The future command of the Armed Forces of Ukraine in the modern military security ensurance system of Ukraine: concept, implementation, tasks, and principles

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Abstract. The issue of anticipatory thinking in the field of defense is becoming particularly relevant. It involves the ability to forecast future conflicts, changes in the nature of military confrontation, potential transformations of threats, and timely formulate appropriate conceptual and technological solutions. For this purpose, a number of countries, such as the USA, the UK, France, Australia, and others, have been established specialized military advisory bodies at the strategic level, in particular Future Command, which play a key role in developing and implementing cutting-edge defense concepts, forecasting the evolution of the situation, and initiating innovations in defense technologies. These structures serve as drivers of strategic transformation in national armed forces. They provide synergy between scientific-research institutions, military units, the defense industry, and government agencies to build effective, technologically grounded, multi-level strategies for ensuring military superiority in future conflicts. For Ukraine, under conditions of the ongoing Russian-Ukrainian war, such a strategic advisory authority is crucial both for strategic military leadership and for the leadership of the country in a whole. Therefore, the main goal of the article is to design proposals and recommendations for implementing a Future Command of the Armed Forces of Ukraine in the current system of ensuring Ukraine's military security, including defining the concept of creation of such Command, identification of methods, tasks, and principles of its operation. The main results of the article are the following: it reveals the key features of

foreign countries' experience in creating military strategic authorities of forecasting, modeling, and evaluating the future, their key tasks, organizational structure, and the potential for adapting these approaches to Ukrainian realities; it proposes variants of the structure of the Future Command of the Armed Forces of Ukraine based on the experience of applying such technologies in the U.S. Army (Army Futures Command, AFC); it defines the main tasks of a special military advisory authority at the strategic level, namely, the Future Command of the Armed Forces of Ukraine, under different options of the organizational structure; it identifies the main advantages for Ukraine in case of creation of the Future Command of the Armed Forces of Ukraine. The materials of the article might be useful for leaders at the strategic state level, commanders, and heads of military management authorities who are putting into life the planning and forecasting of the development of the Armed Forces of Ukraine, the defense forces, and the state in a whole. The results of the article could be used as a background for further researches in this area by scientists and researchers from main and central research institutions of the Ministry of Defense of Ukraine, as well as civilian institutions involved in the study of the strategic development of the state in the military sector.

Keywords: security environment, military security, threats to the national security, government authorities, innovative weapons and military equipment, Future Command of the Armed Forces of Ukraine, forecasting and planning of the development of the Armed Forces of Ukraine, defense forces, and the state in a whole, military command and control (2C), russian-Ukrainian war, military management authorities, development and deployment of the armed forces, defense forces, defense technologies.

Introduction

In the modern warfare and preparation for future threats, strategic planning is becoming critically important. Leading nations worldwide recognise that traditional approaches to defense and military management must be adapted to rapid technological changes, new forms and methods of warfare, and the continuously evolving multidimensional security challenges [1]–[12].

The need for anticipatory thinking in defense has become particularly relevant. This includes the ability to predict future conflicts, changes in the nature of military confrontation, potential transformations of threats, and timely develop corresponding conceptual and technological solutions. With this goal in mind, several countries, including the United States, the United Kingdom, France, Australia, and others, have established specialised high-level military advisory authorities, as Future Command, which play a key role in developing and implementing advanced defense concepts, forecasting situational developments, and initiating innovations in defense technologies.

These structures act as drivers of the strategic transformation of national armed forces. They ensure synergy between scientifical-research institutions, military units, the defense industry, and government agencies in order to develop effective, technologically sound, multi-layered strategies for ensuring military superiority in future conflicts. Additionally, they play a crucial role in implementing multi-domain approaches to warfare, shaping a model of warfare based on information superiority, operational autonomy, and high adaptability to the combat environment [1]–[12].

Thus, researching of the issue of formation of new state-level military institutions capable of accurately and thoughtfully forecasting, modeling, and shaping perspectives on the security environment that is surrounding the country, developing new forms and methods of warfare, and driving technological breakthroughs is of paramount importance in the context of the ongoing russia-Ukraine war.

In this regard, the concept of establishing a Future Command within the Armed Forces of Ukraine (AFU) represents a logical response to current challenges and is ensuring Ukraine's resilience, adaptability, and strategic advantage in future conflicts. In this article are explored approaches to the creation of such an authority, defined its key tasks, structural elements, principles of operation, and outlined pathways for its integration into Ukraine's military security system.

Materials and Methods

The experience of countries that have already implemented the Future Command concept allows for an assessment of the effectiveness of such authorities, their role in the transformation of the armed forces, and their adaptation to new realities of warfare [1]–[29]. Defining of these models is essential for Ukraine, so the country continues its struggle for independence and must rapidly adjust its defense strategies in response to the dynamics of the modern battlefield.

Table 1 presents the peculiarities of the experience of foreign countries in establishing military strategic authorities for forecasting, modeling, and assessing the future, their key tasks, organizational structure, and the potential for adapting these approaches to Ukrainian realities.

Table 1. Experience of foreign countries in establishing specialized high-level military advisory authorities (Future Command)

Country, year of creation, name	The main task	The main focus of functioning
*USA (*2018) – *Army Futures Command (AFC)*	Development and testing of advanced military technologies, including robotics, drones, hypersonic weapons, artificial intelligence, and cybersecurity.	Flexibility and rapid implementation of innovations, collaboration with the private sector and research institutions.
The Great Britain (2018) – Future Force Development	Focuses on the development and implementation of new military concepts, adaptation to hybrid warfare, and the use of autonomous combat systems.	Integration of artificial intelligence, information dominance, and rapid decision-making in a dynamic environment.
France (2018) – Agence de l'Innovation de Défense (AID)	Development of breakthrough military technologies, particularly in space, cyberspace, autonomous systems, and neurocommunications.	Collaboration with the private sector and scientific institutions to accelerate military innovations.
China (2009) – Strategic Support Force (SSF)	Cyber operations, information warfare, space operations, unmanned technologies.	State mobilization of technological potential through close integration with the private sector (Huawei, Baidu, Tencent).
Germany: Innovation center for adapting the armed forces to new types of threats.		
Israel: An institution focused on the startup ecosystem for developing unmanned and cyber solutions.		

The U.S. Army Futures Command (AFC) is responsible for the transformation and modernization of the army, ensuring its readiness for future challenges. AFC's headquarters is located in Austin, Texas, and the organization includes more than 17,000 personnel worldwide.

The structure of Army Futures Command (AFC) consists of several key components (Figure 1), so main parts, which define the operational framework of AFC. These include:

1. Cross-Functional Teams (CFTs), which are formed within the focus on the specific areas:

Long-Range Precision Fires. Developing and implementing systems that enable the army to conduct precision strikes over long distances, surpassing adversaries in both range and accuracy.

Next-Generation Combat Vehicles. Creating new combat vehicles, including unmanned and optionally piloted platforms, to ensure battlefield superiority.

Future Vertical Lift. Developing new aviation systems that are able to provide the speed, range, and manoeuvrability that are necessary for modern combat operations.

Network. Establishing a mobile and expeditionary network infrastructure that ensures reliable communication and data exchange under any conditions.

Air and Missile Defense. Developing systems capable of protecting military units from modern aerial and missile threats, including unmanned aerial vehicles.

Soldier Lethality. Enhancing soldier effectiveness and survivability through the launch of advanced weaponry, protective gear, and training programs.

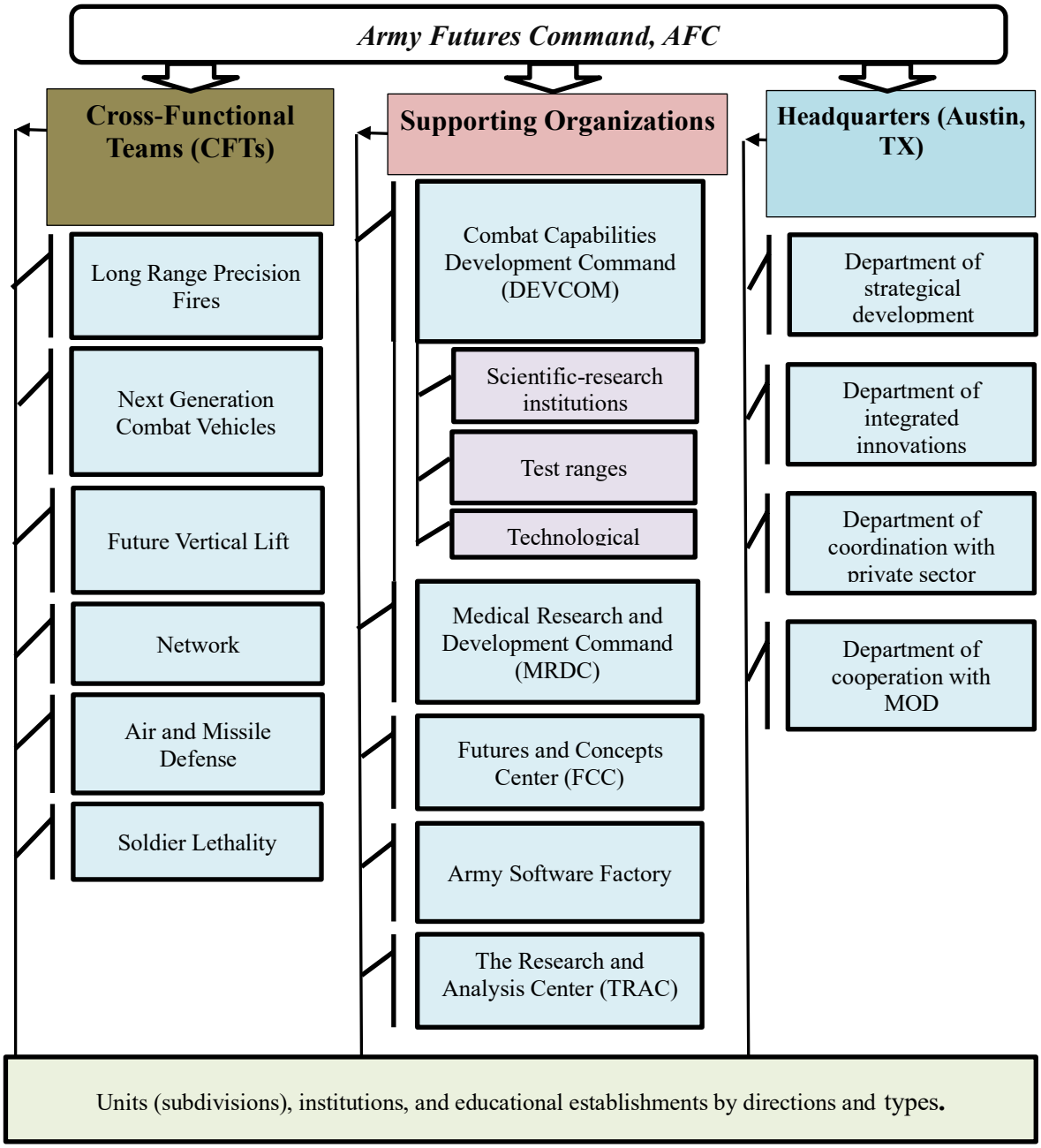


Figure 1. Structure of the U.S. Army Futures Command (AFC)

2. Additionally, supporting teams and institutions within the U.S. Army that are involved into the AFC operations:

Combat Capabilities Development Command (DEVCOM) – The largest research and development organization in the Army, responsible for developing and integrating cutting-edge technological solutions to ensure battlefield superiority.

Medical Research and Development Command (MRDC) – Responsible for medical research, development, and implementation of medical technologies aimed at improving the health and survivability of military personnel.

Futures and Concepts Center (FCC) – Assesses the future operational environment, develops concepts and requirements to ensure the advantage of the Army in future conflicts.

Army Software Factory – An initiative focused on developing the Army's internal software capabilities, enabling the rapid implementation of modern technological solutions.

The Research and Analysis Center (TRAC) – Conducts operational research and analysis to support decision-making on the most complex challenges faced by the Army and the Department of Defense.

Supporting teams and institutions within the U.S. Army enable AFC to effectively coordinate modernisation efforts, ensuring the integration of cutting-edge technologies and concepts to maintain the combat effectiveness of the Army and superiority in future conflicts.

Future Command is a key element of defense strategies in leading nations.

Its objective is to ensure technological and tactical superiority in the evolving nature of warfare. Considering its experience in asymmetric warfare, Ukraine can establish its own Future Command, integrating cyber defense, unmanned technologies, artificial intelligence, and information operations.

Results

The Future Command of the Armed Forces of Ukraine (AFU) – is a strategic military authority designed to forecast future threats, develop innovative defense solutions, prevent wars or minimize their consequences if they occur. The Future Command ensures the integration of advanced technologies into the military sphere, development of adaptive warfare strategies, enhance of Ukraine's strategic resilience.

Core Mission of the AFU Future Command

The primary mission of the Future Command is to **establish a proactive defense strategy**, which includes: predicting future wars, developing cutting-edge defense technologies and concepts, rapid implementing them in the Armed Forces of Ukraine, ensuring state resilience against potential challenges and threats.

Two main approaches to structuring the AFU Future Command can be identified. They share common principles but differ in organizational structure.The first version of the organizational structure is presented in Figure 2.

Description and Key Elements of the first variant of the organisational structure of the AFU Future Command

1. Operational Groups for Innovative Solutions (OGIS) (U.S. Experience)

These groups are formed based on key tactical and strategic development areas that directly impact combat effectiveness in the war against russia and prepare the for future conflicts. The primary directions include:

Precision Strike and Firepower Asymmetry – Development of long-range artillery, strategic unmanned systems, guided munitions, and long-range missiles capable of striking deep behind

enemy lines.

Combat Unmanned Systems, Robotic Platforms, and Autonomous Systems – Integration of kamikaze drones, reconnaissance drones, ground and naval unmanned vehicles into a unified combat management system.

Cyber Defense and Information Warfare – Intelligence operations, psychological warfare, countering russian information and psychological operations (IPSO), hacking operations, digital camouflage, and information flow management.

Tactical Mobility and Adaptive Logistics – Ensuring rapid maneuverability of units, decentralized supply depots, and new automated supply chain management systems.

Air Defense: Anti-Aircraft, Missile Defense, and Electronic Warfare – Coordination of a multi-layered air and missile defense system, countering enemy drones and electronic warfare (EW) threats.

Military Engineering, Protective Structures, and Fortifications – Development of intelligent fortifications, mobile field fortifications, underground shelters, and rapidly deployable defensive structures.

These groups can be formed within the Ministry of Defense of Ukraine and the General Staff, involving representatives of civilian leadership institutions at the level of the Cabinet of Ministers, sectoral ministries and agencies, and relevant departments. At the initial stage, these operational groups will function as an external, non-permanent structure of AFU Future Command.

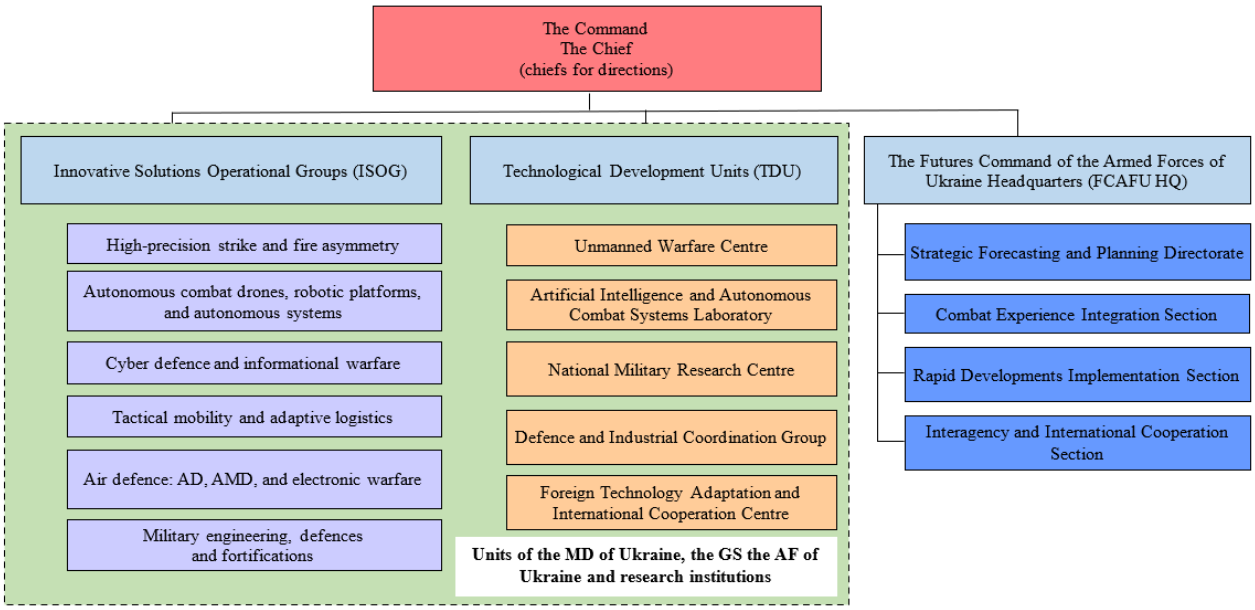


Figure 2. Organizational structure diagram of the Future Command of the Armed Forces of Ukraine (Option 1).

2. Technological Development Units

These structures focus on research, testing, technology implementation, and their integration into real combat operations, for instance:

Unmanned Warfare Center – Development, testing, and deployment of combat drones, reconnaissance UAVs, strike UAVs, and ground-based robotic platforms.

Artificial Intelligence and Autonomous Combat Systems Laboratory – Utilization of AI in military planning, development of unmanned ground and naval platforms, and automated reconnaissance systems.

National Center for Military Research – A collaboration of scientists, military experts, and analysts for threat forecasting and future warfare strategy development.

Defense-Industrial Coordination Group – Interaction with the private sector and defense industry, facilitating joint development and production of innovative weapons.

Center for Foreign Technology Adaptation and International Cooperation – Integration of NATO standards, adaptation of cutting-edge foreign technologies to Ukrainian realities, and testing & certification processes.

The proposed technological development units are also non-permanent and are formed based on the most experienced experts from scientific and research institutions in both military and civilian sectors of Ukraine, as well as specialists from the defense industry and international cooperation programs.

3. Headquarters of the AFU Future Command (HQ FC AFU)

The Strategic Management Center that oversees all operational directions, defines priorities, collaborates with international partners, analyzes combat experience, and accelerates the deployment of cutting-edge developments:

Strategic Forecasting and Planning Directorate – analytical assessments, evaluation of potential war scenarios, and development of strategic concepts.

Combat Experience Integration Department – Studies of real battlefield applications of new technologies, analyzes of successful operations, and adjustment of military doctrines accordingly.

Department of Rapid Deployment of Innovations – Implementation of promising technologies at the frontlines, rapid tests of them, and adaptation of them for combat units.

Department of Interagency and International Cooperation – cooperation with NATO and global partners in defense research, coordination of programs opf technical collaboration, facilitation of technology exchange, standartization of processes, and integration of Ukraine into global defense initiatives.

The first two components of the AFU Future Command: Operational Groups for Innovative Solutions (OGIS) and Technological Development Units (TDU)—are non-permanent structures based on MOD units, General Staff departments, and scientific-research institutions.

The command leadership and heads of directorties of the AFU Future Command (HQ FC AFU), however, should be permanent structures, reporting directly to the Commander-in-Chief of the AFU and serving as the foundation for the effective operation of the command.

The second organizational structure variant of the AFU Future Command is shown in Figure 3.

Justification and Key Elements of the Second Structural Variant of the AFU Future Command

Main Components and Their Responsibilities

1. Strategic Forecasting and Security Group (SFSG)

Tasks: Analyzing and forecasting future threats; Developing warfare scenarios and conflict escalation models; Creating deterrence and preemptive response strategies.

2. Advanced Defense Technologies Group (ADTG)

Tasks: Coordinating the development and deployment of innovative weapons; Testing autonomous combat systems, unmanned systems, and precision weapons; Engaging with defense industries for rapid integration of new technologies.

3. Adaptation and Innovative Training Group (AITG)

Tasks: Integrating the latest technologies into the combat training system; Preparing commanders for modern warfare using advanced approaches; Utilizing simulation-based modeling for personnel training.

4. Cyber Defense and Information Warfare Command (CDIWC)

Tasks: Protecting critical infrastructure from cyberattacks; Conducting information and psychological operations; Countering enemy intelligence systems and disrupting adversary communications.

5. Center for Experimental Operations (CEO)

Tasks: Testing new tactics and warfare methods; Implementing mosaic warfare concepts and adaptive combat groups; Analyzing combat experience and transforming it into new approaches to warfare.

6. Interagency and International Cooperation Directorate (IICD)

Tasks: Collaborating with NATO and international partners in defense research; Coordinating technical cooperation and technology exchange programs; Standardizing processes and integrating Ukraine into global defense initiatives.

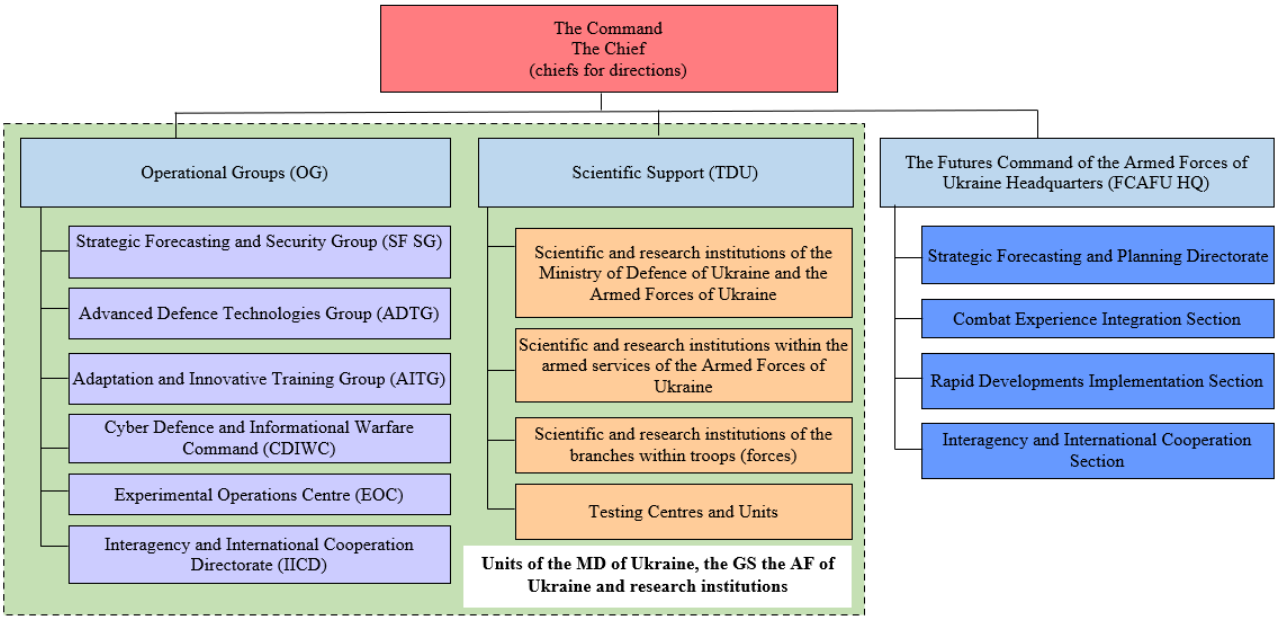


Figure 3. Organizational Structure of the AFU Future Command (Variant 2)

General Objectives of the AFU Future Command are:

Forecasting Future Conflicts and Threats: Analyzing global and regional security trends; Identifying potential war scenarios; Defining new forms and methods of warfare, including asymmetric and hybrid threats.

Developing innovative weaponry and military technologies: Coordinating research on autonomous combat systems, artificial intelligence, and robotic platforms; Deploying cutting-edge weapons systems, including precision-guided missiles, unmanned systems, electronic warfare (EW) tools, and hypersonic weapons; Testing next-generation military technologies.

Proactive planning and military strategy adaptation: Developing new doctrines and operational concepts; Defining effective approaches for offensive and defensive operations in future warfare; Integrating innovative solutions into combat training.

Establishing a multi-dimensional defense system and preparation for the war of new generation: Coordinating joint operations between different branches of the armed forces in multi-domain operations; Developing network-centric military systems to ensure unified battle management; Using innovative methods for information warfare, cyber warfare, and electronic countermeasures.

Creating an Effective Deterrence System: Implementing the "Anti-Access/Area Denial" (A2/AD) concept to defend Ukraine's territory; Enhancing asymmetric strike capabilities to counter aggression; Improving strategic communications and psychological operations.

Results and Discussions

We will form here the Key Proposals for the Future Command in AFU.

Ukraine requires now an integrated military structure that integrates intelligence, advanced technologies, AI-powered weapon and command systems, and cyber warfare technologies.

Key Strategic Tasks of such an advisory authority (Future Command):

1. At the State Level:

- Anticipating future threats and strategic military shifts.
- Supporting and coordination the defense industry in developing innovative technologies.
- Enhancing interagency and international cooperation on the field of defense research etc.

2. At the Armed Forces Level:

- Developing and testing new combat concepts for next-generation weapons and military units.
- Integrating new technologies into military operations.
- Preparing personnel for next-generation warfare.
- Utilizing AI, autonomous systems, and cyber operations.
- Accelerating decision-making speed in combat scenarios.

Ukraine currently is conducting the asymmetric war, therefor a key is the innovations:

Mass deployment of drones and autonomous systems with AI enhancements.

Permanent cyber and information warfare as a core component of the defense strategy.

Development of long-range precision strike weapons for asymmetric warfare.

Technological advancements focused on rapid integration with NATO armed forces.

The creation of the Future Command of AFU will allow Ukraine not only maintain defensive strength but also actively shaping future warfare scenarios and global security by anticipation of war developments with reinforcement of proactive measures to prevent war or mitigate results.

Conclusions

Why is this structure essential for Ukraine's Armed Forces under conditions of ongoing russian-Ukrainian war? Because military transformation is always driven by the realities of war. We will disclose the key benefits of such organizational shift.

Victory-oriented structure – Designed to address current threats and the necessity of rapid response.

Technological superiority – Ukraine have to develop asymmetric solutions: drones, robotic systems, cyber operations, and AD.

Adaptation to continuing warfare – The system evolves in real-time based on battlefield conditions.

Accelerated innovation deployment – Technologies are rapidly tested, integrated, and mass-produced for combat use.

Integration with international partners – coordination with NATO and allies to adopt cutting-edge solutions.

By creating the Future Command, Ukraine will become a next-generation military power—not just defending itself, but also shaping the rules of future warfare.

The creation of Future Command - the key step in developing Ukraine's provisional defense strategy. The structure of FC combines threat forecasting, advanced military technologies development, and their rapid implementation into military doctrine.

Amid the ongoing war, the AFU Future Command will enable Ukraine to:

- Overrun the enemy in technological advancement.
- Develop effective deterrence and rapid response mechanisms.
- Ensure adaptation of the Armed Forces to new warfare scenarios and challenges.
- Build a high-tech and adaptive military force for the future.

Ukraine has all the prerequisites to develop an effective defense system based on strategic foresight and innovation.

The Future Command of the AFU will become the core driver of this transformation.

Recommendations

The materials in this article could be useful for strategic-level state leaders, Military commanders and heads of defense management authorities responsible for planning and forecasting the development of the Armed Forces and defense capabilities of Ukraine in a whole. Results of the article could be used by researchers and analysts from key and central scientific research institutions of the Ministry of Defense of Ukraine and **civil institutions** engaged in the study of strategic military development as a basement for the next studies on this field.

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