

ISSN: 2450-6869

eISSN: 2719-6763

No. 16, 2023

DEFENCE SCIENCE REVIEW

<http://www.journalssystem.com/pno/>

[DOI: 10.37055/pno/168409](https://doi.org/10.37055/pno/168409)

Experience gained by the Polish Military Contingent of IRAK in the field of logistic support and preparation of military equipment

Original article

Dominik Jerzy Piękoś¹, A-F

ORCID  0000-0002-9761-7669

A – Research concept and design, B – Collection and/or assembly of data, C – Data analysis and interpretation, D – Writing the article, E – Critical revision of the article, F – Final approval of article

¹ Military University of Technology in Warsaw, Poland

Received: 2023-05-19

Revised: 2023-06-10

Accepted: 2023-06-15

Final review: 2023-06-15

Peer review:

Double blind

Keywords:

technical subsystem, logistic support outside Poland, security of the Polish Armed Forces, military operation in Iraq

Abstract

Objectives: The aim of the article is to present the experience gained by the Polish Military Contingent in Iraq in the field of logistic support and preparation of military equipment. An additional goal is to present how the process of technical security of the Polish Armed Forces outside the country has evolved.

Methods: Theoretical research methods were used to author this article, e.g. analysis of specialist military literature and the empirical method - diagnostic survey, interview technique. Based on the observations of soldiers and military personnel, the basic elements of technical protection and preparation of military equipment for a military mission were presented.

Results: The analysis of the collected information allowed to identify and characterize the experience gained by the Polish Military Contingent in Iraq in the field of logistics support and preparation of military equipment. The article presents the types of used equipment, which has undergone continuous adaptation and modifications.

Conclusions: A meticulously organized and functioning technical subsystem determines the proper functioning of military units. The main task of the technical subsystem is to meet the needs of the Polish Armed Forces in times of peace, crisis and war by providing the appropriate amount of military equipment with a maintenance base, as well as providing repair services in the right place and time. On the other hand, in the training process, the technical subsystem prepares logistic units for technical protection in order to ensure the continuity of operations by military subunits.

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 License

Corresponding author: M.Sc., eng. Dominik Piękoś - platoon commander in the Military University of Technology. His research interests include military security and the impact of transport on logistics security, Military University of Technology, ul. Kaliskiego 2, 00-908 Warsaw, Poland; email: dominik.piekos@wat.edu.pl

Introduction

The Armed Forces of the Republic of Poland conduct operations in times of peace, crisis and war. Tasks faced by military logistics are strictly dependent on the needs of the Armed Forces. One of the elements of the functional logistics system is the technical subsystem, which is composed of logistics units intended for planning and securing operational needs and providing specialized repair services. A meticulously organized technical subsystem is a guarantee of proper military security of a particular country. The exploitation of military equipment turned out to be quite a challenge. Polish armament and equipment were adapted to work in different climatic conditions. Logistics in Iraq functioned in an overly complex environment of several types of support providers and recipients.

In Iraq, a completely new challenge turned out to be the use of a civilian contractor for the implementation of selected logistics security tasks, which allowed to supplement the logistics potential from non-military sources. The presented information shows how big an undertaking the logistical support in Iraq was. One of the more difficult areas was the technical security and operation of military equipment. So, there were a lot of problems that were solved or discussed.

The aim of the article is to present the experience gained by the Polish IRAK military contingent in the field of logistic support and preparation of military equipment. The research problem is: What problems related to logistic security occurred in the military operation in Iraq.

In creating this article, various theoretical research methods were used, such as literature analysis, synthesis, induction and deduction. In addition, a diagnostic survey using the interview technique was used. The research included observations of soldiers and military personnel, which allowed for the presentation of key elements of technical protection and preparation of military equipment.

1. Theoretical aspects of logistic support in Poland and abroad and its importance in the process of logistic support of the Polish Military Contingent in Iraq

To manage the central-south sector of Iraq after the end of the war, the Multinational Division Central-South - MND C-S was established in 2003, commanded by the command of the Polish Military Contingent in Iraq. The main tasks of the division included (Jasiński, 2011, p. 50):

- convoys, patrols;
- disarmament of the population, clearing of mines;
- humanitarian relief;
- training of Iraqi security forces.

The exploitation of military equipment turned out to be quite a challenge. Polish armament and equipment were adapted to work in different climatic conditions.

A military operation on such a large scale had to be based on solid pillars of support. The logistics of the Multinational Division Centre-South differed in many respects from

standard logistics. Based on a multilateral agreement, the division's supply system was built on three independent and mutually complementary pillars: National Support (NSE), U.S. Army resources, and civilian contractors. The pillars of support are presented in the Fig 1.

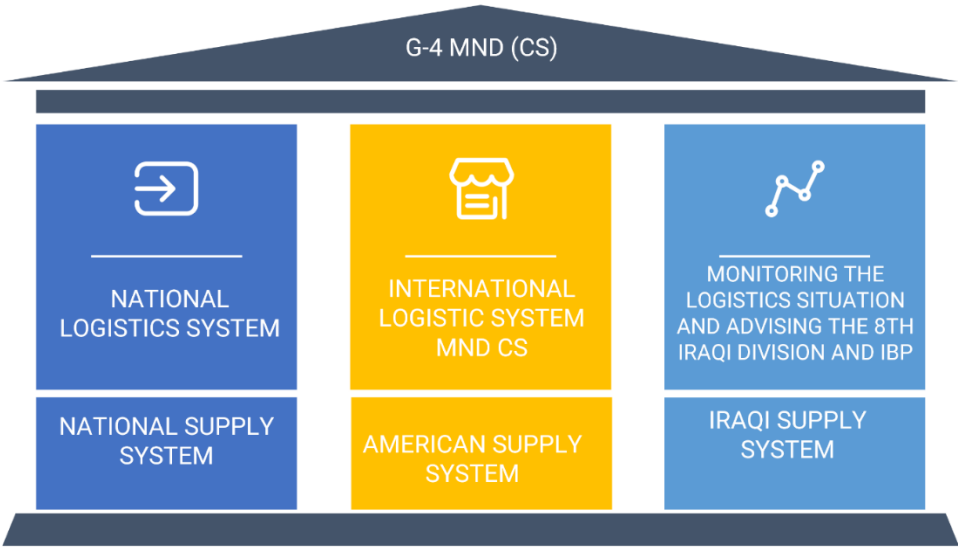


Fig. 1: Multinational Division Central-South - MND C-S support pillars.
Source: Own processing.

Logistics in Iraq functioned in a complex environment of several types of support providers and recipients. In all these areas, it was necessary to master the procedures of the US Army and know its supply system, which operates based on ten material classes, unlike in Poland (Pawlisiak, 2019, p. 108-116).

Building the logistic system of the 8th Division of the Iraqi Army and providing support during the operation to all Iraqi Security Forces conducting tasks in responsibility of the multinational division was a major challenge. The G4 element played an especially key role. This staff element was responsible for the planning of securing the activities of the multinational division in terms of logistics. In addition, G4 supported the Iraqi Security Forces, at the same time being an element coordinating the logistic security of the contingent.

It should be emphasized that the effective management of logistic support for troops in combat depends on the efficiency of the authorities responsible for this field and their active involvement in the process of planning combat operations. A key factor determining the choice of logistic security management procedures is the time available for planning and organizing activities (Kurasiński, 2014, p. 203).

2. Technical security outside Poland and its importance in the process of logistics security

The logistical preparation of the military operation in Iraq would not have been possible without the support of the US Armed Forces. The Acquisition and Mutual Services Agreement (so-called ACSA) concluded between the Ministry of National Defence of the Republic of Poland and the Department of Defence of the United States of America of

November 22, 1996, with amendments of July 11, 2003, proved to be important in the preparation of the MND CS logistics support concept, two agreements:

- Technical Agreement (TA) between the US Department of Defence and the Ministry of National Defence on the coordination of logistical support for the Polish-led Multinational Division Mid-South in Iraq of July 21, 2003;
- Implementing Memorandum of Understanding on Logistics Assistance in Operation Iraqi Freedom between the US Central Command and the General Staff of the Polish Army of January 16, 2004.

It was the details regarding the financing of the Multinational Division Central-South specified in these documents, as well as the areas of support provided free of charge by the US Armed Forces, which determined the success and Poland's taking responsibility for managing the multinational division in Iraq. The division of responsibilities is very illustrated in the Fig. 2.

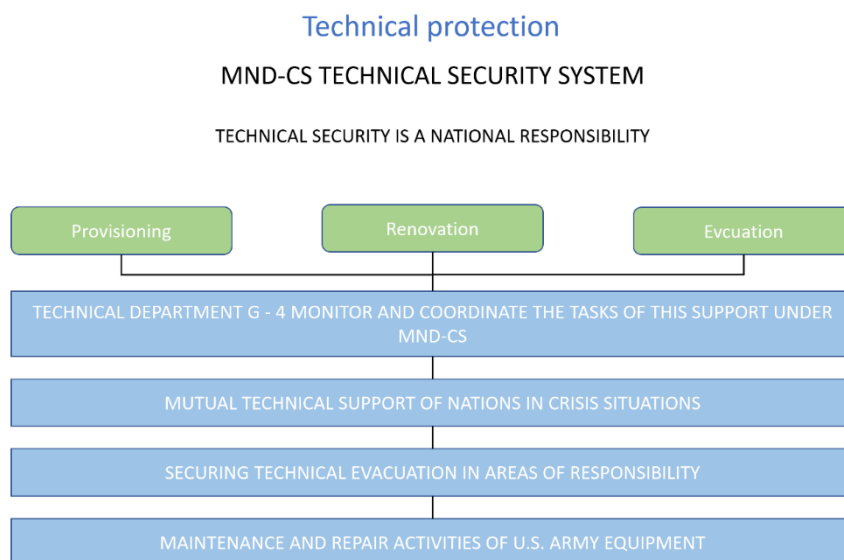


Fig. 2: Schematic of Multinational Division Central-South technical security system.
Source: Own processing.

Technical security turned out to be quite a challenge. The most important tasks included:

- coordinating the technical support plans of the Multinational Division Central-South units;
- monitoring and evaluation of logistic orders and reports in the field of technical security;
- prioritization of equipment operation;
- setting renovation and evacuation priorities;
- keeping records of military equipment of the division;
- sending reports in the field of technical security.

Looking deeper, the main element responsible for technical security was the repair platoon (Fig. 3.).

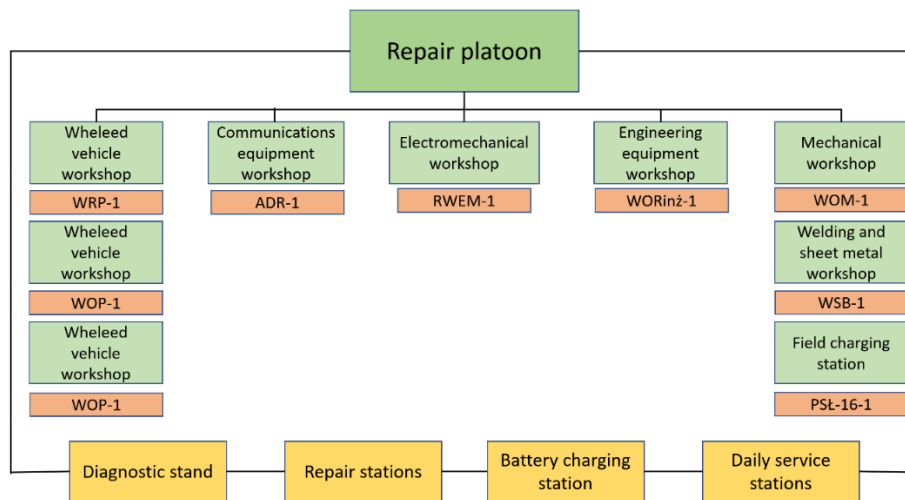


Fig. 3: Schematic of repair platoon.
Source: Own processing.

The Fig. 2 illustrates the tasks that were conducted in the field of operation of military equipment. In addition, operational processes were shown and the equipment responsible for technical protection was given.

In the Armed Forces of the Republic of Poland there was and still is a deficit of means of technical support for the troops. This aspect applies to most of the world's armies, so it is constantly improving. In Iraq, a completely new challenge turned out to be the use of a civilian contractor for the implementation of selected logistics security tasks, which allowed to supplement the logistics potential from non-military sources.

3. Preparation of logistic units and subunits for technical security, technical problems and modifications of military equipment

The presented information shows how big an undertaking it was to secure the logistics of the contingent in Iraq. One of the more difficult areas was the technical security and operation of military equipment. So, there were a lot of problems that were solved or discussed. This exceedingly difficult operation confirmed our deficiencies in many areas, which were also of significant importance in the context of logistical support for our forces assigned to NATO. However, lessons should be learned from these actions and the problems should be looked at holistically in the future. Therefore, conclusions from these problems should be edited and presented. The author focused on technical protection and operation, because considering the entire logistics system of the Polish Military Contingent in Iraq would require a broader study. In addition, the aspect of the problems that required the greatest changes and modernization was selected.

It is possible to distinguish several basic groups of problems with military equipment during the operation and Iraq, and ways to solve them. Belong to them:

- honker issues and customization;
- modernization of Honker - Skorpion;
- problems with Star 266 and 944 and their adjustment;
- modernization of Old 944 – Hyena;
- problems with helicopters;
- modernization of BRDM-2 Szakal;
- problems with HMMWV and model 998;
- imperfection of armament and individual equipment of soldiers.

Due to the large amount of data being processed, the author decided to describe only some of the problems presented above.

The biggest problems with operation in Iraq occurred with Polish Honkers. The Honker is a mid-range off-road vehicle of a passenger and cargo character, produced by the Polish company FSR in the years 1988 - 1997 as Tarpan Honker. Honker cars have been used in the Polish Army since 1990, while in 2009 their number in the army reached almost 2,500 (Wortak, 2015, p. 56-61). The Fig. 4. describes the honker from the first operations in Iraq.



Fig. 4: Honker original version
 Source: <https://polska-zbrojna.pl> [access: 22.03.2023]

Honkers were used for patrolling and were the same as those bought in Poland. That is why the soldiers retrofitted the cars with metal sheets and armour plates. Out of concern for safety, the soldiers reinforced the sides of the cars with sandbags and bulletproof vests. At that time, design work on a latest version of the patrol car was underway in Poland. In the first operations in Iraq, the honker suffered from the following problems:

- weak armour;
- weak bumpers;
- unresistant door handles;
- no rod cutters;
- insufficient masking;
- poor resistance to IEDs;

- burning seats;
- inappropriate filters.

Therefore, it was necessary to adapt the honker to patrol tasks. A version adapted to the prevailing conditions in Iraq is presented in the Fig. 5.



Fig. 5: Honker customized version.
Source: <https://polska-zbrojna.pl> [access: 22.03.2023]

The adaptation of the car consisted, among other things, in installing a base for mounting a machine gun - 7.62 CP. Landing benches were made in the middle of the vehicle and the landing was reinforced with 5 mm sheet metal. There were also knives for steel rods developed by the opponent. Such rods were often deployed by the enemy to injure the crew of the vehicle. Knives made it possible to cut such a wire. In addition, due to heavy dust and a different natural environment, more frequent service periods began to be conducted. The frequency of changing the air and oil filters has been changed. In addition, the soldiers mounted tires on the bumpers for easier ramming of enemy obstacles. Other seats were also installed.

However, these changes were not enough. Soldiers often performed them on their own, out of concern for their safety. So, a thorough modernization of the honker to the SKORPION version was made. Changes included:

- installation of a rotating base for mounting a machine gun 7.62 PK;
- lining the floor of the passenger compartment with anti-splinter lining;
- changing the position of the rear seats;
- windshield mesh cover for protection;
- longer external steps along both sides of the vehicle;
- the possibility of partial or complete disassembly of the door;
- easily detachable canvas seat belts.



Figure 6: Modernization of the honker to the scorpion version
Source: www.wikiwand.com/pl [access: 21.03.2023]

Several dozen pieces of the Skorpion model were produced. In 2007, the Polish Army used ninety units (Mulrzyński, 2009, p. 45). However, the Skorpion had low stability due to the load and lack of side covers on the turntable and at the rear. The driver's head was not sufficiently protected by shields.

In Iraq, Polish soldiers used BRDM 2 vehicles. The vehicle was developed in the Design Office of Factory GAZ in 1962. Its serial production was launched in 1963. It was used in over forty-five countries and many military missions. Due to problems like those related to Honker and Star, the car was modernized to the BRDM 2 Szakal version. It is worth adding that it was the Polish Military Contingent in Iraq that contributed to the introduction of modernization. Modernization included:

- replacement of the 14.5 mm KPWT rifle with the 12.7 mm NSW rifle,
- the use of a passive day-night sight,
- introduction of passive observation devices for the commander and driver,
- installation of air conditioning in the combat compartment,
- the use of an engine cooling system with increased efficiency,
- application of the FONET internal communication system,
- equipped with a RRC 9500 digital radio station and two portable radio stations,
- - painting in desert camouflage.

The modernized version of BRDM 2 is shown in the Fig. 7.



Figure 7: Modernization BRDM-2 Szakal
Source: <https://autokult.pl> [access: 26.03.2023]

The above-described problems with technical protection and operation are not all difficulties occurring in military equipment. In addition, the most common damages were to electrical systems: starters, installation cables, batteries, as well as elements of the braking or pneumatic systems. Due to the extremely elevated temperatures, frequent tire cracking and tire tread peeling were noticed. It was decided that the inter-service standards were cut in half. The damage was caused by the lack of experience in operating the equipment in the conditions of the Iraqi climate. In addition, due to the relatively brief time, it was not possible to fully prepare the technical equipment before leaving for the mission. The significantly higher intensity of equipment uses than in Poland was also not considered. This exceedingly difficult operation confirmed deficiencies in many areas, which are also of significant importance in the context of logistical support for the forces assigned to NATO.

In addition to the described problems with means of transport, there were other logistic problems related to the armament and individual equipment of the soldier. Due to the much higher air temperatures, long guns have been observed to heat up. This reduced the weapon's rate of fire and caused more frequent jamming. However, the greatest imperfections concerned the WIST military pistol. The temperature had a strong effect on the shoes. The shoes often broke after a month of use.

It is worth noting that Polish soldiers had about 2,300 Beryl carbines, but only 120 of them had night vision devices. New to the arsenal were the 7.62-millimeter TRG-22 sniper rifles. The Beryl carbine was of the old type. Initially, it did not have a front grip and a rail for attaching additional equipment. It had a metal opaque magazine and a traditional sling, without the tritium illuminated sights. The amount and efficiency of optical equipment for night operations has been improved. Only after a long wait did laser sights for weapons appear.

Initially, no significant engineering and sapper operations were planned, however, the importance of engineering barriers was noticed, which is why the Bożena 3 sapper robots appeared. Moreover, the mission in Iraq showed a significant deficit of mortars and showed

how important light mortars are. In the first rotation, Polish soldiers in Iraq did not have any mortars.

Zeus-LONS (Laser Ordnance Neutralization System) proved useful for destroying mines and IEDs. With its use, objects were destroyed from 25 to 300 m. The power supply allowed for 2,000 shots per day. In March 2005, the Zeus system was transported to Iraq. A higher power laser was used in it, allowing to reduce the time needed to destroy the charge to an average of 30 seconds. Its main purpose was to protect the moving columns.

Initially, in terms of ICT, you must rely on what was obtained from the USA. They ensured operational communication within the division and with the command. Polish soldiers had only three satellite phones (the most important people) and ten ordinary laptops. Unfortunately, it was all the electronics that was supposed to ensure communication in the first phase of the functioning of the headquarters of the tactical union.

There was also a lack of computers, for which Polish soldiers - as division commanders - began to turn to cooperating countries. A major change was the appearance of 150 working computers that were handed over to the multinational division. However, at that time a more favourable solution was expected, because it was still too small amount of equipment necessary to maintain the continuity of command.

In addition, after the first changes in Iraq, an idea for a modular command system appeared. In Iraq, automated command systems analysed and assessed the operating environment. Geographical data available on the servers enabled the information preparation of the operating area in a much shorter time than with the use of classic maps and book publications. Thanks to computer-aided information processes, the distribution of maps and other products of the war geography team (e.g. special maps) was conducted on an ongoing basis, in the course of operations, according to the needs of users. The threat assessment conducted based on the collected information resources was conducted faster and more effectively. Lists of people wanted and suspected of collaborating with the rebels have been published.

However, a significant problem related to ensuring the safety of the soldier concerned the small number of sanitary stretchers. If a soldier was injured, he was taken away from the scene of the accident together with a stretcher. The remaining soldiers were left without evacuation equipment. Therefore, in later changes, medical equipment was significantly added.

Therefore, a particularly costly, as shown by the data presented by me, but at the same time a necessary capability was the provision of logistical support. Looking more broadly, it was the transport of soldiers, securing technical equipment and armaments, and proper operation that caused the most problems.

Conclusions

The technical subsystem is one of the elements of the logistics system of the Polish Armed Forces. The exceedingly difficult operation in Iraq confirmed the significant importance of logistical support and the technical subsystem, deficiencies in many areas were

indicated, which are also of significant importance in the context of logistical support for the forces assigned to NATO. A particularly necessary capability is to provide logistical support, and from a broader perspective, to ensure the transport of soldiers, technical protection of equipment and armaments, and proper operation. A completely new challenge was the use of a civilian contractor for the implementation of selected logistics security tasks, which allowed to supplement the logistics potential from non-military sources. The above-described problems with technical protection and operation are not all difficulties occurring in military equipment. The damage was caused by the lack of experience in operating the equipment in the conditions of the Iraqi climate. In addition, due to the brief time, it was not possible to fully prepare the technical equipment before leaving for the mission. The significantly higher intensity of equipment uses than in Poland was also not considered. However, the experiences described in this article may be important, valuable and necessary for the future preparation of troops. The operations outside the country require a lot of effort and logistics.

References

- Brzeziński, M. (2005). *Logistyka wojskowa*, Warszawa: Bellona.
- Cegła, J. (2005). Doświadczenia z eksploatacji uzbrojenia i sprzętu wojskowego w PKW Irak, Seminarium WITU, kwiecień 2015, Warszawa: Wojskowy Instytut Techniczny Uzbrojenia.
- Czekaj, F. (2006). Organizacja systemu zabezpieczenia logistycznego podczas przygotowania PKW do udziału w działaniach stabilizacyjnych w Iraku, *Zeszyty Naukowe WSOWLqd – 2006*, nr spec., 43-48.
- Garstka, J. (2012). Modernizacja techniczna amerykańskiej armii w 2012 roku, *Przegląd wojsk lądowych*, 03(60), grudzień 2012, 112-115.
- Jasiński, G. (2011). Kronika Wojska Polskiego; Polski Kontyngent Wojskowy w Iraku 2003-2008, Ministerstwo Obrony Narodowej. Departament Wychowania i Promocji Obronności, Warszawa: Fundacja Polonia Militaris.
- Kaliciak, G. (2015). Karbala. Raport z obrony City Hall, Linie frontu, Czarne, 112-148.
- Kurasiński Z. (2014). *Kompendium logistyka wojskowego*, Warszawa: Wojskowa Akademia Techniczna.
- Modrzewski, J. (2009). Niektóre doświadczenia z technicznych problemów polskich kontyngentów wojskowych w Iraku i Afganistanie, *Problemy Techniki Uzbrojenia*, Warszawa: Wojskowy Instytut Techniczny Uzbrojenia.
- Multarzyński, M. (2009). Następca Honkera, czyli kolejny trudny wybór, *Nowa Technika Wojskowa* nr 4/2009, 97-111.
- Pawlisiak, M. (2016). System logistyczny determinantem bezpieczeństwa Sił Zbrojnych Rzeczypospolitej Polskiej, Warsaw: Wojskowa Akademia Techniczna.
- Politowski, B. (2011). Od bukłaka do Rosomaka, *Polska Zbrojna*, 14/2011, 13–18.
- Wortak, J. (2015), Mustang – pierwszy z serii, *Nowa Technika Wojskowa*, 9/2015, 56–61.

Electronic sources

<https://autokult.pl> [access: 16.03.2023]

<https://www.polska-zbrojna.pl> [access: 12.03.2023]

www.wikiwand.com/pl [access: 23.03.2023]

<https://www.law.cornell.edu/uscode/text/38/101>[access: 22.03.2023]