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Selected aspects of logistic management in the army

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ABSTRACT

The article entitled “*Selected aspects of logistic management in the army*” is the introduction to a cross-sectional analysis of modern logistics problems and the proper management of these processes in the army. These changes are mainly the result of the professionalization of the army – because professionalization is an unprecedented phenomenon in the history of the armed forces. The modernization effort undertaken in a short time has completely changed the face of the Polish army. Military logistics is an area where these changes are mainly visible. The ongoing reorganization is not only to adapt logistics to the new requirements of a professional, fully professional army, but also to improve the efficiency of spending public money and increase the percentage of combat sub-units in relation to the security ones.

Keywords: logistics, management, professionalization, army, professional army, military logistics, Polish army

1. INTRODUCTION

The problem of logistic security appears to be one of the key issues that require special interest on the part of those responsible for the creation and the use of a modern army. Activities of the Polish Armed Forces (Photos 1 & 2) carried out in places far away from the country, in various climatic and geographical conditions and complex realities of the modern security environment require professional and, most of all, effective logistics. Strategic changes in the

security environment of the last decade of the last century, associated with rapid technological development, progressive globalization, and above all the disintegration of the bipolar world and the formation of a new multipolar order, have changed the manner of perception of threats.



Photo 1. Army prepared for defense



Photo 2. Army prepared for defense

Until the end of the 1980s, the greatest threat to national and international security was seen in the military area. However, at the turn of the century, much attention was paid to the threats occurring in non-military security dimensions: economic, ecological, energy, IT, social and other. In place of the key threats in the past related to the military activities of the states, aimed at preparing for a regular, large-scale war, new challenges have emerged that result from the dynamically changing security environment. Non-state actors, influencing the perception of threats by states and international organizations, have begun to play a more and more important role

A new category appeared – asymmetric threats, which are related to the possibility of creating a threat by an entity with a smaller potential than its opponent. Asymmetry also applies to methods and techniques of struggle that are different and not compatible with the way of conducting symmetrical activities [1-22].

2. THE ARMY AS THE ELEMENT OF THE STATE SECURITY SYSTEM

The army as an element of the state security system is obliged to develop and rebuild its potential, in accordance with the current national security requirements of the state, specified in the directive requirements. The process of professionalization of the Polish Armed Forces is one of the methods of adapting the armed forces to the requirements set for them. The aim of professionalization is to replace the mandatory service with a voluntary professional service consisting of permanent and contract service, while adjusting the size, structure and equipment of the army both to new challenges and threats in the field of national security, as well as social expectations. Professionalization allows for a better preparation of the army to respond to current and anticipated military and non-military threats. Its goal is also to increase the number of combat and security units, and at the same time to improve their ability to use outside the country in allied and coalition operations.

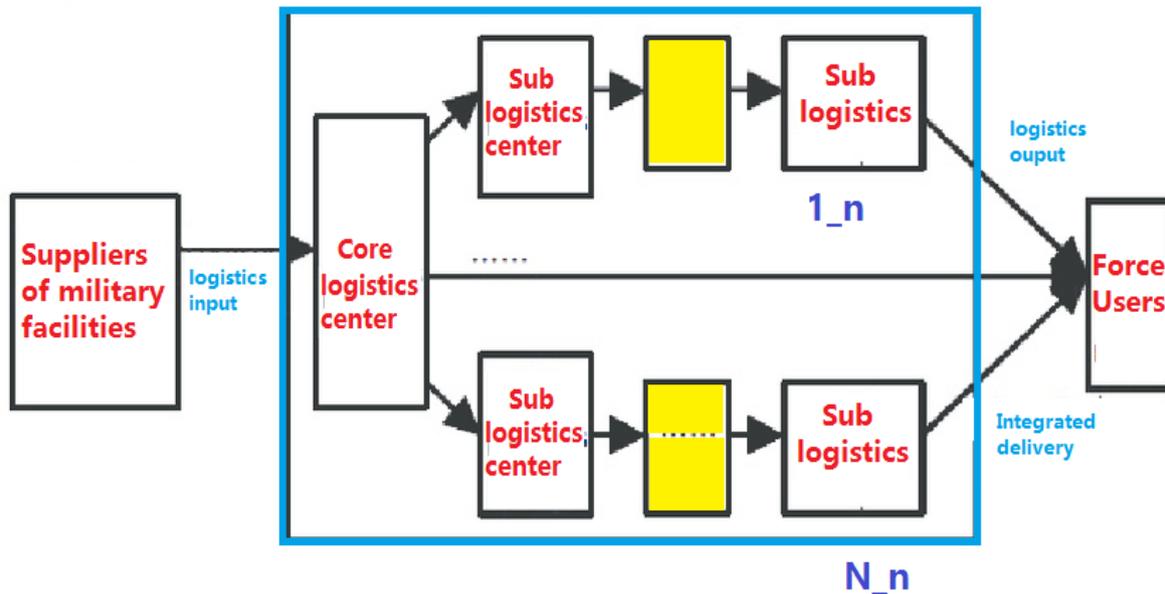


Figure 1. The Structure of Logistics Center based on JIT

The process of rebuilding the armed forces necessary to carry out the tasks that they face, entails the need for changes in the security and support systems. One of such systems is the logistic system of the Armed Forces (AF) of the Republic of Poland (RP).

The logistic system of the AF of the RP is a structured set of elements of the organizational structure and functional areas, which purpose, as well as mutual connections and relations ensure efficient functioning of the AF of the RP in time of peace, crisis and war. In structural terms, this system is created by management bodies (management boards, departments, faculties, sections) subordinate to the chief of staff and executive units (stationary and mobile) intended for security and logistic support of troops, ensuring the implementation of tasks during peace, crisis and war, enabling conducting operations in all conditions, in all climate zones away from the parent territory and the structure of Logistic Center (Figure 1 /Google/).

In functional terms, the logistic system of AF is a deliberate operation of logistic authorities, ensuring continuity of security and logistic support for troops in the process of training and performing tasks⁵. The implementation of future tasks forces the continuous development of the AF of the RP, according to the requirements of the changing security environment. Technological development and the possibilities of using newer technological weapons and means of their transfer lead to the construction of smaller, more mobile, but also much more effective forces. The need to implement the tasks of securing the AF of the RP by the logistic system in functional terms leads to the development of logistic security capabilities of the troops, at the same time entailing the need to adapt the AF of the RP logistics system in structural terms.

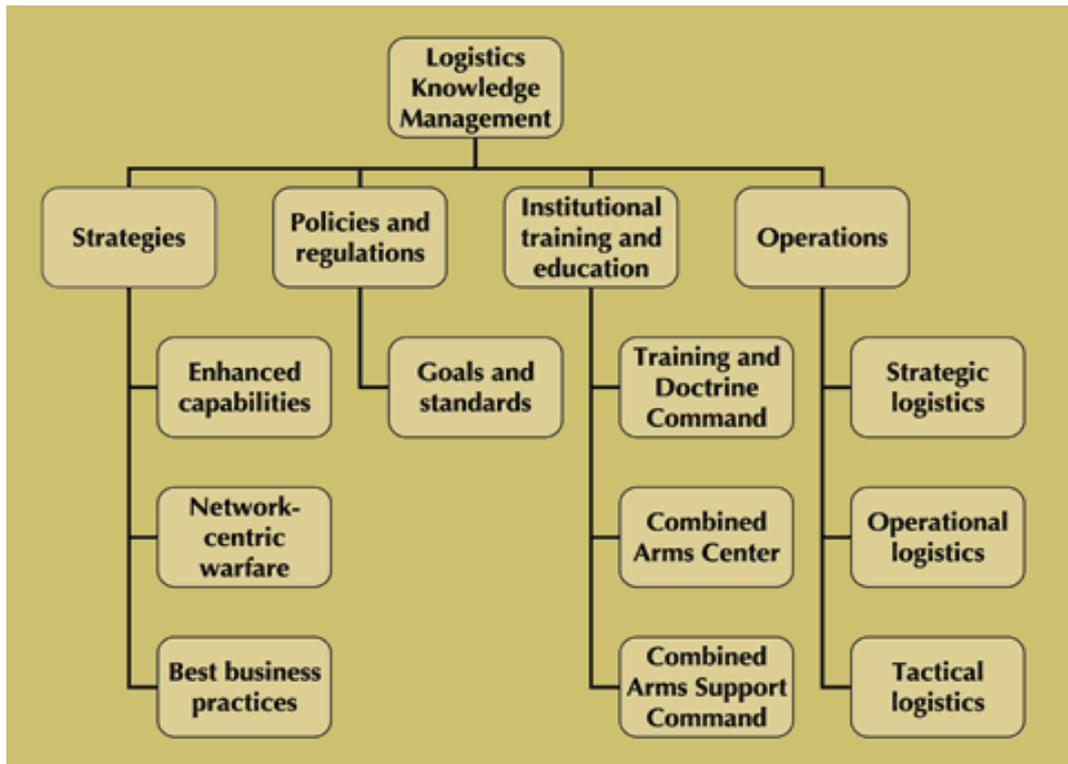


Figure 2. The National Security Strategy of the RP - the Army logistic system

This system has undergone its transformations in the last twenty years, in line with the changing quality and quantity of the Polish Armed Forces. Establishment of the Support Inspectorate (SI) of the AF of the RP and submission of execution logistics to particular types of armed forces (TRP) facilitated and enabled the ordering of the Polish Armed Forces logistics system in organizational, functional and competence terms. The next stages of reorganization and development of logistics eliminate imperfections in the organization and functioning of the system, also taking into account the requirements for the Armed Forces of the RP specified in the National Security Strategy of the RP (Figure 2).

Due to the changing conditions in the security environment, it is necessary to adapt the assumptions of the possible use of armed forces. Currently, in the area of defense preparations, projects aimed at increasing the potential of the Armed Forces of the Republic of Poland are being implemented – the transformation process is underway, including their professionalization and technical modernization, which allows them to be adapted to new conditions. Transformation of the armed forces is a continuous process aimed at adapting them to changes taking place in the security environment. Adapting to these changes is aimed at gaining the desired operational capabilities by the armed forces. As a result, the Polish Armed Forces can become an important instrument for building credibility and Poland's international position in the global security environment. Therefore, the modern Polish Armed Forces should be characterized by a high degree of combat readiness and availability, modern combat technology and military equipment, and have integrated reconnaissance, command and logistic security structures in the global world.

3. FACTORS DETERMINING THE SHAPE OF THE LOGISTIC SYSTEM OF THE POLISH ARMED FORCES – PROFESSIONALIZATION. SELECTED ASPECTS OF PROFESSIONALIZATION AND MANAGEMENT OF LOGISTIC SYSTEMS

The essence of professionalization of the armed forces is their profession, determining transformations in other areas of their functioning, in particular in the field of equipment and training. I will focus on selected areas of logistics security. Peaceful logistic security of the troops is determined by many factors, and the process of professionalization is undoubtedly one of the most important. While the task of logistic of the Polish Armed Forces is to maintain an appropriate logistic potential that should secure their needs in peacetime – with the ability to implement security and logistical support during the crisis and war, taking into account the requirement of modern management. Professionalization is a response to changes both in the security environment and resulting from allied commitments. Nevertheless, the society's expectations regarding the abolition of compulsory military service were an important aspect of professionalization. Another, equally important element of the functioning of the armed forces in the 21st century is the technological progress, which results in the introduction of modern and complicated military equipment and service, and several months of basic military service did not give the soldier the opportunity to train the use of this equipment to the full extent. It is also known that the efficiency of destruction of modern weapons is greater despite the higher purchase costs, and the efficiency of equipment allows to increase the efficiency and effectiveness of the armed forces. The aim of professionalization is to increase the capabilities of the armed forces to operate as intended, taking into account the needs in terms of equipment operations and training (Figure 3).

SMS Framework Terminology

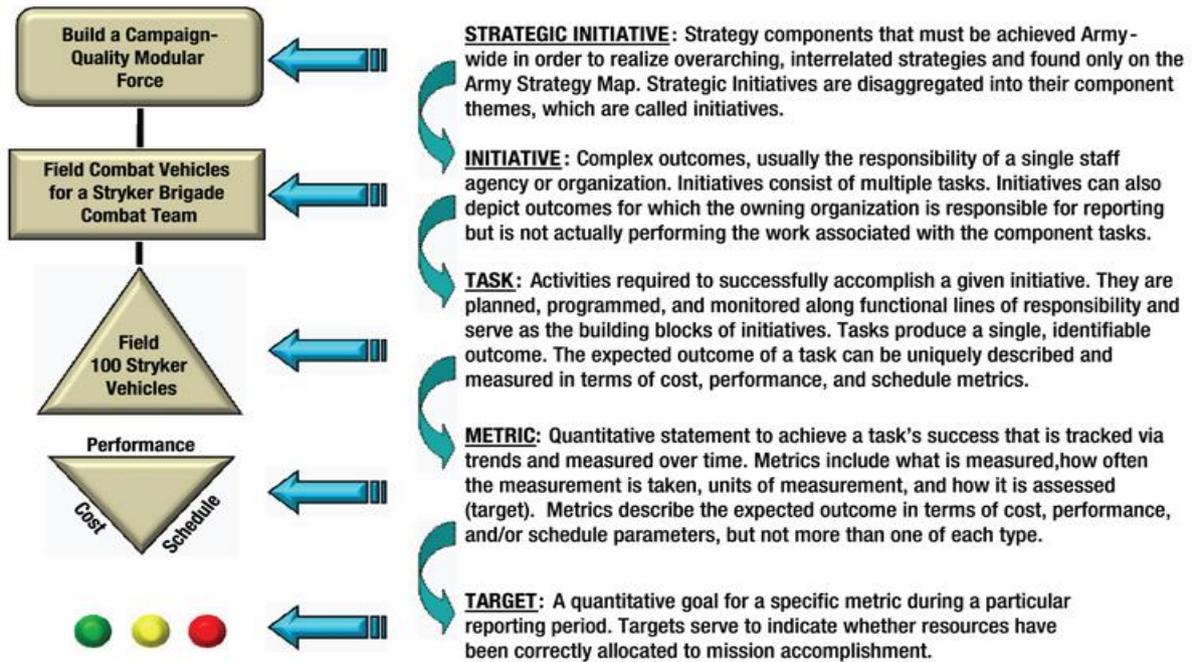


Figure 3. Army Strategic Management System: Enhancing Logistics Readiness

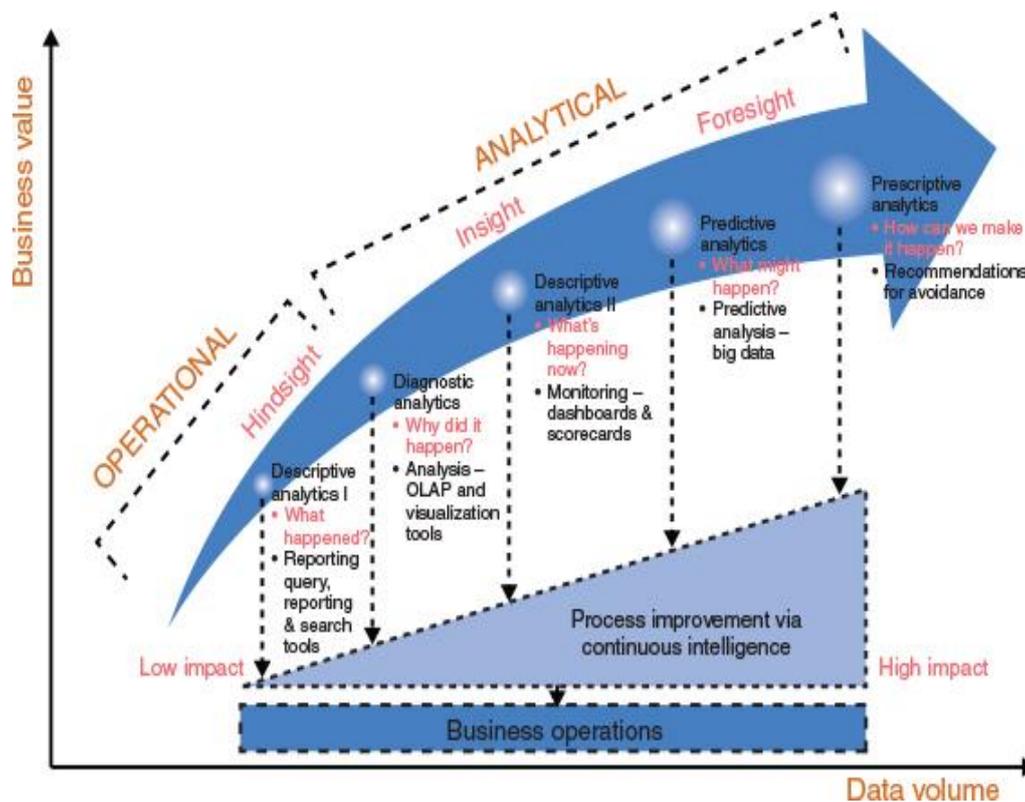


Figure 4. Logistic Enterprises Information System

The process of professionalization of the Polish Armed Forces affected directly the logistics activities in such areas as soldiers' accommodation, nutrition organization and equipment of personal states. Moreover, it forced the need to build new organizational structures by adjusting logistics areas to the new composition of armed forces and logistic security needs resulting from new forms of service and their adaptation to the requirements arising from changing tasks to secure the current operations of individuals during peace, crisis and war. Adaptation changes have been taking place since the beginning of the professionalization process and have evolved in these areas. In my opinion, adapting logistic processes to the needs of the professional army will evolve according to its numerical status, tasks and economic situation.

It should be assumed that in the area of services, this level will require constant changes, depending on the situation on the labour market and the economic situation of the country, in order to recruit soldiers for service and information system (Figure 4).

3. 1. Accommodation

According to the concept of amendments to the Act approved by the Minister of National Defense on accommodation of the Armed Forces of the Republic of Poland, it was assumed that the Military Housing Agency (MHA) will play the leading role in meeting the housing needs of professional soldiers. It was proposed that the target model of accommodation would consist of accommodating professional soldiers in the MHA housing (quarters or dwellings), and in the absence of a possibility – using MHA boarding stock or through the payment of the housing benefit.

The housing benefit is paid at the request of the soldier and allows him to solve the problem of accommodation by renting on the local market, or provides additional financial resources in his budget if he resides in a private housing stock. The basis for housing provision is the fixed percentage rate of basic salary, increased by the garrison factor – taking into account the different market prices (rent cost) in a given garrison, fixed for each garrison and adjusted periodically. In addition, it was assumed that a soldier who was granted a housing benefit has the right to be accommodated in the barracks resource in the military unit. It has been assumed that the soldier will be able to use this license with the consent of the commander of the military unit and will be obliged to pay fees for the use of accommodation in this form. In a special case, this may apply to the lack of housing in a given garrison in the MHA and the lack of rental offers for residential premises on the local real estate market. Soldiers in the candidate service and appointed to the National Reserve Forces are accommodated in barracks in accordance with established norms and standards (free of charge). The above regulations do not apply to soldiers who have already benefited from housing benefits.

3. 2. Nutrition organization

The system of nutrition in the army before professionalization was directed at the 24-hour feeding of soldiers of basic military service. Free meals were also available to certain groups of professional soldiers, e.g. pilots, crews of vessels, paratroopers, divers, professional soldiers, or in strictly defined situations, e.g. during training, field training, reconnaissance, groupings, etc. After conducting the analysis, a position was elaborated in which the uniformity of the rights of all professional soldiers was proposed, granting them free board on the day of performing their official duties. For this purpose, an amendment to art. 66 and 131 of the Act

on the military service of professional soldiers was made. These changes were the basis for the Inspectorate of Support of the Armed Forces to work in the Ministry of National Defense regulations on nutrition (which were introduced). It was assumed that preparing and issuing a meal in military units would enable the maintenance of canteen and kitchen facilities and food personnel necessary to secure the feeding process during exercise, training as well as in crisis situations, mobilization of armed forces, as well as in the case of resumption of basic military service. In addition, it enabled the training of food service personnel in stationary and field conditions as well as the rotation of maintained food stocks by passing it to the preparation of meals. It was also assumed that in some units, it may be necessary to organize places for eating meals, and in specific situations – contracting services of external companies.

The possibility of eating meals in the place of service was to relieve the soldier's home budget. The value of all-day feeding was at the level of approx. PLN 7.00, which in the scale of the month constituted the amount of approx. PLN 160.00. It was estimated that the expenses of the national defense budget for feeding soldiers would amount to about PLN 200 million per year. Moreover, in this concept, it was necessary to swap about 1400 positions of chefs of professional military service to posts of professional soldiers or army employees and to create about 1000 positions of kitchen help in place of the existing soldiers, dedicated to service teams. However, at the end of 2009, the Minister of National Defense instructed the head of SI of the Armed Forces to develop the Concept of changes in the functioning and economization of the food service in connection with the professionalization of the Polish Armed Forces.

From the point of view of the tasks Ahead of the service and the necessity to carry out its economization in the process of armed forces professionalization, three areas were diagnosed that required changes in maintaining the capacity to feed personnel during peaceful training, implementation of crisis tasks and mobilization, and maintenance and rotation of food supplies and how to obtain it to secure nutrition during the crisis and mobilization. In order to adapt the rules of the functioning of the food service to the requirements of the professional army, it was assumed that the ability to secure nutritional needs with military potential would be kept to a minimum, necessary level. In the first stage, it was necessary to organize the formal and legal status of the service's operation. This required the development of many new regulations and decisions of the Ministry of National Defense while maintaining the ability of the food service to carry out tasks ahead of it.

Through the current activities, about half of the canteen facilities were closed, with less than 300 at the beginning of professionalization. The number of food economies will decreased from around 150 at the beginning of 2008 to around 46 at the end of 2012, which will lead to a reduction in the number of food services staff from around 3,800 to around 2,300, of which about 1,500 will be professional soldiers in logistic subunits who will carry out their tasks as part of specialist training in existing food facilities, and in the case of field training or training – on field equipment, preparing to perform tasks in accordance with the purpose.

3. 3. Organizational structures

The changing reality requires us to constantly look into the future. A current assessment of the functioning of existing systems and undertaking actions to improve them are necessary. Therefore, work is constantly being carried out on new solutions that are aimed at their continuous improvement. Subsequent reorganizations entail additional costs, not only financial but also closely related to the human factor. Over the past 20 years, many officers have left the AF structures, not having reached the retirement age, who are outstanding specialists in the

logistics industry. Building a logistic security system of a sub-branch and a branch based on a new type of military units, such as military economic units (MCU), disassembly of regional material bases (RMB), material and technical bases (MATB) and stationary units of technical protection, and in this place forming regional logistic bases (RLB) and reformation of sub-divisions of supply and renovation into logistic sub-divisions is another new challenge for the whole logistics of the Polish Armed Forces, forced to a large extent by the professionalization process. A big challenge in the logistic security process is the organization and security of tasks ahead of the Armed Forces of the RP, and implemented within the forces deployed on the ad hoc basis to NATO, the UN and the EU.

The current goal of the transformation of the logistics system is to adapt the size of logistics potential to the real needs of the armed forces, among others related to the professionalization and technical modernization, creation of new, transparent organizational structures, not only security ones, but also training (Tatham, Pettit, 2010). The combat capability of the AF of the RP will depend on the training of specialists, such as drivers, mechanics, operators of specialist equipment or warehousemen. To this end, the integration of dispersed potential (units and logistic institutions) is carried out in new organizational structures. The final goal is to create financial savings that will allow you to carry out other tasks for the benefit of the armed forces.

3. 4. Problems resulting from the professionalization of the Armed Forces of the RP in the areas of logistics and management

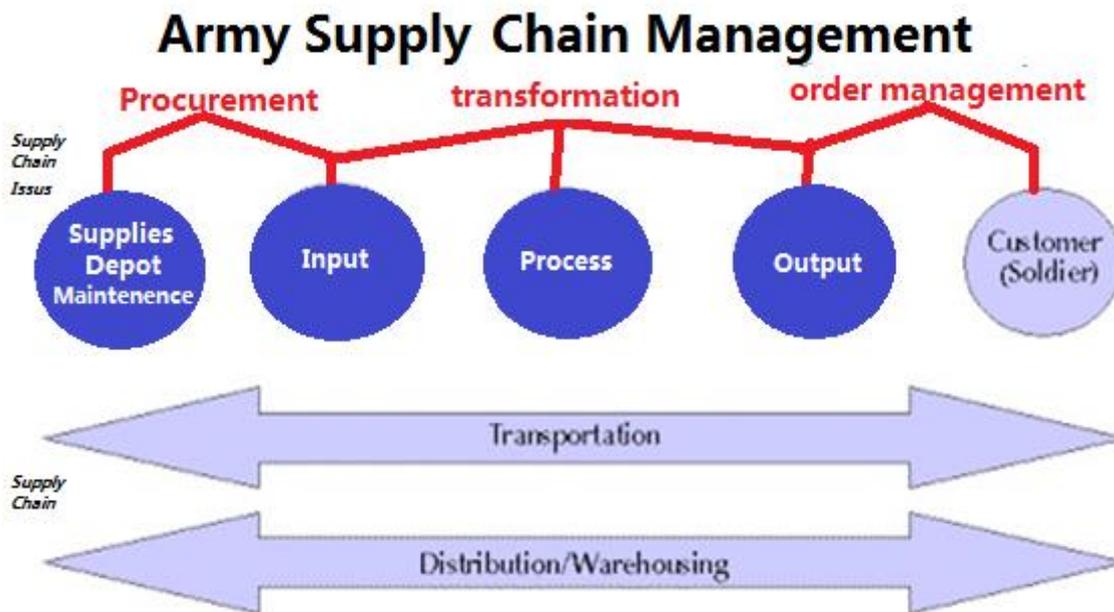


Figure 5. Army Supply Chain Management

Problems resulting from the process of professionalization, and concerning Logistics security, are the protection of facilities and their maintenance, nutrition and accommodation, as well as providing health care. Medical security, in accordance with logistic doctrinal

documents, is part of the logistics system of the Republic of Poland, but currently remains outside its structures. In my opinion, this complicated situation cannot remain in the current task-structure system. It should be changed in the target logistics system of the AF of the RP, including the tasks of military health service in its new conditions and management (Figure 5).

This is very important because it results from the need to build an efficient and effective logistic system of the armed forces.

4. CONCLUSIONS

Previous experience in the functioning of the professional army indicates that in the area of logistics, there has been a significant improvement in the operation, maintenance and use of modern military technology, because professional soldiers deal much better with modern military technology, military service of soldiers – professional soldiers service in sub-units causes better exploitation and less failure of equipment and weaponry, - professional soldiers take better care of the entrusted equipment than the soldiers of the basic military service, and the process of professionalization of the army changed the scope and areas of logistics needs, which forced the logistics to introduce organizational changes.

Professional soldiers are a group which directly determines the training of subordinate soldiers – logistic specialists, as well as efficient execution of economic tasks by commanded departments and sub-divisions: supply, medical, technical, operation, infrastructure, repair and transport. In military logistics, professional soldiers working in positions related to materials management and logistics services are directly responsible for the property entrusted to them, professional training and performance of tasks by subordinates. Professionalism of our army to a great extent depends on their professional skills and competence. Officers and non-commissioned officers as direct training providers have a significant impact on the final effect of training of subordinates.

Professional privates in the logistic system are primarily to specialize in servicing the equipment entrusted to them. Therefore, they serve in positions enabling them to acquire high qualifications in very attractive occupations in the civilian labour market. These are full-time jobs: operators of various types of equipment (e.g. engineering, communications), drivers, specialist chefs, warehousemen, mechanics and finally, medical rescuers. This has a significant impact on the size of costs incurred by the military logistics system. Without modern equipment and money for reliable training of logistics specialists for the army, professionalization of the army would simply be impossible.

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