

Research Article

# The Logistical Functions of Transport and Supply in Peace Operations

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## Abstract

The logistical functions of transportation and supply play a critical role in UN peacekeeping operations, ensuring mission operability and the achievement of objectives in complex scenarios. This article examines these functions within the United Nations Interim Force in Lebanon (UNIFIL) and the United Nations Mission for the Referendum in Western Sahara (MINURSO), highlighting Brazil's participation and the challenges encountered. In UNIFIL, transportation logistics, coordinated by a Brazilian officer in the Movements and Transport Subsection of the East Sector, involves managing land and air movements under strict security and authorization protocols, such as detailed forms and classifications (service or non-service, convoy or single). Although distances are typically under 100km, precision is essential to prevent incidents in sensitive areas. In MINURSO, the supply function, performed by Brazilian military personnel as Rations Officers between 2021 and 2022, focused on managing food, water, and rations in a desert environment, integrating civilian and military components within the Joint Logistics Operations Center (JLOC). Amid the COVID-19 pandemic and a ceasefire breakdown, over 200 tons of food and 50,000 water packages were supplied, predominantly via air transport, overcoming operational constraints. Brazil stands out in both missions for the competence of its military personnel, reinforcing its reputation as a reliable UN partner. The study concludes that robust logistical systems, combined with professional expertise and adaptability, are vital for the success of peacekeeping operations, ensuring continuity of actions and support for local communities in adverse contexts. Investing in logistics and training is thus essential to address the challenges of these missions and promote global stability.

## Keywords

Peacekeeping Logistics, Transportation, Supply Chain, UNIFIL, MINURSO, United Nations

## 1. Introduction

In UN peacekeeping operations, the logistical functions of transport and supply are essential to ensure that missions are successful and that established objectives are achieved.

Transportation logistics involves coordinating vehicles and routes to move troops, equipment and supplies safely and efficiently within areas of operation [1].

Supply includes the acquisition, storage and distribution of

necessary items [2], such as food and water. These functions are crucial to keeping peacekeepers operational and able to respond quickly to emergency situations, as well as supporting local communities.

A well-structured logistics system ensures constant resources for peacekeeping forces, enabling peacekeeping, humanitarian aid and reconstruction. In addition, it contrib-

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utes to trust and cooperation with local communities, demonstrating the UN's ability to provide continuous and reliable support [3].

Brazil plays a prominent role in UN peacekeeping missions, especially in logistics. With extensive experience in complex operations, the Brazilian military coordinates transportation and supply in conflict areas, ensuring the safe delivery of essential resources. The professionalism and adaptability of the Brazilian military are internationally recognized, contributing to the success of peacekeeping missions and strengthening Brazil's reputation as a reliable partner.

## 2. The Logistics Transport Function at UNIFIL

The United Nations Interim Force in Lebanon (UNIFIL) was established in 1978 by the United Nations Security Council with the aim of confirming the withdrawal of Israeli forces from southern Lebanon, restoring international peace and security, and assisting the Lebanese in re-establishing

their authority in the region. Over the years, UNIFIL's mandate has expanded, especially after the 2006 conflict between Israel and Hezbollah, to include monitoring the ceasefire, coordinating the delivery of humanitarian aid, and supporting the Lebanese army in establishing a zone free of unauthorized weapons between the Litani River and the Blue Line, playing a crucial role in maintaining stability and security in that region [4].

UNIFIL headquarters is located in *Naqoura*. The area of operations stretches from the Blue Line in the south to the Litani River in the north and is divided into two sectors: East, with a headquarters in *Marjayoun*, and West, with a headquarters in *Shamaa*. The *Force Commander Reserve* is located centrally in *Burj Qallawiyah* to support both sectors as needed. UNIFIL also has a presence at Beirut airport and port to facilitate military rotations and embarkations, and *UNIFIL House* - Beirut, which supports the administrative and logistical requirements of the mission [4]. The deployment of troops is best seen in [Figure 1](#), which shows the entire UNIFIL Area of Operations.



Source: UN (UNIFIL). Accessed 27 February 2024.

**Figure 1.** UNIFIL Operations Area.

Currently, the Brazilian Army is present in the mission with seven soldiers, who carry out activities in the various

staff sections of the Spanish Brigade, established at the Miguel de Cervantes Military Base, responsible for the Eastern sector of the mission.

The Logistics Section (G4) of UNIFIL's Eastern Sector is composed of 10 military personnel and is divided into a National Logistics subsection, a United Nations Logistics subsection and a Movements and Transport subsection, headed by a Senior Officer of the Spanish Army, who supervises, coordinates and controls all logistical activities. Within the G4 structure, the Movements and Transport Subsection (G4-TPT) is headed by an Intermediate Officer of the Brazilian Army, responsible for the control, coordination and authorization of the sector's air and land movements and transport.

UNIFIL operational standards [5] state that movements are authorized according to the situation and alert status of the mission, or a task order issued by UNIFIL or the sector commander. Units must take into account information on movement restrictions that are provided by the Intelligence Section (G2), Operations Section (G3) or the Logistics Section (G4). Therefore, all logistics and personnel movements require the authorization of the Head of the Logistics Section and are controlled by the Movements and Transport subsection.

Movements are classified as either service or non-service. Service movements are essential for the accomplishment of the mission and are in the interest of the United Nations, while non-service movements are for the welfare or national interest. Movement requests, made on appropriate forms, include details such as the name of the convoy leader, means of communication, dates, vehicle registration numbers, routes, intermediate points, distance, time required and list of passengers. This information is crucial to ensuring the safety and control of movements by the Movements and Transport subsection.

Taking the Miguel de Cervantes Base as the starting point, access to the most distant cities does not exceed 100 kilometers, which are covered in an average of 2 and a half hours. On average, the distances covered are much shorter, however, the operational characteristics of the location require that even in the shortest movements, maximum control and safety be employed in order to avoid possible incidents. To this end, the Units strictly follow the routes authorized and recognized by UNIFIL in order to meet the trafficability and safety requirements in their area of responsibility.

The movements are also divided by the number of vehicles that will carry out the transport. A convoy is a movement of more than seven vehicles, while a single is a movement of seven or fewer vehicles, both excluding escort and security vehicles. Such movements can also be classified into three types: outside the area of operations (outside), through the East and West sectors (through) and inside the East Sector

(inside).

Movements to destinations outside the UNIFIL area of responsibility, for administrative or logistical purposes, are submitted to the G4-TPT at least three days in advance, and must include the Force Commander Approval, a document required for movements outside the Area of Responsibility (except for Beirut Airport, Beirut Port and Saida Hospital), and the waiver, a document required for non-UNIFIL personnel (military and civilian) to be able to transit within the UNIFIL Area of Operations.

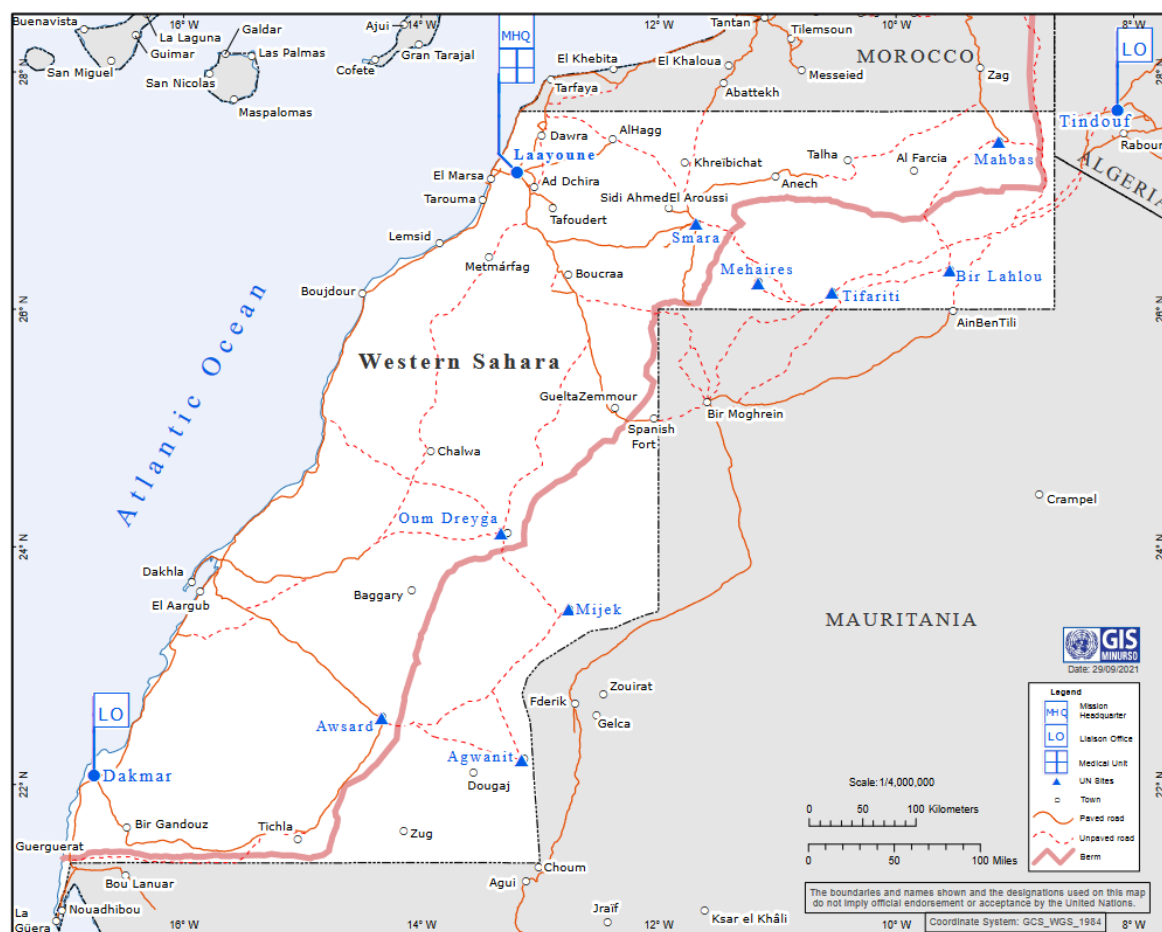
Each movement is controlled by the respective Unit Operations Center, using the personnel and material control procedure called waybill. The movement leader is responsible for issuing the document, at which time the departure time, estimated arrival time, number and list of passengers, purpose, movement leader, destination and vehicle license plate are verified. Upon completion of the mission, the leader informs the G4-TPT.

The above-mentioned procedures are examples of activities carried out and controlled daily by the head of the Movement and Transport subsection, which, conducted within the high quality standards required by the United Nations, guarantee the safety and effective fulfillment of UNIFIL's transport missions.

### 3. The Supply Logistics Function at MINURSO

The United Nations Mission for the Referendum in Western Sahara (MINURSO) was established in 1991 by the United Nations Security Council to monitor the ceasefire between Morocco and the Polisario Front and organize a referendum to determine the final status of the territory [6]. MINURSO plays a crucial role in supervising compliance with the ceasefire conditions, facilitating confidence-building measures between the parties, and promoting security and stability in the region. Furthermore, the mission supports UN efforts to achieve a peaceful and lasting solution to the conflict in Western Sahara [7].

Considered a standard peacekeeping mission, it is composed of around 200 unarmed military observers, distributed in nine detachments called Team Sites, in addition to the MINURSO Headquarters in Laayoune (capital of Western Sahara), carrying out staff activities [7], as shown in Figure 2. In addition, there is a medical detachment from Bangladesh, two liaison offices - one in Dakmar, near the border with Mauritania, and another in Tindouf (Algeria) - and approximately 150 civilians, including UN career staff and local contracted personnel, responsible for administrative, logistical and communications support to the military component.



Source: UN (MINURSO). Accessed on May 12, 2024.

**Figure 2.** MINURSO Area of Operations.

Brazil has nine military personnel deployed in Western Sahara, five from the Brazilian Army, two from the Navy and two from the Air Force. Since a large part of the mission's general staff is staffed by military personnel in military observer positions, and considering the representative balance of the countries present in the mission, MINURSO allocates two vacancies to Brazilians to carry out their activities at the General Headquarters.

In the mission's logistics structure, the elements are grouped under the civil and military components. The civil component performs strategic functions through Mission Support, which is responsible for the service, supply chain and logistics operations departments. These departments include, for example, the logistics support, joint logistics operations, communications, transport, engineering and aviation sections. The operational and tactical levels are the responsibility of the military component, through the Senior Military Logistics Advisor (SMLA), who also serves as U-4, to the Logistics Liaison Officers (Supply & Transport, Engineering & Project, and Rations Officer) and the logistics sections of the detachments, the G-4, which according to Ferreira [8], are considered the "end of the line" of the mission.

The integration of civilians and military personnel in MINURSO, supporting isolated detachments in the desert, made the logistics system unique and efficient. Without a military logistics unit, the civilian component managed all logistical needs, including rations, supplies, fuel, contracts, and infrastructure. To improve efficiency, MINURSO brought together civilians from the Mission Support Center and military personnel from the U-4, creating the Joint Logistics Operations Center (JLOC). This integration was critical to the success of the mission in inhospitable locations such as Western Sahara [9].

Between 2021 and 2022, the Rations Officer role was sequentially performed by three Brazilian military personnel, all with experience in the logistics area. The Rations Officer is responsible for guiding and coordinating the work of the Food Officers deployed in the detachments, as well as liaising them with the Rations Unit, a section that deals directly with the organization and scheduling of logistics for the distribution of food, combat rations and bottled water [10]. He operates directly under the command of the SMLA, dealing with all issues related to the provision of rations and maintaining contact with the Mission Support Centre. Among his main tasks, the following stand out:

1. coordinate the food requisition process carried out by the detachments and forward them to the Rations Unit;
2. conduct, preliminarily, the food inspection - qualitative and quantitative - together with Rations & Inspection at the contractor's warehouse;
3. monitor and inspect the shipment of supply cargo at Laayoune airport for detachments;
4. carry out daily recording of logistical reports related to the function, with the respective weekly and monthly consolidations;
5. provide regular training to Food Officers, with a practical focus;
6. conduct periodic inspections in the detachments with a view to improving sanitary conditions and identifying improvements, in addition to providing recommendations on food issues.

The period coincided with critical events, such as the COVID-19 pandemic and the breakdown of the ceasefire between the Royal Moroccan Army and the Polisario Front. Such events made the logistical scenario faced in that area of operations even more complex [11], requiring hard work from Brazilian military personnel in the role of Rations Officer to maintain the minimum subsistence conditions of the military observers deployed in the desert and, consequently, guarantee the mission's operational levels.

Despite the adversities faced, in 2021 alone, over 200 tons of food, more than 1,200 combat ration packages and approximately 50,000 packages (each consisting of six 1.5-liter bottles) of bottled drinking water were supplied. The delivery of these goods was predominantly conducted by air, as this mode of transport is the prevailing method at MINURSO. These numbers are not only impressive but also corroborate the logistical effort made, despite restrictions on flight hours and airspace opening, to maintain the operational mission.

## 4. Final Considerations

Logistics plays a fundamental role as a facilitator of operational actions in complex scenarios, ensuring the ability to effectively coordinate the transportation of resources, such as food, water and equipment. The logistics functions of transport and supply are crucial to overcome the challenges imposed by adverse environments and unstable conditions.

Well-planned and executed logistics not only ensures the continuity of operations, but also improves the efficiency and effectiveness of missions, enabling objectives to be met even in highly complex contexts. Therefore, investing in robust logistics systems and personnel training is essential for the success of operations in challenging situations such as peacekeeping missions.

Finally, the professional competence of UNIFIL and MINURSO logisticians, based on knowledge, skill and problem-solving, as well as the ability to act with flexibility, adaptability, modularity, elasticity, sustainability and interoperability, were and will always be vital for maintaining

peace anywhere in the world.

## Abbreviations

|         |                                                             |
|---------|-------------------------------------------------------------|
| MINURSO | United Nations Mission for the Referendum in Western Sahara |
| UNIFIL  | United Nations Interim Force in Lebanon                     |
| G4-TPT  | Movements and Transport Subsection                          |
| U-4     | Chief of Logistics Section                                  |
| G-4     | Logistics Staff at Team Site                                |

## Conflicts of Interest

The authors declare no conflicts of interest.

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