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INTRODUCTION

We are happy to invite you to get acquainted with the first issue of the new scientific and practical publication "Intellectualization of Logistics and Supply Chain Management".

We strongly believe that the launch of this magazine indicates the objective need to rethink a wide range of issues related to the development of theory and practice in logistics and supply chain management, awareness of the need to unite the scientific community and logistics practitioners, dissemination of modern knowledge and best practices for innovative development of the logistics services market.

The first issue of the magazine is published at a difficult time. The global coronavirus pandemic and the deep economic crisis have significantly worsened business activity in the world. Currently, global supply chains are collapsing, international trade is declining, and competition between global and regional logistics operators is intensifying. The most common thesis is that the world will never be the same again. Industry experts predict the emergence of new, more flexible and adaptive supply chain management strategies and approaches to logistics business process management. The trend towards collaborations, cooperation and unification of services is emerging, comprehensive proposals for clients are being developed. There is increasing talk about the need to build bimodal supply chains, which involves the development of different decision-making scenarios: the traditional approach - cost-effective efficiency, low risk, high predictability; a new approach "second mode" - rapid recognition of opportunities, adaptability, willingness to solve unexpected problems and look for new opportunities.

Radical transformations of the global and national markets for logistics services require appropriate scientific support. Logistics science has a special role to play in this process. Initiating the emergence of a new journal, we decided to focus on its coverage of problematic aspects of the formation and development of logistics systems at the micro, mezo and macro levels, supply chain management, digitization of logistics, methods and tools for optimizing processes in logistics and supply chains, sociopsychology relations and network interaction of enterprises using cloud technologies, artificial intelligence, e-learning, neural business process management systems, etc.

Therefore, we invite scientists, researchers and business representatives, as well as our colleagues from abroad, to cooperate and present the results of scientific research, to discus and debate on them, to work together to develop the scientific theory of logistics and promote mutual intellectual enrichment.

We hope that the new scientific publication will become a theoretical guide for young researchers and representatives of other fields.

HRYHORAK Mariia
Chief Editor

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THE BASIC TERMINOLOGY OF THE MODERN MILITARY LOGISTICS

Lesia Kostiuchenko, Solomon D.I. «The basic terminology of the modern military logistics». *The article reveals the content of the military logistics basic terms. Different approaches to the construction of conceptual foundations, structure and functionality of this area are considered. The meaning of the term "logistics of the defense sector" is substantiated. The spheres and functionality of military logistics are outlined. The conditions for the integration of logistics and medical support systems, which are able to provide support to all components of the defense forces and the civilian population of the country, have been studied. The research is based on the main strategic goals of the state in the framework of defense reform: the National Security Strategy of Ukraine to ensure Ukraine's integration into the European Union and the formation of conditions for NATO membership. Approaches to structuring definitions and concepts of modern military logistics taking into account the military-political realities of Ukraine are offered. The term "military logistics" is proposed to be interpreted in two ways: first, as a practical activity (a means of implementing operational, tactical or strategic tasks of the defense sector in real resources and time); secondly, as a scientific field aimed at developing models for optimizing the logistics processes of the state defense sector.*

Keywords*: military logistics, logistics support of the defense sector, the subject of military logistics, the rule of military logistics, the field of military logistics, the functions of military logistics, the parameters of military logistics.*

Леся Костюченко, Solomon D.I. «Базова термінологія сучасної військової логістики». *У статті розкрито зміст основних базових термінів військової логістики. Розглянуто різні підходи до побудови концептуальних основ, структури та функціоналу даного напряму. Обґрунтовано зміст терміну «логістичне забезпечення оборонного сектору». Окреслено сфери та функціонал військової логістики. Досліджено умови інтеграції систем логістики і медичного забезпечення, спроможних надати підтримку усім компонентам сил оборони та цивільного населення країни. Зокрема, дослідження ґрунтуються на основних стратегічних цілях держави в рамках оборонної реформи:*

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Стратегії національної безпеки України щодо забезпечення інтеграції України до Європейського Союзу та формування умов для вступу в НАТО. Запропоновано підходи до структурування визначень і понять сучасної військової логістики з урахуванням військово-політичних реалій України. Термін «військова логістика» пропонується трактувати двояко: по-перше, як практичну діяльність (засіб реалізації оперативно-тактичних чи стратегічних завдань оборонного сектору в режимі реальних ресурсів і часу); по-друге, як наукову сферу спрямовану на розробку моделей оптимізації процесів матеріально-технічного забезпечення об'єктів оборонного сектору держави.

Ключові слова: *військова логістика, логістичне забезпечення оборонного сектору, предмет військової логістики, правило військової логістики, сфери військової логістики, функції військової логістики, параметри військової логістики.*

Леся Костюченко, Solomon D.I. «Базовая терминология современной военной логистики». *В статье раскрыто содержание основных базовых терминов военной логистики. Рассмотрено различные подходы к построению концептуальных основ, структуры и функционала данного направления. Обосновано содержание термина «логистическое обеспечение оборонного сектора». Очерчено сферы и функционал военной логистики. Исследовано условия интеграции систем логистики и медицинского обеспечения, способных предоставить поддержку всем составляющим сил обороны и гражданского населения страны. В частности, исследования основываются на основных стратегических целях государства в рамках оборонной реформы: Стратегии национальной безопасности Украины касательно обеспечения интеграции Украины в Европейский Союз и формирования условий для вступления в НАТО. Предложено подходы к структурированию определений и терминов современной военной логистики с учетом военно-политических реалий Украины. Термин «военная логистика» предлагается определять двояко: во-первых, как практическую деятельность (средство реализации оперативно-тактических или стратегических задач оборонного сектора в режиме реальных ресурсов и времени); во-вторых, как научную сферу, направленную на разработку моделей оптимизации процессов материально-технического обеспечения объектов оборонного сектора государства.*

Ключевые слова: *военная логистика, логистическое обеспечение оборонного сектора, предмет военной логистики, правило военной логистики, сферы военной логистики, функции военной логистики, параметры военной логистики.*

Introduction. Modern military-political Ukrainian realities require the formation of a single effective logistics system of the defense forces. The main strategic goals of our country in the framework of defense reform are outlined in the Strategic Defense Bulletin of Ukraine and correspond to the National Security Strategy of Ukraine to ensure Ukraine's integration into the European Union and the formation of conditions for NATO membership. Therefore, they must correlate with NATO's logistics guidelines, standards and instructions. That's why it's very important to systematize the basic terminology of modern military logistics.

Analysis of recent researches and publications. The formation of an effective defense policy, planning and resource management system using modern Euro-Atlantic approaches, as well as the creation of a unified logistics and healthcare system capable of supporting all components of the defense force, are among the five main strategic goals of defense reform [1; 9]. These strategies take a position equivalent to the strategies: 1) joint leadership of the defense forces according to the principles and standards adopted by NATO member states; 2) operational (combat, special) capabilities of the defense forces, necessary for a guaranteed repulse of armed aggression, state defense, peacekeeping and international security; 3) professionalization of the defense forces and the creation of the necessary military reserve [1].

According to [8], the defense forces are: "The Armed Forces of Ukraine, the State Service for Special Communications and

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Information Protection of Ukraine, the State Special Service for Transport, etc. which formed in accordance with the laws of Ukraine, military formations, as well as law enforcement and intelligence agencies, in terms of involving them in the implementation of state defense tasks".

Ukraine is pursuing a defense reform aimed at acquiring and maintaining the necessary level of defense capabilities for the country's defense, effectively responding to threats and challenges to national security, enhancing the interoperability of Ukraine's armed forces with units of NATO and EU member states to perform common missions. In general, the logistics of NATO countries are focused on two groups of tasks: first, the efficient organization of the transportation and regrouping of troops; secondly, ensuring that troops are kept on alert. NATO agreed definition of logistics reads as the «science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, the aspects of military operations which deal with: design and development, acquisition, storage, transport, distribution, maintenance, evacuation and disposition of materiel; transport of personnel; acquisition or construction, maintenance, operation and disposition of facilities; acquisition or furnishing of services; and medical and health service support» [5, p.103]. We think that the term "materials" in the first subparagraph includes equipment in its widest sense including vehicles, weapons, ammunition, fuel, etc.

The concept of military logistics, as a term, correlates with the concept of logistics management set out in such publications [4; 6; 7], etc. In particular, the principles of logistics management which set out in [4; c. 56 - 66.] can be effectively adapted in the planning and organization practice of the state defense forces logistics support.

The purpose and objectives of the study. As the results of the analysis of modern publications have shown, today in the domestic scientific literature there are practically no works devoted to fundamental research of basic terminology on military logistics. So there is a need to systematize concepts and terms in this area, which is the purpose of this research.

Basic material and results. Implementation of an effective policy of resources planning and management in the defense sector requires constant monitoring, comprehensive analysis of real and potential resource opportunities of Ukraine. It allows the development of the optimal distribution system of resources between the objects of the defense sector, taking into account the introduction of modern energy-saving technologies.

The integration of logistics and medical support systems capable of supporting all components of the defense forces and the civilian population on the respective territories will allow building approaches to effective medical care [3]. The implementation of such a structured comprehensive reform of the national health sector should be based on the World Health Organization norms and standards.

Given the above, military logistics are: first, practical activity – a means of implementing operational, tactical or strategic tasks of the defense sector in real terms and time; secondly, the scientific sphere involves in the development of models for optimizing the logistics processes of state defense sector.

Thus, military logistics is an integral part of the effective organization of the joint state defense forces leadership processes, aimed at organizing, planning, regulating, coordinating, controlling, accounting and analysis of logistics (material, personnel, information, financial, service) flows in order to achieve the goals of the defense sector logistics system.

Logistical support of military operations requires the temporary establishment of a routes and nodes capable network of delivering forces to support operations. This, according to Dre Kerstiens, a major of the

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Netherlands Land Forces (Joint Forces Operations) [2], is mainly a problem of "Earth". However, in our opinion, it is not necessary to focus on the geographical coordinates of the end points (consumers) locations and ignore all possible methods of delivery ("air", "water", mixed).

For the sake of objectivity in further research, "logistics of military operations" will be defined by a broader concept – "logistics of the defense sector", which expands the research scope.

So the logistics of the defense sector is a logistics activity aimed at determining the consumer needs parameters, finding sources, organizing delivery and controlling the results in varying degrees conditions of uncertainty (peacetime, warfare, etc.) and possible change in the geographical location of collateral. At the same time, consumers of logistics support for the defense sector are:

- units of the armed forces;
- weapons and equipment locations;
- divisions of the organization of storage, transportation, maintenance, use and utilization of the weapon, equipment and property;
- medical units;
- power supplies;
- training grounds, etc.

The subject of the defense sector logistical support is the number and equipment (by material and technical means) of the rear and force objects in the combat zone.

The implementation of logistics support for the defense sector is based on the achieved fulfillment of such conditions [2]: a) creation of temporary transport infrastructure (routes and nodes networks) which capable of optimally delivering logistics items to consumers; b) the achievement of the condition (restriction) that the number and equipment of combat zone forces is not greater than real needs by the situation (location and redeployment area); c) a clearly structured sequence of forces for 4 R (right forces, right equipment, right time, right place") is the basic rule of military logistics.

In general, the military logistics activities include 5 areas [2]:

1) design – designing process and development, acquisition, storage, transportation, distribution, care, evacuation and location of weapons and equipment;

2) transport – transportation of personnel, delivery of material and technical resources;

3) supply (sourcing) – search for sources, acquisition, construction, maintenance, operation and location of facilities;

4) service – the provision of various services;

5) medical – logistical support of medical units.

According to NATO School [2], military logistics is divided into two types: collective and multinational.

Collective logistics involves the realization of NATO's and national logistics capabilities (facilities) through the use of common processes and structures.

Multinational Logistics involves: a) identification of a leading country in the field of logistics, its role as a logistics expert and the role of other participating countries; b) creation of a multinational joint logistics unit; c) organization of logistical support of operations by the contractor's forces and means.

If one considers that logistics comprises both the building up of stocks and capabilities and the sustainment of weapons and forces, then it is clear that a distinction can be made between two important aspects of logistics: the first one dealing with production and the second one with consumption [5, p.104]. The following definitions of these aspects enjoy widespread acceptance within the NATO logistics community which is clearly demonstrated in Figure 1: Production Logistics (also known as: acquisition logistics and Consumer Logistics (also known as: operational logistics).

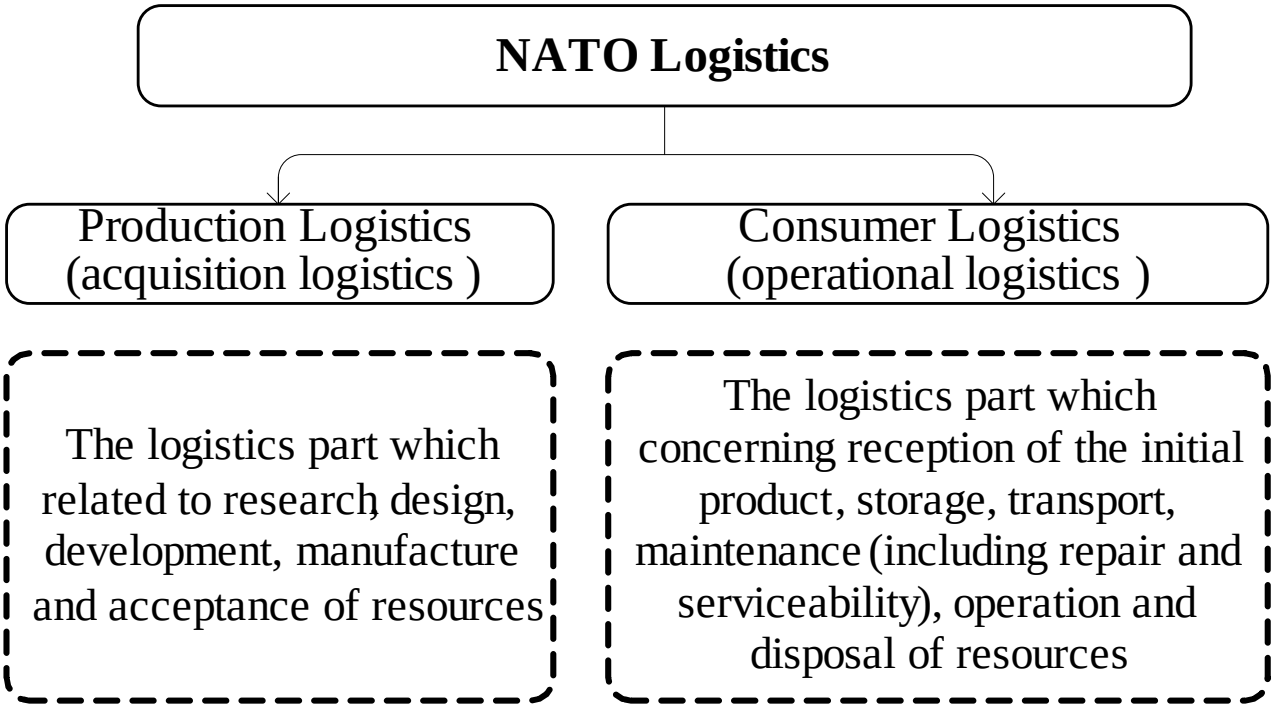

Figure 1. The aspects of the NATO logistics
Source: developed by the author on the basis of [5, p.104]

As specified in Figure 1, production logistics includes: standardization and interoperability, contracting, quality assurance, procurement of spares, reliability and defense analysis, safety standards for equipment, specifications and production processes, trials and testing (including provision of necessary facilities), codification, equipment documentation, configuration control and modifications.

Consumer logistics includes stock control, provision or construction of facilities (excluding any material element and those facilities needed to support production logistic facilities), movement control, reliability and defect reporting, safety standards for storage, transport and handling and related training. There are some definitions which explain the meaning of some military logistics terms in NATO Logistics Handbook (Table. 1) [5].

Examining the essence of military logistics as a logistical support of the defense sector, it is worth to consider its functionality. So the main functions of military logistics according to NATO School are the following [2]: delivery; logistical support; service; maintenance and repair of equipment; obtaining, planning and further movement of resources; relocation and transportation; provision of oil products; providing medical care; concluding agreements; support for the country on whose territory the joint forces are stationed.

This functional is implemented through the implementation of parameters the so-called "5 D"[2]:

1) Destination – determining the need parameters;

2) Distance – determining the level communication routes (LOC) state;

3) Demand (requirement) – determining the degree of the need importance;

4) Duration – determining the required operational reliability and the need to invest for security purposes;

5) Dispersal – detecting the threat of LOCs (by connection) or MSRs (main supply routes).

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An integral condition for the implementation of the functions and rules described above is the constant calculations of the optimal logistics components of the military presence zone. This condition can actually be considered the purpose of military logistics.

Table 1

Definition of some terms according to the NATO Logistics Handbook

Term	Definition	Source in [5]
Multinational Logistics	The overarching term for the different modes to logistically support operations other than purely national, such as Multinational Integrated Logistic Support, Role Specialization Support and Lead Nation Logistic Support.	MC 319/1
National Logistic Support.	A nation takes full responsibility for procuring and providing logistic support to her forces. This support can be provided on a solely national basis and/or through bilateral or multilateral agreements with other nations, NATO or other organizations as appropriate.	AAP-6
Mutual Support.	That support which units render each other against an enemy, because of their assigned tasks, their position relative to each other and to the enemy, and their inherent capabilities.	AAP-6

Source: [5].

For example, the authority to manage military logistics is vested in the NATO commander over the rear and organizations, including the National Support Elements (NSE), which allow him to synchronize, prioritize and integrate the logistics functions required to carry out a joint mission. It doesn't confer authority on nationally owned resources held by the NSE, except in cases agreed to the delegation or in accordance with NATO principles and policies. In essence, NATO's command structure coordinates need and controls logistics for operations, and Partner countries have the physical capacity to provide their own logistics. Such cooperation begins at the planning stage, common tasks and solutions and information needs are identified, and only then resource allocation planning is carried out [8].

Conclusion. Based on the above study of basic terminology in military logistics, we can draw the following conclusions:

1) Military logistics is the sphere of the joint leadership activities of the state defense forces, aimed at the organization, planning, regulation, coordination, control, accounting and analysis of logistics flows in order to achieve the logistics system goals of the defense sector;

2) The system of military logistics includes subsystems: a) planning of logistics activities, b) logistics of the defense sector, c) logistics management or logistics facilities management;

3) Logistics support of the defense sector is built on the principle of "the basic rule of military logistics" – a sequence of forces for 4 R ("right forces, right equipment, right time, right place");

4) Military logistics activities include five areas: design, transport, supply (sousing), service and medical;

5) The military logistics functional is implemented through the execution of parameters: destination, distance, dispersal, duration, demand;

6) The purpose of military logistics is the constant controlling and reengineering of processes aimed at optimizing the logistics components of the military presence zone

A more detailed study of the structure, objects, subjects and other components of

the military logistics system, as well as the tools for implementing the functionality will be continued in future studies and presented in next publications.

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