

Logistic Transportation in Force Interim of the Organization of United Nations in Lebanon

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Abstract: This article deals with the logistic transportation in the eastern sector of the United Nations Interim Force in Lebanon (UNIFIL). After an invasion of Israeli forces into Lebanon, the UN Security Council, in March 1978, established the United Nations Provisional Force in Lebanon (UNIFIL), forcing it to confirm the withdrawal of Israeli forces from Lebanon, restore peace and security, helping the Lebanese government to restore its effective authority in the area. The logistic transport function is responsible for all material and personnel handling in the mission area. The methodology was based on a quantitative analysis of the movements performed by the east sector in the years 2017 and 2018. At the end of the work, charts and tables were elaborated to perform the comparative analysis. The results show that there was an increase of 3.26% (48,700 km) in the distance traveled between the years of 2017 and 2018, in view of the tension escalation in the eastern sector of UNIFIL. From the foregoing, it is concluded that the transport logistics activity in the Eastern Sector of UNIFIL has great relevance for the success of the mission, requiring from the logisticians professional competence based on knowledge of the activity, on the ability to operate the logistical means and on the attitude to solve the problems.

Keywords: Transports, Ground Military Logistic, UNIFIL

1. Introduction

Usually, the term transport is used to designate commuting to work, school, leisure activities, shopping, the transfer of different packages and loads, and another range of similar phenomena of obvious importance in everyday life. The concern to develop means to make these displacements possible has existed since Antiquity, when men were already concerned with trade routes, with the march of armies, with the provision of water and other natural resources [12].

For Ballou [2] the mission of logistics is to provide the right product or service, in the right place and time, in the desired condition at the lowest possible cost. Another definition by the same author is that logistics is the branch of military science related to looking for, keeping and transporting material, personnel and facilities [1].

According to the Colombian Institute of Automation and Commercial Coding, logistics is the process of planning, controlling and managing the supply and distribution chain, from supplier to customer, with a focus on the network of values and Collaboration between actors in the logistics network internal and external [11].

By the definition of the Army General Staff (EME), land military logistics encompasses the set of activities related to the forecast and provision of resources and services necessary for the execution of the Armed Forces' missions. This activity has proven to be an important component of the Armed Forces' missions and has grown significantly in recent years [5]. The correct use of this activity, as well as the strategies used for its operation, constitute decisive factors for obtaining strategic advantages and combat power [3].

The requirements and findings mentioned raise the formulation of the following question: "How is the military transport logistics carried out in the Eastern Sector of the United Nations Interim Force in Lebanon (UNIFIL)?"

This study is relevant to the ground military doctrine, the purpose of quantitatively analyzing the logistical transports of a Multinational Brigade deployed in the East Sector of Lebanon, especially with regard to its learning and development of the activity of land military logistics [7].

In exploring this research, considerable importance is

added to military transport logistics. The Transport Officer will have a better use of the human resources that already exist in the entity, which will enable an improvement in the quality of the transport service and in the control of the movements of his Military Unit [8].

Next, a section on the theoretical framework will be presented.

2. Theoretical Framework

The logistical function refers to the set of activities that are performed, aiming at the displacement of human, material and animal resources by various means, at the appropriate time and to predetermined locations, in order to meet the needs of the Ground Force. Therefore, the transport logistics function is responsible for all material and personnel movement in the mission area [3].

According to Caruzzo [9], in order to determine the location of a military base, the decision must not only take into account the strategic and tactical aspects of the military transport system. The decision must also present a well-structured social, technical and political justification, in order to consider its local and global impacts on society [9].

The same author adds that the decision-making process in logistic systems is important for organizations. In these cases, the analysis can be a complex procedure that involves many different biases and interpretations of the decision. Applied to the transport or military defense sector, the choice in logistical aspects has an impact and, in many situations, can compromise a country's defense strategy, such as selecting a location for a new military base [9].

A study by Ramos [20] states that prerequisites for deploying a troop in an Area of Operations generally include the immediate availability of highly skilled, well-equipped personnel and reliable transportation with secure supply chains. Equipment must be found, rented or purchased. In possession of the equipment, it must be inspected and then loaded and transported to the mission areas [20].

Peace operations are conducted in dynamic environments, conditioned by principles, factors and variables that influence how they will be developed. The Capstone Doctrine consolidated other principles, such as the principles of Consent, Use of Force and Impartiality. Understanding these principles must be considered at the strategic, operational and tactical levels [4].

Another study by Ukpo [10] infers that with the increasing participation of developing nations in UN peacekeeping operations, the option of having troop-contributing nations provide their own transport poses a serious problem. This is because most developing nations do not have the means for such large scale troop movement over long distances, in addition to not having the experience [10].

The same author says that there is an extensive literature dealing with the legal, political and financial aspects of peacekeeping, but very little has been written about the logistical aspects of peacekeeping with the specific transport exam. The problem of logistics is well known and

appreciated, but concrete studies investigating the various aspects of the logistics system have not been completed [10].

The Brazilian Army's Manual of Peacekeeping Operations states that it is the transport logistics function that supports the contingent in customs clearance, together with the host government [6]. It authorizes the receipt of all types of cargo (resupplies or acquisitions). Furthermore, it mediates to organize the use of airports and ports in the host country or under the management of the UN itself [4].

Finally, the Manual reports that all UN transport and transport use is coordinated by the Movement Control Cell (MOVCON), which has the following missions: air observation, administrative transport, tactical transport, supply, liaison, support for contingent rotation, rescue, aeromedical evacuation and others [4].

Next, section 3 will present the methodological procedures.

3. Methodological Procedures

The conclusions of this study are carried out in an inductive way, attributing meanings and analyzing the phenomena, as this is a qualitative study [13].

It is understood that this research meets the characteristics of a "case study", for availability and convenience in exploring the peculiarities of a transport logistics section (G4-TPT) of a Multinational Brigade, located in the city of Marjayoun - Lebanon, as also, of a "documental research", as it is looking in the archives of the transport logistics section (G4-TPT), which is responsible for transport management in the Eastern Sector of UNIFIL, for answers to the problems raised.

The data collected during this research were of the secondary type, as classified by Gil [19], as they had already been, in some way, analyzed, such as: research reports, company reports, statistical tables, among others. Documents produced by the section such as Morning Uptade, Approval Lists for Daily Movements, SOP 15-14, official UNIFIL website and other documents generated by the transport logistics section may also be included.

Data were collected through documentary research carried out in the archives and computerized system of the logistics section (G4) of the Eastern Sector and in the Morning Uptades of the years 2017 and 2018. Two tables and two graphs were made from the analysis of data collected in the Morning Uptades, making a comparison between the quantities of movements in the years 2017 and 2018.

For the preparation of Table 2 - Total movements carried out in 2017, Table 3 - Total movements carried out in 2018, Graph 1 - Total movements in the Eastern Sector in 2017 and Graph 2 - Total movements in the East Sector in 2017, the data contained in 730 (seven hundred and thirty) Morning Uptade were used, which are tables presented to the Brigada Commander of the East Sector every morning containing all the movements of the Units

planned for the day.

To calculate the logistical estimate of the mileage of the movements, the distances to and from Beirut (200 km – OUTSIDES movements) were considered; round trip to Naqoura (160 km – THROUGH movements); return trip to Et Taibe (50 km – INSIDE movements), because they are the cities with the greatest logistical flow of transport.

Next, the results of the survey in section 4 will be presented.

4. Results

4.1. *The United Nations Interim Force in Lebanon (UNIFIL)*

After an invasion of Israeli forces into Lebanon, the UN Security Council, in March 1978, established the United Nations Provisional Force in Lebanon (UNIFIL), forcing it to confirm the withdrawal of Israeli forces from Lebanon, restore peace and security, helping the Lebanese government to restore its effective authority in the area [14].

In June 1982, Israel invaded Lebanon for the second time and subsequently established a security zone within the country, which remained until its withdrawal in 2000. In 1985, Israel partially withdrew its forces from Lebanon, but maintained control of Lebanon. an area in South Lebanon controlled by the Israeli Defense Forces (IDF) and the Lebanese Forces (LAF), the so-called “South Lebanon Army” (SLA) [17].

On April 17, 2000, the Israeli government notified the Secretary General that it would withdraw its forces from Lebanon by July 2000. From May 16, much earlier than anticipated, the Israel Defense Forces began to vacate their positions amidst the exchange of fire. On May 25, the government of Israel notified the Secretary General that Israel had redeployed its forces [17].

In preparation for the Israeli Defense Forces (IDF) withdrawal from Lebanon, the UN has identified the “withdrawal line” or “Blue Line” largely in line with Lebanon’s internationally recognized boundaries [17].

The United Nations established this line in June 2000 for the sole purpose of confirming the total withdrawal of the IDF from Lebanese territory. Blue Line does not in any way represent an international border and does not prejudice the future border regime between Lebanon and Israel. After the withdrawal of Israeli forces, UNIFIL’s main focus was “to restore international peace and security”.

On June 16, the secretary-general informed the UN Security Council that Israel had withdrawn its forces from Lebanon in accordance with the line identified by the United Nations. Following the withdrawal of the IDF from Lebanon, the Security Council passed resolution 1310 (27 July), where it “approved the understanding, mentioned in the Secretary General’s report of 20 July 2000, that UNIFIL will fully implement and function. throughout its Area of Operations and that the government of Lebanon will strengthen its presence in that area by deploying additional troops and

internal security forces.

A Lebanese security force of approximately 1,000 men, consisting of military and internal security personnel, was deployed in the UNIFIL Area of Operations (AOR); however, it did not operate in areas close to the withdrawal line. Until July 2006, despite numerous breaches of the retreat line, as well as breaches from the sea and from the air, the situation in the area remained relatively calm.

The focus of UNIFIL’s operations remained on the Blue Line and adjacent areas, where UNIFIL sought to maintain the ceasefire through patrols, observation of fixed positions and contact with the parties. The mission continued to provide humanitarian assistance to the local population within its available means.

On July 12, 2006, war broke out between Israel and Lebanon after Hezbollah carried out an attack on an IDF patrol, kidnapping two IDF soldiers and killing three others.

On August 11, 2006, the UN Security Council adopted resolution 1701 (2006), which ended the war and in which the Council decided to expand UNIFIL (up to a maximum of 15,000 soldiers) and increase its mandate. The government of Lebanon, in turn, decided to deploy 15,000 soldiers in South Lebanon, extending beyond the UNIFIL Area of Operation (AOR).

Subsection 4.2 will present UNIFIL’s Area of Operations or Area of Responsibility.

4.2. *UNIFIL Operations Area*

UNIFIL’s headquarters are located in Naqoura. The Operations Area extends from the Blue Line in the South to the Rio Litani in the North and is divided into two sectors: East and West. Five battalions were deployed in the Western sector, with a sector headquarters in Shamaa, while four battalions were deployed in the Eastern sector, with a sector headquarters in Marjayoun [16].

The Force Commander Reserve is centrally located in Burj Qallawiyah to support both sectors as needed. UNIFIL also has a presence at the Airport and Port of Beirut, to facilitate rotations and military departures, in addition to UNIFIL House – Beirut, which mainly supports the administrative and logistical requirements of the mission.

UNIFIL’s Eastern Sector comprises the following units: Headquarters (HQ), Headquarters Unit (UCG), Light Tactical Personnel Group (GTLP), Cavalry Squadron (TF-A), Base Support Unit (UABA), Transmission Unit (UTRANS), Civil Guard Unit (UGUCI), Civic-Military Cooperation Unit (UCIMIC) and Logistics Unit (ULOG). This composition of units is called “SPANBATT”. It also has the Indonesian Battalion (INDOBATT), the Indian Battalion (INDBATT), the Nepalese Battalion (NEPBATT), the Eastern Sector Military Police Unit (SEMPU) and the Indonesian Reaction Force (INDOCOY-B). The average total force is approximately 3,500 soldiers.

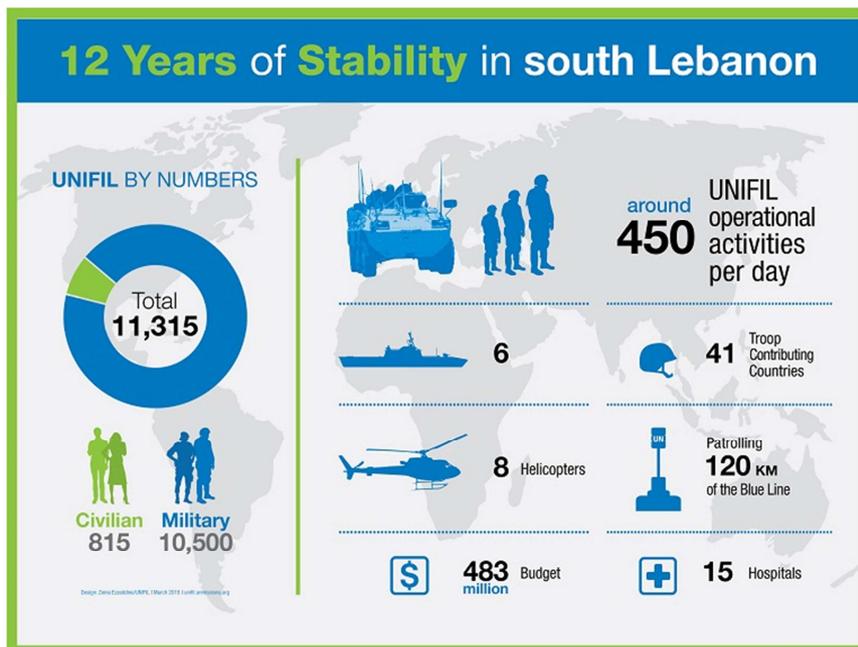
Next, figure 1 will be presented, which shows the UNIFIL Operations Area.



Source: <https://unifil.unmissions.org/>. Accessed January 27, 2019.

Figure 1. UNIFIL Operations Area.

Figure 2 consists of a newsletter that graphically summarizes the last 12 years of stability in South Lebanon, the result of the day-to-day work carried out by the United Nations Interim Force in Lebanon (UNIFIL).



Source: <https://unifil.unmissions.org/>. Accessed January 27, 2019.

Figure 2. UNIFIL's Graphic.

Subsection 4.3 will present the organic structure of the logistics section of the Eastern Sector of UNIFIL for the period from November 21, 2018 to May 21, 2019.

4.3. Organic Structure of UNIFIL's Eastern Sector Logistics Section

The Logistics Section (G-4) of UNIFIL's Eastern Sector is composed of 10 (ten) soldiers and is divided into the National Logistics subsection, the United Nations Logistics subsection and the Movements and Transports subsection.

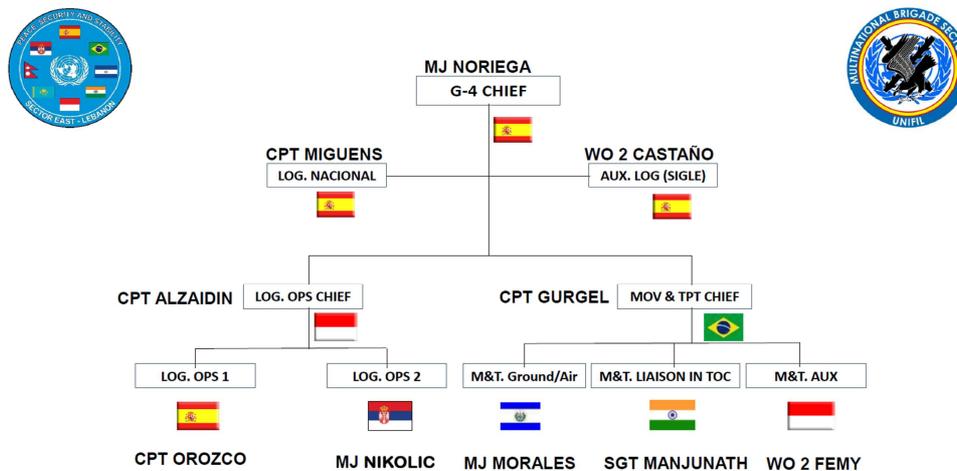
The head of Section G-4 is a Senior Officer of the Spanish Army who oversees, coordinates and controls all logistical activities.

The head of the National Logistics subsection is an Intermediate Officer of the Spanish Army who carries out the logistical management of the Spanish contingent.

The head of the United Nations Logistics subsection is an Intermediate Officer of the Indonesian Air Force and is responsible for the United Nations' logistical management in the Eastern Sector.

Finally, the head of the Movements and Transports subsection is an Intermediate Officer of the Brazilian Army who is responsible for the control, coordination and authorization of air and land movements and transport in the Eastern Sector.

Next, figure 3 will present the functional organization chart of the Logistics Section (G-4).



Source: Author (2019).

Figure 3. Organization chart (G-4).

The next subsection will present the main procedures and logistical tasks of transport in the Eastern Sector.

4.4. Transport Logistics in the Eastern Sector

The international standard Standard Operating Procedure – Land Movements – HOM POL 15-14 provides that movements are authorized according to the status and state of alert of the mission or a task order by UNIFIL or by the Commander of the Eastern Sector (SECEAST). Units will consider information on movement restrictions that will be reported by the Intelligence Section (G2), Operations Section (G3) or the Operations Center (TOC) [18].

All logistical and personnel movements require the authorization of the Eastern Sector Chief of Staff (SECEAST COS) who delegates this to the Eastern Sector Chief of Logistics Section (G4/SECEAST). Operational movements will not be studied as they are not the responsibility of the Logistics Section. These movements are managed by the Operations Center (TOC) and authorized by the Operations Section (G-3). They have their own online control information technology tool - Patrol Mapping and Reporting Tool (PMRT).

Movements using non-UN vehicles (ie car rentals, taxis and civilian cars) must also be requested from G4/SECEAST.

Omitting or ignoring the location of traffic, the documents issued by UNIFIL, the conditions of the vehicle and the way people are driven will not be a strenuous circumstance when investigating possible accidents or incidents. Movements should avoid crossing the center of cities, towns and villages.

Movements are classified into: service and non-service. Service movements are all those important to fulfilling the UN Security Council resolution, directly or indirectly, and are of interest to the United Nations. Non-service movement is generally defined as one undertaken for the well-being or in the national interest (contingent), including a movement to the national embassy, bank or liaison with officials of friendly nations.

The request for movements must be requested with the appropriate form, in accordance with the HOM POL 15-14 standard, indicating the correct data, especially the name of the convoy leader, two means of communication (cell phone, satellite phone, tetrapol or radio vehicle), dates, license plates, routes and intermediate points. It must also contain the passenger list (pax list), detailing which vehicle each soldier will board for the movement. For this, the movement requester must know the distance and time that will be performed [18].

Table 1 shows the main distances and time between the Miguel de Cervantes Base and Lebanese cities within and outside UNIFIL's Area of Responsibility. This information is used for transportation planning purposes.

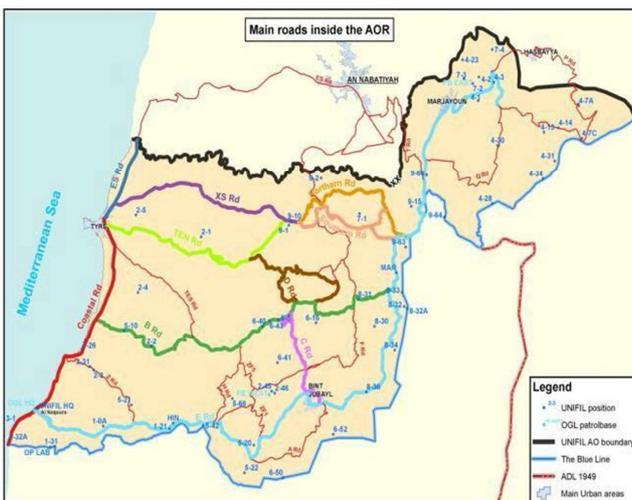
Table 1. Main distances and time between the Miguel de Cervantes Base and Lebanese cities.

CITY	DISTANCE (KM)	TIME
ABASIVA	22.3	0:38
AL QUANTARAH	30.9	0:45
AL QUSAYR	33.5	0:49
AYTARUN	45.5	1:20
BANI HAYYAN	29.1	0:44
BEIRUT	99.8	2:00
BINT JUBAYL	49.1	1:25
BLATE	2.1	0:03
BLIDA	39.7	1:06
BOURJ AL MALOUKE	10.6	0:17
BOURRHOZ	7.1	0:15
CHEBA	20.1	0:40
DEIR SIRIANE	28.5	0:44
DIBBINE	5.1	0:09
EBEL EL SAQI	2.3	0:03
EL AADEISSE	21.5	0:39
KLEYAA	9.7	0:16
KUNIN	45.3	1:17
NABATIYAH	37.2	1:03
NAQOURA	94.3	2:45
MAJDAL SILM	42.3	1:12
MARJAYOUN	6.5	0:10
TIBNIN	42.7	1:13

Source: SOP 15-14 (2016).

Units must strictly follow the routes authorized and recognized by UNIFIL in order to meet traffic and safety requirements in the Area of Responsibility (AOR).

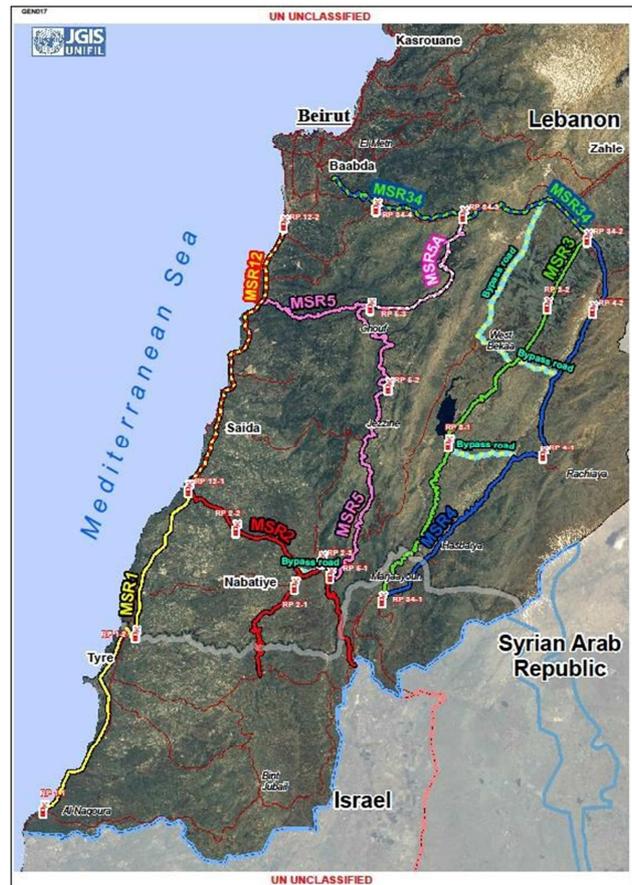
Figure 4 presents the main logistic routes for movements within the Eastern Sector (INSIDE).



Source: <https://unifil.unmissions.org/>. Accessed January 27, 2019.

Figure 4. MAIN SUPPLY ROUTES – INSIDE.

Figure 5 shows the main logistic routes for movements outside the Area of Responsibility (OUTSIDE).



Source: <https://unifil.unmissions.org/>. Accessed January 27, 2019.

Figure 5. MAIN SUPPLY ROUTES – OUTSIDE.

Each Unit Commander is responsible for controlling all movements in their Area of Responsibility (AOR), through their Operations Center (TOC). They must periodically carry out logistical inspections in order to verify the status of available logistical means.

Figure 6 below shows a logistical inspection carried out at UNIFIL Headquarters in Naqoura.



Source: <https://unifil.unmissions.org/>. Accessed January 27, 2019.

Figure 6. Logistical Inspection.

Next, the types of land movements and the respective procedures will be presented.

4.5. Types of Land Movements

Initially, it is necessary to divide the movements into two types by the number of vehicles that will carry out the logistical or personnel transport. CONVOY is a movement of more than 7 (seven) vehicles, excluding escort and security vehicles (JAMMERS and ESCORT). The SINGLE is a movement equal to or less than 7 (seven) vehicles, excluding escort and security vehicles (JAMMERS and ESCORT).

Figure 7 illustrates the execution of a logistic convoy in UNIFIL's Area of Responsibility.



Source: <https://unifil.unmissions.org/>. Accessed January 27, 2019.

Figure 7. Logistic convoy in UNIFIL's Area of Responsibility.

Movements (SINGLE and CONVOY) can be classified into three types: outside the Operations Area (OUTSIDE), through the East and West sectors of the Operations Area

(THROUGH) and within the East Sector (INSIDE) [15].

External movements (OUTSIDE) are those to any destination outside UNIFIL's Area of Responsibility for administrative or logistical purposes. The request for external movement must be submitted to G4 at least 03 (three) days before the movement until 1:00 pm (D-3), using the electronic Movement of Personnel (eMOP) by the Field Support Suite (FSS) available application, with the appropriate supporting documents (Annex B, Task Order – Task Order, Passenger List – Pax List, among others). For a proper description, consider D-day as the day of execution of the movement.

There are two documents required to authorize movements out of UNIFIL's Area of Responsibility and to authorize the transport of non-UNIFIL personnel: FORCE COMMANDER APPROVAL and WAIVER.

FORCE COMMANDER APPROVAL is a required document for movements outside the Area of Responsibility (OUTSIDES), except for Beirut Airport, the Port of Beirut and the OUTSIDES Hospital. The military assistant is responsible for making this document and requesting authorization from the Force Commander via email. WAIVER is a necessary document for non-UNIFIL personnel (military and civilian) to be able to transit the UNIFIL Area of Operations. The Military Transport Officer unit requests authorization from the Chief Transport Officer to transport non-UN/UNIFIL personnel in the UNIFIL vehicle.

Next, figure 8 shows the FSS system screen for approving an OUTSIDE movement for Rafic Hariri Beirut International Airport (RHIA).

First Name	Last Name	Id card number	Gender	Date of Birth	Nationality	Passport Number	Expiry Date	Functional Title	Rank
Isabel	Arias Garcia	ME 151344	Female	19-Sep-1981	Spanish	ME 151344	01-Jun-2019	CPL	CPL
Roberto	Martinez Perdig	ME 151353	Male	03-Jun-1982	Spanish	ME 151353	01-Jun-2019	PVT	PVT
Fernando	Rubianes Garcia	ME 151328	Male	29-May-1974	Spanish	ME 151328	01-Jun-2019	FCPL	FCPL
Miguel	Broz Barrio	ME 151479	Male	21-Aug-1990	Spanish	ME 151479	01-Jun-2019	PVT	PVT
Jose Manuel	Gonzalez Fernandez	ME 151188	Male	18-Sep-1975	Spanish	ME 151188	01-Jun-2019	FCPL	FCPL
Manuel	Mosquera Garcia	ME 151189	Male	12-Jun-1975	Spanish	ME 151189	01-Jun-2019	CPL	CPL
Luis	Colon Meyer	ME 151190	Male	13-May-1966	Spanish	ME 151190	01-Jun-2019	WO2	WO2
Raúl	García Rayo	ME 151191	Male	18-Oct-1989	Spanish	ME 151191	01-Jun-2019	FCPL	FCPL
Marcos Esteban	Gomez Tinoco	ME 151355	Male	18-Sep-1976	Spanish	ME 151355	01-Jun-2019	PVT	PVT
Imaad	Houzi Laabrech	ME147605	Male	18-Feb-1975	Spanish	ME147605	15-Oct-2019	INTERPRETE	INTERPRETE

From	Date	To	Date	Purpose	Priority	Mode	Contact Number
Lebanon, UNP 7-2	03/02/2019 14:00	Lebanon, RHIA	03/02/2019 17:00	Duty (PICK UP A CARGO FROM BEIRUT AIRPORT AND BRING IT BACK TO 7-2.)	2	UN Vehicle 12814 11812 7260 7264 12518 12510 12525 13109; HF Call sigs: 12814 11812 7260 7264 12518 12510 12525 13109 (No escort)	70922518
Lebanon, RHIA	03/02/2019 20:00	Lebanon, UNP 7-2	03/02/2019 23:00	Duty (PICK UP A CARGO FROM BEIRUT AIRPORT AND BRING IT BACK TO 7-2.)	2	UN Vehicle 12814 11812 7260 7264 12518 12510 12525 13109; HF Call sigs: 12814 11812 7260 7264 12518 12510 12525 13109 (No escort)	70922518

Source: <https://fss.dfs.un.org/Process/ProFrame.aspx>. Accessed January 30, 2019.

Figure 8. Field Support Suite (FSS).

CONVOY OUTSIDE must be held at night, preferably between 8:00 pm and 6:00 am. It also needs escort by the Eastern Sector Military Police Unit (SEMPU) and the Lebanese Armed Forces (LAF).

Movements through the East and West sectors of the Operations Area (THROUGH) are those to any destination within UNIFIL's Area of Responsibility and which cross the East Sector (SECEAST) to the West Sector (SECWEST) for

administrative or logistical purposes. The movement request must be submitted to G4-TPT at least 01 (one) day before the movement by 1:00 pm (D-1).

Movements within the Eastern Sector (INSIDE) consist of transport to any destination within the Eastern Sector (SECEAST) for administrative or logistical purposes. The movement request must be submitted to the G4-TPT at least 01 (one) day before the movement by 1:00 pm (D-1).

When Units need to change a movement already submitted to the G4-TPT or to include a movement in the approval list, they must either make a change (AMD) or request an additional movement (ADD).

Only in exceptional cases, these procedures will be authorized, except for cancellation. The lack of planning does not justify the use of additions and alterations. In a normal case, the unit will leave the movement for another day.

The movement leader or head Unit is responsible for sending the order and other consolidated movement documents, including information about other units (vehicle plates, personal information, etc.) when the movement involves more than one Unit.

Each movement will be controlled by the respective Unit

Operations Center. Each Unit must use the personnel and material control procedure called WAYBILL.

The movement leader is responsible for preparing the WAYBILL document and taking it to the G4-TPT for signature before the movement starts. To this end, the G4-TPT checks the document, especially Unit, departure time, estimated time of arrival, number of passengers, purpose, movement leader, destination, passenger list and license plate number. vehicle. There must be 2 (two) copies, one copy for the movement leader and another copy for the G4-TPT control. After finishing the move, the leader of the move returns to the G4-TPT to end the move.

Figures 9 and 10 show the model document used to control and authorize land transport in the Eastern Sector – WAYBILL.

 SECTOR EAST MULTINATIONAL BRIGADE		WAYBILL (HOJA DE RUTA) Nº : IN-	
UNIT (UNIDAD) : SECEAST HQ G-4		DATE (FECHA) : 30/01/19	
CONVOY CHIEF : (JEFE CONVOY) CPT JOAO PAULO GURGEL BEZERRA		ID. CARD : 743602	
DEPARTURE TIME : (HORA SALIDA) 10:00		ESTIMATED ARRIVAL : (LLEGADA ESTIMADA) 12:00	ARRIVAL TIME : (HORA LLEGADA)
TASK : (MOTIVO MOVIMIENTO) TO ATTEND MONTHLY LOGISTIC MEETING		THE CONVOY CHIEF (EL JEFE CONVOY)	
PAX Nº : (Nº PERSONAL) 2		TELEPHONE Nº (Nº Telephone) 7039969 TP 204	
VEHICLES Nº : 1		DESTINATION : 4-2	
PLATE/S : (MATRICULA/S) UN 12975			
TOC STAMP & SIGNATURE (SELLO DE TOC Y FIRMA)		UNIT COMMANDER/COO/TOC DO THE	
COPY TO UNP GATE		SIGNED	

 SECTOR EAST MULTINATIONAL BRIGADE		WAYBILL (HOJA DE RUTA) Nº : IN-	
UNIT (UNIDAD) : SECEAST HQ G-4		DATE (FECHA) : 30/01/19	
CONVOY CHIEF : (JEFE CONVOY) CPT JOAO PAULO GURGEL BEZERRA		ID. CARD : 743602	
DEPARTURE TIME : (HORA SALIDA) 10:00		ESTIMATED ARRIVAL : (LLEGADA ESTIMADA) 12:00	ARRIVAL TIME : (HORA LLEGADA)
TASK : (MOTIVO MOVIMIENTO) TO ATTEND MONTHLY LOGISTIC MEETING		THE CONVOY CHIEF (EL JEFE CONVOY)	
PAX Nº : (Nº PERSONAL) 2		TELEPHONE Nº (Nº Iridium) 7039969 TP 204	
VEHICLES Nº : 1		DESTINATION : 4-2	
PLATE/S : (MATRICULA/S) UN 12975			
TOC STAMP & SIGNATURE (SELLO DE TOC Y FIRMA)		UNIT COMMANDER/COO/TOC DO THE	
COPY TO UNIT TOC		SIGNED	

Source: SOP 15-14 (2016).

Figure 9. WayBill front.

4.7. Comparison of Movements Performed Between 2017 and 2018

Table 2 shows a total of 22,554 movements carried out in 2017 by the East Sector Brigade, with 49% carried out by the Spanish Contingent Units (SPANBATT) and only 4% carried

out by the East Sector Military Police Unit (SEMPU). 19,467 movements were carried out within the East Sector (INSIDE), 2,452 movements between the East and West sectors (THROUGH) and 635 movements outside the Operations Area (OUTSIDE). The total estimated distance covered was 1,492,670 kilometers.

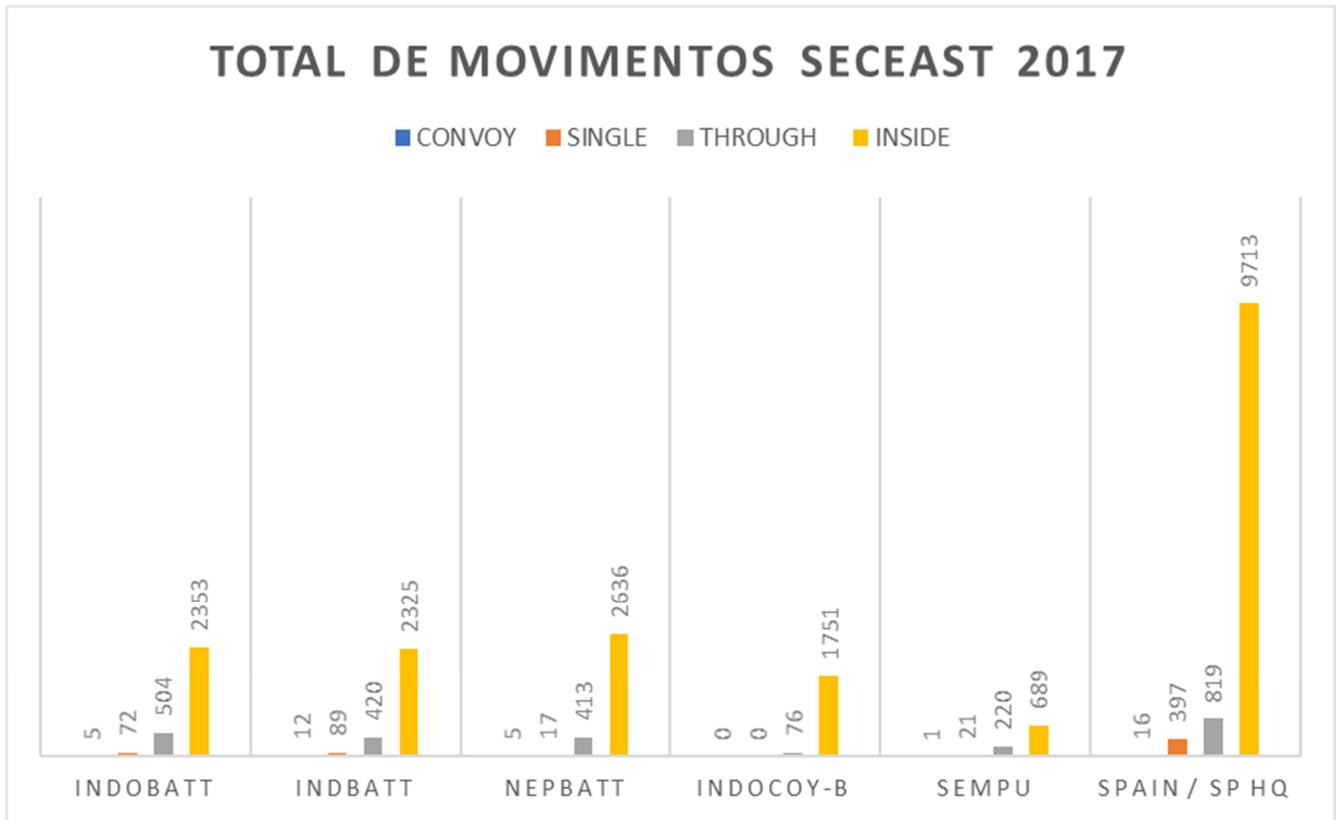
Table 2. Movements in 2017.

MOVEMENTS UNIFIL SECEAST 2017								
Nr	Units	Convoy	Single	Through	Inside	Total	Km	%
1	INDOBATT	5	72	504	2353	2934	213690	13
2	INDBATT	12	89	420	2325	2846	203650	13
3	NEPBATT	5	17	413	2636	3071	202280	14
4	INDO COY-B	0	0	76	1751	1827	99710	8
5	SEMPU	1	21	220	689	931	74050	4
6	SPAIN/SP HQ	16	397	819	9713	10945	699290	49
Total		39	596	2452	19467	22554	1492670	100

Source: Author (2019).

Below, a graphical representation of the total movements of the Eastern Sector in 2017 will be presented, grouped by six Units (INDOBATT, INDBATT, NEPBATT,

INDOCOY-B, SEMPU and SPAIN/SP HQ) and distributed by four types (CONVOY, SINGLE, THROUGH and INSIDE).



Source: Author (2019).

Figure 12. Total movements in the Eastern Sector in 2017.

Table 3 shows a total of 22,435 movements carried out in 2018 by the East Sector Brigade, with 49% carried out by the Spanish Contingent Units (SPANBATT) and only 4% carried out by the East Sector Military Police Unit (SEMPU). 18,893 movements were carried out within the East Sector (INSIDE),

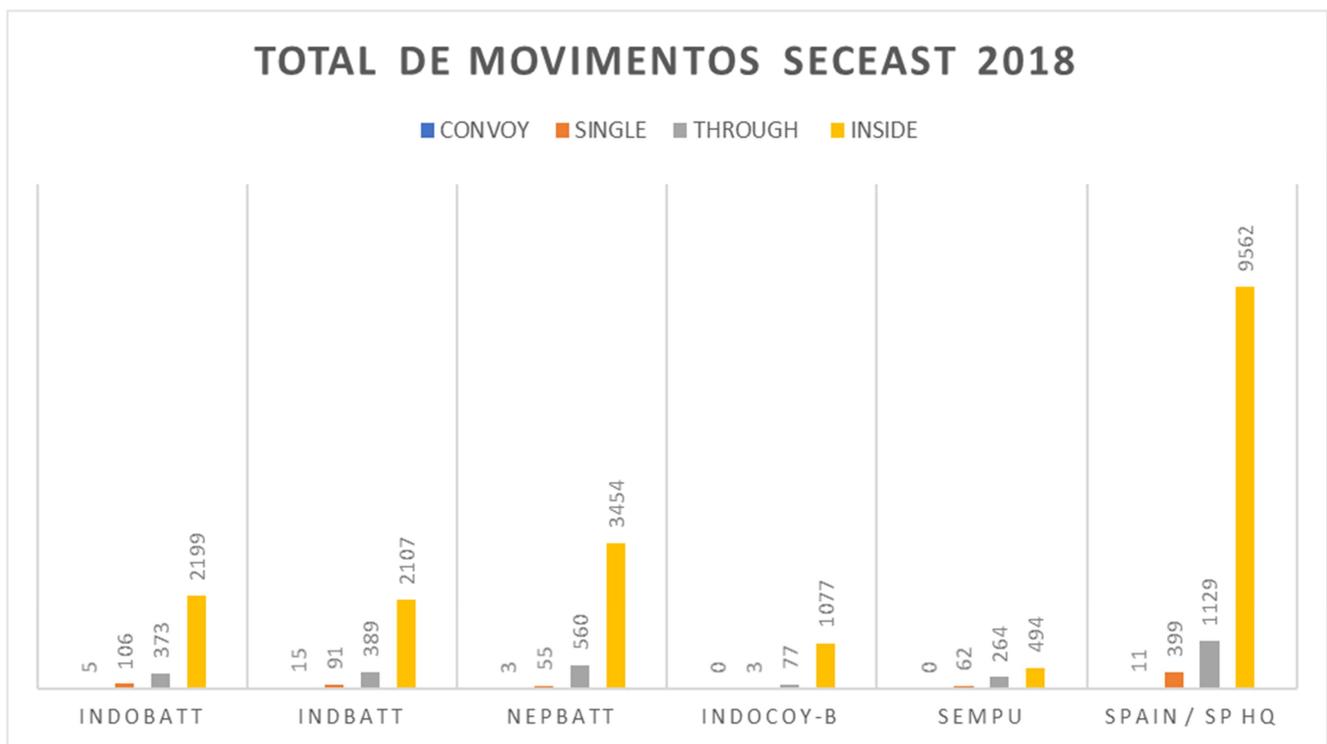
2,792 movements between the East and West sectors (THROUGH) and 750 movements outside the Operations Area (OUTSIDE). The total estimated distance covered was 1,541,370 kilometers.

Table 3. Movements in 2018.

MOVEMENTS UNIFIL SECEAST 2018								
Nr	Units	Convoy	Single	Through	Inside	Total	Km	%
1	INDOBATT	5	106	373	2199	2683	191830	12
2	INDBATT	15	91	389	2107	2602	188790	12
3	NEPBATT	3	55	560	3454	4072	273900	18
4	INDO COY-B	0	3	77	1077	1157	66770	5
5	SEMPU	1	62	267	494	820	79340	4
6	SPAIN/SP HQ	11	399	1129	9562	11101	740740	49
Total		34	716	2792	18893	22435	1541370	100

Source: Author (2019).

Below, a graphical representation of the total movements of the Eastern Sector in 2018 will be presented, grouped by six Units (INDOBATT, INDBATT, NEPBATT, INDOCOY-B, SEMPU and SPAIN/SP HQ) and distributed by four types (CONVOY, SINGLE, THROUGH and INSIDE).



Source: Author (2019).

Figure 13. Total movements in the Eastern Sector in 2018.

Comparing the total amount of movements carried out by the Units between 2017 and 2018, we can say that there was a decrease of 1% in the movements of the INDOBATT and INDBATT Units, and of 3% for INDOCOY-B. On the other hand, there was a 4% increase in NEPBATT movements. There was no percentage change for SEMPU and SPANBATT.

Comparing the years 2017 and 2018, we can say that there was a 0.53% decrease in the total number of movements carried out by the Brigade of the East Sector, considering the decrease of 574 movements within the East sector (INSIDE).

However, there was an increase of 3.26% in the total estimated distance covered, considering the increase of 340 movements between the East and West sectors (THROUGH) and the increase of 115 movements outside the Operations

Area (OUTSIDE). The increase in the distance covered was reflected in the consumption of fuel by the East sector Brigade.

The justification for this fact was the discovery by Israel of the Lebanese tunnels in the location of Kafer Kela and the construction of the Israeli protection wall (T-Wall) in the region of Mishgav Am. These events increased the escalation of tension in the East sector and, therefore, increased military activities in the region, patrols, inspections, visits and other tasks that required logistical support for transport.

5. Conclusion

The survey concluded that there was a 3.26% increase (48,700 km) in the distance traveled between 2017 and 2018,

given the escalation of tension in the Eastern Sector caused mainly by the discovery of the tunnels in Kafer Kela and the construction of the T-Wall in Mishgav Am. There was an 18% increase in SINGLE OUTSIDE and THROUGH moves. There are opportunities for improvement to be implemented in the management of military transport logistics.

The study can be directed towards the doctrine of military logistics, both for military education and for the preparation and employment of military personnel. When it comes to military education, it will be able to help in a better use of the discipline of transport logistics, using this case study in the development of school themes and contributing to future scientific research on the subject.

For the preparation and employment of military personnel, the study may serve as a benchmark for the Brazilian Army Brigades, especially in the control of personnel in each vehicle (WAYBILL), adoption of two means of communication and implementation of a computerized online control system of vehicle movements.

As an opportunity for improvement for the East Sector Brigade, I suggest that all vehicles have their own vehicular radio and satellite telephone, meeting the requirement of communication by two means. I also suggest that each General Staff Officer have at their disposal, on a daily basis, a vehicle with a driver to meet the needs of logistical movements. Regarding the online control information technology tool - Patrol Mapping and Reporting Tool (PMRT), I suggest that the necessary programming adjustments be made to include specific information on logistical movements.

From the foregoing, it is concluded that the transport logistics activity in the Eastern Sector of UNIFIL has great relevance for the success of the mission, requiring from the logisticians professional competence based on knowledge of the activity, on the ability to operate the logistical means and on the attitude to solve the problems. The mission was characterized by flexibility, adaptability, modularity, elasticity and sustainability, being vital for the maintenance of peace in South Lebanon.

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