

MILITARY LOGISTICS SYSTEM IN THE MILITARY OPERATION

SYSTEM LOGISTYCZNY WOJSK W OPERACJI MILITARNEJ

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SUMMARY

New threats to the worldwide peace are recognized as asymmetric and challenge the international community for radical and consequent countermeasures to squeeze any conflict at its very beginning and keep peace. The events of recent years mainly concerning acts of intensifying terror are the reasons for new challenges. More and more difficult challenges imposing a fight with an enemy that becomes more and more difficult to be identified. Therefore apart from the task connected with state security the challenges of fighting against terrorism and keeping peace appear not only in Europe but all over the world. The range of these tasks requires elaboration of the new concept of gradual logistics support for the military, when taking into account the use of national and multinational logistics. It is the basic condition for the Armed Forces of the Republic of Poland enabling them to perform tasks far from the state in various climatic and terrain conditions. The article concerns presenting the contemporary threats to the defense system of the state and possibilities of resisting against them by the Polish Armed Forces possessing the optimally prepared logistics system. That is why the purpose of this article is to expose the requirements of logistics system ensuring the task performance by the military in the contemporary operation when assessing and verifying value of various solutions to point at those that in the certain environment fulfill expectations directly resulting from the predicted conditions for their usage.

STRESZCZENIE

Nowe zagrożenia pokoju światowego określane jako zagrożenia asymetryczne wymagają od społeczności międzynarodowej działań zdecydowanych i konsekwentnych mających na celu zażegnanie w zarodku powstających konfliktów, a tym samym utrzymanie pokoju. Wydarzenia ostatnich lat, a głównie nasilające się akty terroru stawiają przed społecznością światową nowe wyzwania. Wyzwania coraz trudniejsze, bo nakazujące walkę z przeciwnikiem, który jest trudny do zidentyfikowania. Dlatego przed Siłami Zbrojnymi, obok zadań związanych z obronnością państwa, stają wyzwania związane z walką z terroryzmem jak i z utrzymaniem pokoju w różnych częściach nie tylko Europy, ale i świata. Rozległość tych zadań wymaga wypracowania nowej koncepcji kompleksowego zabezpieczenia logistycznego wojsk uwzględniającej wykorzystanie potencjału logistyki narodowej i wielonarodowej. Jest to dla Sił Zbrojnych Rzeczypospolitej Polskiej (SZ RP) podstawowy warunek umożliwiający wykonanie im zadań w znacznej odległości od kraju, w zróżnicowanych warunkach klimatycznych i terenowych. Artykuł dotyczy ukazania obecnych zagrożeń jakie istnieją dla systemu obronnego państwa oraz możliwość przeciwstawienia się nim przez SZ RP dysponujące optymalnie przygotowanym systemem logistycznym. Dlatego, jako cel artykułu przyjęto wskazanie wymagań wobec potencjału logistycznego zapewniającego wykonanie zadań przez wojska we współczesnej operacji militarnej, oceniając i weryfikując

przydatność różnych rozwiązań i wskazując na te, które w określonym środowisku spełniają oczekiwania wynikające bezpośrednio z przewidywanych warunków ich stosowania.

Key words: military logistics system, effectiveness, efficiency, functional system, logistics capability, interoperability, logistics potential

Słowa kluczowe: wojskowy system logistyczny, efektywność, skuteczność, system funkcjonalny, zdolność logistyczna, interoperacyjność, potencjał logistyczny

INTRODUCTION

The basic mission of the Armed Forces of the Republic of Poland is to provide the state security and Polish national interests protection. During peacetime it is essential to maintain forces and their military capability inevitable for task accomplishment in protection and security including a military aid for the civil authorities mainly in case of military threats. Most of these general tasks is referred to the armed forces that in all conditions of the state functioning perform a series of different missions requiring versatile preparation of armed forces for such tasks and logistics support enabling completion of assumed tasks both in the state and abroad.

In peacetime the selected forces may give support during crisis situations by participation in peace missions abroad and liquidation of natural disasters effect as well as to give a humanitarian aid. In war after attaining the combat readiness these forces take part in the state defense through applying various forms of military activities. It means that during peacetime, war and crisis the armed forces have to complete tasks essential for the state functioning. The analysis of these tasks caused many doubts if the current solution of logistics support for the military provide completion of such various and complex tasks? Any answering this question is a continuity of the previously conducted research concerning the perspectives for modern battlefield modifications including the missions of Armed Forces of the Republic of Poland.

The preliminary research studies revealed lack of bright purposeful concept of the structure and major military equipment that is proved by not always righteous investments in this sector and frequent return to this problem, what may indicate the need of permanent searching for solutions enabling the systemic and efficient logistics support tailored to the needs resulting from the tasks currently performed by the military and missions to be prepared for. The results of these research studies indicated the need of seeking solutions that would make possible creation of the universal logistics system of the military and enable it to complete the maneuver tasks. These requirements caused that in the range of Polish Armed Forces the components prepared for missions abroad within a framework of coalitions were

established. These are light maneuver forces equipped with assets enabling their air transport including the forces designated for providing the inviolability of national borders.

1. CONDITIONS OF THE POLISH ARMED FORCES FUNCTIONING

The analysis concerning a series of elaborations indicates that dynamics of changes in any ranges and fields of human activity does not lose its intensity. A particular area of military science is interested mostly in new challenges and threats causing the need of prognostic determining the future in the field of internal security of Poland and its external surroundings. In times of perishing borders, globalization, extension of informatics and, first of all, a growing role and importance of information is the measure of stability and proper functioning of the state resulting in preventive impact against possible threats, high capability and efficiency of the defense system. Permeation through broad spectra of events in local and global scale is more and more visible and intensive. The events that seem to be remote from the Polish or European borders or the area of relative stability can become the arena of anxiety, crisis, fighting, local wars of which escalation can lead to a large - scale war. These transformations are consequences of new political-military conditions, revealed sources of conflict and antagonisms of economic, national, cultural or religious character in the contemporary world.

The Polish Armed Forces play a leading role in the defense system simultaneously bearing responsibility for the security of own country, participation in creating and maintaining the allied and global security resulting from the Constitution.

Organizational-functional structures of the armed forces point at their universal character understood as the capability of undertaking various tasks. They contain various kinds of the military units with specific weaponry and equipment capable to perform various tasks. Universality is also a possibility of performing tasks in any conditions of environment on various battlefields with various combat assets in the depth of enemy combat groupings. This feature can also be perceived in possibilities of conducting various military operations including peace missions.

The tasks facing contemporary armies result from the national doctrinal documents and allied obligations. The analysis of these documents allows concluding that the armed forces will perform tasks on the domestic territory and beyond it. On the domestic territory the basic tasks of the military are situated in the various levels of the state functioning in peacetime, crisis and war. During peacetime the selected part of the armed forces must be prepared for giving an aid for the national and local administration in case of natural disasters

and catastrophes. Their role is based on giving a humanitarian aid and direct help for the victims of such events. Apart from the specialized battalions of engineering rescue, other military troops also can be used. It is not reasonable to equip the non-specialized groups (except of rescue battalions) with the equipment enabling the specialized support for the local administration bodies. When preserving their current equipment and armament they should participate in the exercises aiming at getting them familiar with the tasks predicted to them, the way of task performance in cooperation with non-military specialized forces designated for support of people in case of natural disasters and catastrophes.

During the crisis situation the military will perform tasks enabling for quick control over a crisis situation. For this purpose depending on scale and character of threat the mobilization and operational extension and attainment of combat readiness are performed to counteract any aggression. These tasks can be carried out either by troops of rapid reaction achieving combat readiness relatively quickly, or by local military forces attaining more slowly their combat readiness. Hence it results the need of maintaining the separate military units with high maneuver capability and possibility of fast trooping into the endangered area including an air transport. The logistics support for these units should enable them to act with freedom and high efficiency in power of destruction that might be an effective deterrence and control over the crisis situation.

In the actions abroad the military can take part in peace operations, where requirements toward their logistics support result from the mandate as the basis for accomplishing effectively the mission. It always must be the system enabling the military to perform at full array of tasks. The above requirements indicate the need of possessing the two types of units of different valor. The light units ready for trooping either by air or sea featuring high maneuverability and destruction power are fully autonomic in terms of logistics support.

In the light of experts assessment a potential aggressor can originate an attack in one or two directions (Lidwa, 2003, p. 13). Therefore the Polish Armed Forces must be capable of taking an effective defense fight at least till the time the allied forces join in.

In terms of military threat and during a war on the territory of Poland the entire defense potential would have to be engaged, but the main tasks of the Polish Armed Forces could be accomplished within a framework of collective allied defense on the domestic territory.

The conducted analyses allow us to conclude, that the share of Polish Armed Forces in counteracting an aggression should start right before the real outbreak of conflict, yet in time of growing crisis prior to the military actions. It is not always possible, anyway. Mobile and

operational deployment of military troops, reconnaissance and protection of certain areas including the national border and objects important to its defense and also development of the military movement control system ought to be done within a framework of operational emergency. It means that the creation of operational defense grouping along the directions of expected main enemy thrust lines should decide about maintaining the entire territory through permanent defense of the most threatened areas.

The prognostic approach to the presented tasks has its own justification in need of undertaking ventures preparing the Polish Armed Forces for the reality and requirements of the future. Therefore some of taken efforts generate considerable packets of detailed partial tasks concerning training, equipment, improvement of efficiency and mobility of military units among other. The process of professionalization is highly advanced when the outdated equipment and armament is withdrawn from the contemporary battlefield. Intensive modernization and purchases of new equipment is still lasting. The organizational structures of command and management of the military are systematically adjusted in peacetime, crisis and war. The considerable emphasis is put on cooperation and exchange of contacts between the other armies (allied and friends). Such a kind of tasks should give much of reward in control and counteracting the enemy aggression in possible actions on the domestic territory.

The synthetically outlined tasks of Polish Armed Forces against the background of threats, allied commitments, political interests and the role Poland would like to play on the international arena form the basis of determining the tasks for the military. It is worth emphasizing a considerable reevaluation in this scope. The most important is broadening the scope and contents of tasks that the armed forces currently perform besides the military tasks remained in obligation.

One can conclude that the spectrum of tasks designated for the Polish Armed Forces is broad and considerably differentiated. These tasks result from the various premises and conditions determining their scope and contents.

2. LOGISTICS OF THE MILITARY – SYSTEMIC APPROACH

The systemic approach in logistics is connected with the classic research procedures in favor of referring to the reality forming a certain perspective related not only to purpose, problem, subject and space of research, but also personal traits of researcher, his preparation for systemic perception of reality. We notice, that there is a certain complexity of situation connected with determining the researched system, which has an enormous impact on specific features of each research course based upon the systemic approach. In this case, there is

a necessity of perceiving the logistics system at an angle of logistics needs of the military troops taking part in operations in the state and abroad.

The systemic approach in logistics is featured by setting aside the logistics system from its environment and determining its impact on the logistics system functioning. Exhaustive creation of separate division into subsystems, identification of elements of this system and relations proceeding among them are the essence of transformation mechanism in the logistics system. This way formulated requirements indicate some freedom of research in identification and description of the researched system, but simultaneously they are the basis for accepting certain research methodology in favor of perceiving empirical facts essential for the merit of this system organization and finally to an assessment of its functioning.

The military logistics system (MLS) is one of the subsystems in the Polish Armed Forces. In the relevant literature one can meet many definitions of MLS like E. Nowak claiming that “*the military logistics system is a military organization following the principles of the military art and organization, management theory composed of managerial bodies, logistics units and devices connected through mutual relations and designated for organizing and completing the supplies and rendering services (specialized and quartermaster) for the military* (Nowak, 2000, s. 26). In turn the authors of *Logistics Doctrine of Polish Armed Forces D4(B)* wrote that “*the logistics system is an ordered set of organizational structure elements (subsystems and functional areas) of which designation and mutual relations provide for the conditions essential in proper functioning the armed forces during peacetime, crisis and war*” (Doktryna logistyczna..., 2014, p. 12). In structural approach the logistics system of Polish Armed Forces is created by: mobile, autonomic logistics units of operational troops, stationary logistics units and military infrastructure, entities of national economy engaged in accomplishment of logistics processes in favor of armed forces.

One can also come up with the universal approach to the logistics system of Polish Armed Forces and its surroundings that is reflected in the statement that is “*a complex organizational-functional system aimed at maintaining the desired logistics potential of armed forces guarantying completion of training tasks in peacetime and efficient course of action during war* (Ficoń, 2004, p. 69). In this definition a logistics potential is a key-important term when its essence is described on the basis of document titled “Principles of functioning the logistics system of Polish Armed Forces”. According to authors of this document “a logistics potential” is understood as “*(...) executive capabilities of units and logistics devices of the military and real capacities of national economy infrastructure that can be used by the armed forces* (Zasady funkcjonowania..., 1994, p. 7-8).

According to K. Ficoń, the maintenance of logistics potential is based upon preparing a proper logistics infrastructure, organizing adequate logistics units, preparing essential logistic devices when designating logistics forces and assets from the sector of national economy, in proper quantity for efficient accomplishment of operational tasks.

Describing the logistics system of Polish Armed Forces is common to military logistics as a complex military organization. All these elements as managerial bodies, logistics units and devices are in feedback with various relations enabling efficient accomplishment of supply and rendering logistics services to the allotted military units in the certain close or farther surroundings of the system, what is connected with performing the basic logistics functions such as:

- managing the processes of military logistics support;
- preparing and maintaining the logistics potential (connected with existing and functioning managerial bodies, logistics units and devices);
- accomplishment of supplies;
- rendering logistics services.

On the other hand, the structural approach favors identifying the military and economic entities engaged in the processes of rendering logistics services. A relational approach points at mutual dependence (functional and duty subordination) between the system elements, that is essential for considering the aspects of coordination and cooperation at various organizational levels of the armed forces indispensable for task performance in favor of armed forces participating in the operations. However, the general approach to system including its surroundings identification and essence of potential favors determining the processes of logistics support as the sets of activities inevitable for performing tasks in favor of the military participating in a given military operation.

3. ORGANIZATION OF MILITARY LOGISTICS SYSTEM IN OPERATION

An organization of logistics system of the armed forces taking part in the operations is determined by general features of logistics system of Polish Armed Forces. Then; we can state, that the logistics system is composed of the following subsystems: materiel, technical, transport and troops management, military infrastructure. Furthermore, it is necessary to distinguish the medical subsystem that in case of performing operational tasks is organized as one of the organic subsystems of logistics system of Polish Armed Forces basing upon the medical assets and forces subordinated to the Department of Military Health Service

including medical elements of units and subunits. The medical subsystem ensures the troops completion of tasks and scope of medical evacuation and medical supplies.

The basic functions of military logistics system are delivery of supplies and rendering quartermaster and specialized services relying upon the logistics units and devices developed in favor of operational (task) groupings performing operational tasks on the domestic territory in connection with a given military operation.

The core of logistic support of these groupings is expressed in preparing, rational using and maintaining properly supported echelon and deployed in the terrain logistics potential (supply, technical and transport) essential for efficient performing operational tasks. Therefore it is necessary to gather normative resources/stocks of supplies, organize logistics units and devices of required executive capacity, create a functional transport network system and a stationary basis as well as takeover the forces and assets of national economy essential for the efficient accomplishment of combat and operational tasks.

The military logistics system functioning during the operational activities is submitted to providing the proper efficiency in supplying deliveries and rendering services essential for conducting the military operation. The process of supplying delivery and rendering service requires obeying the main principles of economic effort, advisability, economy of forces focusing an effort, simplicity, security.

However, in times of logistic support processes complexity for the military their efficiency requires an integration of managing these processes including management and command of the logistics units. The use of main principles of military logistics is favorable in achieving this goal but also the detailed rules for each subsystem of the military logistics system.

4. MANAGEMENT OF MILITARY LOGISTICS SYSTEM DURING OPERATIONS

Management of the military logistics system during operations in state and abroad follows the rules and principles described in the doctrinal documents referred to performing managerial functions in the logistics system of Polish Armed Forces.

The managerial system of logistics is functioning according to general rules of command such as: unity of command, continuity of command, functionality, integrity, decentralization, cooperation and common trust (Doktryna logistyczna..., 2014, p. 23). The described system should be organized for possibility of coordinating logistic ventures both in the area of operational grouping responsibility and when relying upon the national and

international logistics elements engaged in the processes of logistics support for the armed forces conducting a given operation in the state and abroad.

It is necessary to emphasize that managing logistics is realized within a framework of a certain command system based on the procedures of command that also has an impact on organizing management of logistics system of the armies participating in operations. Command relations between the operational commander and logistics forces commander must favor an effective use of military units and optimal logistics support for tasks performed by them.

This way organized logistics system should effectively ensure the Polish Armed Forces logistics support management during peacetime and crisis. One can distinguish the universal tasks performed in scope of managing logistics system of Polish Armed Forces, which aim at (Doktryna logistyczna..., 2014, p. 23):

- planning logistic resources in the area (zone, op. belt, region) of conducted actions performed by operational troops;
- monitoring a current operational and logistical situation its assessment and predicted deployment;
- presentation of conclusions and proposals providing for maintenance of proper logistic elements in readiness for operational troops support;
- guarantying a possibility of logistics support for operational troops by the forces of logistics units;
- assessment of logistic needs;
- monitoring of logistic resources.

Managing the military logistics system in the domestic territory and abroad requires discrimination of the levels of logistics support and indentifying tasks of the bodies managing the Polish Armed Forces logistics accomplished on these levels. When following the classification of military activities, there are the three levels; strategic, operational and tactical. In accordance with them, the four functional levels of logistics support are completed: Level VI strategic, level III operational, level II tactical, level I echelon (Doktryna logistyczna..., 2007, p. 11). At the strategic and operational level of activities the bodies managing logistics are focused on support during wars, campaigns and main operations. But at the tactical level their efforts are focused on the tasks of logistics support for the armed forces participating in the battles and operations. Such discrimination of levels in logistics support is aimed at tasks identification and commanders responsibility at various levels of

command for logistics tasks performed in favor of military units taking part in operational actions.

Managing logistics in operational activities is an integral part of the command system of OPCOM. It provides for efficient managing logistics at all levels of command through gathering restricted information, its assessment, drawing conclusions, taking decisions and presenting proposals in scope of logistics support. It is applied both in time of operations in the national and allied system. Management of logistics in operational actions is a purposeful activity of operational commander and his STAFF accomplished in scope of a certain command system providing for high combat readiness and proper preparation to attain the assumed operational target.

Steering the process of logistics support is performed in form of management and command. The superior goal of managing the military logistics support in operational activities of the military is to ensure the fighting armies and troops the proper conditions for conducting an operation to achieve its purpose. Logistics bodies of the operational command perform their tasks by planning, organizing, raising, initiating logistic ventures, control and supervision.

The previously described discrimination of logistics support levels in the Polish Armed Forces is used for identification of tasks and responsibility of various levels of command for logistics tasks including the tasks performed in favor military units participating in operations abroad. This way determined essence of military logistics support is reflected in the tasks completed in scope of managing the system of logistics support for a given military contingent (task grouping).

5. ASSESSMENT OF LOGISTICS SYSTEM OF THE MILITARY IN OPERATION

Functioning the logistics system in operations within the borders of domestic territory and abroad is connected with creating possibilities of performing logistics tasks, when basing upon resources from various sources. In these operations the basic tasks of Polish Armed Forces logistics system ought to be: preparing and maintaining the logistics potential in favor of units and subunits participating in the operation; processing information about possessed forces and logistic assets; determining a target and concept of logistics support for units and subunits participating in operation, planning logistics support for the military; elaboration of logistics tasks, coordination and supervision of their execution.

Tasks and organization of logistics system in a domestic territory and abroad should result from the standards of logistics support determined by a commander of a given operation

and certain guidelines for planning a support like material, technical, medical, transport and the use of infrastructure in the processes of supplying and rendering specialized services.

In the authors assessment the main indicator of logistic resources volume is the array of operational tasks, while possibilities of gathering these resources depend on a degree of logistic interoperability of fighting armies. In case of high degree of this interoperability the dominant sources (besides logistic resources of Polish Armed Forces and GN) are the logistics systems of allied armed forces, multinational logistics units, host-nation, local markets and international logistics organizations.

When assessing management of logistics system of the military in a domestic territory and abroad, it is worth paying attention to usefulness of commanders and their Staffs within a framework of certain command system, that is to give a possibility of taking righteous decisions concerning logistic ventures, planning and practical implementation of the elaborated plans connected with logistics support for the troops participating in military operations. This way understood essence of directing the military logistics system is connected with the need of obeying the current rules of command and completion of universal tasks of logistics management.

In the authors assessment, it is necessary to strive for gaining elasticity of the subsystem directing the logistics system in operations. It results from the specificity of created command structures (national, allied, multinational) that depend on character of operational purpose and composition of the used assets. It is necessary to state that current solutions will be still useful and it is recommended – first of all- to improve the growth of interoperability level in logistics system elements and informatics support for the logistics systems of fighting armies.

6. CONCLUSIONS

Functioning the logistics system depends on a series of domestic and foreign factors and also on the environment where it performs its functions. A mission of logistics system is determined by tasks of armed forces that are the basic element of national defense system, Magnitude, structures and tasks of armed forces result from the needs and possibilities of national economy in scope of security maintenance, territorial integrity, and realization of allied commitments.

The changes in the logistics system organization of the military are an effect of evolution in the environment of international security and professionalization and technical modernization of armed forces following these changes. In spite of such deep changes in

tailoring the logistics system to requirements of modern armed forces, it is still waiting for many ventures aimed at attaining the required logistics capabilities for accomplishment of tasks to be performed by the armed forces and contribute into effective and efficient functioning of military logistics system.

Multinational character of contemporary military operations imposes the necessity of permanent growth of logistic interoperability degree that should concern not only the command-staff structures and procedures of command applied by them, but also forces and logistics assets used in scope of logistics support processes for the military.

First of all – international requirements have a biggest impact on the logistics system for the military. Due to international character of operations it is reasonable to strive for creating possibilities of full using the options of international logistics support for the military including a share in creating and using the multinational integrated logistics units.

The new challenges of XXI century require new ideas, well-prepared people and introduction of proper motivational systems.

It is reasonable to expect that realization of specified task areas according to adopted stages and deadlines will allow for achieving the assumed organizational-functional and qualitative-quantitative changes in the Department of National Defense including an achievement of operational-logistic, technical and technological capabilities determined by the Minister of National Defense and Chief of General Staff of Polish Armed Forces, and resulting also from the Purposes of NATO, Long-term requirements for the Republic of Poland and Commitments in favor of Defense Capabilities.

One can claim with satisfaction that within a period of some recent years it has been possible to introduce a series of changes that considerably improved efficiency of logistics tasks completion in the Armed Forces of the Republic of Poland in peacetime, crisis and war. A considerable improvement of capability for cooperating in the multinational system took place in addition to rationalization of logistics structures at particular competency levels of planning and executive bodies of the Armed Forces of the Republic of Poland as well as growth in efficiency of managing the logistics resources of the military with the use of national economy resources.

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