present on, operating in, or transiting through its territory in times of peace, crisis, or armed conflict. The concept is authoritatively codified in NATO's *Allied Joint Publication AJP-4.5(B): Allied Joint Logistic Support*, which defines HNS as encompassing all civil and military assistance rendered by a host nation to Allied forces and organisations located on, operating from, or in transit through its territory (GLOBSEC 2025). This definition, while administratively concise, substantially

understates the operational and institutional complexity of what effective HNS entails in practice: a dense architecture of bilateral and multilateral agreements, technical standards, infrastructure assessments, legal frameworks, cost-sharing arrangements, and command coordination mechanisms that together determine whether the treaty commitment to support Allied forces can be translated from a political obligation into a functioning logistical reality. The conceptual lineage of Host Nation Support can be traced to the foundational logistical imperatives that have shaped alliance warfare across the modern period. The capacity of military forces to sustain operations over extended distances has always been contingent upon access to the resources, infrastructure, and administrative apparatus of the territories through which they operat*e.* (Fiott 2019). Martin van Creveld's seminal study of military logistics identified the dependence of campaigning armies on local provisioning, infrastructure, and territorial cooperation as a structural constant of organised warfare that predated the institutionalisation of modern alliance frameworks by centuries. What the emergence of NATO as a standing collective defence organisation introduced was the formalisation of this dependency through binding legal instruments and standardised procedures, transforming what had historically been an improvised and often coercive practice of territorial exploitation into a structured framework of reciprocal obligation among sovereign states bound by shared security commitments. General support encompasses broad infrastructure and administrative services provided to Allied forces as a collective. Specific support refers to capabilities or services rendered in response to identified requirements of particular formations, such as the designation of specific bridges, depots, or fuel points for Allied use. *Exclusive support* involves dedicated assets or services assigned to a named Allied unit for its sole use throughout a defined operational period. HNS arrangements governing each category are codified in technical arrangements negotiated between the host nation and receiving states, specifying the engineering standards to which relevant infrastructure must conform (NATO, Strengthened Resilience Commitment 2021). It is precisely within these technical standards, and the degree to which civilian infrastructure meets or falls short of them, that the civil engineering dimension of HNS acquires its full operational significance. A dimension of HNS that is frequently underweighted in doctrinal literature but carries profound operational significance is its fundamental dependence on the physical condition and technical capacity of civilian infrastructure. Unlike the legal or administrative components of HNS, which can in principle be modified through negotiation on relatively short timescales, the infrastructure dimension is governed by long lead times, capital-intensive investment cycles, and engineering constraints that cannot be overcome by political decision alone. Roads must bear the axle loads of main battle tanks and heavy logistics vehicles; bridges must be classified to military load standards codified in STANAG 2021; rail lines must accommodate

the dimensional envelope of oversized armoured equipment; and port and airfield facilities must possess the throughput capacity to receive reinforcing formations at operationally required rates of arrival (Van Creveld 2004) (Sollfrank and Boeke 2024).

1.2. Infrastructure Readiness as a Determinant of Effective Host Nation Support

The operational effectiveness of Host Nation Support is ultimately bounded by a constraint that no amount of legal preparation, political commitment, or logistical planning can substitute for: the physical readiness of the infrastructure through which Allied forces must move, be received, and sustained. Infrastructure readiness, in the context of HNS, refers to the degree to which the civilian and dual-use infrastructure of the host nation meets the technical specifications required to support military operations at the tempo and scale that collective defence scenarios demand. This encompasses a wide spectrum of engineering parameters, from the load classification of bridges and the structural capacity of road surfaces to the gauge and axle-load tolerances of rail networks, the berth depth and crane capacity of reception ports, and the apron area and fuel throughput of designated airfields. Where these parameters satisfy the applicable NATO Standardization Agreements, infrastructure may be considered HNS-ready; where they fall short, they constitute an operational liability that directly degrades the Alliance's capacity to fulfil its collective defence commitments (Commission. 2018).

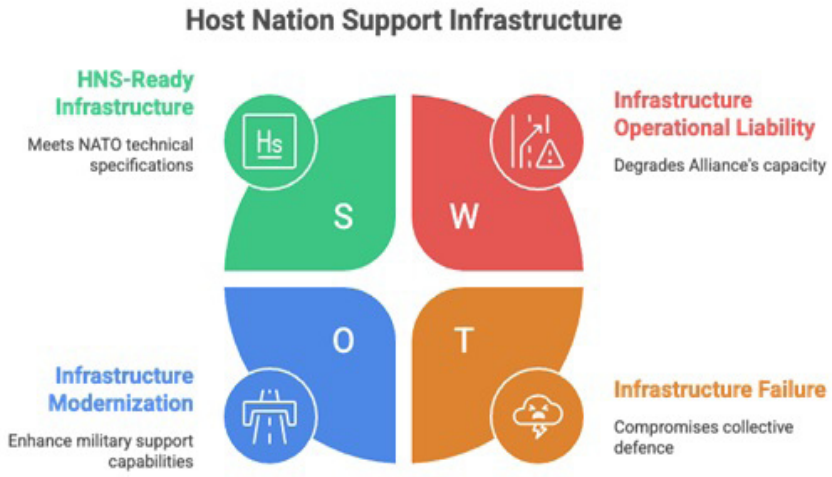

Figure no. 1: SWOT (strengths, weaknesses, opportunities and threats) analysis of the host nation support infrastructure

2. Civil Engineering Standards and NATO Military Requirements: A Gap Analysis on the Eastern Flank

The previous chapter established that Host Nation Support is fundamentally an infrastructure-dependent capability, and that the readiness-commitment gap between what HNS agreements require and what civilian infrastructure delivers constitutes a systemic constraint on NATO's collective defence posture. The present chapter advances the analysis by operationalising this gap through a systematic comparison of NATO engineering standards and the actual infrastructure conditions prevailing across the Eastern Flank. Drawing on applicable Standardization Agreements, independent audit findings, and national infrastructure assessments, it first maps the technical benchmarks that NATO military operations impose on road, bridge, rail, and reception infrastructure. It then evaluates the degree to which those benchmarks are met by the existing civilian infrastructure of Poland, Romania, Estonia, Latvia, and Lithuania, states that occupy the geographic frontline of Alliance deterrence and bear a disproportionate HNS burden in any credible reinforcement scenario. The gap analysis that results provides the empirical foundation for the institutional framework proposed in Chapter 3 (Barrie 2021).

NATO Engineering Standards and the Military Infrastructure Benchmark

Any rigorous assessment of infrastructure readiness for HNS purposes must begin from a precise understanding of the engineering standards that NATO military operations impose on the infrastructure through which they are conducted. These standards are codified primarily in NATO Standardization Agreements, supplemented by Alliance doctrine and operational planning guidance, and they define the technical floor below which civilian infrastructure cannot be considered operationally usable for collective defence purposes. Understanding these benchmarks in their technical specificity is essential both for assessing the scale of the readiness-commitment gap and for designing the governance interventions required to close it, since it is only by reference to defined engineering parameters that infrastructure investment programmes can be meaningfully prioritised, sequenced, and evaluated.

The foundational instrument governing road infrastructure for HNS purposes is STANAG 2154, which establishes the Military Load Classification system for roads and routes, specifying the classification procedures, marking standards, and movement control arrangements through which civilian road networks are assessed and designated for military use. The classification system assigns routes a numerical Military Load Class value reflecting the maximum vehicle load the route can sustain, derived from the weakest structural element along the route, which in the large majority of cases is a bridge rather than the road surface itself. For the movement of heavy armoured formations, which constitute the core of any NATO

reinforcement response to a conventional threat on the Eastern Flank, the relevant Military Load Class requirements are substantial: a main battle tank column requires routes classified to MLC 70 or above, while heavy logistics convoys including fuel tankers, ammunition carriers, and engineer equipment typically require MLC 50 to 60. Routes unable to support these loads require either diversion to alternative itineraries, temporary strengthening through engineer bridging, or the tactical fragmentation of formations to use multiple lower-capacity routes simultaneously, each of which imposes operational delay and consumes scarce combat support resources (Lund 2021).

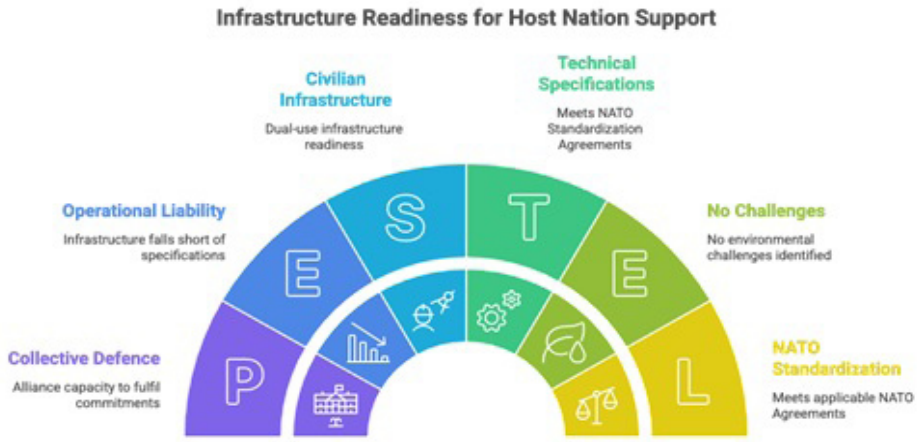

Figure no. 2: Political, Operatioanal, Social, Tehchnological, Environmental and Legal Implications
(author's own source)

3. Infrastructure as Strategic Enabler: Engineering Baselines for NATO Host Nation Support

The aggregate effect of these standards is to define a comprehensive engineering baseline that civilian infrastructure must meet across multiple dimensions simultaneously for a host nation to be considered capable of delivering effective HNS. Critically, this baseline is not static: as NATO's force structure evolves, as new equipment generations impose heavier loads and larger dimensional envelopes, and as Alliance operational planning adapts to the lessons of contemporary conflict, the engineering requirements imposed on host nation infrastructure change accordingly. The dynamic character of the military engineering benchmark means that infrastructure readiness is not a problem that can be solved once through a targeted investment programme, but one that must be continuously monitored and periodically

reassessed as both the standard and the baseline evolve (Kunert 2020). What the foregoing analysis of NATO engineering standards makes evident is that achieving and sustaining infrastructure readiness for HNS purposes requires a fundamentally different approach to civilian infrastructure planning than the one that currently prevails in most member states. Where civilian infrastructure investment is typically driven by traffic volume, economic return, and the safety standards of national and European regulatory frameworks, HNS-ready infrastructure must additionally satisfy military load classifications, dimensional envelopes, and throughput parameters that have no civilian analogue and that are absent from the planning criteria applied by national road authorities, rail regulators, and port development agencies.

3.1. Governance Architectures for Integrating Defence Requirements into Civil Infrastructure Planning

While engineering standards define the technical conditions required for effective Host Nation Support, the implementation of these standards ultimately depends on governance structures capable of translating military requirements into civilian infrastructure planning processes. The challenge is not merely technical but institutional: NATO operational thresholds must be embedded within national infrastructure development cycles that are traditionally governed by economic, environmental, and public service considerations rather than defence imperatives.

Civil infrastructure planning in most European states follows long investment cycles driven primarily by cost-benefit analysis, traffic demand projections, and regulatory compliance with European transport and environmental frameworks. Defence requirements, by contrast, are characterised by contingency planning, high-impact but low-frequency operational scenarios, and classification constraints that limit the transparency of military specifications. The resulting mismatch between civilian planning logic and military operational needs frequently leads to delays in infrastructure adaptation, fragmented investment priorities, and underutilisation of available dual-use funding mechanisms (Dick Zandee 2021). To address this structural gap, several NATO Eastern Flank states have begun to develop institutional mechanisms that integrate defence engineering considerations into national infrastructure governance. These mechanisms typically operate across three interrelated levels: strategic coordination, technical standardisation, and financial programming.

At the strategic level, interministerial coordination platforms are established to align defence policy with national infrastructure investment strategies. Ministries responsible for defence, transport, infrastructure, and finance collaborate to identify critical mobility corridors and prioritise investments that serve both civilian and military purposes. Poland's military mobility programme, for example, integrates NATO requirements into national transport infrastructure planning through a

permanent coordination mechanism linking the Ministry of National Defence with the Ministry of Infrastructure. Similar coordination structures have emerged in the Baltic states, where defence ministries actively participate in national transport planning committees.

At the technical level, governance mechanisms ensure that engineering standards applied in infrastructure design incorporate military load and dimensional requirements where relevant. This involves systematic route classification, bridge capacity assessments, and the integration of NATO Military Load Classification (MLC) standards into infrastructure evaluation procedures. In several Eastern Flank countries, specialised military engineering units collaborate with national road and rail authorities to map infrastructure segments that meet operational thresholds and identify priority upgrade projects. Financial integration constitutes the third critical dimension of governance. Infrastructure adaptation for military mobility often requires significant capital investment that exceeds the scope of defence budgets alone. Consequently, states increasingly rely on hybrid financing models combining national infrastructure funds, defence allocations, and European Union programmes such as the Connecting Europe Facility (CEF) Military Mobility initiative.

By aligning defence-related infrastructure upgrades with broader transport network modernisation programmes, governments are able to maximise dual-use benefits while distributing financial burdens across multiple policy domains (NATO 2014). The institutionalisation of such governance mechanisms reflects a broader shift in the conceptualisation of infrastructure within security policy. Rather than being treated as a passive enabling environment, infrastructure is increasingly recognised as a strategic asset whose design, maintenance, and operational management must be integrated into defence planning cycles. Effective Host Nation Support therefore depends not only on engineering compliance with NATO standards, but on governance systems capable of sustaining continuous civil–military coordination over long infrastructure investment horizons.

4. Applied Perspectives on Civil-Military Infrastructure Cooperation in Poland, Romania, and the Baltic States

The experience of Poland, Romania, and the Baltic states illustrates that Host Nation Support effectiveness depends not only on military planning, but on the extent to which infrastructure governance mechanisms are institutionalised across different levels of the state.

In Poland, strategic coordination between the Ministry of National Defence, transport authorities, and NATO planners has enabled the identification of key military mobility corridors connecting German logistics hubs with the Suwałki corridor and the eastern regions bordering Belarus and Ukraine. Poland has invested

significantly in dual-use road and rail infrastructure, prepositioning facilities, and port modernisation, particularly in Gdańsk and Gdynia. Technical standardisation measures, including bridge assessments and route classification according to NATO standards, have improved the country's capacity to support heavy Allied deployments.

Table no. 1: Governance Mechanisms Supporting Infrastructure Readiness for Host Nation Support

Governance Level	Key Actors	Core Functions	Strategic Outcome
Strategic Coordination	Ministries of Defence, Transport, Infrastructure; NATO planners	Identification of military mobility corridors; alignment of defence and national infrastructure strategies	Integration of defence priorities into national infrastructure policy
Technical Standardisation	Military engineering units; national road and rail authorities; infrastructure agencies	Application of NATO STANAG standards; bridge load classification; route assessments	Infrastructure capable of supporting military mobility requirements
Financial Programming	National governments; EU institutions; infrastructure funds	Allocation of resources for dual-use infrastructure upgrades; coordination with EU Military Mobility funding	Sustainable financing for infrastructure adaptation
Operational Coordination	Logistics commands; civil emergency agencies; local authorities	Planning of reinforcement routes; crisis movement control; infrastructure availability monitoring	Rapid and coordinated deployment of Allied forces
Data and Monitoring Integration	Infrastructure operators; defence digital platforms; monitoring systems	Collection and analysis of infrastructure performance data; predictive maintenance	Continuous infrastructure readiness and resilience

Romania has increasingly prioritised infrastructure projects with military relevance, especially around the Port of Constanța, Mihail Kogălniceanu Air Base, and the north-south transport axes linking the Black Sea region with Central Europe. However, the Romanian case also demonstrates the challenges associated with fragmented infrastructure governance, inconsistent road quality, insufficient

rail modernisation, and the limited number of bridges capable of supporting heavy armoured vehicles. Although coordination between defence and civilian infrastructure authorities has improved, significant investment remains necessary to align national transport networks with NATO operational requirements.

The Baltic states represent a distinct case due to their smaller territory, geographic exposure, and proximity to Russia. Estonia, Latvia, and Lithuania have focused strongly on operational coordination, cross-border infrastructure planning, and the reinforcement of transport corridors that would support rapid Allied deployment in the event of a crisis. Projects such as Rail Baltica have become strategically important not only for economic integration but also for military mobility. At the same time, the Baltic states have invested in digital infrastructure monitoring, logistics planning, and resilience measures designed to maintain transport continuity under hybrid or cyber threats (Adrian Giurgiu 2024.)

Taken together, these cases demonstrate that infrastructure readiness for Host Nation Support is most effective when supported by institutional coordination, technical standardisation, sustainable financing, and integrated monitoring systems. They also show that, despite different national conditions, the fundamental challenge remains the same: transforming civilian infrastructure into a reliable operational asset for collective defence.

A further lesson emerging from the comparison of Poland, Romania, and the Baltic states is that infrastructure readiness cannot be assessed solely through the existence of physical assets, but must also account for their resilience under conditions of disruption. Roads, railways, ports, and communication networks may satisfy civilian requirements during peacetime, yet remain vulnerable to cyberattacks, sabotage, congestion, or kinetic strikes during crisis situations. Consequently, infrastructure planning for Host Nation Support increasingly requires the integration of redundancy measures, alternative transport routes, backup energy systems, and real-time monitoring platforms capable of maintaining operational continuity under degraded conditions (Studies 2025) (Baltics 2024)

Moreover, the cases examined indicate that civil-military cooperation is most effective when it extends beyond emergency response and becomes embedded within long-term national planning cycles. Defence ministries, infrastructure agencies, transport authorities, and local governments must coordinate not only during crises but also throughout the design, financing, and maintenance of strategic infrastructure projects. This approach ensures that roads, bridges, railways, ports, and airfields are developed from the outset with dual-use functionality in mind, thereby reducing future adaptation costs and increasing the speed with which Allied forces can be received, moved, and sustained across national territory.

Conclusions

All in all, the analysis undertaken in this paper has demonstrated that the convergence of digital twin technology, predictive monitoring, and artificial intelligence represents a transformative frontier in defence resilience. Smart infrastructure no longer functions as a passive substrate of national power but as an active intelligence system, capable of perceiving, adapting, and responding to evolving threats across physical, digital, and cognitive domains.

From a strategic perspective, the adoption of data-driven systems redefines both the nature and scope of defence preparedness. Predictive monitoring introduces a paradigm in which resilience becomes anticipatory rather than reactive, enabling decision-makers to foresee disruptions and mobilise countermeasures before critical thresholds are reached. In this sense, the essence of security transitions from protection of assets to preservation of *continuity*, *functionality*, and *decision superiority*.

The study further suggests that digital twins serve not merely as engineering innovations but as doctrinal instruments. They integrate structural diagnostics, cyber resilience, and operational intelligence within a unified framework that strengthens both national and allied defence architectures. The ability to model, simulate, and forecast system behaviour transforms uncertainty into an operational variable, that can be measured, managed, and strategically exploited.

Ultimately, the evolution toward smart, adaptive infrastructure signifies the emergence of a new defence paradigm-one where the boundary between technology and strategy is increasingly indistinct. The resilience of future societies will depend not solely on the strength of their physical structures, but on the intelligence embedded within them. In this context, *smart infrastructure* becomes synonymous with *smart defence*, representing the next decisive step in achieving enduring security in an age of complexity and interdependence.

Additionally, the emergence of predictive, data-driven defence systems underscores the growing relevance of ethical and security frameworks governing the use of advanced technologies. The capacity to automate elements of risk assessment, mission assurance, and operational planning introduces questions concerning transparency, accountability, and human oversight. Ensuring that such systems remain aligned with democratic norms, strategic intent, and societal values will be essential for preserving legitimacy as defence infrastructures evolve toward higher levels of autonomy and computational reasoning..

In this respect, the experiences of Poland, Romania, and the Baltic states demonstrate that Host Nation Support is no longer merely a logistical function, but a broader test of whether civilian infrastructure systems can be transformed into credible instruments of collective defence. Finally, the research presented in this paper highlights the need for long-term strategic investment in resilient, adaptive,

and digitally integrated infrastructure ecosystems. As geopolitical tensions intensify and hybrid threats proliferate, the nations that succeed will be those capable of transforming technological innovation into enduring strategic advantage. Digital twins and predictive monitoring offer precisely such an avenue: they equip defence planners with the capacity to understand, anticipate, and shape complex operational environments. By embedding intelligence and foresight into the structural foundations of society, states strengthen not only their defence posture but their overall capacity to navigate an uncertain and interconnected future.

BIBLIOGRAPHY:

NATO. 2014. *MC 334/3: NATO Principles and Policies for Host Nation Support. Military Committee. Brussels: NATO Standardization Office.* Brussels: NATO Standardization Office.

UNECE., United Nations Economic Commission for Europe. Geneva:. 2020. *Trans-European Motorway and Trans-European Railway Networks: Road and Rail Infrastructure.* Audit , Geneva: UNECE.

NATO. 2015. *STANAG 2025: Military Load Classification Markings. 6th Edition.* Brussels:: NATO Standardization Office.

Van Creveld, M. (. 2004. *Supplying War: Logistics from Wallenstein to Patton (2nd ed.).* Cambridge University Press.

Fiott, D. 2019. *The CSDP and Military Mobility.* . Paris: European Union Institute for Security Studies (EUISS.

Commission., European. 2018. *Action Plan on Military Mobility.* Brussels: European Commission.

Barrie, D., Hackett, J., Nickchild, M., & Béraud-Sudreau, L. 2021. *NATO Military Mobility: The Challenge of Moving Forces Across Europe.* London: International Institute for Strategic Studies.

Dick Zandee, et al. 2021. *Military Mobility: Challenges and Opportunities for the EU.* The Hague: : Clingendael Institute.

Kunert, A., & Śmietana, J. 2020. *Selected Aspects of Infrastructure Resilience in the Context of Host Nation Support.* Security and Defence Quarterly.

Lund, J., & Stoicescu, K. 2021. *The Road to Resilience: NATO, the EU and Military Mobility.* International Centre for Defence and Security (ICDS).

Council, Atlantic. 2025. *Enhancing Land Military Mobility in Europe: Advocating a Pragmatic Approach.* Washington DC: Atlantic Council .

GLOBSEC. 2025. *Roads to Readiness: Military Mobility Infrastructure on NATO's Eastern Flank.* Bratislava: GLOBSEC Future Security and Defence Council.

NATO. 2022 . "Strategic Concept". Brussels.

Evans, Carol V., Chris Anderson, Malcolm Baker, Ronald Bearse, Salih Biçakci, and others. 2022. "Enabling NATO's Collective Defense: Critical Infrastructure Security and Resiliency. Ankara: NATO Centre of Excellence Defence Against Terrorism and U.S. Army". In *NATO Centre of Excellence Defence Against Terrorism and U.S. Army* , 101-102. Ankara: NATO COE-DAT Handbook 1.

Sollfrank, Alexander, and Sergei Boeke. 2024. "Enablement and Logistics as Critical Success Factors for Military Operations: Comparing Russian and NATO Approaches." *The RUSI Journal, Volume 169, Number 7* pp. 10-22.

NATO. 2021. *Strengthened Resilience Commitment.* June 14. Accessed March 4, 2026. https://www.nato.int/en/about-us/official-texts-and-resources/official-texts/2021/06/14/strengthened-resilience-commitment

NATO. 2023. *NATO Resilience Symposium Report.* Norfolk,: VA: Allied Command Transformation.

Adrian Giurgiu, Mihai Vircă, and Alexandra Noja. 2024. "Military Mobility in the Vision of NATO and the European Union." *Romanian Military Thinking.*

Studies, European Union Institute for Security. 2025. *The Road to Readiness: How the EU Can Strengthen Military Mobility.* Paris: EUISS.

Baltics, Rail Baltica Plays a Crucial Role in Enhancing Military Mobility across the. 2024. *Rail Baltica.* Accessed Jan. 17, 2026. https://www.railbaltica.org/news/rail-baltica-plays-a-crucial-role-in-enhancing-military-mobility-across-the-baltics/