

Experiences in the application of LOGFAS (Logistics Functional Area Services) in the Multinational Logistics Training Program Fourlog 2008

JÓZSEF VENEKEI

Miklós Zrínyi National Defence University, Budapest, Hungary

In autumn 2007 I was introduced to LOGFAS (Logistics Functional Area Services) and its modules. After a few months training and studying the program I came to the conclusion that it can be used successfully in the logistic planning work of the multinational logistic training program FOURLOG 2008. It required the tasks created before to be transformed in order to exploit the advantages of the services offered by the program. By the end of March 2008 every task was transformed and ready to work with in the different modules of LOGFAS.

In this article I will try to describe the experiences gained through the application of LOGFAS during the Hungarian part of exercise FOURLOG 2008 which took place in April 2008 with the participation of three nations – Austria, Hungary and the Czech Republic.

Introduction

Last year after a long examination of LOGFAS (Logistics Functional Area Services) including LOGREP (Logistics Reporting) and ADAMS (Movement and Transportation Program), the idea came to make a change in the massive manual work we did during the past FOURLOG exercises.

FOURLOG itself is a multinational tactical level training program, which took place earlier with the participation of four, but nowadays of three nations – Austria, Hungary and the Czech Republic.

It is organized yearly by the Defence University in Brno, the Miklós Zrínyi National Defence University in Budapest, and the Logistic School of the Austrian Armed Forces in Vienna. The exercise is divided in to three parts. In the first part of the exercise the cadets are to take part in a peacekeeping training session in Vienna, in the second part they take part in robust logistic planning work in Budapest, in the third part they become familiar with the deployment of the functional elements of the logistic battalion and the tasks regarding convoy protection in the training area of the Defence University in Vyskov.

The aim of the training program is to train the cadets to work in a multinational environment and to allow them to acquire some skills in staff work as well. During the

Received: November 19, 2008

Address for correspondence:

JÓZSEF VENEKEI

E-mail: venekei.jozsef@zmne.hu

common logistic planning work the cadets experienced lots of problems that came from the different, mostly national approach to the given tasks. Using national methods during the staff work led to many misunderstandings, therefore we couldn't speak a "common" language and that was the second reason we have decided to find a common system to be used to cover the above mentioned goals of the training program. In order to do this we had to partly transform the tasks to meet the requirements of the different modules of LOGFAS.

In March 2008 every task was transformed and ready to use for logistic planning. In this article I will try to introduce you to some of the aspects of the Hungarian part of the exercise and the experience gained through the application of LOGFAS during the Hungarian part of the exercise FOURLOG 2008.

Introduction of the LOGREP and the ADAMS subsystems of the LOGFAS

LOGREP as a part of Logistics Functional Area Services is NATO's Logistics Reporting application designed to automate and simplify the Reports and Returns (R2) requirement of all NATO Headquarters. NATO and EU nations have also accepted the R2 requirement for use and PfPⁱ nations have agreed to comply with these requirements.¹

The HQs at all levels have recognized the benefits LogRep application offers, these have been fully demonstrated during support to the KFOR, EUFOR/SFOR, and ISAF operations. LOGREP uses the so called LOGBASE which is a huge logistics database developed over a number of years. The LOGBASE database is common to all the Logistics Functional Area Services programs such as ACROSS stockpile planning program, ADAMS movement and transportation program and LOGREP, which are being developed continuously. Therefore, LOGREP shares this common database with both ACROSS and ADAMS. It means that such features as database security, auditing and integrity controls are shared by all three systems.

The most critical part of the LOGREP process, the Reportable Item Code (RIC) system, is the link used throughout the program to identify and search for mission critical items of equipment and supplies. That means every item; any sort of equipment and supply has a special RIC code, so you can identify them very clearly. Moreover, the LOGBASE database contains all of these codes to make your work easier.¹

The RIC system allows equipments, supplies and munitions to be classified and reported using a common set of values that transcend different languages, national

ⁱ PfP – Partnership for Peace A programme of practical bilateral cooperation between individual Partner countries and NATO. It allows Partner countries to build up an individual relationship with NATO, choosing their own priorities for cooperation.

nomenclatures and coding systems. The system represents a significant step forward in the exchange of information among Allies, and is used not only in LOGREP, but also in the various modules of LOGFAS.

The other significant part of LOGREP is the Reportable Items List (RIL). It specifies those mission critical items of equipment, supplies and munitions, which need to be reported to the NATO Commander within the LOGUPDATE Report.ⁱⁱ

LOGREP offers the following modules to work with: the Geo Manager module, the LOGFAS Data Manager Module and the Sustainment Planning Module. All of these modules are integrated into the ADAMS system too.

The Geo Manager is the module within LOGFAS that allows the user to manage the system's mapping and infrastructure data used throughout the LOGREP program. Using Geo Manager you have the possibility to create appropriate maps, create road and rail networks that you can assign to your projects. It also allows to define different geographic locations moreover you can assign pictures to them. The Geo Manager has a Map Import function, which can be used to import most types of rasterized maps or anything that can be displayed as an image, even satellite images can be used as your map.

The LOGFAS Data Management Module (LDM) allows users to build their force organization, to create force profiles and holdings. For your personal and equipment you can create an item list where you can give the characteristics of your equipment regarding the supply, dimensions and transportability that can be very important for movement planning. For easier identification you can assign the appropriate picture to your item that can be very useful if you are working in a multinational team. Later on the forces created in LDM as well as the location of your units can be indicated in Geo Manager. LDM is the module where you can prepare the plan for your mission, and it also provides the start point for force selection and force allocation for movements and sustainment planning. LDM offers a range of different reports such as peacetime and operational LOGUPDATE, Force Holdings Surplus and Deficiencies etc. Your force profiles and holdings and plans can be saved in a normal text file you can use later or give it to the teams so that they can use it during the planning work. The LOGUPDATE report can be converted into the Microsoft Office document file format and sent immediately to the place that requested it.

The Sustaining Planning Module (SPM) is an important module within the LOGREP system because SPM can be used for both strategic and operational stockpile planning, as well as undertaking sustainment analysis. It has a scenario manager where

ⁱⁱ The LOGUPDATE is a key logistic report. The purpose of the LOGUPDATE is to provide NATO Commanders with a dynamic update of changes to core database information on stockpiles of specific equipment and consumable materiel held by national forces declared to NATO, as well as specified equipment.

you can create different scenarios according to your task and carry out the relating stockpile and sustainment planning work. In SPM you can prepare a sustainability analysis which indicates for a force or a group of forces whether there will be any shortages in one or more selected supply classes.

The ADAMS offers the following modules to work with: the Deployment Planning Module and the Deployment Display module.

The Deployment Planning Module (DPM) is the main part of the ADAMS system and it is suitable to make every movement planning work related to your units. In order to do this you are required to prepare a Statement of Requirement (SOR) and an Allied Disposition List (ADL) in the LDM module. The SOR outlines the operational requirement for forces by priority, time and destination against a specific plan. The ADL is a crucial tool for Movement Planners and provides the start point for the production of Detailed Deployment Plans (DDPs). It is also used by logistic planners as the basis for sustainment analysis. DDPs are to be created in the Deployment Planning Module and it gives you significant information about the units you want to move from one place to another. In DPM you are to choose a Mode of Transportation (MOT) suitable for you and the program will use the railway or road network for transportation that you have already created and assigned to your project in the Geo Manager Module. The alternative of air lift as a MOT is also available. The module takes into account the rail tunnel restrictions that may occur on the track and will indicate you the equipment which falls under these restrictions.

The Deployment Display Module gives you real-time information about your assets during the transportation.

Scenario of the tactical level multinational training program FOURLOG

The area of operation is EASTLAND. A fictitious state situated in Central Europe. The country's infrastructure both equals and mirrors that of eastern-central European countries. The availability and capabilities of in country infrastructure and of services in the given country is not fictitious. The Federal Republic of Eastland is a multinational state with a population of great religious and cultural diversity. The country is controlled by the Labeg majority. The minority in Eastland are the Mengin population. They are a population of approximately 2 million whose basic human rights are continuously violated by the dictatorial government. As a result of this, an organisation of Mengin seceders has been formed. Their main objective is to establish an independent state. Since it cannot be achieved by political means, an underground Mengin military organisation has been formed, which has also built up a significant

military force. Due to the excessive armament of previous governments, EASTLAND has ended up in an economic crisis. The living standards of the population have decreased drastically and at the beginning of 2007 disturbances broke out. Taking advantage of the opportunity, the army took power and under the pretext of restoring order eliminated the democratic opposition and dissolved parliament. Subsequently to this the UN Security Council, in its Resolution 1995, imposed an economic embargo. This resulted in a shortage of basic supplies in EASTLAND. The military government turned the discontented population against the Mengin minority. Amid continuous international protests the government started clearing the Mengin areas of all forces associated with the illegal Mengin Liberation Army. During this process the nationalist Labeg irregular army, supported by the regular forces, killed the men of several villages and forced the rest of the population to flee.

EASTLAND's eastern neighbour, a central-European middle power called BIGLAND, continues to support the military government despite the territorial disputes, fearing that the Mengin population living on its territory will also rise up and escalate the conflict to BIGLAND. The political leadership of BIGLAND is also expected to try and use the conflict to enforce their own territorial claims.

The government of EASTLAND took the opportunity to solve nationality problems with a decisive blow and launched a military operation codenamed "HOMEGENEOUS NATION". This aimed to quell unrest and to drive away the Mengin civilian population, which lives in one area. Since cleansing began in May 2007 thousands of people have been killed and hundreds of thousands fled to the neighbouring countries, where the difficulty of providing support for refugees caused increased tension.

Learning of the genocide, the UN Security Council condemned the EASTLAND regime in UN Security Council Resolution 1996 (UNSCR 1996) and demanded an immediate end to the genocide. It also threatened the prospect of international intervention should UNSCR 1996 be ignored. The President of the Federal Republic of Eastland refused to meet the UN's demands and all international efforts to mediate remain unsuccessful. For this reason the UN Security Council, in its Resolution 1997, requested the member states of the ALLIANCE to apply military pressure to force the EASTLAND dictatorship to take part in the negotiations. The Foreign Ministers' Meeting of the ALLIANCE decided that in order to avoid losses they would launch air strikes to force the EASTLAND dictatorship to the negotiating table.

The ALLIANCE started the air strikes in October 2007, from bases in the neighbouring member states, NORTHLAND and SOUTHLAND, and also from more remote European and North American bases. After nearly three months of bombardment the leadership of EASTLAND was willing to accept the UN conditions.

They agreed to the return of the displaced population, as long as they were monitored by forces with a UN mandate. The economy of the country is in ruins and the majority of the population wants peace at any cost. However, due to repeated bomb attacks carried out by the Mengin Liberation Army in retribution, the Labeg population lives in constant fear.

In January 2008 the President of EASTLAND signed the ceasefire agreement mediated by the UN Secretary General and in April 2008 agreed to the deployment of a peacekeeping force of two mechanised infantry divisions.

The most developed countries of the world, including the strongest military power, are among the member states of the ALLIANCE. While establishing EFOR (EASTLAND FORCES), the ALLIANCE invited the participation of other countries which are interested in the settlement of the conflict. Three of the ALLIANCE's member states – NORTHLAND, SOUTHLAND, and FRIENDLAND – and the friendly WESTLAND are bordering EASTLAND. They have a direct interest in the fastest possible settlement of the conflict, so at the donor's conference they pledged a joint infantry brigade. The brigade consists of an Austrian (WESTLAND), a Czech (NORTHLAND), a Hungarian (SOUTHLAND) and a Slovak (FRIENDLAND) battalion. In the organisational structure of EFOR the brigade is subordinated to the 10th German Motorized Division. The establishment of the international task force was completed by March 2008. NORTHLAND, FRIENDLAND, SOUTHLAND and WESTLAND have started force generation of the joint brigade. By April 2008 the deploying units will be ready to carry out their mission on arrival in theatre.

In accordance with the operational plan of the Commander-in-Chief of the Allied Forces the territory of EASTLAND will be divided among the five brigades deployed from the two Divisional Commands in theatre. The northern part of the country will be the AOR of the 1st US Mechanised Division. The southern part of the country will be controlled by the 10th Motorized Division, which is under German command. The 1st Mechanised Division and the 10th Motorized Division are tasked with disarming the armed rebel groups, collecting the confiscated armaments from the population and ensuring the peaceful return of the displaced Mengin population. Their mission also includes the conduct of Peace Enforcement operations to counter any limited tactical incursions from the direction of BIGLAND. It is also to provide humanitarian support to the refugees and the civilian population where necessary within their AORs (Areas of Responsibility). Both divisions can rely on the support of the allied air force deployed in the neighbouring allied states.²

Task determination for the logistic planning

In the first phase of the planning work the cadets had the task to deploy the AUCHSPKBDE (Austrian-Czech-Hungarian-Slovakian Peacekeeping Brigade) to the OA (Operational Area). At that time the subunits of the brigade prepared together in two different training areas. The Czech and Slovakian contingent in the area of NYRANY, the Austrian and the Hungarian contingent redeployed from LJUBLJANA to the central training area of SOUTHLAND in the north-western region of ZAGREB. As part of Logistic support preparations for operations the deploying brigade has demanded the required classes I–V of supply materiel and equipment.

In order to accomplish this task, the cadets received the force organisation and the item list of the brigade that had been made by me in the LDM module of LOGFAS. To make the task easier the subunits of the AUCHSPKBDE were distributed among the syndicates. During logistic planning work each of the syndicates had responsibility for the subunits which were assigned to it.

In line with the deployment the syndicates received the second task. It was the intent of the Brigade COS (Chief of Staff) to send out a number of separate logistical reconnaissance (recce) groups to its AOR (Area of Responsibility). The recce groups were to liaise with the local authorities in order to identify the availability of local resources, facilities and assets that can be used to support and sustain the deploying Brigade subunits within the individual battalion AORs (Areas of Responsibility). It required that the cadets divide the planning work within the syndicates, because the next day relying upon the Common Logistics Reconnaissance Checklist they had to carry out recce in the settlements of their AORs. In order to be prepared, cadets needed to import the updated geolocations for Hungary into the Geo Manager module, prepare maps for the deployment and recce. We handed out 1:50000 rasterized maps in picture file format which they had to import into the Geo Manager and returning from recce indicate their findings on this detailed map.

In the second phase the cadets were tasked with logistic planning. AUCHSPKBDE has successfully accomplished deployment and was now at FOC (Full Operational Capability). All units have taken over their AORs and have commenced the conduct of all UN mandated tasks. According to the EFOR G2 Cell there have been clashes between the Mengin and Labeg minorities in the western areas of BIGLAND. As a result of the authorities of BIGLAND not providing adequate shelter for the Labeg civilian population, approximately 20,000 people have left their homes and set out for the border of EASTLAND. The border guards of BIGLAND did not prevent them stopping at the border. The authorities of EASTLAND and the International Red Cross

have asked EFOR for logistical support. In accordance with direction given by the EFOR commander, the Austrian-Czech-Hungarian-Slovakian Peacekeeping Brigade had to provide humanitarian support to the displaced population in terms of accommodation and real life support for up to 3,000 refugees. The authorities of EASTLAND have been told to identify and make available all free capabilities for humanitarian aid, such as accommodation, catering facilities and medical care. According to this task every syndicate had to draw up a plan for the provision of humanitarian aid (food, water, transport, accommodation etc) for 500 refugees taking into account the data gathered during the logistic reconnaissance.

In the third phase the cadets were tasked with redeployment. In this scenario the Mengin splinter groups have broken into the territory of EASTLAND several times from areas within BIGLAND. The Mengin Liberation Army has been backed by the artillery and mechanized forces of BIGLAND. Due to the proximity of EFOR forces deployed on the ground there was a risk of the conflict escalating further. In order to prevent this, the commander of EFOR reviewed the in-theatre situation and directed that responsibility for the AUCHSPKBDE AOR was to be handed over to the 12th US Mechanized Brigade. As a result of this a new AOR was designated for AUCHSPKBDE. According to the new situation syndicates had a task to develop a plan for the conduct of a deliberate controlled road move of the brigade.

Lessons learned from the application of LOGFAS and its subsystems during the logistic planning work in the exercise FOURLOG 2008

It became clear, that the application of LOGFAS for the first phase of planning work was successful. After clearing up the situation and the task for the deployment and logistic reconnaissance, the syndicates started work with the LDM module. They imported the organization and the item list of the brigade into the program. After a short examination and work with the Force Profile and Holdings the LOGUPDATE report was made and sent to DISTAFF (Directors' Staff) successfully.

Due to receiving the parallel task for logistic reconnaissance the syndicates also started to work with the Geo Manager Module in order to create the needed maps for further planning. It became clear that the most difficult part of this task is to import rasterized 1:50000 maps into the Geo Manager. The Syndicates spent lots of time doing this. Returning from the logistic reconnaissance all of the geographic locations and their characteristics were indicated on the detailed recce map without any problem.

The next step for the syndicates was to create a rail and a road network for the deployment to the AORs of the units. A common RPOD (Rail Port of Disembarkation)

was designated for all syndicates in Bp. Ferencváros RH. The road network had to reach the AORs.

As the syndicates finished with map working they had to return to the LDM in order to create plans, SORs (Statement of Requirements) and ADLs (Allied Disposition Lists) for the deployment. In most of the cases the cadets couldn't cope with this simple task without the help of the instructors, although every syndicate had the program tutorial on hand.

Finishing with the LDM the syndicates started to work with the ADAMS. Since the Hungarian cadets had done an ADAMS course before, there was no hitch in planning work. The DDPs (Detailed Deployment Plans) were created successfully. In the next step every calculation for the deployment was accomplished. Every syndicate calculated the number of military trains and cargo planes that were needed to move their forces to their AORs. After calculation for the rail movement, it turned out, that some parts of the equipment fall under the tunnel restrictions, therefore they had to draw up a plan for their deployment and inform the DISTAFF about their decision. An important piece of information was given by DISTAFF about the losses during disembarkation but none of the syndicates updated the operational LOGUPDATE report.

We made some effort in order to use the Sustainment Planning Module during the second phase of the logistic planning work, but it became clear, that this module is only suitable for operational planning. Although I made some calculations for the class I and III supply materiel for a 30 day operation in OA, the logistic planning during the second phase was made by hand using the appropriate NATO STANAGs and national norms for the tactical level supply planning.

In the third phase the syndicates returned to the Geo Manager and prepared the road network for the redeployment. After examination of the map for the redeployment the syndicates carried out a real-time recce of the designated road network. Considering the road restrictions all of the syndicates developed their plans for the conduct of a deliberate controlled road move of the peacekeeping brigade.

Conclusions

After successful execution of exercise FOURLOG 2008, the following conclusions can be drawn:

1. During logistic planning LOGFAS has proved itself to be an extremely useful, time saving program to work with.
2. Some modules of the program are slightly complicated, therefore in the time of preparation for the exercise the cadets need more time to be able to use it smoothly.

3. Most of the instructors were not trained in using of the program either, that is why they are to take a training course organized for them in the period of preparation.
4. The SPM is obviously not suitable for tactical level planning, but it may be essential for use during the FOURLOG's operational level exercise MAGLITE.
5. In the evaluation phase of the exercise it became obvious that the cadets recognized the benefits of using LOGFAS in logistic planning, which will provide foundations for their future work in a multinational environment.

References

1. Logistics Functional Area Services (LOGFAS) version 5.1 Logistic Reporting (LogRep) Tutorial
2. LTC Dr. Á. POHL, LTC J. VENEKEI, LTC Dr. B. RÉGER Ret, MJR A. MOSS: *The Operational Scenario of Fourlog 2008 Logistical Training Program*
3. Dr. BÉLA RÉGER: *MAGLITE has been changing* (AARMS, 2006. 485E490.)