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ORGANIZATION AND MANAGEMENT OF THE SUPPLY OF FUEL, LUBRICANTS AND SPECIAL LIQUIDS IN MILITARY FORMATION

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Abstract. In the modern market conditions organizations ever more realize meaning on supply and assign on supply management and its strategical responsibilities. Supply itself is an area of activity that takes place in any organization using the products and / or services of other organizations. This area from the point of view of the logistics concept is managed in a coordinated manner with production and distribution, using the system approach.

Key words. Supply of fuel and lubricants, special liquids, military formation

Introduction

In the modern market conditions organizations ever more realize meaning on supply and assign on supply management and its strategical responsibilities. Supply itself is an area of activity that takes place in any organization using the products and / or services of other organizations. This area from the point of view of the logistics concept is managed in a coordinated manner with production and distribution, using the system approach.

Supply logistics is material flow management in the process of securing the enterprise with material resources. The main logistics related to the supply are: purchase, delivery and temporary storage. [1]

Object of supply, which is provisionally referred to as "inbound logistics", is the flow of products and services in its first phase, ie. the incoming stream. Various activities - both common to logistics and supply are being carried out from the suppliers to the organization.

The general logistics activities that are carried out at each stage of the material flow include transportation, storage, stock management, and others.

The specific activities related to the provision of products and services from external sources are the process of determining (qualitative and quantitative) the needs of the organization of products and the planning of their satisfaction, as well as the specific supply decisions concerning the choice of suppliers and the development of relationships with them, information systems and the measurement of the results of the supply activities. [3]

The supply of fuel and lubricants (SFL) and special fluids is a major type of logistics and includes:

- quality control of SFL;

- the requirements and working procedures for transporting, receiving, storing and distributing SFL s;
- the technical and fire protection requirements for equipment, stores and means of loading with SFL;
- the interchangeability of SFL, as well as the responsibilities of officials dealing with SFL. [4]

General information on fuel, lubricants and special liquids

The Bulgarian Army has adopted a different classification of **fuel lubricants and special liquids**. Depending on their intended use and the area in which they are used, they are subdivided into: fuel group - petrol, diesel, jet and fuel fuels, oils and lubricants, varieties of SFL: for petrol - aviation and automotive; for oils - motor, transmission, turbine and others; for lubricants - antifriction, protective and sealing, types of SFL: for gasoline - summer and winter; for diesel fuels - winter, summer and special; for motor oils - autotractor and aviation; for hydraulic fluids - brake, shock absorbers and hydraulic fluid.

There are requirements for special liquids. With regard to cooling fluids: effectively absorb the heat; not to form deposits in the cooling system; have a high boiling temperature and heat of incineration; not to cause corrosion of metals and to destroy rubber and plastic parts; have a low pouring temperature (the lower the pouring temperature, the better their performance); to be cheap and non-discriminatory.[4]

With regard to hydraulic fluids: do not cause corrosion of metal parts and also do not damage the plastic and rubber parts of the hydrosystem; have good viscosity, good viscosity-temperature properties, and low pouring temperatures; have good anti-wear properties; not to evaporate, delaminate and oxidize during prolonged storage; are not fire-hazardous, poisonous and deficient.[4]

Definition, principles and concepts of the supply of fuel, lubricants, and special liquids

The "Doctrine of Logistics" in Bulgarian Army is the basic document describing the logistical processes in the armed forces. The doctrine has been developed in accordance with the "Doctrine of the Armed Forces of the Republic of Bulgaria" and the provisions of NATO and European Union (EU) Allied Doctrines and Concepts concerning logistics and its functional areas. It covers all aspects of the logistics of the operations of the three missions of the armed forces and is therefore most closely related to the Doctrine of Operations and the Doctrine of Preparation of the Armed Forces of the Republic of Bulgaria. In addition, the doctrine practically reflects the basic principles and provisions of the White Paper on Defense and Armed Forces, the National Security Strategy, the National Defense Strategy and the current guidelines on defense policy, respecting the philosophy, phraseology and terminology.

According to this document, the supply of material resources at the Bulgarian Army is carried out under the five - class supply system adopted by NATO.

Fuel and lubricants represent a significant mass of materials that is needed to secure troops in operations. That is precisely why, as a quantity they occupy the second place after the war supplies. In this sense, the supply of fuel, lubricants, special fuels and special liquids is an essential element of the logistics of the troops.

Same procurement of fuel, lubricants, special fuels and special liquids is a coordinated activity carried out by the control authorities and the forces and means of supplying of fuel, lubricants, special fuels and special liquids to ensure timely, complete and continuous satisfaction of the needs of troops under all conditions of the environment with quality fuel and lubricants.

The very provision with the Bulgarian Army of fuel, lubricants, special fuels and special liquids should be subject to the following principles:[4]

- Priority - the fulfillment of the assurance tasks is achieved with a clear and unambiguous subordination scheme, which is currently being implemented;

- Liability - the senior authority is responsible for carrying out the tasks of subordinate formations without removing them. Commanders of varying degrees are delegated responsibilities for immediate logistics support;

- Powers - powers are assigned together with responsibilities and should able the relevant superiors to manage provision in the most efficient way;

- Interaction - accurate allocation of responsibilities and clear understanding of SFL tasks at the appropriate hierarchical level;

- Coordination - organized to ensure interactions;

- Insurance and sufficiency - two separate interconnected principles. They suggest adequate resources of fuel, lubricants, special fuels and special liquids to provide troops in peacetime or in crises. These principles set out the levels of fuel, lubricants, special fuels and special liquids resources that should be sufficient to meet the set standards of readiness, living and mobility;

- Flexibility - complies with the requirement that a pledged and functioning system should be able to responds adequately to sudden changes in the environment;

- Simplicity - clear and uncomplicated organization of fuel, lubricants, special fuels and special liquids provision allows accurate and effective provision of the insurance itself;

- Joint actions - the specifics of the Bulgarian Armed Forces requires joint actions between the authorities, the civilians, and organizations;

- Timeliness - this is a principle that requires the quantities of fuel, lubricants, special fuels and special liquids in peacetime to arrive at the warehouse and from there to the users within real time limits, regardless of the current situation;

- Economics - This principle implies the use of mechanisms that ensure the use of resources in the most efficient and effective way possible. Economics involves maintaining an optimal level of resources that matches actual needs, performance and communication lines and expected delivery times;

- Clarity - it is necessary to have a comprehensive and easy-to-understand mechanism for material reporting on the basis of an automated data processing system, easy exchange of information between military and civilian logistics bodies involved in the provision of fuel, lubricants, special fuels and special liquids.

In order to proceed normally the process of supplying troops in peacetime, crises and conflicts, as well as complying with supply principles and patterns, SFL control authorities must perform certain tasks:

- to identify the resources required by the SFL;
- to identify sources for SFL provision;
- to organize the receipt, storage and distribution of SFL;
- to organize the creation, storage and maintenance of stocks of SFL;
- to determine the cost norms;
- to organize the repair of technical means for SFL;
- to organize the interaction with the military security authorities;
- to organize the quality control of SFL;
- to keep an operational report on SFL and technical tools for SFL;
- to manage the provision of SFL in general management system logistics.

In order to create a dynamic and sustainable SFL provisioning structure, it is necessary to accurately predict the needs for class III material in peacetime. Supply of troops consists of some main stages.

The needs of the SEM troops are calculated in:

- estimated supply unit - average daily supply rate;
- units of measurement - liters.

The need itself depends on a number of indicators, namely:

- the tasks of the troops;
- the available technique and the assumed use;
- established operating cost standards;
- stocks at the end of the operation;
- reserve.

In peacetime, the need for SML is calculated per calendar year and depends on the planned mileage and hours of technique, the technical cost of technology, the allowances paid, and the plans for acquiring new equipment during the year.

The need for SEM for troops consists of two components - the need for fuel and the need for oils, lubricants and special liquids. The leading component is the need for fuel. The amount of oil, lubricants and special liquids for automotive

equipment is based on a percentage of the fuel. The need for oils, lubricants and special fluids for aviation equipment is set by the manufacturer of the equipment itself and is determined on the basis of hours of work.

In order to be successful in supplying troops in the course of operations, it is still necessary to create, in peacetime, the necessary stock of material resources that are properly scheduling and also to continuously fill costs and losses.

Supply of SMLs to operations is planned by their logistic bodies and is being implemented by logistic formations. Supply itself is delivered in accordance with the logistics plans for operations and is based on reports on logistics and military orders based on their actual needs and the resources allocated to the operation.

There are two activities for supplies in need: transportation to the military formations and refueling. This is part of the distribution process, where the SGM from one place is delivered to another. The subsystem is organized and implemented to create stocks of SMLs, to fill costs and incur losses in the troops, and to create a new reserve.[2]

Conclusion

The organization and management of the supply of SEMs and SFs should comply with the basic principles of logistics management, which are: continuous gathering, summarizing, studying and analyzing data about the situation; deciding on the organization of logistics; logistics planning; reducing tasks to subordinates; organizing and maintaining interaction; organizing and conducting activities to increase the preparedness and sustainability of logistics forces, their protection, security and defense; and organizing the management, management and control system.

LITERATURE

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