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PÉTER BODA 1

# AIR AND WATER TRANSPORT SYSTEMS IN HUNGARY BEFORE AND AFTER THE CHANGE OF THE POLITICAL SYSTEM<sup>2</sup>

#### Abstract

Transport, including air and water transport systems, has always played a dominant role in society, in resolving the consequences of emergencies as well. The social, economic and technological developments and changes have affected the functioning and structuring of transport companies. The question arises what transformation was induced in this field by the transition to a market economy. In the article, the author examines the structure and operation of the two systems, and their participation in protection tasks, before and after the change of the political system. He analyzes the situation and the characteristics of major Hungarian transport companies. The author examines how protection organizations of smaller units, established as a result of privatization after the termination of large state-owned enterprises, have changed.

**Key words:** transport systems, impacts on the market economy and protection, characteristics of transport systems

#### INTRODUCTION

"Transport has become a decisive part of our everyday lives; the increase of the living standards and the economic development could not be imagined today without modern transport systems and infrastructures. Transport systems consist of transport networks, facilities serving them and installations facilitating access, i.e., travel to the homes or depots of those participating therein. The science of transport classifies the different types of transport in sub-sectors." Traffic and transport systems play a decisive role in Hungary in the field of transport and forwarding.

In this article, I demonstrate the two very large and dynamically developing segments of the four sub-sectors of transport systems, as they are classified: the evolution of the

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<sup>&</sup>lt;sup>3</sup> Szabó, Sándor – Tóth, Rudolf: Repülőterek kialakítása, létesítményeinek kritikus elemei, védelmük lehetséges műszaki megoldásai, Repüléstudományi Közlemények, Repüléstudományi Konferencia 25:(2 special edition) (2013) (pp. 89-113)

situation of air and water transport, before the change of the political system<sup>4</sup>, and afterwards up to date, with a special regard to the development of their protection systems.

Following the historical overview, I examine how the authoritative regulation of protection organizations of smaller units have changed, established as a result of privatization, following the cessation of large public companies, furthermore, what role transport has in protection (against emergencies), how the structuring of their own protection systems has changed within each sub-sector, and what actions they can take today during emergencies.

## THE STATUS OF AIR TRANSPORT FROM THE BEGINNING<sup>5</sup>

The most dynamically developing sector of transport today is air transport. Its development is closely linked to long-term uncertainties such as international political and economic situation, the economic, transport and security policy of each country, as well as the technical development of the field of aviation.<sup>6</sup> The development of aviation started in the early 20<sup>th</sup> century and went through an enormous development within a short time. The two world wars and the change of the political system had significant impacts on industry. In addition to state-owned companies, civilian air companies had operated in Hungary from the time of its inception as well. Let us examine a few of them.

#### **MAEFORT (1920-1921)**

The Hungarian Aero Traffic Company (MAEFORT) was a key company of the twenties. Its aim was to utilize the Hungarian airline fleet, ruined by the war, and the ground infrastructure for civilian purposes, but its tasks included to covertly collect and maintain the remaining military aircraft. The company only performed postal and freight transport, i.e., no passenger service. The Trianon Peace Treaty ended its operation, which prohibited the

http://mult-kor.hu/20120203 kis magyar legitarsasagtortenet?pIdx=1&fbrkMR=desktop (Downloaded: 30 May 2016)

<sup>&</sup>lt;sup>4</sup> The political process using peaceful means, started in Hungary in 1988 and partially completed in 1990 after the free elections, which transformed the dictatorial one-party system of the communist regime (*between 1944 and 1948: Hungarian Communist Party; between 1948 and 1956: Hungarian Workers' Party; between 1956 and 1989: Hungarian Socialist Workers' Party*), and converted the planned economy built on state and social property, into a multi-party parliamentary democracy and market economy built on private property, is called the change of the political system in Hungary. Source: Harmat, Árpád Péter: A rendszerváltozás története és eseményei Magyarországon (http://tortenelemcikkek.hu/node/125 (Downloaded: 30 May 2016)

<sup>&</sup>lt;sup>5</sup> The basis for the sub-chapter is the study entitled Little Hungarian History of Aviation Companies (Kis magyar légitársaság-történet),

<sup>&</sup>lt;sup>6</sup> Szabó, Sándor – Tóth, Rudolf: Repülőterek kialakítása, létesítményeinek kritikus elemei, védelmük lehetséges műszaki megoldásai, Repüléstudományi Közlemények, Repüléstudományi Konferencia 25:(2 special edition) (2013) (pp. 89-113)

defeated States to maintain or build engine-driven aircraft, ordering a total ban on flights in the Hungarian airspace.

#### **AEROEXPRESS RT. (1922-1926); MALERT (1922-1946)**

Hungary, after regaining its air sovereignty, established two airlines. *Aeroexpress Rt.*, which then had six five-seater Junkers aircraft, equipped with alighting gears. It operated sightseeing tours in Budapest and Lake Balaton, as well as domestic flights, and passenger flights to Zagreb, Prague, Bucharest and Vienna. The company also carried out postal service, and delivered newspapers to rural towns, but it did not deliver postal consignments door to door, but the packages were dropped from a 15-meter height in a special way, from a moving aircraft at the specified locations. The company, becoming uneconomic, ceased its operation in 1926. The *Hungarian Air Transport Rt.*, with its five-seater Fokker II aircraft, following the first occasional sightseeing trips, strove to reach Vienna, and gradually expanded its postal and passenger services with domestic and international destinations.



Illustration 1: <a href="http://www.kisalfold.hu/kepek/a\_malev\_tortenete\_kepekben/2023669/2643392/">http://www.kisalfold.hu/kepek/a\_malev\_tortenete\_kepekben/2023669/2643392/</a> (Downloaded: 30 May 2016)

However, the company failed to conclude agreements with the aeronautical authorities of the neighboring countries, in vain was the flight ban lifted, it could not yet to start flights to the neighboring capitals, and came close to bankruptcy. In 1928, Baron Manfred Weiss, also engaged in aircraft production, bought up the shares of the reorganized company, saving it from the financial crisis, and by importing three new Fokkers, he upgraded its outdated fleet. To expand the fleet he purchased, in 1937, seven new Junkers, and in the following year, some Italian-made Savoia-Marchetti aircraft. The company opened more and more domestic

and international flights in the thirties; the devastation of the Second World War put an end to the operation of fleet in 1946.

#### MASZOVLET (1946-1954)

After the Second World War, on 29 March 1946, the predecessor of Malév, the Hungarian-Soviet Civil Aviation Plc. (Maszovlet) was established, whose first flights were domestic ones. The first international flight was to Bucharest in 1947, the destination of the first international scheduled flight was Prague, the Czechoslovak capital. On 25 November 1954, in Moscow, Hungary and the Soviet Union signed an interstate agreement, under which the Hungarian government bought the shares of the Soviet Union in Maszovlet. The following day, Maszovlet's successor, the Hungarian Airlines Company (Malév) was established.

#### MALÉV (1954-2012)



Illustration 2: http://www.kisalfold.hu/kepek/a\_malev\_tortenete\_kepekben/2023669/2643392/ (Downloaded: 30 May 2016)

After the transformation, the company mainly operated domestic flights, but in 1956, the first flight headed towards the "West": on 5 June, to Vienna. Later that month, the first Western European aircraft also arrived at the newly opened Ferihegy airport, a Dutch KLM Amsterdam-Budapest-Cairo flight. After the events in 1956, the Soviets banned all flights and the traffic only re-started in January 1957 on the Budapest-Miskolc-Debrecen line. Before 1989, Malév operated exclusively Soviet aircraft. On 18 November 1988, it started to replace the Soviet fleet by leased Boeings: the first was a Boeing-737, while the first large aircraft was a Boeing-767, entering service on 10 May 1993.

In December 1995, the first Dutch Fokker-70 aircraft arrived, by which the replacement of the Tu-134s started. Alitalia, the Italian national airline and the Italian Simest Bank acquired a 35% share on 12 November 1992, by increasing its capital, in the Hungarian airlines company, which had been exclusively Hungarian-owned until then. However, in December 1997, Hungarian banks bought back the Malév shares from Alitalia. Between 1999 and 2007, the State Privatization and Property Management Plc. (ÁPV Rt.) was owner the majority of Malév in 99.5%, minor investors owned the remaining 0.5 percent. 19 October 19 2000, the Management Board of ÁPV Rt. decided to sell the minority share package of Malév Plc. in a single-round, sealed-scale tender, but the privatization tender was unsuccessful.<sup>7</sup>

At the end of 2010, the European Commission announced that it had investigated a number of financial support measures, including several capital injections and shareholder loans that were granted by the Hungarian authorities to Malév. Following the investigation, in January 2012, the European Commission ordered the company to repay HUF 70-100 billion worth forbidden state subsidies.

On 30 January 2012, the government declared the unprofitable Malév a business organization with strategically important priority, which meant special bankruptcy or liquidation proceedings for the airline company. Malév, which, starting from the 1990s, did not have sufficient capital to be economical, indicated that it may become inoperable within a short time, and then at dawn, on February 3, it terminated its flights.

#### THE PERIOD AFTER CHANGE OF THE POLITICAL SYSTEM

For Hungary, the Association Agreement, signed in 1991 with the European Union, determined the law approximation tasks that were more specifically defined by at start of the accession process. Act XCVII of 1995 on air transport partially grounded and incorporated the liberalized aviation legislation necessary for the accession. The Transport Policy Strategy, adopted by the Parliament in 1996, was meant to facilitate the accession to the European Union. During this period, there were two major Hungarian air transport organizations, that is, civil organizations aviation: Malév, the Hungarian Airlines Company Plc. and the Air Traffic and Airport Administration, LRI.

The successful and efficient functioning of the two systems had to be constructed to be able to establish alliances and partnerships, taking into account the European integration as

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<sup>&</sup>lt;sup>7</sup> Little Hungarian History of Aviation Companies http://mult-kor.hu/20120203\_kis\_magyar\_legitarsasagtortenet?pIdx=1&fbrkMR=desktop (Downloaded: 2016.05.30)

well. The continuation of privatization and the operation of shared flights, economical networking and infrastructure development had to be established and properly prepared as well. In Hungary, the role of the state prevailed in the field of air transport as well with a majority of national ownership, in the elaboration of bilateral and multilateral intergovernmental agreements regulating the access to international markets, as well as in light of the infrastructure development of the Budapest Ferihegy International Airport and air traffic control.

The country's geographical position makes it possible, in the long term, to develop an international airport, capable of fulfilling a hub and distribution function. Budapest Ferihegy International Airport can be considered suitable for this. The European Union initiated negotiations in 1998 to create a European Common Aviation Area, in which, in addition to EU Member States, Norway, Iceland and the ten associated Central and Eastern European countries would participate. Following the entry into force of the Agreement, a single system based on EU legislation would prevail, which would contribute to the faster development of air transport in Europe.

The Hungarian civil air traffic basically serves the international air transport today; it does not satisfy the demands for scheduled flights within the country. Liszt Ferenc Airport is an airport capable of receiving and sending sophisticated aircraft in Budapest. It is expected in the near future that the Debrecen and Sármellék Airports would also have a greater significance. The Debrecen airport was qualified, at the end of 2001, as a public commercial airport, opened for international traffic. The Hévíz-Balaton Airport operating in Sármellék is also a permanent, public, commercial airport, opened for international passenger traffic.

#### SECURITY CHALLENGES

Air transport plays a role in the mitigation of emergencies, in granting assistance and elimination of damages. An important task is to manage emergencies occurring in its territory. It has operated and is operating protection systems to perform these activities in the past and at present, too. It also runs organizations nowadays that need to meet the current security challenges.

Act CLXVI of 2012 on "the identification, designation and protection of critical systems and facilities," contains the definition of the protection of critical system components, as well as the definition of critical system components. Annex 1 of the Act, classifies air and water transport as sub-sectors of the transport sector. "[...] the airports of Hungary, which, under

Annex 1 of the Act, fall within the air transport sub-sector of the transport sector, are listed as elements of the national critical system. The negative effects of its dysfunction can occur at national or international level. One of the tasks of the future will be for experts to decide which are the airports that must be listed as components of the national critical system, and which are those that must have a lower protection level."

Examining the security challenges of today and the potential damage and consequences of the critical infrastructure, experts concluded that terrorist attacks are most often committed the field of air transport and, therefore, airports should be regarded as elements of the critical infrastructure of the sub-sector.

Dr. Ferenc Kovács, in his article entitled "Airports and air traffic control as part of the critical infrastructure", points out the correctness of the systems approach of Act CLXVI of 2012, when the author describes, in detail, what the relationship between the set of national, protection and military critical infrastructure elements is.

"Transport networks, in their own peculiar way, in addition to the set of the national infrastructure, also fall within the protection infrastructure. [...] In spite of this, they function according to a specific set of rules of the transport sector, and they are also subject to the sector security measures." <sup>10</sup>

Before the change of the political system, major state companies could afford to operate large protection organizations to cope with emergencies occurring during their operation in their territories. There were much money and possibilities to conduct exercises both within their organizations and together with the protection organizations. The numbers of personnel, human resources were less limited, necessary to exercise protection tasks and the purchase of certain equipment was not a problem. The profit-oriented approach accompanied by the transition to market economy, in addition to the beneficial rationalization and modernization, was also by followed by the transformation of protection entities. Although there are regular exercises, but the cut in the numbers inevitably affected the personnel of protection organizations. The advantage of the new structure is that downsizing induced the

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<sup>&</sup>lt;sup>8</sup> Szabó, Sándor – Tóth, Rudolf: Repülőterek kialakítása, létesítményeinek kritikus elemei, védelmük lehetséges műszaki megoldásai, Repüléstudományi Közlemények, Repüléstudományi Konferencia 25:(2 special edition) (2013) (pp. 89-113)

<sup>&</sup>lt;sup>9</sup>Szabó, Sándor – Tóth, Rudolf: Repülőterek kialakítása, létesítményeinek kritikus elemei, védelmük lehetséges műszaki megoldásai, Repüléstudományi Közlemények, Repüléstudományi Konferencia 25:(2 special edition) (2013) (pp. 89-113)

Kovács, Ferenc: Repülőterek és légiirányítás a kritikus infrastruktúra részeként. Véget ért a MIG-korszak. Repüléstudományi Közlemények, special edition (15 April 2011), Repüléstudományi Konferencia, Szolnok (2011) (pp. 1-15)

acquisition of more modern and efficient equipment. Institutions and organizations of air transport have always participated in eliminating the consequences of disasters.

Usually, they participated in the detection of the damage sites, but it was often necessary to involve them in the rescue in case of large fires. During detection, from different altitudes, air reconnaissance information could be obtained by aircraft. In some cases, may that be floods or large open-air fires, etc., when a large area is involved, or the area is inaccessible for some reason by land or water, the use of these organizations and equipment is highly justified, since the information needed to manage a disaster can be obtained quickly and efficiently. To involve state-owned entities in situations that require the declaration of a special legal order was relatively simple. Today, when companies are privately, mostly foreign owned, their involvement is relatively more difficult from a financial and legal point of view. Thus, the common practice has moved in the direction that professional rescue organizations acquire helicopters, unmanned aerial vehicles, etc., and deploy them themselves.

## THE HISTORY OF HUNGARIAN PASSENGER SHIPPING<sup>11</sup>

In the above, I demonstrated the organizations before the political changes and the differences in air transport and the transformation of protection systems afterwards. In this chapter, I examine the development of water transport.

By the appointment of Gábor Baross to minister of trade and transportation in 1886, a new chapter began in the Hungarian transport policy, which, besides the development of railways, brought favorable changes in shipping as well. The modernization of the Hungarian seaport, Rijeka started. In 1886, the regulation of the Upper Danube, and in 1890, the construction of the Iron Gate restarted. Water transport was implemented by a few companies.

#### **Hungarian River and Sea Shipping Company (MFTR) (1895-1947)**

The foundation assembly of the Hungarian River and Sea Shipping Company (MFTR) took place on 24 January 1895, after the adoption of Act XXXVI of 1894. The law defined the relationship between the new shipping company and the state. MFTR took the ships of the Hungarian State Railways (MÁV), and gradually acquired the vessels of a number of smaller companies, including the Győr steamship company, founded in 1865, and it also built new ships at a rapid pace. The continuous development slowed down after the outbreak of the First

<sup>&</sup>lt;sup>11</sup> The hitory of MAHART <a href="http://www.mahartpassnave.hu/hu/mahart/rolunk/mahart-tortenete/">http://www.mahartpassnave.hu/hu/mahart/rolunk/mahart-tortenete/</a> (Downloaded: 2016.05.30.)

World War and broke down as a result of the defeat at the end of the Great War. The conditions of the peace treaties closing the war had a severe blow on the shipping companies of the defeated powers, on MFTR as well. In 1945, MFTR restarted shipping traffic with ferries. It started extracting the sunken ships and repairing the damaged ones. Its vessels taken to the West, returned home after the conclusion of a new peace treaty in 1946/47, however, they had to be handed over gradually, until 1950, to the Hungarian Soviet Shipping Company Limited (MESZHART), established on 30 March 1946.

#### **MSzHRT - Hungarian-Soviet Shipping Company Limited**

The Soviets rendered the MFTR ships taken in possession as spoils of war to the new joint venture. MESZHART continued to operate primarily in the area of foreign cargo shipping. It performed the passenger service until 1950, shared with MFTR and the Balaton Shipping Company. The "upgrade" was limited to the restoration of wrecks and the reconstruction of some passenger ships.

#### **Hungarian Shipping Company Limited (MAHART)**

In 1948, the seven Danube states concluded the Belgrade Convention on Danube Shipping. This had a significant impact on Hungarian shipping. According to the Convention, the Danube Commission started its operation, and it moved its headquarters in 1954 from Galati to Budapest. At the end of 1954, the Soviet Union terminated its interests in the Hungarian shipping, it became unprofitable, and on 1 January 1955, the Hungarian Shipping Company Limited started its operation purely on a national basis. The company initially continued the operation of the old legacy ships, but at the end of 1950, the modernization of the fleet started. MAHART, during its existence, successfully served the interests of the Hungarian economy. Its history reflects the dramatic changes in the country's fate of the past century.

From time to time, it suffered major losses as well, but even in the most critical times, it was able to stay on its feet. From the 1980s onwards, with increasingly unfavorable economic environment, the termination of the Hungarian shipbuilding, the conflicts impeding navigation on the Danube, a breakdown of traditional trade relations, as a result of the termination of the state engagement, the Hungarian national shipping found itself in a critical position. Solving its problems could have been based on the correct recognition of the dominant trends prevailing in the European shipping in the following years and on the enforcement of an appropriate state transport policy. After the change of the political system,

MAHART operated on a holding basis, in the framework of independent operating units, and limited liability companies continued the various activities.

#### MAHART PassNave Passenger Shipping Ltd.

MAHART PassNave Passenger Shipping Ltd. was founded on 1 January 1994 as a 100% owned company of MAHART Hungarian Shipping Ltd. Following the privatization, completed in 2008, the owner of the company in 84% was the 60-year-old Masped Ltd., Hungary's market-leading transportation and logistics company. Since October 2013, the majority owner of the company has been the Hungarian State again.

#### THE PERIOD AFTER THE CHANGE OF THE POLITICAL SYSTEM

For Hungary, water transport, because of the distance from the seas, basically means inland water transport. We do not have any marine fleet either, deployed to foreign ports. Nowadays, the Danube – sea shipping does not function either that, in principle, could be operated very efficiently. Due to its technical-economic characteristics, in cargo transport, shipping would primarily be suitable for transporting bulky items that do not require fast transfer, and in passenger transport, it only has a touristic significance. According to forecasts, the change of the composition of cargo shipping, the geographical location of the seller and the reception points allow for a doubling of the inland cargo transport output. In passenger water transport, an increase can be expected in the performance related to tourism.

The situation of water traffic was determined by the fact that the situation of shipping had changed with shifting to market economy, by the modification of the economic environment and demand for services and the termination of state support. Although the intensification of environmental requirements improves the position of shipping, radical shifts of the direction of economic and market structures caused the backlog of shipping. Nevertheless, the long-term classification of MAHART into state ownership, decisively representing the Hungarian navigation, shows the recognition of the strategic importance of shipping. According to experts, with fulfillment of certain conditions, the government plans are feasible, according to which, by 2030, the proportion of water transport in the domestic freight transport should be tripled.

MAHART always played a significant role in flood management. Its pool of vessels and personnel were capable of and suitable for contributing to flood protection and population protection tasks. Today, the fulfillment of protection requires complex organization. The system of protection administration also provides a framework for the implementation

thereof. The Hungarian Defense Forces, disaster management, NGOs and citizens are undertaking a significant part, while shipping companies are rarely involved.

#### **SUMMARY**

Transport is one of the priority areas of the life of the society. It plays an important role not only in economic processes, but also in performing protection duties. In the period prior to the change of the political system, considering its personnel and assets available, quantitative indicators were predominant. There was a better opportunity to use their protection organizations, to deploy them during the management of emergencies in Hungary. After the change of the political system, there are less possibilities to do so, since the market and profit-seeking organization forms, striving for rationalization, forms smaller organizations, however, in respect of assets, they sought to increase efficiency.

In this article, I examined air and water transport from amongst the sub-sectors of transport, I analyzed the transformation of their evolution and the characteristics of their participation in protection. Aviation is going through a continuous and significant transformation. The previous periods were characterized by the dominance of state ownership in this sub-sector. The liberalization of markets and the globalization of the economy have led to a global alliance system of airlines, the cooperation between alliances has gradually replaced competition the companies. This leads to the concentration and redistribution of the market. Airlines, in this world economy and air traffic environment, must perform their activities and ensure their survival. In this process, the establishment of their own protection systems represents a peculiar scope of tasks. The personnel of their protection organizations are optimized, more focused and targeted exercises are organized and they pay attention to upgrading their assets. During the protection, aircraft are used for detecting the incident sites and assisting measures of population protection and potentially firefighting.

The water traffic situation is determined by the fact that switching to a market economy, the modification the economic environment, the termination of state support, the position of shipping, as well as the demand for its services have changed. Although the intensification of environmental criteria could improve the position of shipping, the radical shifts of the direction of economic and market structures caused the backlog of shipping. Nevertheless, the long-term classification of MAHART into state ownership, decisively representing the Hungarian navigation, shows the recognition of the strategic importance of shipping. MAHART plays a significant role in the fulfillment of protection tasks, and

cooperates with the protection agencies and organizations. In order to increase efficiency in the future, however, the reconsideration of the cooperation and the exercises of protection organizations, and the development of skills meeting the new challenges and the expansion of the existing ones may be necessary.

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