




Designing a Contemporary National Mobilization System for Kazakhstan: A Comparative Case Study

◆◆◆

Kazakistan için Çağdaş Ulusal Seferberlik Sistemi Tasarımı: Karşılaştırmalı Bir Vaka Çalışması

Hakan Ömer TUNCA *

<https://izlik.org/JA75GS53AH>

<https://doi.org/10.25204/iktisad.1787599>

Abstract

Article Info

Paper Type:
Research Paper

Received:
19.09.2025

Accepted:
16.04.2026

© 2026 JEBUPOR
All rights reserved.



This article examines how Kazakhstan can develop a modern national mobilization system to confront emerging security challenges, including hybrid warfare, regional instability, and civil-economic vulnerabilities. It specifically asks whether an integrated civil-military mobilization framework can enhance Kazakhstan's strategic resilience and preparedness against both conventional and asymmetric threats. The study is theoretically grounded in the perspectives of security governance, state capacity, and strategic resilience, emphasizing the importance of whole-of-society preparedness in contemporary security environments. Employing a comparative case study methodology, the article draws insights from the mobilization experiences of nine countries including Türkiye, Russia, China, Finland, Israel, Poland, South Korea, France, Azerbaijan, and Kazakhstan selected for their geopolitical, institutional, and security relevance. The findings reveal that Kazakhstan currently lacks a coherent mobilization framework and remains reliant on fragmented mechanisms inherited from the Soviet era. The proposed model advocates the establishment of a National Mobilization and Crisis Coordination Agency under the authority of the president, supported by legal reforms and regular national exercises. In conclusion, the adoption of this multidimensional framework is expected to enhance Kazakhstan's resilience, provide policymakers with a flexible preparedness strategy, and contribute to broader discussions on security within the Eurasian context.

Keywords: National mobilization, national security, hybrid warfare, civil-military integration, Eurasian security.

Öz

Makale Bilgileri

Makale Türü:
Araştırma
Makalesi

Geliş Tarihi:
19.09.2025

Kabul Tarihi:
16.04.2026

© 2026 İKTİSAD
Tüm hakları saklıdır.



Bu makale, Kazakistan'ın ortaya çıkan güvenlik tehditlerine, hibrid savaşlar, bölgesel istikrarsızlık ve sivil-ekonomik kırılganlıklara karşı nasıl modern bir ulusal seferberlik sistemi geliştirebileceğini incelemektedir. Çalışma özellikle, entegre bir sivil-asker seferberlik çerçevesinin Kazakistan'ın hem konvansiyonel hem de asimetrik tehditlere karşı stratejik direncini ve hazırlığını artırıp artıramayacağını sorgulamaktadır. Teorik olarak güvenlik yönetimi, devlet kapasitesi ve stratejik dayanıklılık perspektiflerine dayanan çalışma, modern güvenlik ortamlarında topyekûn toplumsal hazırlığın önemini vurgulamaktadır. Karşılaştırmalı bir vaka çalışması metodolojisi kullanan makale; jeopolitik, kurumsal ve güvenlik açısından uygunluklarına göre seçilen Türkiye, Rusya, Çin, Finlandiya, İsrail, Polonya, Güney Kore, Fransa, Azerbaycan ve Kazakistan dahil olmak üzere dokuz ülkenin seferberlik deneyimlerinden çıkarımlar yapmaktadır. Bulgular, Kazakistan'ın halihazırda tutarlı bir seferberlik çerçevesinden yoksun olduğunu ve Sovyet döneminden miras kalan parçalanmış mekanizmalara bağımlı kalmaya devam ettiğini ortaya koymaktadır. Önerilen model, yasal reformlar ve düzenli ulusal tatbikatlarla desteklenen, doğrudan cumhurbaşkanının yetkisi altında bir Ulusal Seferberlik ve Kriz Koordinasyon Ajansı'nın kurulmasını savunmaktadır. Sonuç olarak, bu çok boyutlu çerçevenin benimsenmesinin Kazakistan'ın direncini artırması, politika yapıcılara esnek bir hazırlık stratejisi sunması ve Avrasya bağlamındaki daha kapsamlı güvenlik tartışmalarına katkıda bulunması beklenmektedir.

Anahtar Kelimeler: Ulusal seferberlik, ulusal güvenlik, hibrit savaş, sivil-asker entegrasyonu, Avrasya güvenliği.

Atıf/ Cite (APA): Tunca, H. Ö. (2026). Designing a contemporary national mobilization system for Kazakhstan: A comparative case study. *Journal of Economics Business and Political Researches*, (29), 480-501. <https://doi.org/10.25204/iktisad.1787599>

* PhD, Atılım University, Engineering Faculty, hakan.tunca@atilim.edu.tr

1. Introduction

Kazakhstan is confronted with a strategic dilemma regarding national mobilization. Despite its extensive territory, considerable natural resource endowments, and growing geopolitical importance, the country's mobilization framework—inherited from the Soviet era—remains largely antiquated and predominantly oriented toward mass manpower mobilization. Recent scholarship on hybrid warfare, strategic resilience, and security governance emphasizes that contemporary mobilization systems must holistically integrate military preparedness with civil defense, economic coordination, and cyber resilience (Galeotti, 2022; Kofman & Lee, 2022; Jungwirth et al., 2023). While the literature on mobilization and total defense has expanded significantly within NATO and European contexts, comparatively little attention has been devoted to post-Soviet Central Asian states, particularly Kazakhstan. Existing studies generally focus on broader military doctrines or regional geopolitics, leaving a critical gap concerning how Kazakhstan can develop an integrated, multidimensional mobilization framework adapted to modern hybrid threats. This study seeks to address that gap through a comparative analysis of selected Eurasian and European cases.

Kazakhstan's security environment presents a distinct paradox. On the one hand, its vast geographical expanse, sparse population density, and the absence of immediate direct military confrontation reduce the likelihood of urgent, full-scale mobilization. On the other hand, its extensive militarized border with Russia, China's growing strategic influence, broader Central Asian instability, and the rise of asymmetric threats create persistent vulnerabilities that cannot be mitigated by traditional reserve systems alone. Operating within this complex landscape, Kazakhstan's current mobilization structure remains highly fragmented. It is heavily reliant on outdated Soviet-era mechanisms, lacking the necessary integration of civilian institutions, economic sectors, and cyber capabilities. This institutional limitation has become increasingly critical in light of ongoing military reforms and the modern transformation of warfare. Consequently, the central research question of this article is: How can Kazakhstan develop a modern, flexible, and nationally cohesive mobilization system capable of integrating military, civil, economic, and cyber dimensions, while effectively adapting the strategic experiences of comparable states to its unique geopolitical and institutional context?

The scope of existing scholarship on mobilization systems remains relatively narrow and ill-equipped to answer this question. Much of the comparative literature concentrates on NATO member states and other major powers, featuring analyses of European professionalization and reserve reforms, Nordic total defence models, and high-threat cases such as Israel and South Korea (Boene, 2009; Irondelle & Schmitt, 2013; Eilam, 2018; Sederholm et al., 2025; Shim, 2017). Conversely, studies analysing Eurasian security predominantly emphasize the roles of Russia and China in shaping regional order and great-power competition, treating Central Asian states largely as secondary objects rather than primary cases of national mobilization (Peimani, 1998; Buzan & Wæver, 2009; Cooley, 2012; Baev, 2017). Consequently, Kazakhstan's specific mobilization challenges remain insufficiently analysed, and investigations into civil–military cooperation rarely provide a comprehensive framework for how a post-Soviet state can synchronize its military, civil, economic, and informational instruments into a cohesive approach.

To address this empirical and conceptual void, the present study is theoretically grounded in a framework built upon three interrelated pillars: security governance, state capacity, and strategic resilience. By utilizing these concepts, the article evaluates how Kazakhstan's distinctive circumstances including its landlocked geographical position, diverse ethnic composition, and vulnerability to external influences from Russia and China shape its overarching capacity to withstand and adapt to multidimensional security shocks.

Empirically, this study adopts a qualitative comparative case study methodology. Kazakhstan serves as the principal case, while nine comparator nations are analysed to provide both strategic and institutional perspectives: Azerbaijan, China, Finland, France, Israel, Poland, Russia, South Korea,

and Türkiye. These nations have been deliberately selected based on their geographical proximity, regime characteristics, and diverse traditions of mobilization, thereby encompassing a spectrum of total, partial, and hybrid systems. To ensure analytical rigor, this research draws upon a triangulation of academic and strategic literature, relevant policy documents, and publicly accessible data.

Building upon this comparative foundation, the article ultimately introduces a tailored national mobilization model designed to address the distinct strategic landscape of Kazakhstan. A central feature of this proposed model is the establishment of a civilian-led, cabinet-level agency tasked with coordinating military, civil, economic, and cyber mobilization within a comprehensive four-tiered framework. Furthermore, the paper identifies essential prerequisites for successful implementation, namely comprehensive legal reforms, the restructuring of military reserves, and the enhanced integration of civil defence. By anchoring its institutional design in comparative analysis, this work significantly contributes to bridging the existing gap in the literature surrounding post-Soviet mobilization systems, offering actionable insights for Eurasian security architectures.

2. Conceptual Framework and Literature Review

The twenty-first century has undergone a significant transformation in security threats, necessitating corresponding adjustments in the responses of states. Conflicts in Europe, the Middle East, and Asia illustrate the convergence of conventional warfare with asymmetric strategies, hybrid operations, cyber aggression, and risks related to energy security. For Kazakhstan, which is positioned between two nuclear powers, namely Russia and China, and shares borders with volatile regions, the need for an effective mobilization system is particularly pressing. This analysis contextualizes mobilization not merely as a military endeavour but as a holistic civil-military initiative that bolsters strategic resilience, enhances state capacity, and improves national security governance. Kazakhstan's security concerns are influenced by a multitude of elements, including persistent remnants of Soviet-era frameworks, a lack of extensive experience in national mobilization efforts, reliance on external security assurances through entities such as the Collective Security Treaty Organization (CSTO) and various bilateral agreements, and an increasingly dynamic landscape characterized by hybrid warfare.

Mobilization has traditionally been characterized as the procedure through which a state readies its military forces for conflict, involving the activation of reserves, conscription, and meticulous logistical planning. Established definitions highlight the systematic organization and preparation of all resources available to a nation to address emergencies that pose a threat to its security. However, contemporary academic discourse emphasizes that mobilization extends beyond the military sphere. Instead, it necessitates the comprehensive integration of civilian, economic, and institutional resources (Buzan, Wæver, & de Wilde, 1998; Edmunds, 2014; Wither, 2020; Luckham & Kirk, 2013).

Military mobilization entails the process of gathering and equipping military forces, summoning reserve units, and readying them for either combat or peacekeeping missions. In contrast, partial mobilization may consist of reactivating specific reserve forces or implementing temporary measures in reaction to regional emergencies. The concept of national mobilization, in a more comprehensive framework, includes civil defence initiatives, disaster response operations, industrial mobilization efforts, and readiness for cyber threats. Researchers specializing in modern warfare emphasize that the potential risks of cyber-attacks, electromagnetic pulse incidents, and industrial sabotage broaden the parameters of mobilization to encompass areas that have traditionally been regarded as outside the realm of military doctrine (Irfan, 2018).

Mobilization serves as a connection between the military sector and civilian society. It encompasses aspects such as industrial readiness, energy security, economic stability, and societal resilience. The principle of the "nation-in-arms," which denotes the collaboration of the military, law enforcement agencies, private entities, and the general populace during emergencies, exemplifies the

concept of mobilization as a societal pact aimed at ensuring national defence and survival. This holistic viewpoint aligns with total defence strategies observed in Northern Europe and the multi-layered defence frameworks utilized in Türkiye and Israel (Sederholm et al., 2025; Antai & Hellberg, 2024; Kamel & Zyla, 2018; Eilam, 2018; Inbar & Shamir, 2014; Ocal, 2021; Zulham et al., 2020).

The academic discourse typically categorizes mobilization into three primary typologies: total, partial, and hybrid systems. Each typology corresponds to distinct historical circumstances, institutional frameworks, and strategic necessities.

Total mobilization refers to the comprehensive activation of a nation's human and material resources in preparation for armed conflict. This process includes mandatory military service, robust reserve structures, and the conversion of the economy to support wartime efforts. Finland exemplifies this model: over 90% of Finnish males participate in compulsory military service, subsequently entering the reserves, which allows for the mobilization of up to 130,000 reservists within a span of 30 days (Sederholm et al., 2025; Kosonen & Mälkki, 2022).

Partial mobilization is implemented when threats do not reach existential proportions, necessitating the focused mobilization of specific categories of personnel or resources. This approach frequently aids in addressing regional crises, engaging in peacekeeping operations, or conducting limited military conflicts. For instance, the United States enacted partial mobilization during the Gulf War (1990–1991), whereas South Korea utilizes a system of conscription in conjunction with selective reserves. Although France has eliminated compulsory military service, it preserves legal provisions for partial national mobilization in times of emergency (Irondelle & Schmitt, 2013).

Alternative methods of classifying mobilization tend towards systems that are partially hybrid, underscoring the critical importance of multi-tiered readiness forces. This framework encompasses conscription, a partially trained reserve, and a structured civil and economic mobilization strategy. The emergence of hybrid warfare and asymmetric tactics employed by potential adversaries introduces a new layer of military capability necessities that extend beyond the conventional employment of reserve personnel in traditional warfare.

The contemporary framework of mobilization extends beyond the doctrines formulated during the Cold War era. The scholarly discourse primarily emphasizes four principal challenges:

- **Hybrid Warfare:** The amalgamation of both conventional and unconventional strategies in hybrid warfare complicates the mobilization process, necessitating readiness across both military and civilian sectors concurrently (Wang et al., 2021).
- **Cyber Threats and Information Warfare:** In contemporary conflicts, hostile actors increasingly target critical infrastructure, communication networks, and industrial systems. To counter these vulnerabilities, cyber mobilization—encompassing the training of specialized personnel, the enhancement of defensive capabilities, and the creation of network redundancies—has emerged as a fundamental pillar of national security strategies (Aloudat et al., 2011).
- **Energy Security Vulnerabilities:** For energy-abundant nations such as Kazakhstan, the fortification of oil, gas, and electricity infrastructures is essential. Mobilization strategies must integrate mechanisms that safeguard, restore, and secure energy assets in times of crisis (Sazdovska, 2023).
- **Climate Change and Natural Disasters:** The expanding interpretations of mobilization now encompass large-scale disaster response, humanitarian coordination, and resilience to environmental disruptions. Literature concerning mobilization increasingly intersects with civil defence and emergency management (Kamel & Zyla, 2018).

Modern mobilization necessitates collaboration among governmental bodies, military entities, and local populations in scenarios such as disaster relief, counter-terrorism efforts, and law enforcement activities. This cooperative framework has been institutionalized within the European Union through the "comprehensive approach," which seeks to integrate civil and military resources for effective crisis management (Kamel & Zyla, 2018).

Civil-military integration also relates to the private sector. Mobilization systems are progressively dependent on private industry to sustain essential infrastructure, supply chains, and digital networks during times of crisis. The attainment of strategic resilience necessitates robust collaboration between the public and private sectors, especially in critical domains such as energy, telecommunications, and finance. This necessity is in harmony with Kazakhstan's security requirements, given that its economy is significantly reliant on energy exports and international trade routes that are susceptible to disruption.

The body of literature recognizes various theoretical frameworks through which the concept of mobilization may be examined. A particularly valuable perspective is that of security governance, which highlights the importance of collaboration among a range of stakeholders—including state entities, military organizations, civil society, and the private sector—in addressing security challenges. From this viewpoint, mobilization transcends mere military capability; it also encompasses considerations of institutional structure and the effectiveness of governance.

A secondary framework of analysis is state capacity theory, which emphasizes the capability of states to marshal resources, implement policies, and coordinate efforts in times of crisis. Mobilization signifies a state's ability to effectively utilize human, economic, and institutional resources to ensure survival. In post-Soviet nations like Kazakhstan, remnants of centralized planning coexist with emerging democratic reforms, resulting in a hybrid institutional framework. This context presents challenges to mobilization, while simultaneously providing opportunities for innovative institutional development.

The third and most pivotal theoretical perspective for this research is strategic resilience. Resilience is characterized as the ability to alleviate disruptions and restore the operational effectiveness of both military and societal systems during periods of crisis (Luckham & Kirk, 2013). Mobilization serves as the practical manifestation of resilience; it empowers states to endure shocks, swiftly allocate resources, and maintain functionality in the face of pressure. In contrast to frameworks of social resilience, which primarily concentrate on local communities or non-military threats, strategic resilience accentuates the systemic capability of the state to withstand military, cyber, and geopolitical crises.

For Kazakhstan, the concept of strategic resilience serves as a particularly pertinent foundational principle. Due to its geographical location situated between Russia and China, complete mobilization proves to be impractical, whereas dependence on partial mobilization introduces significant vulnerabilities. Consequently, a hybrid mobilization framework that is consistent with strategic resilience—focusing on adaptability, comprehensive societal integration, and multilayered preparedness—represents the most appropriate route forward.

3. Methodology

This research utilizes a qualitative comparative case study methodology to examine the ways in which states establish and modify mobilization systems considering modern strategic challenges. The case study framework is particularly effective for assessing intricate institutional arrangements that are contingent upon their specific contexts and multi-faceted in nature, as is the scenario with national mobilization. Although there are substantial discussions surrounding the advantages and drawbacks of case study methods (Yin, 2014; Flyvbjerg, 2006; Stake, 1995), this study employs it in a practical

manner: it facilitates a thorough contextual analysis of Kazakhstan as the principal case while deriving comparative insights from a varied array of reference countries.

The comparative framework is grounded in two fundamental principles. Firstly, the mobilization system of Kazakhstan cannot be comprehensively analysed in isolation, as its security challenges are intrinsically influenced by both regional dynamics and global shifts in military conflict. Secondly, existing literature reveals considerable deficiencies in the examination of post-Soviet mobilization systems (Peimani, 1998; Davis, 2017), thereby underscoring the need for a more expansive comparative analysis. Consequently, a comparative case study methodology enables the discernment of structural patterns, institutional similarities, and divergences that may contribute to shaping Kazakhstan's reform initiatives. A purposive sampling strategy was employed to select nine comparator countries in addition to Kazakhstan. The selection process was guided by four specific criteria.

- Geographical characteristics. Geography has long been recognized as a central determinant of state security and mobilization capacity. States with expansive landmass, extended borders, and vulnerable geopolitical positioning require distinctive mobilization frameworks due to the difficulty of defending wide frontiers and the risks of exposure to external aggression (Buzan & Wæver, 2009).
- Political regimes. The configuration of political regimes plays a crucial role in the development and execution of mobilization systems. Hybrid, semi-authoritarian, and presidential systems typically depend on centralized authority and bureaucratic oversight to synchronize civil and military mobilization efforts. Jarosiewicz (2016) emphasizes that the type of regime has been a pivotal determinant in influencing security sector reforms within Central Asia, thereby providing justification for the selection of comparator states with political contexts akin to Kazakhstan's governance framework.
- Military and economic capabilities. The systems of mobilization are influenced by the degree to which states can transform latent resources into operational capacity. Middle powers, characterized as states possessing moderate military and economic capabilities, generally have adequate institutional resources to facilitate mobilization, yet they are often limited by the systemic pressures exerted by more powerful nations (Holbraad, 1984).
- Strategic relevance to the Eurasian security architecture. Comparator cases were also chosen for their embeddedness in Eurasian security frameworks. Galeotti (2016) underlines the growing significance of hybrid warfare in regional security calculations, making the study of regionally integrated mobilization models indispensable for Kazakhstan.

Considering this foundation, the research centres on the nations of Azerbaijan, China, Finland, France, Israel, Poland, Russia, South Korea, and Türkiye. Collectively, these countries exemplify a broad array of mobilization practices, ranging from total defence models as seen in Finland and Israel, to hybrid layered frameworks characteristic of Türkiye and Poland, and extending to partial mobilization structures identified in France and South Korea. The inclusion of both democratic and authoritarian regimes enhances the analytical framework, thereby situating Kazakhstan's potential trajectories within a variety of institutional contexts.

The research employs a broad array of primary and secondary sources to guarantee analytical rigor and ensure triangulation. Primary data consist of official government strategic documents, defence white papers, national mobilization legislation, and planning directives. Additionally, reports and databases from entities such as NATO, the CSTO, and the Stockholm International Peace Research Institute offer further factual foundation. Secondary data are sourced from peer-reviewed academic literature, policy briefs, and focused studies on mobilization systems (Jarosiewicz, 2016).

The study utilizes a methodical and focused comparative framework as outlined by George and Bennett (2005). This approach involves an analysis of each case through a defined set of common dimensions, thereby ensuring comparability while simultaneously allowing for the emergence of contextual nuances. The key dimensions considered comprise mobilization structures (institutional arrangements, conscription systems, reserve designs, and legal frameworks); readiness indicators (mechanisms for activation, integration of civil and economic resources, and resilience to hybrid threats); and institutional coherence (central coordination, civil–military integration, and alignment with national security strategies). These dimensions are assessed to discern patterns and divergences among the cases, with a particular focus on extracting lessons applicable to Kazakhstan.

By placing Kazakhstan’s mobilization challenge within a comparative context, the methodology contributes in three ways. First, it highlights relevant parallels from both regional and international spheres that clarify Kazakhstan’s strategic options. Second, it underscores civil–military integration as a fundamental organizing principle, consistent with contemporary security studies. Third, it establishes the methodological foundation for subsequent analysis, which translates comparative insights into a proposed institutional framework tailored for Kazakhstan.

4. Case Studies

This section analyses the mobilization frameworks of Kazakhstan alongside a selection of comparable nations. Each case exemplifies the aspects that are most pertinent to the research goal: to ascertain how the design of institutions, integration of civil-military relations, and frameworks for readiness can contribute to the establishment of a modern mobilization framework tailored for Kazakhstan.

4.1. Kazakhstan

Kazakhstan’s national mobilization structure remains a Soviet relic ill-suited to its present strategic challenges. Despite increasing military expenditure and a National Mobilization Plan dating from 2003, its effectiveness is questionable (Davis, 2017). Modern threats include unresolved conflicts in the South and West and the growing danger of terrorism. On the positive side, national identity efforts, notably the centrist "Kazakhstan 2050 Strategy," demonstrate state resolve (Mun, 2014; Jarosiewicz, 2016). An institutional half-step can pave the way for the comprehensive sphere of national mobilization required to meet 21st-century demands.

4.1.1. Current Defence Structure

The first problem is how to re-create a national mobilization system amidst the transition from a Soviet-type military service provision system to a new state service provision system. The old mobilization system, especially the personnel (human resources) system of the Kazakh military, still depends on the ongoing military service system, which has been under review since the collapse of the Soviet Union. The rapid transition of the military service system has resulted in the loss of a reserve personnel system that was embedded in the Soviet military service type (Kříž, 2005). The new conscript system, which is under construction, requires a significant amount of time to develop an effective reserve personnel force and establish defence partnerships with the private sector.

Second, because the country is in a post-communist democratizing phase, a new institutional design is needed for the peacetime and wartime management of a large number of personnel. The previous system was based on central planning and federal levels of decision-making, as in the Soviet military doctrine of the 1950s, which intended to implement a point of mobilization system immediately. The previous military doctrine is still embedded in the military thinking of the Kazakh government.

4.1.2. Weaknesses in Civil-Military Coordination and Rapid Response Mechanisms

Kazakhstan's mobilization policy highlights its strategic vulnerabilities and prioritizes measures to address them. The country's huge territory and low population density create a significant strategic predicament (Tibekov et al., 2004; Buzan & Wæver, 2009). Furthermore, since the dissolution of the Soviet Union, it has been governed by what scholars describe as a hybrid military-political regime, aligned mainly with Russia-led security structures, which makes NATO membership improbable and limits the depth of its security ties with the United States (Peimani, 1998; Jarosiewicz, 2016). Despite incremental reforms, Kazakhstan continues to lag other Central Asian states in building a civil-military integration and reform system geared towards rapid reaction to a wide spectrum of challenges, including hybrid wars (Jarosiewicz, 2016; Luckham & Kirk, 2013). Hybrid wars, as recent European experience illustrates, can disrupt key military-economic coordination in a very short period (Galeotti, 2016; Irfan, 2018; Fedotenko, 2023). The weakness of such a system in Kazakhstan therefore constitutes a serious national security threat.

The identified weaknesses in the mobilization system represent the basic parameters affecting national stability and national security, irrespective of who is responsible for distributing power and devising crisis tactics and strategies. Since the nation-state can wage war and punishing criminals, a state's national security depends not only on how these feeble mobilization capacities are accounted for. It also determines the ability to rebuff any external attack or regime change, thereby preserving the existing ruling regime until the end of its constitutional mandate. In the event of another country threatening the political survival of Kazakhstan's ruling regime, this paradox continues to exist.

4.1.3. Strategic Vulnerabilities due to Vast Geography and Sparse Population

Kazakhstan's vast territory and limited population constitute significant strategic vulnerabilities (Tibekov et al., 2004). The country extends nearly three thousand kilometres from west to east, yet its population counts almost twenty-one million (Bureau of National Statistics [BNS], 2026). Such vast distances and sparse population make the country strategically vulnerable. Multiple authors stress that the low population density, combined with geopolitical competition in the region, may weaken Kazakhstan's national unity. (Peimani, 1998; Buzan & Wæver, 2009; Davis, 2017; BNS, 2026; Tibekov et al., 2004).

The demographic profile poses serious impediments to economic development. A handful of population hubs punctuate the country; Kazakhstan's administrative structure resembles another Soviet-era legacy (Tibekov et al., 2004; Davis, 2017; Mun, 2014). The large land mass and the long distances between centres hampers the development of a vibrant labour market. The coupling of heavy industrialization and sparse population further contributes to the problem. Travel times are frequently long between state and private enterprises, government administration, and other public institutions. A similar pattern characterizes communication and information services. Regular, reliable services and information flow become thus, very expensive. Strategically it also endangers sustainability and continuity of services in some cases, since spare parts and repairs may not be readily available.

4.1.4. Limited Preparedness for Protecting Critical Infrastructure

But one of the strategic vulnerabilities of the Kazakh mobilization system is its limited preparedness for protecting critical infrastructure. Among others, the country lacks an effective system for protecting energy pipelines, communication lines, and transportation routes from occupation during a contingency (Peimani, 1998; Cooley, 2012; Kaldor, 2012; Sazdovska, 2023; Luckham & Kirk, 2013).

Kazakhstan shares its borders with critical energy and transportation resources that must be always protected. The Western Kazakhstan Transportation Corridor continues from Crimea, passing through southern Russia, Western Kazakhstan, and Turkmenistan on the way to Kuwait via the Persian Gulf. The Caspian Pipeline transports oil from Russia to Western Kazakhstan and on to the Black Sea. The Caspian coastal route is a less expensive alternative to the difficult land route through the Caucasus, while the trans-Caspian route aims to supply western China and eastern Kazakhstan.

4.1.5. Reforms and Modernization Efforts, but Lacking an Integrated Mobilization Doctrine

Kazakhstan continues to pursue reforms based on a European development model as part of its modernization and diversification strategy, with implementation and sustained commitment representing significant, long-term challenges. These reforms began taking shape following the 2014 Crimea crisis—a pivotal moment for Kazakhstan. Since the geopolitical crisis, the country has introduced several national securities, economic, and administrative reforms to maintain its sovereignty and independence while navigating challenges stemming from the resurgence of Russia and China in the region (Jarosiewicz, 2016). Since 2015, Kazakhstan has increased its military expenditure considerably, and its Military Industry Committee has embarked on an aggressive military rearmament program (Tian et al., 2024; Jarosiewicz, 2016; Davis, 2017). Nevertheless, the country remains among the most vulnerable internationally for failure to keep pace with global military modernization trends, partly because of maintaining Soviet-style military doctrine. Kazakhstan has increased efforts to revise its national military doctrine. However, reforms of the national mobilization system remain at a very early stage, and the efforts have yet to coalesce into a coherent modern national mobilization doctrine.

4.2. Azerbaijan

Azerbaijan's mobilization framework is significantly influenced by its status as an energy-rich rentier state and its security apprehensions within the South Caucasus region. Analysts observe that Baku's energy strategy transcends conventional rentier motivations, as pipeline diplomacy aligns with broader geopolitical objectives rather than being solely commercially driven (Marosvari, 2012). Nonetheless, Azerbaijan's reliance on oil revenues renders its security vulnerable to fluctuations in global price levels, a factor that has played a pivotal role in shaping its foreign policy since attaining independence. The structures for mobilization remain extensively centralized under presidential authority, with the executive maintaining control over reserve forces and military procurement, while there is minimal emphasis placed on civil defence or the delegation of responsibilities to civilian sectors for mobilization coordination. This mobilization framework reflects the country's precarious security circumstances, which are predominantly influenced by its protracted conflict with Armenia concerning Nagorno-Karabakh. The 2020 war over Nagorno-Karabakh highlighted Azerbaijan's dependence on swift military mobilization, bolstered by external defence alliances, particularly with Türkiye, rather than relying on comprehensive societal readiness initiatives (De Waal, 2021). Scholars contend that Azerbaijan's model exemplifies how small to medium-sized states embroiled in territorial disputes frequently prioritize military mobilization over broader societal preparedness (Sayfutdinova, 2021; Ihar, 2023).

4.3. China

China has established a robust system of mobilization rooted in the doctrine of military-civil fusion (junmin ronghe), which effectively incorporates civilian sectors into defence planning. This methodology aims to unify manpower, industry, and innovation into a cohesive “system-of-systems” framework. The People's Liberation Army employs a dual reserve system that combines traditional

conscription with cutting-edge technological capabilities, capitalizing on the nation's extensive industrial base and innovative sectors (Cheung & Hagt, 2020). The country maintains a four-tier manpower reserve structure, which includes Reserve Military Service (RMS), National defence Students (NDS) trained at universities, Civil Air Defence Troops (CADT), and the militia (Rana, 2019). These elements not only enhance military preparedness but also facilitate the mobilization of industrial, academic, and technological resources across various domains, including space, cyber, and energy security. This integration effectively diminishes the distinctions between civilian and military operations, rendering mobilization a fundamental component of China's overarching national power strategy. Mobilization efforts are governed by national legislation, particularly the National Defence Mobilization Law, which mandates coordinated actions among central government ministries, provincial administrations, and private enterprises during times of crisis. Analysts contend that China's mobilization initiatives extend beyond mere wartime applications, encompassing efforts in disaster relief, infrastructure resilience, and cyber defence (Richter & Wang, 2025; Thorne, 2024; Stone & Wood, 2020). The strategic utilization of consolidated manpower and systems-of-systems synergy promotes the engagement of all industrial, academic, and societal sectors, significantly impacting military readiness and competitiveness. Furthermore, non-military sectors are also adaptable within this paradigm, encompassing energy resource development, space exploration, economic growth, and ecological advancement. This comprehensive strategy highlights China's dual aim of preparing for potential major-power conflicts while ensuring domestic stability, thereby providing a distinctive reference point for Kazakhstan, particularly considering its geographical proximity and shared commitment to centralized state authority.

4.4. Finland

Finland exemplifies a highly developed model of total defence mobilization, significantly shaped by its historical encounters with Russia. At the core of Finland's defence framework is the principle of universal male conscription, ensuring that over 70% of each male cohort fulfils military service, complemented by a robust active reserve system with the capacity to mobilize 280,000 troops within a brief period (Sederholm et al., 2025; Kosonen & Mälkki, 2022). In addition to personnel mobilization, Finland's defence strategy prioritizes the concept of "comprehensive security" (kokonaisturvallisuus), which integrates governmental bodies, private sector entities, and civil society in fostering national preparedness (Kosonen & Mälkki, 2022). Recent research emphasizes Finland's adaptability in planning mobilization strategies to respond to emerging hybrid threats, such as cyber and information warfare, thus creating a flexible yet thoroughly institutionalized model (Fedotenko, 2023). Finland's strategy illustrates resilience, aimed not only at deterring foreign aggression but also at maintaining the functional integrity of society during various crises, including military invasions and cyberattacks. For Kazakhstan, Finland's focus on cross-sectoral collaboration and national resilience presents valuable lessons on how small to medium-sized powers can effectively mobilize societal resources in the face of larger adversaries.

4.5. France

The mobilization framework in France has transitioned from a conscription-based model to a professional volunteer military, while retaining legal mechanisms for selective national mobilization during crises. The "Loi de programmation militaire" provides a structured approach to planning for both active professional forces and reserves, which currently number approximately 40,000 personnel (Irondele & Schmitt, 2013). France operates within a partial mobilization framework that aligns with NATO's collective defence strategy. The French Armed Forces significantly depend on a combination of professional soldiers and reservists, with the latter receiving training to ensure preparedness for broader European contingencies and NATO operations (Kuokštys, 2022). France's

experiences during the Gulf War, alongside ongoing counter-terrorism initiatives such as Operation Sentinelle, exemplify a mobilization system geared toward partial activation, engaging specific personnel and resources for clearly defined missions. Although France's mobilization model does not attain the comprehensive scale often seen in Nordic "total defence" frameworks, it effectively integrates with the nation's robust defence industrial base and its contributions to European security arrangements (Boene, 2009). For Kazakhstan, France serves as a pertinent example of the effectiveness of partial mobilization frameworks within democratic systems, achieving a balance between professional military readiness and selective activation of reserve forces.

4.6. Israel

Israel has established one of the most comprehensive mobilization frameworks globally, influenced by ongoing security challenges. Its security strategy is founded on the maintenance of a relatively small standing army, which is supported by a substantial, swiftly mobilizable reserve force, all within a universal conscription system that encompasses both men and women (Eilam, 2018). The Home Front Command (HFC) plays a crucial role in facilitating civil defence efforts, effectively connecting civilian infrastructure, emergency response mechanisms, and military capabilities in anticipation of both conventional and asymmetric threats. Repeated mobilizations during conflicts in Lebanon and Gaza have underscored Israel's commitment to preparedness and rapid deployment, exemplified by its capacity to expand from 170,000 active personnel to over 450,000 within a 48-hour timeframe (Inbar & Shamir, 2014). Recent military operations in Gaza (2021–2023) further showcased this capability, with a large-scale activation of reservists for both combat and civil defence responsibilities. Mobilization efforts extend beyond the military realm: the Ministry of Defence and the HFC collaborate with various government ministries, civil authorities, private sector stakeholders, and the broader community to effectively allocate resources and ensure successful implementation. This holistic approach positions Israel as a model for multi-tiered mobilization in a high-threat environment (Yousfi, 2024; Antai & Hellberg, 2024; Antonovsky, 2022). Taken together, Israel's experience shows how a small state in a high-threat environment can compensate for limited standing forces through dense civil–military integration and highly institutionalised reserve cycles. For Kazakhstan, the key lesson is that mobilization reform should not focus only on troop numbers, but on building reliable mechanisms that link reserves, civil defence structures and critical infrastructure protection into a single, rapidly activatable system.

4.7. Poland

Poland's mobilization framework reflects its historical encounters with Russian aggression and its affiliation with NATO. Following military reforms implemented in the 2000s, Poland transitioned from a conscription model to a professional military force. However, elements of territorial defence were reintroduced through the creation of the Territorial Defence Forces and a National Reserve Force, which integrates active-duty personnel with trained reservists while coordinating mobilization planning across local and regional administrative structures (Liśniewska, 2017). This hybrid approach merges a professional military with volunteer territorial units, aimed at bolstering societal resilience and enhancing deterrence against hybrid threats, particularly those posed by Russia. The mobilization effort is further supported by Poland's defence industrial capabilities and its integration within NATO, which not only provide external assurances but also necessitate adherence to interoperability standards. Consequently, Poland exemplifies how hybrid mobilization can be effectively adapted within the framework of alliance commitments, offering valuable insights for Kazakhstan regarding the balance of external partnerships and internal mobilization strategies.

4.8. Russia

Russia upholds a mobilization framework that is fundamentally grounded in Soviet traditions, emphasizing mass manpower and territorial defence. This system operates predominantly through the territorial defence infrastructure overseen by regional military districts and operational commands (Bartles, 2016; Sukhankin, 2019; Verma and Sharma, 2023). Recent academic research indicates that Russia is currently transitioning from a deficient conscription-based framework to a strategy of "partial mobilization," as evidenced during the 2022 conflict in Ukraine, which aimed to activate hundreds of thousands of reservists while simultaneously revealing substantial institutional shortcomings (Galeotti, 2022). Nevertheless, Russia possesses considerable mobilization capabilities due to its demographic size, defence industrial base, and centralized governmental control. Analysts emphasize that Russia's situation serves as both a cautionary tale and an instructive example: reliance on antiquated mobilization systems without sufficient modernization may compromise strategic effectiveness. For Kazakhstan, Russia's experience highlights the dangers of adhering to Soviet-style mobilization frameworks in the absence of reform (Jarosiewicz, 2016).

4.9. South Korea

The mobilization framework of South Korea is intricately designed in response to the perpetual threat posed by North Korea, thereby necessitating one of the most comprehensive systems of conscription and reserves globally. All able-bodied males are required to fulfil approximately 18 to 21 months of mandatory military service, subsequently followed by reserve duties until they reach the age of 40, which culminates in a reserve personnel pool that exceeds 3 million individuals (Shim, 2017; Yeo, 2017). Following reforms implemented in 2021, men born after January 1, 1994, are granted an exemption from full military service; however, they are still required to undergo four months of training prior to their integration into the reserve system (Chung, 2023). Annual mobilization exercises are conducted to maintain preparedness against both conventional invasions and hybrid threats (Bowers & Hiim, 2021). Furthermore, civil defence measures have been institutionalized, requiring local governments to establish shelters, communication infrastructures, and emergency services (Chung, 2023). South Korea's mobilization system serves as a pertinent illustration of how high-threat environments necessitate a collective societal approach to defence, effectively balancing deterrence and resilience (Chang, 2022). The Korean model offers valuable insights for Kazakhstan, demonstrating that mobilization can be effectively sustained through well-structured reserve cycles and the integration of civil defence strategies within densely populated yet vulnerable regions.

4.10. Türkiye

Türkiye possesses one of the most extensive mobilization preparedness systems within NATO. The Turkish Armed Forces consistently operate at readiness levels that surpass the NATO average, attributable to a combination of mandatory military service, a robust reserve system, and thorough territorial defence planning employing evolving hybrid methodologies. The Turkish Armed Forces maintain approximately 240,000 conscript personnel at any given time, bolstered by a reserve force exceeding 2.5 million individuals (Schvachová & Vojtek, 2024; Karataş, 2021; Hoffmann, 2019). The extensive mobilization framework of Türkiye, as delineated in the 2941 Mobilization and State of War Law and subsequently elaborated upon in the 2024 Mobilization and State of War Regulation, anticipates the systematic incorporation of civilian entities, private sector organizations, and non-governmental organizations into the national defence strategy and crisis management preparation (2941 Sayılı Seferberlik ve Savaş Hali Kanunu, 1983; Seferberlik ve Savaş Hâli Yönetmeliği, 2024). Türkiye's experiences in counter-terrorism operations, cross-border activities in Syria, and its obligations within NATO have resulted in its mobilization strategy increasingly prioritizing flexibility, cyber resilience, and civil-military integration (Başer et al., 2017; Kovacs, 2019;

Ringsmose & Webber, 2020; Zulham et al., 2020). Furthermore, Türkiye has progressively incorporated civil defence and disaster management into its mobilization strategy. The collaboration between the Ministry of Defence and the Disaster and Emergency Management Authority (AFAD) has become increasingly critical, especially in addressing cross-border threats arising from the Syrian civil war, missile strikes, and the refugee crisis (Ocal, 2021). For Kazakhstan, Türkiye serves as the most pertinent point of comparison, sharing similar geographic vulnerabilities, features of a hybrid regime, and the necessity to balance conventional defence capabilities with resilience against hybrid threats.

Taken together, these case studies also demonstrate that mobilization systems are not merely technical arrangements, but institutional expressions of deeper logics of security governance and state capacity. States that conceive security as a whole-of-society endeavour, such as Finland, Israel and South Korea, tend to institutionalize dense civil–military linkages and invest in reserve structures that blur the boundary between peacetime and crisis. By contrast, more centralized or rentier systems, such as Russia, Azerbaijan or China, rely heavily on hierarchical command and coercive authority, which may generate impressive mobilization on paper but expose weaknesses in flexibility and societal ownership. Hybrid models like Türkiye and Poland highlight an intermediate pathway in which legacy conscription and alliance frameworks are selectively adapted to confront hybrid threats. For Kazakhstan, this comparative spectrum clarifies that any future reform will necessarily be constrained and enabled by its own configuration of regime type, economic structure and regional alignments, rather than by the technical imitation of a single “best practice” model.

5. Comparative Analysis

The ten case studies delineated above illustrate a wide array of mobilization practices that can be methodically analysed based on several fundamental criteria: (i) the nature of conscription and reserve commitments, (ii) preparedness for mobilization, (iii) integration of civil defence, (iv) collaboration between civil entities and military forces, and (v) capacity for sectoral and economic mobilization. Although there are variations in scope, institutional complexity, and strategic justification, this comparative analysis brings to light trends that are pertinent to Kazakhstan's pursuit of a contemporary mobilization framework.

In nearly all instances, some iteration of conscription is maintained, be it universal, as seen in South Korea, Finland, and Israel, or selective, as observed in Türkiye, France, and Russia. Although there is an increasing emphasis on professionalized volunteer forces, conscription continues to serve as the foundational element of national preparedness. The cases of Israel and South Korea exemplify how conscription contributes to a substantial reserve capacity that can be mobilized within 24 to 72 hours. Conversely, Russia's partial reliance on conscripts illustrates the dual influences of demographic challenges and historical institutional frameworks. Türkiye adopts a hybrid model, integrating short-term conscription with voluntary paid service, thereby addressing manpower requirements while ensuring social acceptance. In contrast, Azerbaijan and China represent two distinct approaches: Azerbaijan utilizes a centralized command structure that lacks extensive reserve integration, while China operates in the principle of civil–military fusion.

Israel and South Korea are notable for their capacity to swiftly augment active military forces through well-established reserve systems, which are reinforced by continuous training and regular exercises. Finland's comprehensive "total defence" strategy ensures preparedness across both military and civilian sectors by means of consistent national drills (Sederholm et al., 2025). France effectively integrates reserve readiness with broader commitments to the alliance. Conversely, Russia's territorial defence framework theoretically allows for readiness; however, the deficiencies observed during the conflict in Ukraine have exposed organizational shortcomings. Türkiye exhibits a degree of preparedness, with enhancements largely prompted by challenges arising from the situation in Syria and its internal counterterrorism initiatives. In contrast, Kazakhstan's inability to promptly shift from

a peacetime stance to a heightened state of readiness highlights the necessity for reform within its reserve system.

Civil defence and whole-of-society approaches are exemplified by Finland and Sweden, which demonstrate a comprehensive integration of civil defence mechanisms, engaging all sectors of society—from healthcare to logistics—in the realm of national preparedness. France has institutionalized its civil defence strategies which ensures a seamless interplay between civilian and military operations. Israel's HFC collaborates with various ministries, municipalities, and the private sector to enhance civil resilience. Conversely, Azerbaijan exhibits a significant deficiency in its civil defence capabilities, while Türkiye has recently augmented civil-military collaboration through AFAD, particularly in response to regional instability and the ongoing refugee crisis. For Kazakhstan, these instances underscore the imperative to reconcile formal military mobilization with the active involvement of civil society.

Civil-military cooperation and sectoral integration are prominent in contemporary defence strategies. China's military-civil fusion approach effectively incorporates mobilization within economic, technological, and industrial domains, thereby establishing a robust framework for dual-use mobilization. Similarly, Israel's system adeptly combines the defence industry, academic institutions, and local government entities into a cohesive mobilization planning process. In contrast, Poland emphasizes the linkage between mobilization and regional administrative frameworks, illustrating how smaller nations can effectively embed mobilization within governance structures at various levels. Furthermore, both Finland and South Korea underscore the necessity of incorporating civilian infrastructure into national defence strategies, with particular attention to sectors such as energy, communications, and cybersecurity. Kazakhstan, given its resource-dependent economy and significant geographic vulnerabilities, stands to gain from fostering collaborations with the energy, mining, and logistics industries, while simultaneously enhancing its cyber defence capabilities.

The extent and nature of mobilization are influenced by prevailing security environments. Israel, South Korea, and Finland, confronted with existential threats, uphold highly sophisticated systems. France and Türkiye navigate regional instability within the framework of alliances such as NATO. Russia possesses a significant mobilization apparatus focused on great-power competition; however, recent developments indicate challenges in its implementation. The post-Soviet institutional legacies of Azerbaijan and Kazakhstan constrain their adaptability, whereas China's global aspirations propel its comprehensive mobilization strategy.

The comparative analysis indicates that Kazakhstan necessitates a hybrid model that selectively incorporates the strengths observed in other nations. From Türkiye, Kazakhstan can learn the advantage of implementing both conscription and voluntary service, complemented by the establishment of a civil emergency agency. Israel and South Korea offer insights into fostering rapid reserve readiness alongside sectoral integration. Finland provides a foundational model through its principle of total defence, which emphasizes the integration of mobilization efforts across civil society. China underscores the importance of embedding mobilization within comprehensive economic and technological strategies, particularly concerning the cyber domain. Thus, it is essential that Kazakhstan's future mobilization framework encompasses civil-military cooperation, enhances sectoral readiness, and bolsters legal and institutional frameworks to ensure resilience against both hybrid and conventional threats.

Analytically, the comparative patterns identified here refine the classic typology of total, partial and hybrid mobilization by linking each type to distinct combinations of threat perception, regime characteristics and international embeddedness. Total defence systems emerge where elites perceive existential danger and where state-society relations allow for high levels of conscription-based participation; partial systems crystallize where alliance guarantees and professionalization reduce the political incentives for broad societal engagement; hybrid systems evolve where states confront multi-dimensional threats but face social, economic or political constraints that prevent a fully total model.

In this sense, mobilization becomes a useful lens for observing how states prioritize between coercion, consent and capacity in their wider security governance. For Kazakhstan, locating itself within this triadic space underscores that reforms cannot be reduced to increasing troop numbers or issuing new doctrines: they involve rebalancing the relationship between state authority, societal participation and external security partnerships in ways that enhance strategic resilience without overextending fragile institutional resources.

6. Proposed Mobilization Model for Kazakhstan

The proposed framework is organized around four fundamental dimensions: planning, activation, attributes, and forecast trends, which collectively offer a systematic approach to the design of Kazakhstan's mobilization strategy.

6.1. Institutional Design

At the institutional level, it is imperative for Kazakhstan to establish a National Mobilization and Crisis Coordination Agency (NMCCA), which would function under the auspices of the Defence Council chaired by the President. This newly formed entity would serve to consolidate responsibilities that are presently fragmented between the Ministry of Defence and the Ministry of Emergency Situations, thereby creating a cohesive platform for planning related to military, civil, and economic mobilization. A civilian Chief Executive Officer, appointed directly by the President, would provide impartial oversight and civil legitimacy, whilst fostering close collaboration with military leadership.

The NMCCA would be responsible for the coordination of the defence, economic, intelligence, and civil protection sectors within a centralized and integrated mobilization planning framework. This structure embodies lessons learned from Türkiye's partial reforms and Finland's comprehensive defence model, while steering clear of the inefficiencies found in Russia's disjointed mobilization institutions. Notably, this central agency would fulfil not only wartime requirements but also centralize mobilization efforts within the wider context of national resilience, encompassing disaster response, hybrid threat mitigation, and cyber defence. This institutional planning framework serves as the foundational element for the four-tiered system.

6.2. Four-Tiered Framework

To implement its mandate effectively, the proposed model is structured around a four-tier system that encompasses military, civil, economic, and cyber mobilization. This strategy not only incorporates comparative analyses but also acknowledges the distinctive vulnerabilities faced by Kazakhstan.

6.2.1. Military Mobilization

The existing one-year conscription model in Kazakhstan, along with its minimal reserve training programs, offers restricted levels of military readiness. It is imperative that a reformed system be instituted to enhance the duration of reserve training, optimize the periodic recall processes, and create conscript brigades that can be mobilized swiftly during emergencies. Additionally, reserve forces ought to be upheld at a more advanced state of operational readiness compared to prior standards, aligning more closely with NATO's rapid deployment criteria. Legal and institutional reforms must be implemented to guarantee sufficient equipment stockpiles, efficient recall protocols, and the effective incorporation of professional volunteers into the reserve framework.

6.2.2. Civil Mobilization

Civil mobilization ought to concentrate on leveraging the skills of non-military specialists in the fields of healthcare, logistics, communications, and energy. The establishment of a national registry of essential personnel would facilitate the swift mobilization of vital sectors during emergencies. Rather than relying on disjointed ministerial oversight, the NMCCA should serve as the primary coordinating entity, ensuring preparedness through regular exercises, comprehensive training modules, and uniform emergency protocols. Insights derived from Israel's HFC and Türkiye's AFAD underscore the significance of cross-sector collaboration in bolstering resilience against both military and non-military emergencies.

6.2.3. Economic Mobilization

Kazakhstan's economy, which is abundant in resources, presents considerable opportunities for mobilization; however, the mechanisms for integration remain inadequately developed. It is imperative that partnerships within the energy, mining, and logistics industries be formalized through legal frameworks that facilitate the swift reallocation of industrial capacity during periods of crisis. This strategy parallels China's civil-military integration model, albeit tailored to align with Kazakhstan's economic characteristics. Furthermore, economic mobilization must encompass adaptable labour arrangements, thereby allowing both workers and enterprises to temporarily transition towards defence-related production without jeopardizing long-term economic stability.

6.2.4. Digital and Cyber Mobilization

Considering the increasing significance of hybrid warfare, it is imperative for Kazakhstan to incorporate cyber readiness into its mobilization framework. This initiative entails the establishment of cybersecurity reserve units, collaboration with private technology enterprises, and safeguarding essential infrastructure, including energy grids and communication networks. Regular cyber-defence exercises should be formalized, reflecting methodologies employed by South Korea and Israel. Furthermore, it is essential to create a centralized crisis communication unit to guarantee dependable public information dissemination and to effectively address adversarial disinformation efforts. These activation mechanisms ensure that conscription, civil expertise, and sectoral resources are effectively mobilized.

6.3. Legal and Regulatory Reforms

The current mobilization legislation in Kazakhstan is characterized by obsolescence, fragmentation, and insufficient alignment with contemporary security threats (Jarosiewicz, 2016; Davis, 2017; Luckham & Kirk, 2013). To implement the proposed framework effectively, comprehensive reforms are essential. These reforms should encompass the following:

- The revision of the Mobilization Instruction of 2007 alongside related decrees to adequately address hybrid and cyber threats
- A clear delineation of responsibilities among the NMCCA, the General Staff
- Relevant ministries and the establishment of periodic national-level exercises that simulate multi-domain crises, thereby ensuring preparedness that transcends traditional military drills.

By institutionalizing regular scenario-based exercises, Kazakhstan can enhance not only military readiness but also the resilience of society as a whole. Legal reforms and exercises will further institutionalize the fundamental characteristics of multi-sectoral coordination and a whole-of-society approach.

6.4. Scenario-Driven Implementation

The complete execution of the four-tiered framework cannot be realized instantaneously. Rather, a methodical approach informed by threat assessment should direct the necessary reforms:

- Short term (0–5 years), priority should be given to enhancing border security and reforming conscription, in conjunction with the establishment of the NMCCA
- Medium term (5–10 years), efforts should be concentrated on broadening civil and economic mobilization capabilities, fortifying registry systems, and improving public-private partnerships
- Long term (beyond 10 years), the focus should shift towards the integration of comprehensive cyber mobilization, fostering sectoral resilience, and achieving interoperability with regional security frameworks such as the CSTO, OSCE, or selective partnerships with NATO.

This phased strategy ensures operational capacity in the face of immediate threats while progressing towards a sophisticated mobilization system.

6.5. Adaptability

Kazakhstan's mobilization framework must maintain sufficient flexibility to adapt to changing security circumstances. While Türkiye serves as the most pertinent institutional comparison, valuable insights can also be gleaned from Finland (total defence), Israel (reserve preparedness), and China (sectoral integration), which may be selectively incorporated. Consequently, the proposed structure should be regarded as dynamic rather than rigid, with the ability to align with evolving regional security frameworks and international collaborations. The forecast trends demonstrate adaptability to hybrid warfare, energy security, and regional alliances.

From a theoretical standpoint, the proposed National Mobilization and Crisis Coordination Agency and the four-tier framework translate the abstract notion of strategic resilience into a concrete institutional design tailored to a hybrid regime in a contested regional order. Rather than treating mobilization as a purely military function, the model embeds it within a broader architecture of security governance that links political leadership, bureaucratic coordination and societal participation. This approach recognizes that resilience in Kazakhstan will depend less on maximal force levels and more on the state's ability to orchestrate dispersed capabilities across civil, economic and digital domains under conditions of stress. At the same time, the model highlights key trade-offs: centralization versus decentralization, legal formalization versus informal practices, and short-term readiness versus long-term institutional learning. These tensions suggest that the success of the proposed framework will ultimately hinge on whether it can evolve iteratively, absorbing feedback from exercises, crises and regional dynamics, rather than remaining a static blueprint imposed from above.

7. Conclusion

This study set out to address a central research question: How can Kazakhstan develop a modern, flexible, and nationally cohesive mobilization system capable of integrating military, civil, economic, and cyber dimensions, while effectively adapting the strategic experiences of comparable states to its unique geopolitical and institutional context? The findings indicate that to overcome its reliance on fragmented and antiquated Soviet-era mechanisms, Kazakhstan must develop a hybrid, multi-layered mobilization system. Rather than depending solely on traditional mass military mobilization, this system must seamlessly integrate civil, economic, and cyber resources under a centralized, civilian-led authority. By selectively adapting the "total defence" societal integration seen in Finland, the rapid

reserve readiness of Israel and South Korea, and the centralized coordination mechanisms of hybrid regimes like Türkiye and China, Kazakhstan can establish a nationally cohesive framework tailored to its vast geography and unique geopolitical vulnerabilities.

Beyond addressing Kazakhstan's immediate policy needs, this study makes a distinct conceptual contribution to the broader mobilization literature. By moving beyond conventional Western-centric analyses, this research demonstrates how the traditional typology of total, partial, and hybrid mobilization is intrinsically linked to regime type, threat perception, and the degree of international integration. The study illustrates that in post-Soviet, semi-authoritarian contexts, mobilization is not merely a technical military procedure, but a profound reflection of state capacity and security governance. This theoretical framing bridges the gap between state-building theories and strategic resilience, offering a nuanced analytical lens for examining civil-military integration in hybrid political regimes facing multi-domain threats.

In terms of policy implications, the findings suggest that Kazakhstan's transition towards a modern mobilization architecture requires dismantling disjointed ministerial oversight. The proposed establishment of a NMCCA and a four-tiered readiness framework provide actionable blueprints for policymakers. However, translating this model into reality necessitates comprehensive legal reforms, the restructuring of conscription and reserve cycles, and the creation of a national registry for critical civilian personnel in sectors such as energy, cyber, and logistics. Implementing these reforms will not only enhance military readiness but also foster a whole-of-society resilience capable of withstanding the complex shocks of the 21st-century security environment.

Despite these contributions, this study is subject to several methodological and empirical limitations. First, due to strict data access constraints, the analysis inherently relied on publicly available strategic documents and academic literature, as classified national mobilization plans and internal military directives of Kazakhstan remain inaccessible. Second, while the nine-country comparative framework provides diverse strategic insights, the qualitative nature of the case selection may limit the broader generalizability of the findings to all post-Soviet or developing nations. Third, the proposed institutional model currently serves as a conceptual blueprint; its operational feasibility and practical effectiveness have not yet been empirically verified through wargaming, simulation exercises, or formal expert evaluations.

These limitations, in turn, pave the way for a broader and highly relevant future research agenda. Subsequent investigations should aim to empirically validate the proposed NMCCA model and the four-tier framework through rigorous simulation exercises and structured panels with defence and civil emergency experts. Moreover, future research should explore how such integrated national mobilization models can be adapted to, and tested within, other authoritarian or semi-authoritarian states across the broader Central Asian region. Finally, investigating how Kazakhstan's independent, multidimensional mobilization framework might interact with or be structurally integrated into regional security architectures most notably the CSTO or the Shanghai Cooperation Organisation (SCO) remains a critical avenue for comprehensively understanding the future of Eurasian security dynamics.

References

- Aloudat, A., Michael, K., Abbas, R., & Al-Debei, M. (2011). The value of government mandated location-based services in emergencies in Australia. *Journal of Information Technology Research, 4*(4), 41-68. <https://doi.org/10.4018/jitr.2011100103>
- Antai, I. & Hellberg, R. (2024). Identifying total defense logistics concepts: a comparative study of the Swedish pandemic response. *Journal of Humanitarian Logistics and Supply Chain Management, 14*(2), 208-222. <https://doi.org/10.1108/JHLSCM-07-2022-0084>
- Antonovsky, A. (2022). Salutogenesis and the mental health of first responders. In M.B. Mittelmark et al (Eds.), *The Handbook of Salutogenesis*. Springer. https://doi.org/10.1007/978-3-030-79515-3_50
- Baev, P. K. (2017). Russia: A declining counter-change force. In S. E. Cornell (Ed.), *The international politics of the Armenian-Azerbaijani conflict: The original “frozen conflict” and European security* (pp. 71-88). Palgrave Macmillan. https://doi.org/10.1057/978-1-137-60006-6_4
- Bartles, C. K. (2016). Getting Gerasimov right. *Military Review, 96*(1), 30–38. <https://tinyurl.com/yckdf9c4>
- Başer, B., Akgönül, S., & Öztürk, A. (2017). “Academics for peace” in Turkey: a case of criminalising dissent and critical thought via counterterrorism policy. *Critical Studies on Terrorism, 10*(2: 10 Years of Critical Studies on Terrorism), 274-296. <https://doi.org/10.1080/17539153.2017.1326559>
- Boene, B. (2009). Shifting to volunteer armed forces in Europe: Why, how, with what effects?. *Forum Sociológico, 19*, 49–60. <https://doi.org/10.4000/sociologico.347>
- Bowers, I. & Hiim, H. S. (2021). Conventional counterforce dilemmas: South Korea's deterrence strategy and stability on the Korean peninsula. *International Security, 45*(3), 7-39. https://doi.org/10.1162/isec_a_00399
- Bureau of National Statistics. (2026). *Population*. <https://stat.gov.kz/en/>
- Buzan, B. & Wæver, O. (2009). *Regions and powers: the structure of international security*. Cambridge University Press.
- Buzan, B., Wæver, O., & de Wilde, J. (1998). *Security: a New Framework for Analysis*. Lynne Rienner Publishers.
- Chang, K. (2022). ‘I know something you don’t know’: the asymmetry of ‘strategic intelligence’ and the great perils of asymmetric alliances. *The British Journal of Politics and International Relations, 25*(3), 480-497. <https://doi.org/10.1177/13691481221109727>
- Cheung, T. M. & Hagt, E. (2020). China’s efforts in civil-military integration, its impact on the development of China’s acquisition system, and implications for the U.S.. *Acquisition Research Program. Report no: UCSD-AM-20-031*. <https://dair.nps.edu/handle/123456789/4170>
- Chung, S. (2023). Challenges to hegemonic constructions of militarized masculinities in the neoliberal era: The case of South Korea. *The Journal of Men’s Studies, 32*(2), 346-364. <https://doi.org/10.1177/10608265231221571>
- Cooley, A. (2012). *Great games, local rules: The new great power contest in Central Asia*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199929825.001.0001>
- Davis, T. (2017). *Leftovers of a Dissolved Empire: Assessing the Political Stability of the Former Soviet Republics of Kazakhstan, Georgia, and the Ukraine* (Publication No.272). [Honors Undergraduate Theses, Taraleigh Davis University of Central Florida]. Stars Library University of Central Florida. <https://stars.library.ucf.edu/honorsthesis/272/>
- De Waal, T. (2021). *The Nagorny Karabakh conflict in its fourth decade*. CEPS Working Document No. 2021-02. <https://tinyurl.com/ecuk437a>
- Edmunds, T. (2014). Complexity, strategy and the national security. *International Affairs, 90*(3), 525-539. <https://doi.org/10.1111/1468-2346.12125>
- Eilam, E. (2018). *Israel’s military doctrine*. Lexington Books.

- Fedotenko, K. (2023). Cyber warfare as part of information warfare of Russia against Ukraine since the beginning of the 2022 Russian invasion. *Věda a Perspektivy*, 8(27), 351-357. [https://doi.org/10.52058/2695-1592-2023-8\(27\)-351-357](https://doi.org/10.52058/2695-1592-2023-8(27)-351-357)
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219–245. <https://doi.org/10.1177/1077800405284363>
- Galeotti, M. (2016). *Hybrid war or Gibridnaya Voyna? Getting Russia's non-linear military challenge right*. Lulu Press.
- Galeotti, M. (2022). *Putin's wars: From Chechnya to Ukraine*. Bloomsbury Publishing Plc.
- George, A. L. & Bennett, A. (2005). *Case studies and theory development in the social sciences*. MIT Press.
- Hoffmann, C. (2019). Neo-Ottomanism, Eurasianism or securing the region? A longer view on Turkey's interventionism. *Conflict, Security and Development*, 19(3), 301-307. <https://doi.org/10.1080/14678802.2019.1608016>
- Holbraad, C. (1984). *Middle powers in international politics*. Macmillan.
- Ihar, Z. (2023). Properties of war: the militarization of housing policy and urban planning in contemporary Azerbaijan. *Catalyst Feminism Theory Technoscience*, 9(1: Special Section: Domestication of War). <https://doi.org/10.28968/cftt.v9i1.39527>
- Inbar, E. & Shamir, E. (2014). Mowing the Grass: Israel's strategy for protracted intractable conflict. *Journal of Strategic Studies*, 37(1), 65–90. <https://doi.org/10.1080/01402390.2013.830972>
- Irfan, I. (2018). Hybrid warfare: Escalation in Europe and implications for EU and North Atlantic Treaty Organization. *International Affairs and Global Strategy*, 64. <https://iiste.org/Journals/index.php/IAGS/article/view/42790>
- Ironelle, B. & Schmitt, O. (2013). France. In: Biehl, H., Giegerich, B., & Jonas, A. (Eds) *Strategic cultures in Europe. Schriftenreihe des Zentrums für Militärgeschichte und Sozialwissenschaften der Bundeswehr*, Vol 13. Springer. https://doi.org/10.1007/978-3-658-01168-0_10
- Jarosiewicz, A. (2016). *Perestroika – the Nazarbayev way: crisis and reforms in Kazakhstan*. Centre for Eastern Studies: Point of view No: 58. <https://tinyurl.com/y8wap8xh>
- Jungwirth R., Smith H., Willkomm E., Savolainen J., Alonso Villota M., Lebrun M., Aho A., & Giannopoulos G. (2023). *Hybrid threats: a comprehensive resilience ecosystem*. Publications Office of the European Union. <https://doi.org/10.2760/37899>
- Kaldor, M. (2012). *New and old wars: Organised violence in a Global Era* (3rd ed.). Stanford University Press.
- Kamel, A. H. & Zyla, B. (2018). The comprehensive approach to EU crisis management: Contexts, lessons identified, and policy implications. *Journal of Regional Security*, 13(1), 39-63. <https://doi.org/10.5937/JRS1801039K>
- Karataş, İ. (2021). Analyzing article 5 of the North Atlantic Treaty as an assurance of Turkey's security. *Ortaoğru Etütleri*, 13(2), 155-176. <https://doi.org/10.47932/ortetut.813769>
- Kofman, M. & Lee, R. (2022). *Not built for purpose: The Russian military's ill-fated force design. War on the Rocks*. <https://tinyurl.com/bdhta2zx>
- Kosonen, J. & Mälkki J. (2022) The Finnish model of conscription: A successful policy to organize national defence. In C. de la Porte, G. B. Eydal, J. Kauko, D. Nohrstedt, P. Hart, & B. S. Tranøy (ed.) (Eds.), *Successful Public Policy in the Nordic Countries: Cases, Lessons, Challenges* (pp. 456-472), Oxford University Press. <https://doi.org/10.1093/oso/9780192856296.003.0022>
- Kovacs, L. (2019). National cybersecurity strategy framework. *Academic and Applied Research in Military and Public Management Science*, 18(2), 65-76. <https://doi.org/10.32565/aarms.2019.2.6>
- Kříž, Z. (2005). Tendencies in the development of Czech Armed Forces at the turn of the millennium. *Central European Political Studies Review*, 7(2-3), 276-289. <https://journals.muni.cz/cepsr/article/view/4112>

- Kuokštytė, R. (2022). Revisiting France's commitment to defence integration. In Česnakas, G. & Juozaitis, J. (Eds.), *European Strategic Autonomy and Small States' Security*. Routledge. <https://doi.org/10.4324/9781003324867>
- Liśniewska, H. (2017). Isolated personnel recovery – new direction in the military forces of the republic of Poland. *About Security and Defense*, 1(3), 113-121. <https://tinyurl.com/yhrjyxdu>
- Luckham, R. & Kirk, T. (2013). The two faces of security in hybrid political orders: a framework for analysis and research. *Stability International Journal of Security and Development*, 2(2), Article 44, 1-30. <http://dx.doi.org/10.5334/sta.cf>
- Marosvari, C. (2012). *Cold reality in the land of fire: The interrelations of Azerbaijan's natural gas export and foreign policy*. [Master Thesis, University of North Carolina]. Carolina Digital Repository. <https://doi.org/10.17615/s8qb-nk13>
- Mun, O. (2014). *Re-imagining national identity through early literacy textbooks in Kazakhstan*. [Master Thesis, Lehigh University]. Lehigh University Library and Technology Services. <https://asa.lib.lehigh.edu/Record/10545461>
- Ocal, A. (2021). Disaster management in Turkey: A spatial approach. *International Journal of Disaster Risk Management*, 3(1), 15–22. <https://doi.org/10.18485/ijdrm.2021.3.1.2>
- Peimani, H. (1998), *Regional security and the future of Central Asia: the competition of Iran, Turkey, and Russia*. Praeger Publishers.
- Rana, D. S. (2019). Chinese defence reforms and lessons for India. *Claws Journal*, 12(1), 138-165. <https://ojs.indrastra.com/index.php/clawsjournal/article/view/95>
- Resmî Gazete (1983). Seferberlik ve Savaş Hali Kanunu (Kanun No.2941). [Law No. 2941 on Mobilization and State of War]. <https://mevzuat.gov.tr/MevzuatMetin/1.5.2941.pdf>
- Resmî Gazete (2024). Seferberlik ve Savaş Hâli Yönetmeliği [Mobilization and State of War Regulation]. <https://www.resmigazete.gov.tr/eskiler/2024/05/20240522-1.pdf>
- Richter, E. & Wang, H. (2025). China's transition to a war-oriented national defense mobilization system. In B. Frohman & J. Rausch (Eds.), *The PLA in a complex security environment*. The National Bureau of Asian Research. <https://tinyurl.com/4udzv6et>
- Ringsmose, J. & Webber, M. (2020). Hedging their bets? the case for a European pillar in NATO. *Defence Studies*, 20(4), 295-317. <https://doi.org/10.1080/14702436.2020.1823835>
- Sayfutdinova, L. (2021). Ethnic boundaries and territorial borders: On the place of Lezgin irredentism in the construction of national identity in Azerbaijan. *Nationalities Papers*, 50(4), 794-812. <https://doi.org/10.1017/nps.2021.3>
- Sazdovska, M. M. (2023, 27-29 September). Protection of critical infrastructure – a challenge for the Republic of North Macedonia. In *Security Horizons: The Strategic and Security Concept for the Countries of Southeast Europe* (pp. 51-56). Skopje, North Macedonia. <https://doi.org/10.20544/icp.8.1.23.p05>
- Schvachová, D. & Vojtek, J. (2024). Turkey's trust in the USA: causes of the criticised alliance member's approach. *Vojenské Rozhledy*, 33(2), 3-17. <https://doi.org/10.3849/2336-2995.33.2024.02.003-017>
- Sederholm, T., Rannikko, R., & Salo, M. (2025). Total defence model at the heart of Finland's national defence and resilience. In G. F. Rongved (Ed.), *European total defence* (1st ed.) (pp. 155-134). Routledge. <https://doi.org/10.4324/9781003497370>
- Shim, J. (2017). *A Study on the improvement of military manpower system of ROK Armed Forces through introduction of partial volunteer force system*. [Master Thesis, KDI School of Public Policy and Management]. KDI Central Archives. <https://core.ac.uk/download/213855397.pdf>
- Stake, R. E. (1995). *The art of case study research*. Sage.
- Stone, A. & Wood, P. (2020). China's military-civil fusion strategy: a view from Chinese strategists. China Aerospace Studies Institute. <https://tinyurl.com/3yv7ze5y>
- Sukhankin, S. (2019). David vs. Goliath: Kaliningrad oblast as Russia's a2/ad 'bubble'. *Scandinavian Journal of Military Studies*, 2(1), 95-110. <https://doi.org/10.31374/sjms.20>

- Thorne, D. (2024). *China's national defense mobilization system*. U.S.-China Economic and Security Review Commission. <https://tinyurl.com/j9jrtcj3>
- Tian, N., Lopes da Silva, D., Liang, X., & Scarazzato, L. (2024). Trends in world military expenditure, 2023 SIPRI Fact Sheet. Stockholm International Peace Research Institute. <https://doi.org/10.55163/BQGA2180>
- Tibekov, B. L., Adams, S. J., & Prochaska, N. (2004). Characteristics of the labor market and human resources management in the Republic of Kazakhstan. *Advances in Competitiveness Research*, 12(1), 44-56. <https://digitalcommons.kennesaw.edu/facpubs/2407/>
- Verma, G. & Sharma, S. (2023). The paradoxical policies: Russia's rampant resource quest and the devastating toll on the planet. *Scientific Collection «InterConf+»*, 40(183), 239-253. <https://doi.org/10.51582/interconf.19-20.12.2023.022>
- Wang, C., Lu, Y., Chang, Y., & Huang, A. (2021). Coordinated mobilization matters: how did Taiwan do it during the covid-19 pandemic? *Chinese Public Administration Review*, 12(2), 160-167. <https://doi.org/10.1177/153967542101200206>
- Wither, J. K. (2020). Back to the future? Nordic total defence concepts. *Defense Studies*, 20(1), 61-81. <https://doi.org/10.1080/14702436.2020.1718498>
- Yeo, Y. (2017). The good, the bad, and the forgiven: the media spectacle of South Korean male celebrities' compulsory military service. *Media, War & Conflict*, 10(3), 293-313. <https://doi.org/10.1177/1750635217694122>
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Sage.
- Yousfi, S. (2024). The right to legitimate defense between international law and practice in the Palestinian and Israeli conflict. *International Journal of Humanities and Educational Research*, 6(2), 185-196. <https://doi.org/10.47832/2757-5403.25.11>
- Zulham, M., Saragih, H. M., Thamrin, S., & Silitonga, T. B. (2020). Turkey's involvement in the Syrian conflict from a defense management perspective. *AJIS: Academic Journal of Islamic Studies*, 5(2), 81-100. <https://doi.org/10.29240/ajis.v5i2.1915>