# The Joint Supply Chain, Support Chain and MAGLITE 2008/2

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Exercise MAGLITE 02/2008 was held from 29 September to 7 October with the participation of the officers attending the JLOC course of the British Royal Logistics School, the appointed students on the MSc course of the Logistics Institute of the Miklós Zrínyi National Defence University and its teaching staff and officers delegated to the exercise by the Czech Defence University, the Logistics School of the Austrian Army and the Military Academy of Bucharest.

The primary aim of the exercise on the British part was to familiarize the officers participating in the exercise with the Joint Supply Chain Concept, the phases of operational level logistic planning processes and staff work required to conduct joint expeditionary operations.

The task of the Hungarian, Czech, Austrian and Romanian officers participating in the exercise was to play the role of the logistic officers of the Multinational Peacekeeping Brigade that had been employed in the Fourlog Logistic Training Program and plan the deployment of the brigade in the area of responsibility (AOR) as well as to organize the supply tasks of brigade in cooperation with the British forces in the AOR.

Through the analysis of the activities of the British and multinational syndicates in our article we will try to give a summary of the lessons learned during the application of the Joint Supply Chain Concept and logistic planning process during the exercise.

#### Introduction

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### **Short introduction of Joint Supply Chain**

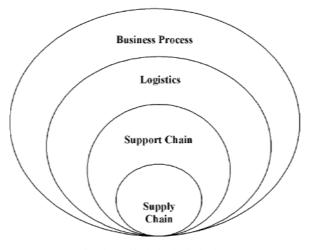
What are the difference between Logistics, the Joint Supply Chain and the Support Chain? It looks like a basic question but nobody can answer it instantly.

1. Logistics and the Supply Chain

Definitions and concepts:

Common logistics is the service that ensures that the products required to the flawless business processes are in the right place and time, in the required quantities, qualities and range are available.<sup>1</sup>

What is the connection between Logistics, Support Chain and Supply Chain?



Scheme 1. The place of logistics in the business processes (RÉGER, 2008)

We can find answer about military logistics and military support chain in JSP 886 Defence Logistics Support Chain. Look what is the correct answer according to this document. The following terms are repeated here:

- a. *The Joint Supply Chain*. "The Joint Supply Chain (JSC) is that element of the Support Chain that covers the policies, end-to-end processes and activities associated with receipt of stocks from trade to their delivery to the demanding unit and the return loop for all military services (Army, Navy, Airforce)."
- b. *The Support Chain*. "The *Support Chain* is the in-service operation of Support Solutions, including the physical flow of materiel, people, services and information."<sup>2</sup>

### 2. The Joint Supply Chain

The JSC must satisfy both operational and non-operational requirements. The end-to-end JSC stretches from requirements of operational commanders and Front Line Commands (FLCs) back to Industry. The JSC is the Defence controlled network of nodes comprising resources, activities and distribution options that focus on the rapid flow of information, services and materiel between end users and the Strategic Base to generate, sustain and redeploy operational capability. It is founded upon integrated logistic information systems, common policies, doctrine, processes and procedures to provide a core enabling capability for Defence, optimised to deliver military effect. This includes recent initiatives such as Contractor Logistic Support (CLS) arrangements.

The Reverse Supply Chain (RSC) operates as a part of the JSC utilising common Joint processes and performance targets. The RSC is defined as the process by which surplus, repairable, damaged or waste material is returned for reallocation, reclamation, repair or disposal. The process begins when a return item is identified and ends when that item is receipted onto the account from which retention; reallocation, repair or disposal takes place.

#### **Principles:**

The JSC based upon 5 principles of logistics:

- Foresight;
- Efficiency;
- Co-operation,
- Simplicity;
- Agility.
- a. Foresight. Logistic foresight is the ability to predict and manage critical logistic constraints to the Commander's freedom of action. Planners, at all levels, should

analyse the probable course of future operations and forecast the likely requirement for personnel, materiel, equipment and services. They should also address how the required resources are to be provided and moved into, around and returned from the Joint Operations Area (JOA).

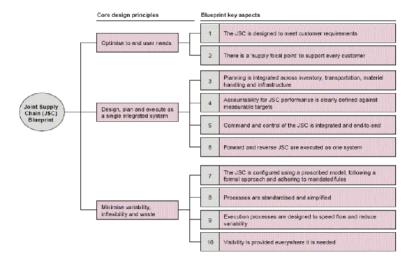
- b. Efficiency. Logistic efficiency involves achieving the maximum level of support for the least logistic effort and making the best use of finite resources, transportation assets and Lines of Communication (LOC). Logistic efficiency will ultimately determine the most appropriate organisational structures and necessary resources to support an operation, in some cases employing alternative, possibly non-military, support arrangements.
- c. Co-operation. Joint and multinational operations require a co-operative approach to logistics from planning to execution. The options for co-operation between components, and between the MOD and international partners, will be determined by either the Permanent Joint Headquarters (PJHQ) or the Joint Task Force Commander (JTFC) based on operational planning considerations.
- d. Simplicity. In order to ensure that logistic arrangements are as robust and as readily understood, as possible, they should be simple, both in their concept and execution. Simplicity is enhanced by:
  - (1) Establishing a robust command and control (C2) framework that provides for delegated authority.
  - (2) The use of common logistic processes amongst components, Allies and other organisations.
  - (3) Maintaining control along the Line Of Communication and in the Join Operation Area.
  - (4) Ensuring that future platform/system developments are coherent with the principle of simplicity by the coherent development of logistic support solutions.
- e. Agility. Logistic agility provides the commander with the ability to respond quickly to the unexpected, maintain sharpness of thought, remain effective under arduous conditions, be flexible in overcoming the unforeseen and adjust rapidly.

Other important concepts:

Purple Gate: The Purple Gate is the mechanism to ensure the regulation of materiel flow from industry into the JSC for the sustainment of operational theatres, including equipment procured through Urgent Operational Requirements (UOR) and other forms of Contractor Logistic Support agreements. Where materiel enters the JSC and their contractors will need to comply with Purple Gate policy.

*The JSC Action Plan:* The purpose of the JSC Action Plan is to outline the steps necessary to transform the JSC. It seeks to guide those involved in leading, planning, developing and delivering supply chains and supply solutions. It ensures the JSC:

- (1) Is optimised to meet end user needs.
- (2) Is designed, planned and executed as a single integrated system.
- (3) Minimises variability, inflexibility and waste.



Scheme 2. The JSC Blueprint intent is captured in 10 key aspects (The Defence Logistics Support Chain manual, 2007)

#### Inroduction of the operational task of MAGLITE 2008/2 Exercise

#### 1. The Operation

Exercise MAGLITE is a logistic planning exercise designed to practise students in logistic planning of joint and combined expeditionary operations. The operation is a crisis response operation (CRO) based on UN mandate and takes places in a fictious state, Slovary, situated on Centrica Island in the Atlantic Ocean approximately 6000 km far from Europe. The country's infrastructure equals the infrastructure of eastern-central European countries. The availability of the services in the given country is the same as in reality.



Figure 1. Map of Centrica Island (MZNDU Institute of Military Logistics)

#### 2. Area background

The recognised nation states of Slovary and Balkania share the Centrica island mass in the Atlantic Ocean. Formerly one nation, the nations split along ethnic lines in the late 19th century. Slovary has developed into a relatively affluent nation, leaning towards European alliances, and developing a prosperous tourist industry. Balkania has not kept pace with Slovary's rapid development, and finds itself increasingly isolated internationally. There is a national feeling of persecution, with Balkania not getting its fair share of Centrica's natural wealth when Slovary and Balkania split into separate entities. The Centrica island mass has inaccessible or poorly developed northern, eastern and southern shores, and consequently only the western shore has any sea ports of significance. National waters have in the past been disputed, with a sharp naval confrontation that led to the shelling of the Slovarian port of Koper by the Balkanian Navy. The recent Slovarian discovery of an oilfield off the western shore has increased the Balkanian perception of injustice and grievance.

The Zagros region lies within the north-eastern portion of Slovary, and has a history as an unsettled province, with obstinate locals yearning for re-unification with Balkania. Over the past few years Zagros separatists have sought independence from Slovary, encouraged by a more strident expression of Balkanian nationalism. The situation in Zagros deteriorated significantly as the regional government of Zagros declared itself independent from Slovary; naming the head of the regional assembly as President and refusing to recognise the legitimacy of the central Slovary government. In response, the Slovary government re-took control of the region through military force over a 2 month period – however this was not bloodless as resistance from an organisation known as

the Zagros Liberation Army (ZLA) was unexpected and at times fierce. The reimposition of Slovarian control of Zagros led to an uneasy calm, punctuated by a low-level campaign of subversion and sabotage conducted by a small number of active ZLA insurgents. The remainder of the hard-core ZLA members fled to Balkania, to recuperate and plot their return. Balkanian influence in this regional dispute has until recently been controlled through a number of UN Security Council Resolutions and monitoring activity; however, over the past year the Balkanian government has become less compliant and there is growing evidence to indicate that much ZLA activity against Slovary forces in Zagros is state sponsored by Balkania. Balkanian anti-Slovary rhetoric grows stronger as each month passes, suggesting that direct intervention by Balkania into Zagros is a distinct possibility. Later on Balkanian Armed Forces started to radar-illuminate Slovarian flights within international airspace and there has been an increase in the number of maritime 'incidents' on the limits of Slovarian national waters that reportedly involved the Balkanian Navy.

A small UN Peacekeeping force (UN Deterrence Force – UNDFOR) has been present in the Zagros region for 2 years. However increasing hostility in the region, combined with increasing demands on military resources within the Troop Contributing Nations and a lack of domestic political support for the mission, led to a gradual erosion of UNDFOR's capability and credibility and finally it has been withdrawn.<sup>3</sup>

## 3. Operational design

The scenario is based on the contingency of a UK intervention onto an isolated landmass in the Atlantic Ocean, as part of a multinational coalition, to contain a developing situation. The UK is likely to deploy as the lead, or framework nation for the operation, which has been named Operation MAGLITE. For the purpose of the exercise it is to be assumed that other European nations will deploy the AUCHSPKBDE, la light role brigade, and that the UK will contribute a heavier force to deter military action between belligerents.

After the withdrawal of UN Deterrence Force from Zagros the direction given to the Recce Team of the coalition forces is to assess the HNS<sup>2</sup> capabilities and logistic infrastructure of Slovary, in order to enable an operation with the following scheme of manoeuvre:

a) A demonstration of capability and intent, focusing on ensuring operational freedom over Slovary airspace and in her national and adjoining international waters. To be deployed as soon as feasible.

<sup>&</sup>lt;sup>1</sup> Austrian-Czech-Hungarian-Slovakian Peacekeeping Brigade

<sup>&</sup>lt;sup>2</sup> Host Nation Support

- b) Rapid deployment of 1st echelone of UK land forces into Slovary and the early demonstration of capability.
- c) The continued build up of UK forces in Slovary, initially to deter Balkanian aggression, and subsequently to a level where medium scale offensive operations can be conducted successfully, if necessary. To be carried out in conjunction with the deployment of a Multinational Peacekeeping Brigade to Slovary. To include in-theatre training where necessary.
- d) Subsequent options including demonstration on Zagros/Balkania border, or restoration of Slovarian sovereignity if Balkania crosses border. Possible involvement of the Multinational Peacekeeping Brigade to assist Slovarian authorities in ZAGROS region of Slovary.
- e) Redeployment of UK and multinational forces (expected time is 6 month after D-Day). In each phase of the operation the UK will use maritime, land, air and logistic components and all UK components will be integrated within the coalition.

The logistic intent of the operation is to build up and maintain a robust logistic architecture to allow continued deployment and sustainment of forces in the  $JOA^3$  minimising the logistic footprint, reducing risk, and to ensure a robust  $C2^4$  arrangements through the JFLogC.<sup>5</sup>

#### Description of the logistic planning work during the exercise MAGLITE 2008/2

In the first phase of the exercise syndicates simulated an in-theatre recce conducted by JFHQ,<sup>6</sup> the findings of which they used during the planning process. The syndicates represented the J4 members of that recce team.

The main goal of the recce was to survey the HNS capabilities and logistic infrastructure of Slovary to enable a successful operation in the JOA.

The Recce Teams of coalition forces started their activity at the same time on the territory of three countries, in Italy, in Slovenia and in Hungary. The Recce Teams in Slovenia and Italy carried out recce of Ronchi Airport as a possible APOD<sup>7</sup> and the maritime port in Koper as a possible SPOD<sup>8</sup> which according to task are situated in the territory of Slovary. The Recce Team in Hungary carried out logistic recconnaisance in the ammunition depot and the training base in Táborfalva (possible place for the

<sup>&</sup>lt;sup>3</sup> Joint Operational Area

<sup>&</sup>lt;sup>4</sup> Command and Controll

<sup>&</sup>lt;sup>5</sup> Joint Force Logistic Component

<sup>&</sup>lt;sup>6</sup> Joint Force Headquarters

<sup>&</sup>lt;sup>7</sup> Air Port of Disembarkation

<sup>&</sup>lt;sup>8</sup> Sea Port of Disembarkation

training of the coalition forces). Later on they carried out recce of the Air Base in Kecskemét (possible APOD) which is according to task also belongs to Slovary.

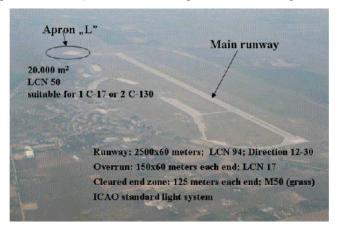


Figure 2. Recce datas of 59th Slovary Air Base in Kecskemét (Syndicate's Presentation MAGLITE 2008/2)

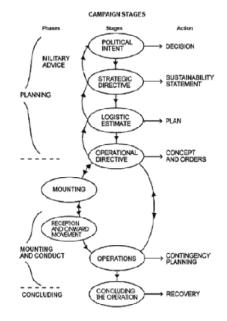


Figure 3. Place of Logistic Estimate amongst the stages of a campaign (The British Army Doctrine Publication Volume 3, Logistics)

The British working groups had to prepare the operational level logistic planning on the basis of five main principles of logistics and the multinational logistic interoperability. The main task of the syndicates was to prepare the logistic estimate, set up and operate the JSC and formulate the logistic plan of operation.

Process of Logistic Estimate consisted of the following steps:

- 1. Reviewing the situation
- 2. Mission Analysis
- 3. Calculating the demand considering emerging factors
- 4. Developing a COA<sup>9</sup>

After reviewing the situation the British syndicates accomplished the Mission Analysis. During the Mission Analysis they summarized the logistic intent and the effects logistic support must deliver. They also summarized the constraints and freedoms on the configuration and operation of Logistic Support and the Joint Supply Chain.



Figure 4. Supply Chain for Joint Forces (Syndicate's Presentation MAGLITE 2008/2)

The Syndicates finished the Mission Analysis with drawing up the Task Matrix and the Risk Table. The Risk Table gives a summary of emergencies that can affect on the logistic operation.

<sup>&</sup>lt;sup>9</sup> Course of Action

After the Mission Analysis syndicates calculated the demand for Class I-V materials in each phase of the operation. After calculation they had to display their commodity demand forecasts using the appropriate demand patterns.

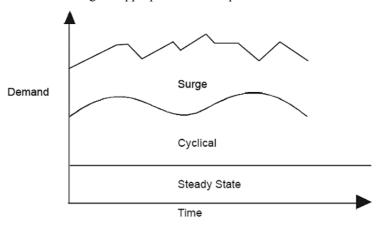


Figure 5. Demand patterns (The British Army Doctrine Publication Volume 3, Logistics)

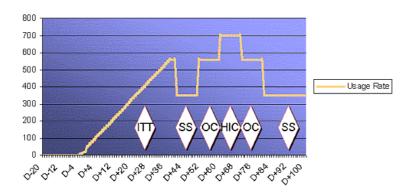


Figure 6. Single Commodity Surge Demand Profile for Class V (Syndicate's Presentation MAGLITE 2008/2)

In the last phase of the logistic planning work syndicates prepared the logistic effects schematics, developed their COA and it's evaluation.

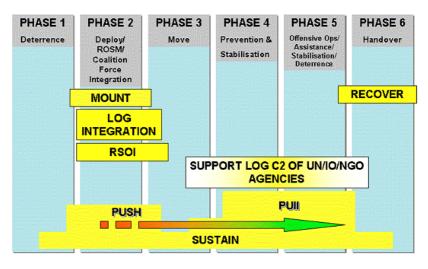


Figure 7. Logistic Effect Schematics (Syndicate's Presentation MAGLITE 2008/2)

#### Conclusion

In our article we tried to describe the differences between Logistics, Supply Chain and Support Chain, because nowadays there are a lot of misunderstandings regarding these definitions, that is why we showed how they are connected to each other.

We also made a short description of Joint Supply Chain Concept which is considered as a completely new approaching to the tasks of the British Army's operational level logistic planning process that took decisive effect on the planning work during the exercise MAGLITE 2008/2.

MAGLITE itself is a definitive point in the educational process of the Military Logistic Institute. It prepares the officers how to carry out an operational level planning work in multinational teams gathering essential information about the planning, setting up and running an expeditionary operation.

# References

- 1. Logistic Strategy 2007.
- 2. JSP886 Volume 1 Defence Logistics Support Chain, pp. 3-6
- 3. Exercise MAGLITE Slovary/Balkania Briefing Pack
- 4. The British Army Doctrine Publication Volume 3, Logistics