

INTERNATIONAL LOGISTICS AS PART OF NATO EXERCISES ON THE EXAMPLE OF ANACONDA 2016

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Abstract

The organization and implementation of multinational exercises is an important element of NATO's activities. Exercises continue to ensure that Allies are able to meet NATO's level of ambition, and to demonstrate that capability for deterrence purposes. Implementation of exercises helps to strengthen the bond between participating units, but above all allows you to actually improve procedures and strategies. It is particularly important that thanks to them the appropriate level of interoperability is constantly maintained associated with the pursuit of ever higher effectiveness and efficiency. What plays a special role in the effectiveness of international exercises is the use of logistics, especially for the organization and implementation of displacements and the proper integration of the HNS system. Without it, modern international military logistics - especially in peacetime - is unable to carry out its tasks at the appropriate level.

The aim of the article is to identify the concept of multinational exercises implemented under the NATO system, in the context of HNS and international logistics challenges in the field of displacement resulting from the exercise scenario, example ANACONDA-2016. The article is based on the analysis of literature and documents (normative acts dedicated to military and civilian spheres), case studies, and on observation of participants and interviews, and analysis of scientific and specialist publications.

Keywords: International logistics, military logistics, military exercises, NATO, HNS

1. INTRODUCTION

International logistics can be seen as processes of coordination and optimization of all flows on an international scale, based on the analysis of relationships between various organizations (enterprises, institutions, etc.) created on the basis of implementing the idea of the logistics chain [1], where the role of the "stimulator and watchman" is played by relevant specialized supranational, international and global organizations and institutions. The specificity of international logistics is associated with the characteristic international freight flow [2]. It is characterized by, among others [3]:

- overcoming geographical, political, legal and administrative, cultural, technical and time barriers [4];
- repeatedly crossing borders [5];
- using different types of transport systems, transport means and different storage and storage systems [6,7,8];
- greater scale and variety of projects in relation to domestic logistics (eg: mass of goods moved, number of participants, distances, documents, exchange rate and language differences) [9];
- the impact of international organizations and institutions.

Three main trends in international logistics analysis can be distinguished in the literature. The first of them, concerns research on the functioning of enterprises in the global economy and the creation of increasingly effective organizational forms that are a consequence of internationalization processes. The second is analyzes related to supply chains and networks as alternatives to lonely combat. The third is the analysis of phenomena from a macroeconomic point of view, in the context of conditions and mutual interactions between entities of the world economy. In the latter case, military logistics plays a special role. Military logistics is the

basic supporter responsible for sourcing and providing nearly every consumable item used by military forces worldwide. Military logistics operations are essential for armed forces to be able to support an ongoing deployment or respond effectively to emergent threats or natural disasters. For that reason, the military segment aims at accelerating logistics improvement, as the latter may enhance the support to the war fighter and tackle accordingly operational demands [10]. The field of military logistics has advanced along two dominant lines: the historical and the operational [11].

Currently, the largest entity implementing operations within international logistics is the North Atlantic Treaty Organization (NATO). NATO defines logistics as the science of planning and carrying out the movement and maintenance of forces including acquisition of services and the provision of medical and health support. Exercises are important tools through which the Alliance tests and validates its concepts, procedures, systems and tactics. They enable militaries and civilian organizations deployed in theatres of operation to test capabilities and practice working together efficiently in a demanding crisis situation. Alliance exercises are supported by NATO countries and, as appropriate, by partner countries, which provide national commitments in the form of troops, equipment or other types of support. Exercises are organized in both the military and civilian structures of the Alliance [12].

The aim of the article is to identify the concept of multinational exercises implemented under the NATO system, in the context of HNS and international logistics challenges in the field of displacement resulting from the exercise scenario, example ANACONDA-2016. The article is based on the analysis of literature and documents (normative acts dedicated to military and civilian spheres), case studies, and on observation of participants and interviews, and analysis of scientific and specialist publications.

2. MILITARY EXERCISES IN THE NATO SYSTEM

Military exercises are an important element of the functioning of the NATO system. They have been organized and run as part of the alliance since 1951. They create conditions for maintaining an appropriate level of combat readiness of allied countries. This creates opportunities for joint testing and evaluation of procedures and systems as well as tactics, not only in individual armies, but primarily in relation to the entire integrated system. Exercises allow to assess the level of integration and are an impulse to improve and create innovation. The cooperation of allied armies creates conditions to prove themselves in the conditions of simulations of war or crisis, also allows the exchange of experience, knowledge and ideas. This has a significant impact on increasing the level of interoperability, which in turn creates conditions for improving the defense system. Therefore, the participation of all member countries in this form of Alliance activity is an important element. According to the assumption that guides the first exercises, that NATO forces are not only a collection of national units, but that they form a coherent system. In 1953, about 100 exercises of various kinds were conducted by NATO commanders. The Alliance is striving for this level to be permanently maintained. In addition to NATO-organized exercises, the Alliance also participates in national exercises (**Table 1**).

Table 1 Exercises conducted in the NATO in 2015-2018 [Own elaboration based on NATO Annual Report 2015-2018]

Year	Number of conducted exercises by NATO	Number of NATO exercises associated with national exercises
2015	99	198
2016	107	139
2017	108	181
2018	104	188

Changes in the geopolitical situation, especially in security concepts, contribute to the intensification of activities improving defense systems, and thus result in the strengthening and development of the NATO

exercise system. Of course, the type, form, scope, duration, number of participants, and the topics of the exercises vary. From field exercises organized in individual countries to laboratory simulations. It is assumed that in the NATO system „the exercises are executed in three forms: a live exercise (LIVEX) in which forces actually participate; a command-post exercise (CPX), which is a headquarters exercise involving commanders and their staffs, and communications within and between participating headquarters; and an exercise study, which may take the form of a map exercise, a war game, a series of lectures, a discussion group or an operational analysis.” [13] Regardless of the form of exercise, one of their main assumptions is that NATO-led forces would be able to cooperate effectively despite differences in doctrine, language, structures, tactics and training. The more countries and troops are involved in individual exercises, the greater the chance that the NATO system will achieve the appropriate level of effectiveness, efficiency and interoperability.

A special dimension of modern military exercises is the cooperation of military organizations with the civil system. Although military activity is a separate organizational system within the organization of the state, the current situation forces it to cooperate with the civil system. The times of self-sufficiency of military systems, characteristic of post-war economies or the duties of providing military services during the war, are not adequate to the contemporary economic and political situation. Therefore, the conditions for cooperation between the army and the civil sphere are similar to market conditions. Which means the need to negotiate, care not only for effectiveness, but also for efficiency and appropriate quality. Cost analysis and implementation of market freedoms forces the military system, undertaking the effort of organizing and implementing military exercises, to enter the civil market under the conditions applicable to other entities participating in the market game. Military-civilian cooperation, in order to be optimal, must be based on best practices and the pursuit of obtaining the highest quality. Military exercises are also an important element for the civil system. Not only because of creating the conditions for the functioning of another group of entities that can become business partners, but also in the context of gaining experience and improving the quality of co-created systems and processes that can be used in times of crisis and war.

Conducting international military exercises requires the involvement not only of the military systems of the allied countries, but also the involvement of the civil system of the host country or countries, i.e. the host of the area where the exercises will take place. The main purpose of support for the host country is to ensure that allied forces can conduct their activities, mainly by creating opportunities and conditions for effective support for their activities on the territory of the member state that is supported. The main role of the host state support system is primarily to increase the efficiency of military operations by separating from its own potential forces and resources for the forces of the alliance residing on its territory.

3. HOST NATION SUPPRT (HNS) AS A PART OF NATO EXERCISES

The implementation of allied multinational exercises requires the involvement not only of the military systems of allied countries, but also the involvement of the non-military system of the host country or countries, i.e. the country in which the exercises will take place. Due to the complexity of this issue, it has become necessary to properly regulate the issue of support for the host country in the arrangement: North Atlantic Alliance - armed forces of individual countries and the host country.

HNS, as an area of activity also covering broadly understood international logistics, gives the opportunity, above all, to avoid potential problems arising from the need to carry out shipments and to secure, including logistical support of allied armed forces implementing projects in the host country. Therefore, it is an area of special attention in the implementation of NATO policy and tasks. In documents at international level [14] the host state support system (HNS) is defined as civil and military assistance provided by the host state in times of peace, crisis and during the war, allied armed forces and organizations that are deployed, carrying out a task, or moving through the territory of the host country. The basis for providing such assistance are agreements concluded between the relevant authorities of the host country and sending countries and / or NATO.

The main purpose of support for the host country is to ensure that allied forces can conduct their activities, mainly by creating opportunities and conditions for effective support for their activities on the territory of the member state that is supported [15]. The main role of the host state support system is primarily to increase the efficiency of military operations by separating from its own potential forces and resources for the forces of the alliance staying on its territory. It should be remembered that states are the parties and not the armed forces themselves. In fact, it also has, and perhaps above all, an impact on the civilian environment, which, based on separate documents at national level, largely safeguards the host state support process. It is an efficiently functioning military and non-military system, and more precisely coherent cooperation between them, is able to effectively implement and improve the national support system.

Thanks to the widely developed possibilities of supporting the sending state by the host state, it is possible to use the potential efficiently and rationally, including primarily the resources of the countries participating in the implementation of HNS. According to the general assumptions of HNS, this support covers not only the potential of the armed forces, but more importantly the unique and much greater potential of the non-military system. This solution brings great opportunities in the field of international cooperation at the level of both the army and the army, and above all the army and the civilian environment. The use of these opportunities in the process of planning, controlling and implementing possible flows of host nation (HN) resources in international relations as part of the support provided is now becoming the basis for creating an efficient and functional cooperation system. We are dealing here with both multidimensional internal relations and processes occurring in HN as well as those occurring at the international level. Due to the multinational dimension, these relationships and processes are primarily characterized by high diversity and a significant impact of the human factor on the implementation of tasks related to providing support. The essential, therefore representative of the HNS area, features include multiculturalism, and thus diversity and diversity resulting from the difference in cultures of countries participating in the support process. This manifests itself both at the individual and institutional level and applies to both understanding, defining, behaving as well as from the organizational point of view, conflicts and ways of solving them. Such a large number of variables requires entities participating in the HNS process to be very flexible, and thus organizational and cultural awareness. An equally important feature of this process are formal and legal differences at the national level, specific to each allied state participating in the implementation of HNS. They are of the greatest importance at the operational and tactical level, where they directly influence the process implementation.

The increasing involvement of non-military environment in the full formalization of the military system is also an important factor influencing the implementation of the process. It helps strengthen mutual relations and increase awareness of goals between the civil and military, national and international environments. The growing involvement of national and international organizations in the HNS process forces standardization and unification of formal and legal regulations constituting the basis for the implementation of tasks at the international level min. regarding the stay of allied forces in another country, customs, transport, compensation, environmental protection, health, etc. These processes require a certain flexibility in, among others, looking at management and protection of information, gathering resources and maintaining proper relations with both allied armed forces and civilian entities.

The space currently occupied by HNS in the implementation of NATO exercises and, consequently, in international logistics increases adequately to the potential of international cooperation within the Alliance. Knowledge, skills and experience gained from the civil and international zone allow for more and more rational management of space, as well as forces and resources of both sending nation (SN) and host nation (HN).

4. ANACONDA-2016 AS AN EXAMPLE OF NATO EXERCISES

The ANACONDA-2016 exercise is the largest exercise of the Polish and NATO Armed Forces implemented in a multinational system whose non-military system was an important element of support. This exercise was also a check of the solutions adopted at the NATO Summit in Newport, which took place on September 4-5,

2014 and was one of the most important meetings of the North Atlantic Council since Poland's accession to NATO. The Newport Summit launched a strategic reflection resulting in NATO returning to its roots, i.e. focusing allied operations and preparations on the core mission of collective defense. At the same time, it was stated that Poland, as well as other countries in the region, should be prepared to contribute to the implementation of these decisions, including as part of HNS [16]. Co-organization and participation of Poland in the multinational ANACONDA 2016 exercises have become a test of the implementation of these assumptions.

As part of the ANACONDA-2016 exercise, which was carried out from 07 to 17 June 2016 in various regions of Poland, which was attended by over 31,000 soldiers from 23 countries, including eighteen member countries of the alliance and four of the partner countries (Finland, Macedonia, Sweden, Ukraine). ANACONDA-2016 are defensive exercises that were conducted at Polish training grounds, including in Drawsko Pomorskie, Ustka, Świdwin, Żagań, Chełmno, Nowa Dęba, Orzysz and Wędrzyn. Army equipment included, among others, 3,000 vehicles, 105 aircraft and helicopters and 12 ships [17]. This exercise was accompanied by many parallel exercises that took place in Europe and Poland, including SWIFT RESPONSE, SABER STRIKE or BALTOPS. The ANACONDA-2016 exercises were the largest military exercises in Poland after 1989, which were primarily to demonstrate NATO's unity and solidarity as part of the alliance's capabilities and readiness to collectively defend the territory of the member states, and the Alliance's quick response to external threats while being test of capability for joint operations, displacement of forces [18]. For Poland, it was the largest undertaking implemented by the Polish Armed Forces, which was also a test of the country's ability as a NATO member to implement the tasks of the host country (HNS) and part of NATO's international logistics. As part of the support, the needs of approximately 31,000 soldiers and support for over 7,000 equipment were secured, including medical security, food, accommodation, material and technical security, ICT and displacement coordination.

5. THE SCOPE OF SHIPMENTS WITHIN THE TASKS OF ANACONDA-2016

According to information provided by General T. Tomaszycycki - Operational Commander of the Armed Forces of the Republic of Poland, co-supervising the ANACONDA-2016 exercises - in the scenario adopted for ANACONDA-2016, the acting side of the Red Alliance sought to master the Baltic Sea region, including physical occupation of Estonia, Latvia, Lithuania and selected regions of Poland [19]. The actions of the Alliance of Reds were to lead to the occupation of northern Poland by its troops, the establishment of power in the occupied territories and to the political and military isolation of Poland and the Baltic States on the international stage. The exercise scenario included, among others, a parachute landing near Toruń of the soldiers of the American 82nd Airborne Division from Fort Bragg. But not only them, in the initial phase of the exercise a drop of nearly 2,000 Polish, American and British paratroopers with howitzers, vehicles and supplies was carried out. As part of the exercise, 1130 paratroopers, including 230 British soldiers, landed to secure the areas east of the Vistula [20]. They arrived over 30 aircraft directly from Fort Bragg in the USA, as well as from Ramstein in Germany and from Cracow [21]. One of the elements of the scenario was also an air raid on the training ground in Wędrzyn by over 30 helicopters. The core of the shock forces involved in this episode were AH-64D Apache helicopters from the 12th US Air Force Combat Brigade, transferred to Poland for the time of the NATO war training as part of the BRILLIANT JUMP [22]. Deliveries of equipment and people are of particular importance for the implementation of combat operations, which is why during ANACONDA-2016 exercises, deliveries were made, among others, with American C-5A Galaxy cargo planes, which landed in Poland even at civil airports carrying equipment and ammunition, which Americans they sent 5,000 tons to Poland.

Implementing the scenario assumptions on the Vistula, near Chełmno, German and American troops were to build a crossing from M3 and IRB bridges, intended to cross, among others, the 2nd Cavalry Regiment. It was assumed that American and Polish troops would capture the main bridge of Toruń, thanks to which allied

troops would be able to cross the river. The British task was, among others, to overcome the river through a crossing built by Polish sappers in Biała Góra. A drop in equipment and supplies from the air was also planned at the training ground in Drawsko, where armored and mechanized troops trained. For the first time, territorial defense forces, whose task was to protect the infrastructure and the crossing of troops near Toruń, were also involved in such maneuvers.

The marine component of the exercises included a dozen or so units from both the 3 Ship Flotilla from Gdynia and Świnoujście's 8 Coastal Defense Flotilla. Among them were, inter alia, the ORP rocket frigate "Gen. T. Kościuszko", a corvette for combating submarines ORP "Kaszub", two OORP transport mine-mine ships "Toruń" and "Gniezno" and four minesweepers. Throughout the whole exercise of enemy force represented the submarine ORP "Kondor", while the landing in Ustka while "red", or Mondy, also joined transport-mine units [23]. Forces of the "blue", i.e. Wisland, fought a simulated fight with a real submarine, but also with the enemy's virtual units. They fought off aerial attacks and carried out rescue operations. On the list of tasks was also putting own mine farms and removing mines left by "red".

The special nature of ANACONDA-2016 also consisted in the fact that its participants came to Poland using all possible forms of transport: road, rail, sea and air. For the first time on parachutes to Poland, in a few throws, more than 2,000 parachutists arrived during the exercise. Also, for the first time during the exercises, a direct involvement of civil infrastructure was assumed. In Mielec Drawski, chemical soldiers carried out the liquidation of the contamination at the school there [17].

As part of the material subsystem, the main effort was focused on securing the exercising sub-units in classes I and III. In class I, the maximum condition of people fed during the exercise is over 17,000. people and a total of about 927 tons were spent securing almost 350,000 daily rations in the form of cooked meals and dry food rations. The vast majority of nutrition services (almost 80 %) were carried out by forces and means of military economic departments, and only slightly more than 20 % by the own potential of operational units based on food supply means (including fresh food) provided by Military Economic Departments. On the other hand, in the case of hedging in class III, consumption and consequently fuel and fuel dispensing increased in line with the implementation of the exercise plan. The highest amount of aviation fuel was used (81 %) and the lowest amount of car gasoline (0.4 %). In total, over 4,200,000 kg of fuel was used during the exercises.

In the area of technical support, the focus was primarily on: separation and maintenance of technical subsystem forces and resources in readiness to provide assistance to damaged vehicles during displacement, assistance in damaged servicing and separation of additional vehicles and equipment. A total of 251 vehicles from military units were allocated for the reported needs.

In the field of transport and movement of troops, the main effort was focused mainly on the coordination of air, sea, road and rail transport throughout the country. As part of these activities, 768 permits for road journeys were issued, 51 allied rail transports, 52 air transports and 9 sea transports secured. Cooperation with customs services and the Border Guard was of particular importance, especially when securing the arrival of US troops directly to the training grounds, at the training ground in Toruń.

A great support confirming the necessity of increasing involvement of the non-military system was the participation and involvement of the Police, Border Guard or Customs Service and local administration authorities in the implementation of individual elements of the exercise, among others, regarding the security of military movements on public roads, areas of stationing troops, equipment shows, etc.

6. CONCLUSION

The organization and implementation of multinational military exercises is an important and significant element of the operation of the NATO system, while being a huge challenge in the sphere of logistics, technical and formal-legal, due to the need to cooperate with the civil sphere. Conducting about 100 different types of exercises per year and participating in the growing number of national exercises is a great challenge for the

command, but also for individual NATO members. However, without these exercises, both the effectiveness, efficiency and interoperability of the system would be at a much lower level, and you can even risk the statement that in practice it would not exist at all. An important element of this activity is the involvement and use of the host country's conditions in which the exercises are carried out. Without the support of the civil system, the implementation of exercises in modern geopolitical conditions would not be possible. As the ANACONDA-2016 example shows, multinational exercises are also a great technical and logistical challenge related to the appropriate location and displacement of troops (people and equipment) and the need to properly secure these activities. Without civil-military cooperation and coordination, especially in the sphere of international logistics, the implementation of this challenge would fail. For cooperation of so many nations to be possible and effective, it is necessary to use international logistics, especially dedicated organization and implementation of shipments both between countries and within the host countries. It should be remembered that thanks to the implementation of the exercises it is possible to improve the technique, procedures, as well as the relations between the entities participating in them and supporting them. This is an important element in creating an effective system of international and national security.

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