

The human factor of Armenia's defense: Personnel value, command autonomy, and combat readiness in the era of cheap mass and machine speed

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Summary

In recent years, Armenia has been rapidly modernizing its military equipment. However, the reduction of mandatory service to 18 months (starting from January 2026), set against the backdrop of planned defense budget cuts, makes personnel a critical factor in combat readiness. The article argues that defense reform built on rational calculation and innovation must rest on an explicit national ideology, and it proposes five ideological coordinates as the foundation of Armenian military service: national memory and the principle of non-recurrence, national identity, the future and mission of the state and the nation, unity with the Diaspora, and civic solidarity.

This article analyzes reforms to the Armenian Armed Forces' recruitment and manning systems. It argues that shortening the conscription period without first establishing a professional NCO corps, a trained reserve, and modern training infrastructure risks creating an army that, despite superior equipment, is less combat-effective. The author introduces the concept of the "effective service man-month", demonstrating that shorter service terms most severely impact technical specialties, which play a decisive role in warfare characterized by the widespread use of drones, and proposes a model of phased combat readiness.

Drawing on the experiences of Finland, Estonia, Switzerland, Israel, and Ukraine, the study outlines a system of continuous training (spanning from school to the reserve) and a Territorial Reserve concept based on versatile tactical groups. It also details a command training approach that fosters initiative among junior leaders and prevents over-reliance on automated systems. It also examines the expanding role of women in the armed forces.

Furthermore, the article examines values, public trust, and psychological resilience as measurable components of combat readiness, while proposing a legal and financial framework that engages civil society and the technology sector as a "second echelon" of defense. Finally, the paper presents a phased implementation plan for these reforms, concluding that Armenia's defense sovereignty depends on human capital development just as much as it does on arms procurement or the growth of domestic defense manufacturing.

Keywords: Armenia; defense reform, military personnel, combat readiness, conscription, reserve forces, military education, command autonomy, command and control civil-military cooperation, moral-psychological resilience, national ideology, women in the armed forces.

Человеческий фактор в оборонной политике Армении: Ценность личного состава, автономность командования и боевая готовность в эпоху дешевых массовых средств и машинной скорости

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Аннотация

В последние годы Армения ускоренными темпами модернизирует военную технику. Однако сокращение срока обязательной военной службы до 18 месяцев (с января 2026 года) на фоне планируемого уменьшения оборонного бюджета превращает личный состав в критически важный фактор боевой готовности. В статье утверждается, что оборонная реформа, основанная на рациональном расчете и инновациях, должна опираться на четко сформулированную национальную идеологию. В качестве основы армянской военной службы предлагаются пять идеологических координат: национальная память и принцип недопущения

повторения трагических событий, национальная идентичность, будущее и миссия государства и нации, единство с Диаспорой и гражданская солидарность.

В статье анализируются реформы системы комплектования Вооруженных сил Армении и управления личным составом. Автор утверждает, что сокращение срока призыва без предварительного формирования профессионального корпуса сержантов, подготовленного резерва и современной учебной инфраструктуры создаёт риск появления армии, которая, несмотря на превосходство в оснащении, будет обладать более низкой боевой эффективностью. Вводится понятие «эффективного человеко-месяца службы», демонстрирующее, что сокращение сроков службы наиболее существенно сказывается на подготовке специалистов технических специальностей, играющих решающую роль в условиях ведения боевых действий с широким применением беспилотников. В качестве альтернативы предлагается модель поэтапного формирования боевой готовности.

На основе опыта Финляндии, Эстонии, Швейцарии, Израиля и Украины в исследовании предлагается система непрерывной военной подготовки – от школьного образования до резервной службы, – а также концепция территориального резерва, основанная на универсальных тактических группах. Отдельное внимание уделяется системе подготовки командиров, которая должна развивать инициативность младших командиров и предотвращать чрезмерную зависимость от автоматизированных систем. Рассматривается также расширение роли женщин в вооружённых силах.

Кроме того, в статье ценностные установки, общественное доверие и морально-психологическая устойчивость рассматриваются как измеримые составляющие боевой готовности. Предлагается правовая и финансовая модель привлечения гражданского общества и технологического сектора к обороне в качестве «второго эшелона». В заключение представлен поэтапный план реализации предложенных реформ. Автор приходит к выводу, что оборонный суверенитет Армении зависит от развития человеческого капитала не в меньшей степени, чем от закупки вооружений и наращивания отечественного оборонного производства.

Ключевые слова: Армения, оборонная реформа, военнослужащие, боевая готовность, воинский призыв, резервные силы, военное образование, автономность командования, управление войсками, военно-гражданское сотрудничество, морально-психологическая устойчивость, национальная идеология, женщины в вооруженных силах.

The human factor of Armenia's defense: Personnel value, command autonomy, and combat readiness in the era of cheap mass and machine speed

I. Introduction: The personnel bottleneck

Following the 2020 Artsakh War, Armenia began upgrading its defense infrastructure and equipment at a faster pace than at any time since gaining independence. Defense spending between 2022 and 2025 reportedly exceeded the combined total of the preceding two decades by a factor of 5.4 [1]; these procurements enabled the diversification of suppliers, the introduction of new air defense systems, artillery, and unmanned aerial vehicle (UAV) complexes, and the laying of a foundation for expanding the national defense industry. These aspects have already been addressed in previous publications covering defense partnerships, the economics of serial production, and the concept of a layered counter-UAV system [2], [3]. However, hardware is merely one component of military power; it is transformed into actual combat capability by the quality of the personnel who operate and maintain the equipment and exercise command.

It is precisely here that the vulnerabilities of Armenia's defense system transformation process are most clearly evident. Starting from January 1, 2026, the mandatory military service term was reduced from 24 to 18 months, a measure justified by the expansion of contract service, the implementation of a professional non-commissioned officer (NCO) system, and the introduction of an attestation procedure [4]. The government presents this change as a step toward creating a more professional army. At the same time, the defense budget for 2026 was planned with a reduction of approximately 15%, and local analysts question the feasibility of increasing the number of contract soldiers amidst shrinking resources [5]. Reducing the conscription term without first establishing the necessary training infrastructure, NCO corps, and reserve forces capable of compensating for the lost service time risks creating an army that, while better equipped, is less combat-ready.

The nature of modern warfare exacerbates the situation. Cheap, mass-produced weapons systems compress decision-making timeframes, overwhelm defense systems, and render centralized command vulnerable, particularly when communication channels are jammed or severed. In such an environment, the individual soldier and the junior-level commander increasingly become decisive factors: their training, initiative, resilience under fire, and readiness to execute combat missions. For a small state with limited GDP, a shrinking pool of military-age men, and a neighbor possessing a far larger population and a formidable defense budget, relying on sheer numbers is not an option. Consequently, every service member must possess greater combat value.

This paper argues that Armenia's defense sovereignty now depends on the development of human capital, a process that must be pursued with the same level of priority as arms procurement or the organization of domestic production. Such development, however, cannot

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rest on rational calculation alone. Defense reform, however rational, calculable, and innovative in its means, must be grounded in a national ideology that supplies its ends: rational design answers how to build an effective force, while ideology answers what the force is for and therefore why citizens will serve in it, sustain it, and trust it. The paper accordingly begins with the ideological foundation and derives each element of reform from it. The analysis is then structured across four levels. At the individual level, the study examines the training system throughout the entire lifecycle: from school and university to active service and reserve retraining. At the military unit level, the focus is on command autonomy, the non-commissioned officer (NCO) corps, and decentralized tactical organization, together with the growing role of women in the defense system. At the societal level, the analysis covers the values, trust, and psychological resilience that give meaning to military service. Regarding state-society interaction, the paper proposes a legal and financial framework to engage civil society, volunteer groups, and the technology community as a “*second echelon*” of defense. The study draws on the comparative experiences of Finland, Estonia, Israel, Switzerland, and Ukraine, paying particular attention to which elements of these models are applicable to the Armenian context and which are not.

The analysis is based on legislation, official government statements, budget documents, open-source defense research, and comparative case studies. Given the limited availability of public data regarding combat readiness, personnel retention, and training outcomes, the paper clearly distinguishes between conclusions based on direct evidence and those based on inference.

II. The ideological foundation of Armenian military service

Reform that rests only on rational calculation lacks an answer to the question of purpose. Cost-exchange ratios, readiness metrics, and force structures describe how to build and sustain a military, not what it is for, and people do not serve, endure hardship, or accept risk for a metric. This paper therefore treats ideology as the foundation of reform and calculation as the means of realizing it: the national purpose defines the ends, rational and innovative design chooses the instruments, and measurement tests whether the instruments serve the ends. In each of the comparative cases examined in Section IV, military service rests on a recognizable national idea. Armenia has no equivalent codified doctrine. The last explicit attempt, the “*nation-army*” concept of 2016–2018, held that every state body and citizen must understand their role in defense and that the army should be a school for society [6]. The current reform documents emphasize professionalization and democratic and civilian oversight [7], but they do not state the national purpose that service is meant to serve. This section proposes five coordinates on which such a purpose can be built.

The 1st is **national memory**. The Armenian nation suffered genocide in its historical homeland, losing more than a one and half a million lives, a vast cultural and spiritual heritage, and roughly nine-tenths of its historical territory. The loss was also strategic: depth for defense, water and land resources, mineral deposits, and access to the Middle East and the Black Sea disappeared with the territory. Turkey officially denies the genocide to this day. This memory has been renewed by the recent war in Artsakh. The war of 2020 and the Azerbaijani offensive of September 2023 deprived the nation of a significant part of its homeland and ended the Armenian presence there: within days, more than 145,000 people fled to Armenia, and Artsakh was emptied of its Armenian population, a presence of millennia. In the Armenian perspective, the loss of Artsakh and the displacement of the Armenian population are perceived as a continuation of the genocide. The former ICC chief prosecutor Luis Moreno Ocampo said that

its legal description is genocide. Whatever the legal verdict, the experience establishes non-recurrence as the central task of the armed forces: a population's security depends on the capacity to defend it, and the survival of the state cannot be assumed.

The 2nd is **national identity**: religion, history, culture, language, and traditions. The Constitution establishes Armenian as the state language and recognizes the mission of the Armenian Apostolic Church in preserving national identity [8]. The nation's continuity rests on the early adoption of Christianity as a state religion, the creation of the alphabet, a written literature, and a tradition of defending faith and identity from Avarayr to Sardarapat. Service is thus understood as the defense of a living inheritance, which the army protects and which in turn gives service its meaning. Practical measures follow, such as historical and cultural education during service and cooperation between the armed forces and the Church.

The 3rd is **the future of the state and the nation**: where Armenia is heading, what role it should play in the region and the world, and what its mission is. That mission can be formulated from security and self-reliance: Armenia is to be a secure and defensible homeland for the Armenian people and the spiritual and cultural center of the global nation, a state that no neighbor can coerce. Its regional role follows from strength, as a stable pillar of security in the South Caucasus that cooperates with others by interest and not by dependence, in line with the diversification logic of earlier studies on defense cooperation with India and France. The foundations of this role are a domestic defense industry, a knowledge economy, demographic recovery, and the return of the Diaspora.

The 4th is **unity of the nation in Armenia and the Diaspora**. The Constitution commits the state to ties with the Diaspora, including the protection of Armenian historical and cultural values in other countries. The Diaspora is a source of expertise, funding, and volunteers, and a reason for service that reaches beyond the citizens of the Republic.

The 5th is **civic solidarity and the rule of law**. The preamble commits the nation to the freedom, general well-being, and civic solidarity of the generations. This coordinate prevents national identity from becoming exclusionary and ties the legitimacy of service to fairness as a precondition of readiness.

Table 1. Ideological coordinates of Armenian military service

Coordinate	Core content	Implication for personnel policy
National memory	Genocide and its denial; territorial and strategic losses; Artsakh and the loss of its Armenian population; non-recurrence	Historical education in school and service; preparedness; protection of the population as a core mission
National identity	Church, history, culture, language, traditions	Cultural and historical components of service; cooperation with the Church
Future and mission	Secure homeland; cultural center of the nation; self-reliance	Service tied to defense industry, technology, and demographic recovery
Nation and Diaspora	Pan-Armenian unity	Diaspora expertise and volunteers via the registry (Section X)
Civic solidarity	Rule of law, equality, civilian oversight	Fair recruitment; transparent reporting; trust indicators (Table 7)

Together, the coordinates explain why service in Armenia can be understood as an obligation to earlier and later generations. They also sharpen tension in the reform. The

government has announced a gradual shift to a professional army, which narrows the share of citizens who serve directly, and the bond between army and nation must then be sustained by other means: school and university training, the territorial reserve, the fuller participation of women, and a structured role for volunteers and the Diaspora. Each subsequent section returns to these coordinates: it identifies the coordinate on which the proposed measure rests and tests the measure against it. A reform that improves efficiency but contradicts the national purpose, for example by weakening the bond between army and society, should be revised even if its calculations are sound.

III. The current model and the effective Soldier–Month metric

The national purpose set out in Section II, with non-recurrence above all, supplies the standard against which the reform is judged: the question is how much of the obligation to protect the population the armed forces can actually deliver. The government justified the decision to shorten the term of service by citing the expansion of contract service, which relies on several mechanisms: the “Motherland Defender” program², allowing conscripts to sign 5-year contracts with the Ministry of Defence; a professional non-commissioned officer (NCO) system; an evaluation procedure; and long-term contracts that entitle border guard personnel to a pension. This reduction is part of the government’s 2021–2026 program and the Army Transformation Plan, the stated goal of which is a gradual transition from a conscription-based recruitment system to the formation of a more professional armed force [9].

This policy direction is entirely justified. A professional core of personnel is better suited to operating and maintaining the combat readiness of complex air defense systems, unmanned aerial vehicle (UAV) complexes, and electronic warfare assets than rotating conscripts. The challenge lies in the sequencing of actions and the assumptions regarding the institutional capacity that must be established before the reduction in service duration takes effect.

Three such assumptions cannot be verified using open-source data.

- **The 1st** is that the recruitment of contract soldiers will proceed rapidly enough to offset the loss of capability resulting from the 6-month reduction in conscript service; yet public data on contract soldier numbers, contract renewal rates, and unit manning levels remain very limited.

- **The 2nd assumption** posits that shorter, more intensive training cycles can still produce competent soldiers, a claim that, as both domestic and foreign analysts note, holds true only given a strong NCO corps, modern simulators, and regular field exercises.

- **The 3rd assumption** is that the resulting shortfall will be covered by the reserve; this implies the existence of a trained, pre-equipped, and locally organized reserve, conditions discussed in Section VI. Building each of these capacity elements takes years, whereas the reduction in service duration was implemented within a matter of months.

The budgetary situation exacerbates the problem. The reform coincides with a planned 15% cut to the defense budget for 2026 following a period of sharp increases in spending on weaponry and infrastructure. Although officials anticipate cost savings from scaling back conscription by 2028, a logical question arises: how can a transition to a professional army, which is more expensive to maintain on a per-soldier basis than a conscript force, be achieved

² The “*Motherland Defender*” program is an Armenian military reform designed to transition the country from a conscription-based model to a professional, contract-based military. Under this initiative, soldiers can opt out of traditional conscription by signing a 5-year contract with the Ministry of Defense. A key incentive is that the program enables the government to shorten mandatory military service from 24 down to 18 months for those who qualify.

amidst shrinking resources? Contract soldiers require salaries, housing, pension benefits, and continuous combat training. If the budget is cut while the proportion of contract soldiers increases, either the quality of training or the number of trained personnel will inevitably suffer.

The traditional metric for the cost of maintaining a single service member fails to account for this nuance, as 18 months of service do not equate to 18 months of full combat readiness. The initial months are consumed by basic training, followed by courses for a military occupational specialty, while other time is taken up by leave, rotations, and administrative matters. Consequently, this paper proposes using a more precise metric: the cost of one “*effective month of service*” per soldier, calculated as the total annual expenditure on recruiting, training, equipping, protecting, and sustaining a soldier, divided by the number of months of actual service during which they perform their duties.

A hypothetical example illustrates why this distinction matters. Suppose basic training takes 3 months, while leave and administrative procedures account for another month and a half (these figures are for illustrative purposes and not based on official data). In this scenario, with a 24-month service term, a general-duty conscript serves 19.5 months, whereas with an 18-month term, they serve 13.5 months; this represents a loss of about 31% of service time, despite a nominal term reduction of only 25%. If a specialist role (such as a drone operator) requires a 4-month training course, the figures become 15.5 and 9.5 months respectively, resulting in a loss of approximately 39%. Since the 6 months of non-combat time remain constant and training duration is difficult to compress, the proportion of lost service time rises as the technical complexity of the specialty increases.

Two conclusions follow from this. Reducing the conscription term has the greatest impact on technical specialties – precisely the roles that determine combat effectiveness in an era of drone dominance. Furthermore, because fixed training costs are amortized over fewer months, the cost per month of actual service rises, unless specialists remain in the ranks beyond the standard conscription term. Consequently, contract service for specialists is not merely an optional add-on but a prerequisite for shortening the conscription term.

This analysis points to the need for a differentiated approach to combat readiness rather than the application of uniform standards. A small state cannot maintain high combat readiness across all units; a more realistic strategy is to concentrate limited professional resources where the consequences of failure are most severe (as shown in Table 2).

Table 2. A tiered readiness model

Tier	Composition	Service model	Priority investment
1	Air defense, drone, electronic warfare, and most exposed border units	Contract professionals with retained specialists	Retention incentives, advanced training, individual survivability
2	Defensive units built around sensors and prepared positions	Conscripts led by a professional NCO corps	Sergeant training, simulators, tactical medicine
3	Territorial reserve	Reservists with periodic refresher training	Local organization, pre-positioned equipment, employer compensation

The principal risk of the present trajectory is a hollow force, in which units possess modern equipment but too few trained personnel to employ it. The effective soldier-month metric makes

this risk measurable before it manifests in operational failure, and it supplies a basis for evaluating the reform by outcomes rather than by announced intentions.

IV. Comparative lessons: What transfers and what does not

The reform in Armenia invites comparison with systems that combine short- or medium-term mandatory service with a large, trained reserve. Five examples are of particular interest, not because Armenia might replicate them exactly, but because each demonstrates a different way of transforming peacetime conscript service into wartime combat capability. Each of these systems rests on a distinct national idea: comprehensive security and a broad consensus on defending the homeland in Finland, restored statehood and the memory of occupation in Estonia, the citizen-soldier and armed neutrality in Switzerland, national survival in Israel, and sovereignty and self-determination in Ukraine. A mechanism is therefore transferable to Armenia only if it fits Armenia's own national purpose, set out in Section II.

Finland stands out as a prime example of a small state facing a security threat that relies on a trained reserve rather than a large standing army. Conscript service lasts 165, 255, or 347 days, and a wartime force of 280,000 personnel is considered a sufficient deterrent. Longer service periods apply to officers, non-commissioned officers, and conscripts training for highly complex tasks; thus, the duration of service is determined by functional duties rather than the branch of service. The country maintains an impressive reserve (approximately 870,000 personnel), with combat readiness ensured through regular training exercises and a broad societal consensus on defense: 83% of citizens express a willingness to defend their homeland against a superior adversary. The conscription system provides Finland with a cost-effective yet highly motivated army, allowing budget resources to be concentrated on the procurement of weapons and equipment. Finland's experience is particularly relevant to Armenia regarding the differentiation of service terms based on specific tasks, as well as the integration of conscription, the reserve, and public trust into a unified system. However, it is difficult to transfer an element such as the depth of social consensus, which forms over the course of decades.

Estonia, with a population of approximately 1.3 million, serves as a highly suitable case for comparison in terms of scale. Its defense system is built on the reserve principle: reserve units form the backbone of the defense forces, while career military personnel fill only 4,200 of the more than 43,000 wartime positions. This structure is sustained through conscription. The government has extended the total service period to 11 months to enhance combat readiness and expand the pool of trained reservists; notably, conscripts serving in certain critical branches are assigned to specific wartime roles while still on active duty. In wartime, territorial defense tasks are carried out by the "Kaitseliit"³ (Defence League), a volunteer organization with around 26,000 members. The direction of reform in Estonia stands in contrast to the trend in Armenia: Estonia has extended the term of service against the backdrop of a deteriorating security environment. Although the two states differ in their alliance affiliations and financial capabilities, this contrast reinforces the argument made in the third section: reducing the term of service requires the existence of genuine, proven compensatory mechanisms. A common

³ The Estonian Defence League (Estonian: Kaitseliit) is a voluntary, militarily organized national defence organization in Estonia. It operates under the jurisdiction of the Ministry of Defence and acts as a central part of the Estonian Defence Forces' territorial defence structure.

element here is the link between conscript training and assignment to wartime roles, even though Estonia operates within a different alliance context.

Switzerland demonstrates how a militia (civilian-based) system enables the maintenance of combat readiness at minimal cost and without the need to sustain a large professional army. Basic training typically lasts 18 weeks, followed by 6 3-week refresher courses over a 9-year period. Costs are shared between employers and the state: soldiers receive compensation for lost income amounting to 80% of their most recent salary or a set daily minimum, thereby mitigating the financial losses associated with conscription. The Swiss experience also shows that regular, predictable training sessions announced well in advance are entirely compatible with civilian careers. This is directly relevant to the challenge of retaining skilled technical personnel in Armenia. The potential for adopting this model is limited by financial and cultural factors: the Swiss income compensation system relies on a developed economy, while the militia tradition is rooted in a political culture based on a sense of civic duty.

Israel exemplifies the most advanced model of a small state that maintains a high level of combat readiness through a manpower system combining conscription and reserve service, underpinned by a strong professional corps of non-commissioned and commissioned officers. The value of this experience lies in its organizational principles: a career progression system for junior leaders, the delegation of authority to them, and the training of reservists within units rather than on an individual basis. However, the recent increase in the burden placed on Israel's reserve forces highlights the costs associated with the prolonged deployment of reservists; this should dispel any notion that a reserve force serves as a cheap substitute for professional personnel.

Ukraine offers the most illustrative example of the nature of this threat. The country's experience since 2014 (and especially since 2022) demonstrates that the effective decentralized use of drones and the capacity for rapid adaptation depend on low-level commanders and skilled operators, whereas the Soviet-era hierarchical system, focused exclusively on the officer corps, hinders both processes. Furthermore, Ukraine's experience reveals vulnerabilities in personnel training systems, rotation mechanisms, and societal readiness for military service.

Table 3. Comparative cases and their relevance for Armenia

Case	Core mechanism	Transferable to Armenia	Not readily transferable
Finland	Role-differentiated service, large trained reserve	Differentiated terms, unit-based reserve, linking service to public trust	Decades-old social consensus, scale of reserve
Estonia	Reserve-based structure; conscripts trained for wartime positions; volunteer Defense League	Assignment of conscripts to wartime units; regular reserve exercises; legal framework for volunteers	Alliance context; fiscal capacity
Switzerland	Militia with periodic refresher courses and income compensation	Predictable refresher cycle, employer compensation	Fiscal capacity, civic tradition
Israel	Conscript-and-reserve pipeline with strong NCO corps	Career path for junior commanders, unit-based reserve	Size of professional base, strategic depth of resources
Ukraine	Rapid adaptation under fire, decentralized drone use	Operator training, empowered junior leaders	Wartime conditions, scale of mobilization

Across the cases, 3 features recur: differentiated service by role, an NCO corps with real authority, and a reserve that is trained regularly in the units to which its members belong. These points frame the proposals that follow.

V. The training continuum: From school to reserve

The reduction in the term of compulsory military service makes the remainder of a citizen's life a key factor determining the level of combat readiness. Section III demonstrated that every month cut from the service term represents, in effect, a lost month of effective training, given the fixed time requirements for initial instruction and specialist courses. A logical solution would be to shift part of this training to the periods before and after service; this would allow the allotted 18 months to be dedicated to consolidating existing skills rather than acquiring them from scratch. In this scenario, combat readiness ceases to be a one-off event and becomes a continuous process shaped during schooling and higher education, during active service, and through reserve training.

The foundations for implementing the first stage have already been laid in Armenia. Regulations approved in 1999 govern pre-conscription training in general education schools and specialized secondary educational institutions; a subject known as “*preliminary*” or “*basic*” military training is taught in the upper grades [10], [11]. The Ministry of Defence has assigned specific military units to schools for the purpose of conducting field exercises. For instance, in 2018, over 13,000 11th-grade students (including girls) participated in field activities that involved visiting military units, inspecting military hardware, and conducting live-fire exercises [12]. However, the quality of such training has long been a cause for concern. In 2018, the Minister of Defence announced the formation of a joint working group with the Ministry of Education to analyze the teaching of this subject, which at the time was taught only once a week. Information from open sources does not reveal the conclusions reached by this group or how the subject is currently taught.

The arguments for improving school-based education are compelling, yet the content matters. A model of narrowly specialized military training faces a practical objection: drill and rifle assembly do little to foster the competencies truly required in modern conflicts. A sounder approach is to view pre-conscription training as a form of civic and technical education relevant to both military and civil resilience. Its core components should include first aid and tactical medicine, civil protection and emergency response (echoing the author's earlier analysis of the national civil protection system) [13], land navigation and map reading, basic digital literacy and drone skills, physical fitness, and information hygiene, specifically, the ability to recognize and counter manipulated content. Such a curriculum raises the baseline proficiency of every recruit, supports civil defense independently of military service, and avoids the criticisms associated with purely military training. It also directly increases the number of effective months of service, as recruits who arrive already trained in first aid or navigation need not spend scarce service time acquiring these skills. Education before service is also the channel through which national memory, language, and culture are passed to each cohort; for that reason, it is best framed as civic and historical education rather than military drill.

A different challenge arises during the university education stage: competition for skilled technical personnel. Armenia's technology sector offers salaries that the armed forces cannot match, and the specializations most critical to the fields of unmanned systems and electronic warfare are the very ones highly valued in that sector. Rather than viewing this as a conflict of interest, the state

could establish a clear system, such as a training program for reserve officers or technical specialists, tailored to students in engineering, IT, and medical fields. Such a program could offer academic credit for completing military modules, entail specific service obligations, and confer an officer or specialist rank upon completion. This approach would reduce the training burden during active service, retain specialists for the army who might otherwise join the private sector, and offer students a predictable, respectable way to fulfill their military duty. Developing such a system requires safeguarding academic freedom and avoiding any coercion regarding students' choice of majors; furthermore, it must be aligned with the existing deferment system, the fairness of which is a crucial factor in maintaining public trust.

In this scenario, the period of military service becomes more purposeful. If recruits already possess foundational knowledge, the initial training phase can be shortened, allowing the time saved to be devoted to unit cohesion, professional training, and integrating personnel into the formations where they will eventually serve as reservists. There is a precedent for this: in 2011, a group of PhD holders (including the author) petitioned the Armenian Ministry of Defence to be sent to a border military unit for one month to experience army life under conditions closely resembling full-time service. At that time, the Ministry of Defence sent this group to an army unit for just 5 days. It was an interesting experience for both the PhD holders and the career military personnel. The PhD holders had the opportunity to undergo brief military training, while the conscripts were able to engage in seminar-style discussions with these established specialists from various fields. Both the Ministry of Defense and the PhD holders themselves were pleased with the initiative. The PhD holders had envisioned launching a pilot officer training program within universities; unfortunately, the program was not continued.

This approach mirrors the Finnish practice of training conscripts in units formed according to wartime principles, followed by their assignment to the reserve within those same units.

It is precisely at this final stage that Armenia's current system is weakest, and this is where a comparative analysis of other countries' experiences offers the greatest value. Conscripts who leave active duty without undergoing further training lose most of the skills they acquired within a few years. Switzerland and Finland address this issue through predictable, regular refresher training sessions. In Switzerland, for instance, after completing basic training, a soldier is required to attend 6 3-week refresher courses over a 9-year period; the schedules are announced in advance, allowing both employers and reservists to plan accordingly⁴. A model adapted for Armenia does not need to be quite as intensive. A realistic option would be annual training sessions lasting one to two weeks for specific groups of reservists, primarily specialists with critical skills and units assigned to the most vulnerable sectors, with the scope of the program expanding as the system's capabilities grow. The effectiveness of such a system would depend on meeting **4 conditions**.

1. Training sessions must be linked to local units so that reservists train alongside the very people with whom they would fight side by side.
2. Hardware and equipment must be pre-positioned at training sites to avoid wasting training time on their collection and inspection.

⁴ According to the Swiss federal authorities, this system ensures that reservists maintain active combat readiness while allowing employers and soldiers to plan for mandatory annual training blocks..
<https://www.ch.ch/en/safety-and-justice/military-service-and-civilian-service/military-service/>

3. Employers must be compensated (following the Swiss model of income replacement) to ensure that reserve service causes no financial loss to either the reservist or the company.

4. The training must be rigorous and purposeful, as reservists who view the sessions merely as a formality quickly lose interest and motivation [14].

The financial implication deserves frank treatment. Refresher training costs money, yet the cost of a reserve is small relative to the cost of the equipment it is meant to operate, and the alternative, an untrained reserve, delivers little. A phased approach that begins with critical specialties and scales as resources allow is more credible than a universal system announced without funding.

Table 4. A proposed training continuum

Stage	Principal content	Main objective	Principal constraint
School	First aid, civil protection, navigation, digital and drone literacy, fitness, information hygiene	Raise the baseline of recruits and civil resilience	Avoiding militarized, drill-centered education
University	Reserve-officer and technical-specialist track with academic credit	Secure scarce technical talent	Competition from the private sector; fairness of deferments
Service	Specialist qualification, unit cohesion, integration with future reserve units	Maximize effective soldier-months	Fixed training overhead of an 18-month term
Reserve	Annual refresher assemblies tied to local units, pre-positioned equipment, employer compensation	Preserve skills and sustain mobilization capacity	Budget; employer and reservist burden

The continuum suggests a broader point. Readiness in a small state is cumulative and societal. It depends on how many citizens can administer first aid, operate a small drone, or navigate in difficult terrain before they ever put on a uniform, and on how many return periodically to renew those skills afterward.

VI. A distributed territorial defense reserve and decentralized tactical cells

The foregoing demonstrates that a small state's readiness depends on both the organization of the population and the scale of personnel training. This section proposes a structure that can be termed a "*distributed territorial defense reserve*". This term was chosen deliberately over "*partisan reserve*", as the latter could be interpreted as a plan to cede territory and aligns poorly with the mission of guarding the state border. In contrast, the proposed concept entails an access-denial strategy: it increases the costs for an aggressor by making defense forces harder to detect and suppress while allowing for faster recovery of combat effectiveness, all while the direct defense of the border remains the primary mission of the professional and conscript formations described in Section III.

Arguments favoring decentralization stem from the economic realities of modern warfare. Previous works in this series noted that the advent of low-cost unmanned systems and mass-produced munitions has shifted the cost-effectiveness ratio against large, expensive, and concentrated targets. Large formations concentrated in a few locations are vulnerable to precisely those weapon systems that are cheapest to produce. Conversely, small, dispersed groups whose members possess cross-training in multiple specialties present a more difficult

target, making the cost-result ratio unfavorable for the adversary. A group of a few trained fighters, equipped with a mortar, a small number of FPV drones, secure communications, and organic medical capabilities, can achieve results disproportionate to its size and the cost of its formation. However, the effectiveness of such a group depends less on equipment than on the training level and the personnel's ability to make sound decisions, bringing us back once again to the importance of the human factor.

The viability of such combat groups depends on 3 conditions.

- **The 1st** is interchangeability (proficiency in related specialties). While specialists in larger units can be organized into distinct groups, every member of a small combat group must be capable of performing multiple tasks: operating a drone, adjusting fire, providing tactical medical care, and maintaining communications. These are demanding requirements that cannot be met within the 1,5 years of general military training received by most conscripts; this fact reinforces the hierarchical approach described in Section III, wherein the most complex technical tasks are assigned to professional contract soldiers and trained reservists, while conscripts are integrated into groups to perform auxiliary functions.

- **The 2nd condition** is individual survivability. In recent years, the Armenian armed forces have invested heavily in combat hardware; however, protecting a soldier from the primary threats of the modern battlefield, drone strikes, indirect fire, and thermal detection, depends less on heavy combat systems than on the availability of relatively inexpensive equipment and appropriate training. Thermal signature suppression gear, electronic warfare-resistant communication and data transmission systems, and advanced tactical medical training are inexpensive compared to major weapon systems, yet they are precisely what determines whether a trained fighter survives and is able to put their skills into practice. These expenditures safeguard much larger prior capital investments and therefore require dedicated budget allocations rather than being funded on a residual basis.

- **The 3rd condition** is a management culture that allows units to act independently, in alignment with the commander's intent, even when communications are disrupted. While this issue is addressed in Section VIII, it is worth emphasizing here that organizational decentralization without the delegation of authority leaves units vulnerable.

A territorial reserve formed on these principles must also be anchored to specific terrain. In the Finnish and Swiss models, reservists are assigned to units linked to their home regions, ensuring that personnel are intimately familiar with the local landscape, the community, and one another. This is particularly relevant for Armenia in its border and mountainous provinces, where local knowledge of the terrain is a valuable asset and depopulation itself poses a strategic challenge. Reserve units rooted in local communities can help retain the population, give residents a clearly defined role in ensuring security, and reduce mobilization times. Achieving this requires the pre-positioning of vehicles and equipment, regular training exercises, and a compensation system for both employers and the reservists themselves. Without meeting these conditions, the reserve will exist only on paper. Local anchoring also expresses the coordinate of national memory: the defense of one's own land and community, and the lesson of Artsakh that the security of a population depends on its capacity to defend it.

Volunteer and veteran organizations also operate in Armenia, though their contributions have not yet been systematically integrated into the Armed Forces' structure. Their strengths lie in high

motivation, local knowledge, and flexibility, while their weaknesses include inconsistent levels of training and equipment, as well as an ambiguous legal status. The optimal solution would not be to incorporate these units into the regular military, which would result in the loss of their valuable attributes, but rather to integrate them within a 3-part framework: a unified training standard, clearly defined roles within the reserve and civil defense systems, and a certification mechanism to validate the qualifications of individuals and units. Those meeting the established standards would gain legal status, insurance coverage, and a place in the chain of command, while the rest would remain civil society organizations without operational responsibilities. This approach mitigates the primary risk associated with volunteer formations: the potential for complications arising from the involvement of untrained and unaccountable personnel in crisis situations. Furthermore, it aligns with a multi-component model of state-society cooperation.

This proposal entails risks that must be acknowledged. A territorial reserve could become a source of political fragmentation if local units fall under the control of private individuals or if loyalty is directed toward specific people rather than institutions; therefore, matters of command, funding, and weapons storage must remain exclusively under state control. Furthermore, the existence of such a reserve could create a false sense of security if it is used to justify reducing the size of professional forces. Finally, the effectiveness of this measure depends on society's willingness to accept the obligations associated with reserve service, which brings us back to issues of fairness and trust.

Table 5. Components of a distributed territorial defense reserve

Component	Function	Key condition
Cross-trained tactical cells	Dispersed, low-signature capability with organic fire, drone, medical, and communications functions	Retained specialists; training standard beyond general conscript service
Individual survivability	Thermal masking, resilient personal communications, tactical medicine	Dedicated budget line; low unit cost relative to hardware
Local anchoring	Reserve units tied to home communities, especially in border and mountain provinces	Pre-positioned equipment; employer compensation; regular refresher assemblies
Volunteer integration	Certified voluntary and veteran organizations in defined roles	Common standard; legal status; state control of command, funding, and weapons

In summary, the territorial reserve is an institutional response to a demographic and fiscal constraint. A state that cannot field mass can field resilience, provided its personnel are trained, equipped, and organized to operate in small units under uncertain conditions.

VII. Women in Armenia's defense system

The ideological coordinates and the demographic constraints analyzed above converge on a question that Armenian defense analysis has addressed unevenly: the role of women. Shrinking cohorts of military-age men mean that a small state cannot leave half of its human capital outside the defense system, and the coordinates of national memory and civic solidarity make women's participation a matter of principle as well as capacity.

From an institutional perspective, the process is characterized by a gradual and uneven expansion of women's participation. Prior to 2012, women served primarily within the Ministry of Defence, as well as in medical and communications units; according to the

Ministry, there were over 1,400 women in its ranks in 2012, a figure that rose to more than 2,000 by 2017 [15]. Military educational institutions began admitting women only in 2013, and their service remains voluntary and based on a contract system. In 2017, a female platoon was formed for participation in peacekeeping missions, and in September 2020, the launch of a 45-day basic military training program for women aged 18 to 27 was announced [16]. Women took part in the 2020 war and subsequent hostilities along the border; during the clashes in September 2022, five female service members were brutally killed [17]. Subsequently, the government introduced a bill providing for a 6-month voluntary service option for women, with the subsequent right to transition to contract-based service. Data is extremely scarce: the Ministry of Defence classifies information regarding the proportion of women as confidential, and published figures vary – for instance, it was reported that women accounted for 9.1% of contract personnel in 2019, whereas the Human Rights Defender's office indicated a figure of 0.5% for 2021. Furthermore, the number of women among the senior command staff remains very low.

The case for expanding women's role follows the logic of the rest of this paper. It raises the number of qualified personnel without enlarging the conscript cohort, and it supplies scarce capacities: communications, intelligence analysis, the operation of unmanned systems, medical care, and cyber and data work. These fields do not depend on peak physical strength, do not require long absence from the family, and carry a lower, though not negligible, risk to life, so priority should go to them, together with contract and reserve arrangements that allow flexible schedules, parental leave, and childcare support.

Two qualifications apply.

1. These criteria define priority areas without excluding others: Armenian women took part in the fighting of 2020 and after, and access to any role should be governed by performance standards applied equally. Operators of unmanned systems and intelligence staff also work under threat, so the protective measures discussed in Section VI apply to them.

2. Women's service should remain compatible with the national value of the family and with demographic recovery, which is why the design avoids forcing a choice between service and family.

Practical measures follow from this: a technical specialist track for women; access to NCO and officer education so that the senior ranks open to them; safeguards against harassment and adequate health care; and veteran benefits that treat women equally. Aggregate indicators, published within security limits, should cover the share of women in contract and reserve service, in technical specialties, and in NCO and officer ranks, together with retention and reported harassment. Expanding women's role is also continuous with national tradition, since women have long been guardians of language, faith, and the continuity of the family, and in recent wars were combatants, medics, and volunteers.

VIII. Command autonomy and military education

The organizational proposals outlined in the previous section rely on a factor that cannot be purchased: a command culture in which junior commanders receive appropriate training, enjoy trust, and are expected to make independent decisions. The actions of dispersed groups are effective only when their commanders are capable of making sound

decisions in situations where communication with higher command is impossible. This section examines the specific approaches this requires from Armenia's military education system and its troop command practices. Mission command also presupposes shared intent, and the national purpose supplies the deepest intent on which a junior leader can act when orders cannot arrive.

The core argument is straightforward. Modern combat operations are characterized by a drastic reduction in the time available for decision-making and by threats to the channels used to transmit those decisions. Electronic warfare, jamming, and the destruction of communication nodes can isolate a unit from command for extended periods, while unmanned systems shorten the interval between target detection and strike. Under such conditions, a command system that requires approval for every significant action becomes a source of vulnerability. A subordinate who waits for orders that cannot arrive, or who lacks experience in making independent decisions, cedes the initiative to an adversary operating differently. The doctrinal response to this challenge, linked to the concept of “*mission command*”, involves communicating the operation’s intent and objectives to subordinates while leaving the choice of specific methods of action to them [18]. While this concept is not new, its relevance has grown in light of the technologies discussed in this series of publications and implementing it in armies with traditionally rigid hierarchies has proven to be a challenging task.

The Armenian Armed Forces inherited a command culture shaped by the Soviet model, which concentrated authority in the hands of senior officers and placed little value on a professional non-commissioned officer NCO corps. Reforms have begun to alter this, notably through the introduction of a professional NCO system, but the changes required are institutional and cultural, not merely organizational. Doctrine alone cannot establish decentralized command; **3 other mechanisms are more critical.**

- **The 1st** concerns promotion and evaluation: officers and NCOs who show initiative within the commander's intent should be rewarded rather than punished when outcomes are uncertain, while those who stifle initiative should face negative consequences.

- **The 2nd** is how the organization handles errors. A culture that punishes every mistake teaches subordinates to avoid making decisions, whereas a culture that distinguishes between honest errors and negligence fosters the development of sound judgment.

- **The 3rd** is training that repeatedly places junior commanders in situations requiring independent decision-making, using exercises that simulate lost communications, ambiguous orders, and time constraints.

The second failure scenario deserves equal attention, as measures taken to prevent the first may inadvertently trigger the second. Without a balanced approach, decentralization can lead to over-reliance on automated systems, a risk identified during analyses of AI use in recent conflicts, where human verification of machine-generated recommendations often amounted to little more than hasty approval. Consequently, commander training must simultaneously cultivate two skills: the readiness to act independently when communications are disrupted, and the habit of critically evaluating (and, if necessary, rejecting) automated recommendations when they are available. These skills are complementary facets of the same professional competence: the ability to make sound decisions under intense pressure. This combination

should be reflected in training scenarios that incorporate both situations requiring action in the absence of information and situations involving misleading information.

Military education serves as the primary instrument for these transformations and is conducted at 3 levels.

- **At the junior leadership level**, the success or failure of decentralization hinges on sergeants, as they lead the small units. Their training must focus on small-unit command skills, the integration of unmanned systems, the employment of indirect fire assets, and the provision of medical aid, as well as the ability to make decisions aligned with the commander's intent. Furthermore, training must be linked to career progression; a well-trained sergeant who sees no prospects for advancement will leave the army, making the personnel retention issue discussed in Section III particularly critical here.

- **At the officer level**, education should foster operational thinking, an understanding of the technologies employed by the troops, and the ability to command based on the operational concept. Armenia's military educational institutions and overseas officer training programs (specifically those with France and India, mentioned earlier) establish the necessary foundation for further development; however, the selection of overseas training areas must be based on a thorough analysis of skills that the national training system cannot yet provide.

- **At the technical specialization level**, distinct career paths are required for operators and maintenance specialists working with unmanned systems, electronic warfare assets, and data transmission and communication systems. Such specialists are a scarce and highly sought-after resource in the civilian economy; therefore, career programs must offer clear prospects, recognized qualifications, and an incentive system that is competitive with the private sector.

Simulation-based training deserves special attention, as it is the most cost-effective method for teaching decision-making under stress. Simulators and structured exercises allow for the repeated practice of actions, such as operating during communication outages or dealing with incomplete or distorted information and the need for rapid decision-making, at a fraction of the cost of field exercises; furthermore, they enable armed forces to systematically record and analyze training outcomes. Such methods are also ideally suited for the compressed training cycles necessitated by shorter terms of service: a recruit who has repeatedly practiced a scenario on a simulator enters live exercises far better prepared.

Another important institutional mechanism, low-cost yet potentially highly significant, is a formalized system for capturing lessons learned. In recent years, Armenia's Armed Forces have participated in various conflicts and border skirmishes; whether this experience translates into changes in doctrine and training depends on the quality of the institutional memory built upon it. A permanent, secure mechanism for collecting, analyzing, and disseminating experience, empowered to directly influence training curricula and exercise plans, would enable the transformation of accumulated experience into actual combat capability. The effectiveness of such a system hinges on establishing a norm where candid assessments of events do not result in punishment; this, in turn, relies on an atmosphere of trust among the military, political leadership, and the public. This is a highly sensitive issue, and a constructive approach involves creating a clear legal framework and fostering trust, thereby enabling officers to exercise initiative within established boundaries.

Table 6. Elements of command autonomy and military education

Level	Core content	Principal enabling condition
NCO	Small-team leadership; integration of drones, fires, and medical care; authority within intent	Career progression and retention incentives
Officer	Operational thinking; technological literacy; command through intent	Selective use of foreign programs; promotion that rewards initiative
Technical specialist	Drone, electronic warfare, and communications career tracks	Competitive incentives; recognized qualifications
Cross-cutting	Simulation of degraded communications and misleading information; lessons-learned system	Tolerance for good-faith error; protected review process

The central argument of this section is that decentralization is an achievement of a cultural and educational nature rather than a structural one. Armies can rapidly reorganize their structures, yet changing the mindset of officers and non-commissioned officers takes years. For a state that cannot afford to squander time on training or human resources, investing in commanders capable of making sound decisions without orders ranks among the most effective investments.

IX. Values, trust, and moral-psychological resilience

In previous sections, readiness was examined as a matter of training, organization, and command. Underlying each of these aspects is a premise often overlooked in technical analysis: the willingness of individuals to serve, to continue serving, and to endure the associated hardships. This willingness cannot be generated by directives alone. It depends on whether service is perceived as meaningful, whether the distribution of burdens is viewed as fair, and whether service members trust the institutions providing leadership. These conditions define the value dimension of the human factor, and they can be analyzed just as systematically as issues of equipment and budgetary support. The ideological foundation gives this willingness its content; the conditions examined here determine whether that content is credible in practice.

Comparative analysis shows that this aspect is by no means secondary. Finland's reserve system functions effectively in part because the vast majority of citizens (around 83% according to recent data) express a willingness to defend the country against a numerically superior adversary [19]. Such public consensus enables Finland to maintain a cost-effective yet highly motivated military and to direct the bulk of its budget toward the procurement of materiel. Ukraine's experience demonstrates the opposite: a protracted war erodes motivation, complicates troop rotation, and diminishes public support for mobilization – even in a society that initially displayed firm resolve. It follows that the willingness to serve is both a valuable asset and a finite resource that the state must manage wisely.

Armenia's starting position is favorable in one respect: according to public opinion polls, the Armed Forces consistently rank among the institutions enjoying the highest level of trust in the country. In a study conducted in October 2025 by the ARAR Center for Civilizational Studies, the approval rating for the Armed Forces stood at 66.4%, reaching approximately 70% among the youth⁵. These data indicate a significant reservoir of public support upon which

⁵ ARAR Center for Civilizational Studies, Public opinion survey conducted 5–25 October 2025, <https://ararfoundation.am/en/news/public-opinion-survey-arar-foundation-presents-findings-from-latest-research/>

reform efforts can draw. However, two important factors must be taken into account. First, polls vary in terms of question wording, sample composition, and methodology; consequently, their results cannot be aggregated to identify general trends, and it is inappropriate to make direct comparisons between data from earlier studies, which showed higher figures, and recent results. Second, data from the IRI also reveal a discrepancy in perceptions: only 48% of respondents expressed satisfaction with the military leadership, whereas 72% approved of the Armed Forces' performance overall⁶. Public respect for rank-and-file military personnel does not automatically extend to the command staff; this gap is significant for the arguments presented in Section VIII, as trust in commanders is a prerequisite for cohesion and for the willingness of junior commanders to act in accordance with the command's intent.

Trust in the institution does not, in itself, guarantee a readiness to serve. Whether a citizen views service as a meaningful undertaking or as an imposed obligation depends on a number of factors. First is the sense of fairness regarding the distribution of the service burden. Consequently, issues such as deferments, exemptions, and the option to avoid service through a financial contribution, an idea abandoned only temporarily, not permanently, directly impact citizens' willingness to serve; a perception of unfairness undermines the institution's legitimacy far more rapidly than any lack of resources. Second, the personal significance of service matters: it is about defending the country, one's community, and one's family's future, which is the content of the national purpose, not an abstract slogan. Third, the treatment of those who have already served plays a crucial role, specifically, the quality of medical and psychological care, prospects for reintegration into civilian life, and how the state honors the wounded and the families of the fallen. The experience of recent wars and the forced displacement of the residents of Artsakh shape the moral context in which these questions arise; a serious, credible approach requires acknowledging this context rather than attempting to ignore it.

Table 7. Indicators of moral-psychological resilience

Indicator	What it measures	Possible source
Cohesion and trust in immediate leaders	Confidence of conscripts and contract personnel in their sergeants and officers	Anonymous unit-level surveys at fixed intervals
Perceived fairness	Views on recruitment, deferments, promotion, and distribution of risk	Surveys of servicemen, reservists, and the public
Psychological support	Access to and use of counseling; stigma around seeking help	Service-use statistics; anonymized feedback
Retention and attrition	Share of contract soldiers renewing after the first term; early separations	Ministry personnel data, published in aggregate
Youth willingness	Interest in voluntary and contract service among those approaching service age	National surveys, including a willingness-to-defend question
Public trust	Confidence in the armed forces and in their leadership, measured separately	Independent polling with consistent wording

An analysis of open sources revealed data regarding levels of satisfaction and trust; however, as far as could be determined, Armenia lacks a methodology for regularly assessing citizens' readiness

⁶ International Republican Institute nationwide survey, Public Opinion Survey: Residents of Armenia, June 2025, <https://www.iri.org/resources/public-opinion-survey-residents-of-armenia-june-2025/>

to defend the country, a practice long established in Finland. Implementing such a tool would help bridge this gap. The proposed indicators also complement the overall readiness assessment framework, enabling the state to detect declining morale before it leads to personnel attrition or mission failure.

Morale presents an additional challenge in the modern operational environment. Troops operating in a landscape dominated by unmanned systems face unique psychological pressures: constant surveillance; the sensation of being targeted by systems that are invisible or impossible to engage directly; and the strain of prolonged operations in small, isolated units. Consequently, personnel training must incorporate elements that build psychological resilience and stress-management skills, alongside simulations of the challenging conditions. Furthermore, units must be prepared to counter protracted information operations aimed at undermining cohesion and public trust. The most reliable defense against such operations is a commitment to credible, transparent communication by the armed forces and the state; a public that receives accurate information is less susceptible to manipulation.

There is a risk inherent in this line of reasoning: discussions about values can easily devolve into calls for patriotism – yet such appeals, if unsupported by fairness and competence, breed only distrust. A more reliable path to resilience lies in institutional measures: establishing a conscription system that the public perceives as fair, and ensuring the presence of competent, trusted commanders, honest communication regarding objectives and costs, as well as concern for those bearing the brunt of the service. Institutional conditions therefore do not replace the ideological foundation; they make it credible.

X. A State–Society model: Law, funding, and the secondary echelon

The concepts of a territorial reserve and a continuous engagement model (or continuum) assume the state can leverage civilian potential without absorbing it. In Armenia, this model of state-society cooperation is currently developing unevenly. During recent crises, volunteer groups, veterans' associations, civil society organizations, and the tech community made significant contributions; however, their actions were often improvised, leading to gaps in training, legal status, and accountability. This section proposes a multi-tiered approach in which the state provides the legal and financial framework, while civilian entities operate as a second echelon, performing clearly defined functions. Its membership follows two coordinates of the national purpose: unity between Armenia and the Diaspora, and civic solidarity.

The rationale for such a model is economic and demographic as well as ideological, since it rests on the coordinates of Diaspora unity and civic solidarity. A state with a limited GDP and a shrinking population of military-age men cannot afford to maintain, within its armed forces, the specialists needed for every type of activity required in modern conflict. A range of such competencies, including software development, data analysis, UAV maintenance and modification, cybersecurity, and medical and logistical support, already exists in the civilian economy, often at a higher level of sophistication. The technology sector is a prime example, as its labor market directly competes with that of the armed forces. If this sector is viewed not as a competitor to be contained but as a resource of professional expertise requiring advanced organization, a structural weakness transforms it into a strategic advantage.

The experience of other countries confirms the validity of this approach, albeit with certain caveats. The example of Estonia's "Kaitseliit" (Defence League)⁷, and its cyber unit staffed by private-sector volunteers, demonstrates how a small state can integrate civilian technical specialists into its national defense system. Ukraine's creation of a state-backed defense technology ecosystem, which facilitated ongoing interaction between volunteer developers, startups, and the armed forces, illustrates both the rapid pace achievable through such collaboration and the importance of having institutional mechanisms in place⁸. In both instances, the value lay not in spontaneous acts of goodwill, but in the existence of a system that made participation predictable.

- **The 1st element** of such a system is the legislative framework. Roles must be defined in advance, as mobilizing civilians during a crisis without prior preparation entails operational and legal risks. Legislation or implementing regulations, adopted within the scope of existing laws on defense and civil protection, must clearly specify the categories of civilian participants, the conditions for their potential mobilization, the bodies responsible for overseeing their activities, and measures for their social protection (including insurance, compensation for injuries, and job retention). International humanitarian law requires particular attention in this context. Civilians who take a direct part in hostilities lose their protection against attack for the duration of such participation; however, the line between support functions and direct participation in combat is not always clear⁹. Therefore, the regulatory framework must clearly define which functions fall under specific statuses, ensuring maximum protection for individuals not integrated into the armed forces' structure; at the same time, individuals performing tasks related to combat operations should be officially enrolled in a reserve force or another recognized structure.

- **The 2nd element** is registration and certification. Establishing a voluntary registry of technical specialists, who have undergone vetting and meet established qualification requirements and clearance standards for handling classified information, would enable the state to rapidly identify and mobilize necessary experts without permanently incorporating them into the armed forces. Organizational certification serves a similar function: a volunteer group that meets published standards regarding training, equipment, and operational procedures receives official recognition and specific assignments, whereas a group failing to meet these requirements remains a civic association with no operational responsibilities. This approach aligns with the model for volunteer and veteran formations and should be implemented as a unified system. Maintaining the registry also entails data protection and security considerations. Since the registry will contain sensitive information about individuals and their professional skills, it requires robust protection, as well as clear regulations governing

⁷ Estonia's Defence League ("Kaitseliit") and its Cyber Defence Unit ("Küberkaitseliit") serve as a global model for integrating civilian tech talent from the private sector into national security. The Cyber Defence Unit leverages vetted private-sector volunteers who maintain civilian careers but hold official legal status to defend critical infrastructure and participate in elite international exercises.

⁸ Ukraine's state-backed defense tech ecosystem, anchored by the Brave1 cluster, radically accelerated weapons development by directly linking IT volunteers, commercial startups, and frontline military units to strip away traditional military bureaucracy.

⁹ Under International Humanitarian Law (IHL), civilians lose their protected status and become legitimate military targets for the duration of their direct participation in hostilities (DPH). This core principle, codified in the Geneva Conventions, balances military necessity with humanitarian protection by ensuring that civilians who actively engage in combat can be lawfully targeted, but only while their hostile actions are ongoing.

access and the purposes of such access. The registry should also be open to specialists of the Armenian Diaspora, a resource of expertise and volunteers.

- **The 3rd element** is funding. Reliance on goodwill renders the system vulnerable, and “second-echelon” units, expected to carry out tasks despite a lack of resources, will operate inconsistently. The state should ensure sustainable funding for training, equipment, insurance, and operational coordination through grants or service contracts awarded via transparent procedures. Stable, moderate funding is more valuable than large, one-off cash injections. Transparency also safeguards the model against capture by vested interests or corruption – risks that inevitably arise when defense funds are channeled to private entities or volunteer organizations.

- **The 4th element** is the involvement of employers and universities. Employers release staff for training and crisis-response operations, while universities deliver the training programs and conduct applied defense-related research. Both groups require incentives, such as tax breaks, compensation for costs associated with employee absences, and access to research funding, as well as predictable conditions. A company that is aware of requirements in advance can plan its operations accordingly, whereas facing unexpected requests is likely to trigger resistance.

Table 8. A multimodal state–society model

Layer	Principal role	What the state must provide
State	Law, funding, command framework, vetting	Legal statute; budget lines; accreditation and security clearance
Civil society and volunteer groups	Medical support, logistics, civil protection, local mobilization	Common training standard; legal status; insurance
Technology community	Drone support, cyber defense, software and data services, rapid prototyping	Registry of specialists; service contracts; secure channels for cooperation
Employers and universities	Release of staff, training pipelines, applied research	Compensation and incentives; predictable demand

This model entails risks that must be taken into account. Reliance on civilians can blur the lines of command and accountability; furthermore, in the absence of clear legal regulation, it could give rise to legal liabilities for the state. There is also a risk of dependency, where the armed forces neglect the development of their own capabilities, counting instead of civilian structures to fill the gap. Civilian formations serve merely as a supplement and cannot replace the professional core of the army. Political risks also exist: groups pursuing their own agendas or maintaining specific affiliations could become instruments of private interests if funding, participant vetting, and command structures are not subject to state oversight. Finally, there is a danger that such cooperation could remain a mere formality devoid of practical substance; this is precisely why the proposal places special emphasis on standards, registration systems, and regular exercises to verify the effectiveness of these mechanisms.

In a broader sense, a small state’s defense capability depends not only on the size of its army but also on how effectively it harnesses the potential of its society. A legal and financial framework that clearly defines the role of civilian participants, ensures their protection, and mandates adherence to established standards makes it possible to transform spontaneous solidarity into a

reliable defense asset. This, in turn, strengthens societal values: when citizens recognize their acknowledged role in national defense, they are more willing to embrace it as a shared obligation.

XI. Welfare, retention, and a phased implementation plan

Previous sections outlined the requirements for a people-centered defense system reform. This section addresses the sustainability of this process and the sequencing of actions. These two aspects are interconnected: if the armed forces fail to retain trained personnel, the resources invested in the measures described in Sections V–VIII are wasted; conversely, disrupting the reform sequence can lead to a personnel shortfall that is costly to rectify. Personnel retention depends less on any single incentive than on overall service conditions. Contract service, the foundation of the transition to shorter conscription terms, competes with the civilian labor market, with the fiercest competition centering on the technical specialists. Consequently, compensation for specialists with scarce skills must be competitive, though financial remuneration alone is insufficient. Service members consider factors such as housing provision, medical care (for themselves and their families), pension guarantees, educational opportunities, and career advancement prospects. The government’s introduction of a system of long-term, pension-eligible contracts (as seen in border guard units) is a step in the right direction; the effectiveness of such measures should be assessed based on concrete outcomes, specifically, whether contract personnel renew their service after their initial term expires. In a broader sense, social support also encompasses care for those bearing the greatest burdens of service: medical treatment and rehabilitation for the wounded, stigma-free psychological support, assistance with reintegration upon discharge, and recognition of service alongside support for the families of fallen service members. Such measures serve as important moral and psychological indicators and demonstrate to potential recruits that the state is fulfilling its obligations.

Table 9. A phased implementation plan¹⁰

Phase	Priorities	Benchmarks
1 (1 st year): foundations	Establish the effective soldier-month metric and the readiness scorecard; draft the legal framework for reserve and civilian participation; begin NCO and specialist retention measures; start the lessons-learned process; launch a pilot of reserve refresher assemblies for critical specialties	Baseline data published; legal drafts submitted; first retention figures for contract personnel
2 (years 2–3): build	Expand NCO training and simulation; introduce the university specialist track and the revised school curriculum; certify volunteer organizations and open the specialist registry; extend refresher assemblies to additional units; integrate individual survivability equipment into regular procurement; expand women’s service in technical, medical, and communications fields, with family-compatible contracts	Share of conscripts with a specialist qualification; contract retention after the first term; reserve mobilization time in exercises
3 (years 4–5): consolidate	Full territorial reserve structure with local anchoring; stable funding for the state–society framework; periodic review of service length and tiered readiness against measured outcomes	Scorecard indicators at or above targets; public trust and willingness-to-defend measures stable or improving

¹⁰ Table 9 sets out a 3-phase plan. The phases are indicative, and the timing should be adjusted to institutional capacity and budget.

The reform must also be sequenced. The reduction of the conscript to 18 months took effect on January 1, 2026, so the question is no longer whether to shorten service but how to compensate for the capacity that was lost. The central principle is that compensating measures should be built in order of their lead time and verified against defined benchmarks, rather than assumed to exist. Capacities that take years to develop, such as a sergeant corps, a trained reserve, and specialist career tracks, should start first, while measures that can be introduced quickly, such as survivability equipment and revised curricula, can follow. If benchmarks are not met, the armed forces should have the option to adjust other variables, such as the allocation of conscripts to roles, the duration of training for particular specialties, or the pace of further professionalization.

The issue of funding requires a frank discussion. The 2026 defense budget is under pressure; however, a reduction in the scale of conscription is expected to generate cost savings by 2028. Some of the proposed measures could be funded by reallocating resources within the existing budget – for instance, by shifting a portion of spending from procurement to personnel training, the use of simulation systems, and enhancing troop survivability (the rationale for this is easily justified using the “*effective man-month of service*” metric). Other measures – such as compensating employers for hiring reservists and ensuring stable funding for volunteer and technical partners—require new financial commitments; these should be introduced gradually and linked to achieved results. International partners already involved in training and institutional cooperation programs could support the implementation of specific components (such as developing simulation systems or training instructors); however, the choice of areas for such support must be driven by national priorities rather than merely the availability of partner proposals. The Ministry of Defence needs to prepare a comprehensive cost estimate (given the lack of publicly available data), and the metric proposed in Section III could serve as the basis for this assessment.

The plan also requires a governance mechanism. A single responsible body, reporting to the Minister of Defence and regularly briefing the Government and Parliament, should oversee the performance indicator system and publish aggregated results (subject to security requirements). Public reporting serves as both a management tool and a source of legitimacy: it enables parliament, the press, and civil society to evaluate the plan's implementation progress while providing the armed forces with an incentive to promptly address shortcomings. Before adoption, each measure should also undergo an audit, that is, a test of whether it serves the five coordinates of the national purpose, and in particular whether it strengthens or weakens the bond between the army and the nation.

XII. Conclusion

This paper substantiates the argument that the decisive factor in Armenia's defense sector is becoming not so much the available weaponry as the people who operate, employ, and maintain its combat readiness. In recent years, the country has had to modernize the material foundation of its security more rapidly than at any other time since gaining independence. The reduction of mandatory service to 18 months, set against a shrinking defense budget, makes the human factor the critical link upon which the success or failure of these transformations hinges.

The analysis leads to **5 conclusions**.

1. Defense reform that is rational, calculable, and innovative in its means must rest on an explicit national ideology that supplies its ends. Five coordinates are proposed for this purpose:

national memory and the principle of non-recurrence, national identity, the future and mission of the state and the nation, unity of the nation in Armenia and the Diaspora, and civic solidarity. Each reform measure is justified by how well it serves them, and none replaces them.

2. The reform's key assumptions – regarding the increase in contract soldiers, the adequacy of shortened training cycles, and the reserve's ability to offset personnel shortages – appear sound but remain unproven in practice; the metric of “*effective man-months of service*” clearly illustrates their importance, as the reduction in service time most severely impacts technical specialties that play a decisive role in modern conflicts involving the extensive use of drones.

3. Combat readiness is a multifaceted characteristic that depends on society as a whole. It is shaped during primary and higher education, during military service and periodic reservist training, and is significantly bolstered by a territorial reserve organized into small, versatile units with broad training that are closely integrated with local communities. The fuller participation of women, in fields compatible with family life, adds capacity that a small state with a shrinking pool of military-age men cannot do without.

4. A decentralized organizational structure necessitates decentralized command; this represents a cultural and educational achievement designed to safeguard the system against both excessive centralization and over-reliance on automated systems.

5. Citizen readiness for service is a measurable component of combat readiness, underpinned by principles of fairness, competent leadership, and concern for those bearing the burden of service. The state's task is to create a legal and financial framework that enables the involvement of civil society and the technology community in this process, while defining clear and protected roles for them.

The conclusions drawn are subject to certain limitations that the author sought to highlight. Data regarding combat readiness, personnel retention, and training outcomes are available only to a very limited extent; furthermore, a number of proposals, such as a model for skills-maintenance training or a phased schedule of activities, are analytical in nature rather than the product of empirical research. The experience of other countries offers useful lessons rather than ready-made templates: factors such as public consensus in Finland, Switzerland's financial resources, Israel's professional military foundation, or wartime conditions in Ukraine do not apply to Armenia's situation; therefore, any experience considered for adaptation must be evaluated in light of national realities. The proposed measures also require decisions regarding resources and priorities, decisions that fall exclusively within the purview of authorized state bodies.

The overarching conclusion is that Armenia's defense sovereignty depends as much on developing institutional human capital as it does on procuring weaponry or establishing domestic production. While weapons can be purchased or manufactured, trained sergeants, competent commanders, a reliable reserve, and a society that views military service as a shared and meaningful endeavor cannot be obtained from allies; cultivating these assets requires years of effort. A state unable to field a mass army can still achieve high military quality by investing in people with the same consistency it applies to upgrading its material and technical infrastructure. Consequently, the effectiveness of the reform should be assessed based on actual combat readiness rather than stated intentions, and the metrics proposed in this study facilitate such an assessment. Rational design determines how Armenia builds its force; the national purpose determines why its citizens will serve in it.

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