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A SURVEY ON THE ROLE OF LOGISTICS PROVIDING CENTRES IN CIVIL EMERGENCY PROTECTION

Introduction

The aim of the logistics support process is to create such an effective and cost-effective system which will result in the implementation of successful civil emergency protection. To achieve this, it is necessary to analyse in what ways the Logistics Providing Centres – furthermore LSZK – can be involved in the financial procedures of the protection. In my article I would like to present the work done in this field since 2011, which will have resulted in the operation of the first LSZK in the area of professional civil emergency protection by the end of this year.

Absztrakt

A katasztrófák elleni védekezés logisztikai támogatási folyamatának célja egy olyan hatékony és költség takarékos kialakítása, melynek eredménye a sikeres védekezés megvalósítása. Ennek érdekében szükséges annak vizsgálata, hogy az úgynevezett Logisztikai Szolgáltató Központok (LSZK) milyen formában vonhatók be a védekezés anyagi folyamataiba. Cikkemben azt 2011-től zajló munkát kívánom bemutatni, melynek eredményeképpen a hivatásos katasztrófavédelem rendszerében terveink szerint ez év végére az első LSZK megkezdheti működését.

1. The establishment and peculiarities of LSZK

Dr. Tarnai Júlia in her essay under the title of *Logistics Services, Logistics Providing Centres* in connection with the establishment of the logistics providing centres writes about the accelaration of creating logistics providing centres, i. e. LSZK by spreading the logistics sources and applying the method of outsourcing² as for certain elements of logistics tasks.[1]

LSZK consist of central affiliates of the logistics providing centres, the industrial parks based on serving logistics centres, the product turnover/logistics providing centres - which are of nationwide importance -, the subcentres operating as product turnover logistics centres, as well as the virtual logistics providing centres. The common feature of these LSZK is that they operate for common benefit, meaning that *it is an opportunity which can be taken by anybody*, after having signed the appropriate contract for a certain fee.

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 $^{^{2}}$ Outsourcing means that certain tasks are eliminated from a firm, a company or an organisation and the tasks in question are accomplished by other firms or companies. The main principle is clear: the company have to accomplish only the most important tasks included in its profile. Its basic aim is to reduce costs.

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The regulation of 68/1996 (VII. 9.) OGY (National Assembly) on the most important tasks of implementation of transportation policy prescribes "the establishment of logistics centres, considering the asks of environment protection", moreover it contains "providing the necessary financial resources by the state for creating the suitable infrastructure." The New Hungarian Policy on Transport (2003-2015) also puts a great emphasis on the ways of a more environmentally-friendly transportation system in the process of establishing a network of logistics centres. The proposition on "The conception of establishing nationwide logistics centres connected to the European network" was ratified in 1998 by the Minisztériumi Kollégium (Committee of Ministries). In the proposition, having been continually updated since then, there were 13 LSZK of nationwide importance within 11 regions.

As for LSZK, on 17 June 2009 the Hungarian Government accepted the Logistics Action Plan in the medium run for 2009-2013 after a two-year long planning and agreeing period. The Logistics Action Plan is based on Hungarian Logistics Strategy for 2007-2013, whose *basic aim is that Hungary become the defining logistics providing centre of Central East-Europe by 2013.*³ It reinforces the validity of the regulation on transportation policy19/2004. (III. 26.) OGY for 2003-2015, accepted in 2004 by the National Assembly of the Hungarian Republic. According to this, *the establishment, the development and support of LSZK network is of prior importance till 2015.* The most important aims of establishing logistics providing centres are as follows:

- Hungary can become the part of the complex European logistics network, giving opportunities for national trade, industry and agriculture;
- The Hungarian centres integrated in the European logistics network can operate as distributional and collective centres in the area of East-Europe, resulting in significant economic and financial benefits;
- The economic value of the transit product turnover can also be significant, provided the LSZK can interrupt the transportation of goods by quoting favourable prices, promoting the economic development of the given region;
- In accordance with the distributional and collective tasks of the logistics providing centres, they can reduce polluting the environment by transpoting goods on railways in long distances. [2]

Examining LSZK from macro-economic point of view, it can be claimed that they contribute to the improvement of cost-effectiveness, quality of supplies transported among companies, to the better and enhanced service of the customers included in the processes.

2. A survey connected to LSZK in the system of professional civil emergency protection

Péter Lakatos in his PhD essay analysed the importance of effective handling of civil and military (author's remark: defense) sources during the period of limited financial sources of defense. In order to maximalise the availability of civil protection sources, measures must be taken which are able to put a balance in self-maintenance between the supplementary supplies, coming from both the civil sector and the military one (author's remark: that of defense). [3] Recognising the possibilities of civil logistics system, in the Centre of Economic Supply in the Nationwide Civil Emergency Protection of the Ministry of Interior Affairs

³ Source: <u>https://hirkozpont.magyarorszag.hu/srv/letolt?id=978632&lang=hu</u>, 14 December 2011. 8:43

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(furthermore: BM OKF GEK) the examination of how the LSZK ⁴ can be integrated into the logistics system of civil emergency protection started in 2011.

The examination was preceded by a thorough analysis of the situation whose results can be summed up as follows:

- The infrastructure, serving the logistics tasks of OKF is practically based on the supplying system of the cold war military system, planned in the 50-60-s,
- The present storing system was created for the defended objects, edifices, built deep in the ground, the commander bases in abandoned areas and the supply are out-of-date and due to the infrastructural and maintenance problems (e.g. transport, removal) they are obstacles in the operation of logistics system,
- The organisational background in providing staff supply and technical equipment is missing,
- The operation and maintenance of a scattered and non-optimal object-system is not cost-effective at all.

Having examined the availability and the infrastructure of the central and county storehouses⁵ of OKF, it was claimed that the establishment of a new nationwide storehouse-system is unavoidable, based on new principles of an organising system, whose aim is to create a storing system, allocated in the most optimal place, making it possible to plan fast transportation routes to areas in danger, which are cost-effective both in maintenance and in operation.

This possibility of transformation in the existing civil protection system means a cheaper settlement base compared to the recent one, in addition to this it will not incure surplus expenses. The examinations reinforced the necessity of urgent and complex transformation of the functional and professional controlling in the current storing system. As a first step, in 2012 the establishment of the *advanced storing system* must be created, in which the proposed recent central and county storehouses would be included. The storehouses which would not suit the new logistics system, could be returned to Magyar Nemzeti Vagyonkezelő Zrt/Hungarian National Property Handling Co. Ltd.-nek, or would belong to the circle of responsibility as for maintenance of the county directorates *as usable real estates for other*

⁴ The examinations were done by Bujdosó János fire fighting colonel, deputy general manager of BM OKF GEK and Horváth Zoltán fire fighting lieutetant based on the order given by Dr. Demény Ádám fire fighting lieutenant colonel, general manager of BM OKF GEK. A report was made on the examination which was based on the nationwide task project of the law on civil emergency protection and execution, in complete accordance with point III.d.) df.) of the report under the title of *A Conception of Transforming the Logistics System in Civil Emergency Protection* for the executive-in chief of BM OKF.

⁵ The features of the storehouse system of OKF can be described as follows:

> Their ownership structure is different (local government/state),

> There are stocks and materials in the storehouses, belonging to the local, county or central government,

The proportion of *incurrent* stocks (substandard goods) is about 40 % on average,

> The majority of the storehouses are not suitable for economical and effective storing, due to their technical, mislocated or non-functional features,

> The independently operating financial regional organisations (directorates) have their own stock-registrations, there is no unified data-base on the nationwide stocks at disposal,

The unified data-handling system is not worked out (purchasing, registration, usage, sorting out, handling incurrent materials).

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purposes. From the point of view of *professional controlling*,⁶ the second step must be made is to put these storehouses under the authority of the central management of GEK.

The third step must be to reinforce the system of advanced storehouses with the LSZK, having state-of-the-art providing abilities.

- The main groups of possible services in the logistics centres are as follows:
- ➤ Establishment of services (by making new conceptions, etc.),
- Basic logistics services (services connected to preparations for transportation; to traditional and combined product turnover, loading and downloading,
- Supplementary logistics services (fuel transportation; transporting vehicles, leasing and repairing removal vehicles, etc.),
- Safety and maintenance of law and order services (property protection and guarding, fire-fighting, etc.),
- Managing services (customs, insurance, banking and postal services, etc.),
- Providing services concerning information and consultations (information on transportation, consultations on insurance policies and legal affairs, marketing, training, etc.). [4]

Based on our preliminary examinations, creating LSZK on one hand, it will be possible to eliminate the out-of-date storehouses, which are operated at high costs and are used ineffectively, on the other hand, it will be possible to handle the incurrent, badly structured goods, stored in these storehouses more effectively. By creating LSZK, a package of logistics services can be "bought" which includes stocking, training for unified loads, data-base registration, as well as maintenance functions, and distribution based on a legal contract.

⁶ The author's interpretation of the unified control system of OKF GEK is as follows:

> Taking normative measures to accomplish the tasks connected to the logistics system of OKF alongside with the Technical Department of BM OKF,

> Taking measures as for accomplishing individual tasks alongside with the organisations of the same profile,

[➤] Taking controlling measures, regarding organisations in question,

> Giving and asking for information from the county directorates of civil service protection,

Making decisions in order to create a unified system, concerning the accomplishment of tasks which emerges during action, providing the unified accomplishment of tasks by agreeing the decisions with the Technical Department of BM OKF,

> Preparing regulations on the special tasks of civil emergency protection, concerning special controlling tasks.

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By including LSZK and choosing the right place for the enhanced storehouses, a complex system of storehouses can be established which will cover all the endangered places of the country. The LSZK-to-be-included are shown on **Diagram 1**:

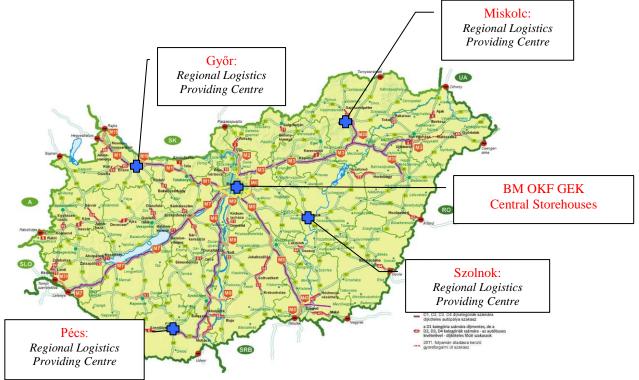


Diagram 1: The allocation of the planned LSZK⁷

However, while integrating new LSZK it is necessary to work out and implement several tasks. Regarding the new system of storage it is necessary to carry out the central professional controlling system on the complete supplying system from purchasing through registration and settlement of the service costs, provided in the area in danger to replacement, by coordinating all the connected logistics tasks (e.g. transportation).

BM OKF GEK would make a contract with the LSZK centrally, thus the principles and controlling, as well as fulfilling the duties could be supervised.

In connection with this it is necessary to establish the *System of Storage and Supply of the National Civil Emergency Protection* (furthermore - OKER) based on the new chain system material supply⁸ with would include the supervision of regulations on stock-usage of the county civil emergency protection directorates, besides the tasks of professional controlling by BM OKF GEK.

⁷ Author's own diagram.

⁸ To define the basic stock of chain supply in civil emergency protection it is necessary to quote the classical interpretation of Economics, according to which the basic stocks are the entirety of raw materials, half-ready products, which go under the process of production only once, their value equals the value of the ready-made product or that of the service it can provide, i.e. the end product. During rescue processes the technical equipment and means (energy resources) as well as the replaceable materials and means used directly by the rescue organisations are included in the chain of material flow. To accomplish the tasks of purchasing and distribution of materials and means needed for the rescue processes on the venue of emergency, it is necessary to create suitable logistics abilities in the system of civil emergency protection.

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The proposition of creating OKER would contain the rules of uploading storehouses, the access to the stocks and equipment, the registration of usage, the system and phases of replacement, the regulations of central financing, handling, sorting out and eliminating waste. The basic principle of the new system is the standardization of stock-handling based on unified principles. To achieve this aim it is necessary to create a list under the name of *Nationwide Stocks of Protection* (furthermore - *ORVK*) which would contain all the means and stocks which are a priori needed for protection in case of flood and inlands waters or any other emergencies which occur most frequently.

By establishing LSZK the following problems can be solved:

- The out-of-date storehouses can be replaced by new ones which are able to provide the suitable services,
- ▶ New principles and theories could be worked out, e. g. the lists of OKER and ORVK ⁹,
- The preventive stocking system could become predictable, since the contributions included on the Act of Law on civil emergency protection¹⁰ could be the sources for creating the new appropriate stocks. The recent stocks of the county storehouses cannot be stored in the new system of LSZK, as 40% of them are incurrent, they would be stored in the central storehouses in the first place, based on the list of ORVK, therefore there is no reserve in the recent system.

3. Summary

On 7 March 2012 the deputy general manager of BM OKF and the staff of BM OKF GEK had a meeting in Szolnok, concerning the LSZK-to-be established. During ground scouting Tollár Tibor fire fighting brigadier general and, deputy general manager said, that according to plans, after establishing the LSZK in Szolnok there would be three other LSZK established next year. Thus the logistics system, supporting the civil emergency protection would be supplemented by an element which makes it possible to provide a state-of the-art logistics supporting system which is based on new principles. The requirement on execution of tasks, to-be done by the county directorates can be formed simply: flexible access and constant alert. [5]

Starting from the 9M principles of logistics, the aim of experts in civil emergency protection of BM OKF GEK is to have the necessary, reinforcing logistics supplies of equipment and means which are at disposal in due course and in the right place.

To achieve this aim it is of great importance to introduce new methods and modernise the infrastructure of logistics abilities.

⁹ Dr. Bakondi György fire fighting lieutenant general, general manager of BM OKF on 17 January 2012 approved of the Schedule on Tasks and Phases, in which Kőlapos, Alsónyék and Kádárta will be under the professional control of BM OKF GEK and in which the creation of OKER and ORVK is also included.

¹⁰ The 77. § of the new Act of Law on civil emergency protection claims: "The finacial sources given to civil emergency protection can be used only for purchasing, developing and repairing technical equiment, for establishing new objects, for expenses of defense, for training and equipping security experts and the staff of civil protection organisations and for supporting rescue organisations."

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[4] Tarnai Júlia 2000. Logistics Centres. - In: GLATZ F. et al. (editor): Transportation systems and their Infrastructures. Magyar Tudományos Akadémia, Budapest, pp. 213-227

[5] <u>http://gek.katasztrofavedelem.huindex2.phppageid=hirek&hirid=23.htm</u>, downloaded: 7 April 2012., 12:40

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