

# Regional bus transport system in Hungary

Transport Operation Technology

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Középnnyugat-magyarországi  
Közlekedési Központ Zrt.

# Introduction

► Welcome on board!



# Public bus transport systems in Hungary

## ▶ Types:

- ▶ Local (e.g. Budapest, Szeged etc.)
- ▶ Regional, long-distance (countrywide)
- ▶ International (e.g. Eurolines, Flixbus)
- ▶ (Contracted bus lines)

## ▶ Sustainer:

- ▶ Government
- ▶ Local government
- ▶ Market-based



# Public bus transport systems in Hungary

- ▶ Owned by

- ▶ Government (e.g. Volánbusz, Regional Transport Centers etc. -> from 1. october 2019 one big company: Volánbusz)
- ▶ Local Government (e.g. MVK Ltd., SZKT Ltd., BKK Ltd., BKV Ltd. etc.)
- ▶ Private company (e.g. VT-Arriva Ltd., Trans-Tour Ltd.)



# Classification of the operators by the owners



- ▶ Owned by the government:

- ▶ Main task: regional and long-distance service

- ▶ Other task: local service

- ▶ Based on public service contract

- ▶ Compensation subsidy

- ▶ Fare is ruled by law, based on travelled kilometres-interval

- ▶ There are no discounts

- ▶ Example: Székesfehérvár

- ▶ Main operators: Volánbusz Ltd. and the Regional Transport Centers

- ▶ Over 14.600 bus every day countrywide



# Volánbusz and the Regional Transport Center Companies

- ▶ Before the 1st January 2015
  - ▶ 24 „VOLÁN” companies
  - ▶ In 19 of county
  - ▶ 1-3 companies in each county
  - ▶ Smaller (Hatvani Volán Ltd.) and bigger companies (Volánbusz Ltd.)
  - ▶ „VOLÁN”, the brand!



# Volánbusz and the Regional Transport Center Companies

- ▶ After the 1st January 2015
  - ▶ Volánbusz and 6 Regional Transport Center Companies
  - ▶ Biggest: Volánbusz Ltd.



# Reasons of the integration



- ▶ To utilize the budget source reasonably (e.g. buying new buses for each location)
- ▶ To remove the redundancy in the traffic-management and traffic output (e.g. informatical system is different)
- ▶ To increase the level of the service (e.g. distribution of the new buses)
- ▶ To create more competitive companies
- ▶ E.g.: Hatvani Volán (77 buses) + Jász kun Volán (240 buses) + Mátra Volán (144 buses) + Agria Volán (194 buses) + Nógrád Volán (ca. 200 buses) = KMKK
- ▶ Disadvantages:
  - ▶ Losing the „VOLÁN” brand
  - ▶ Making a unified corporate identity is expensive and takes a lot of time





# Subcontractor's role in regional public bus transport system

- ▶ The private sector

- ▶ operates the buses (e.g. filling with fuel, repairing, storing etc.)
- ▶ grants the HR (e.g. traffic-management, bus drivers, engineers etc.)

in the selected lines.

- ▶ Incomes from the tickets go to the „VOLÁN” -> private companies operate for fix income based on level of norm
- ▶ To decrease the level of norm of the „VOLÁN”



# Garage, basis

- ▶ **Storing, examing and repairing** the buses

- ▶ Daily (short, 5-10 minutes)

- ▶ Weakly (longer)

- ▶ Repairing malfunction (case by case)

- ▶ Usually in the suburbs

- ▶ Regional bus service

- ▶ Each buses „sleep” front of the drivers house in the countryside (routes start early in the morning)

- ▶ Examining weakly or less often

- ▶ Big problem: malfunction <-> replacement bus



# Garage, basis

- ▶ Problems with the new buses' reparationment:
  - ▶ Needs professional service, provided by the manufacturer
    - ▶ Diagnostic systems
    - ▶ Servicebook is secret (new technologies)
    - ▶ Ordering fixtures are time-consuming
  - ▶ Because of that, repairing some types of buses is outsourced for the manufacturers (e.g. MAN, Mercedes etc.)



# Bus stations

- ▶ Located in the bigger cities
  - ▶ In the city center
  - ▶ Problems:
    - ▶ Lack of intermodality (bus and train)
    - ▶ The huge bus station destroys the landscape (green areas)
    - ▶ The area is very valuable
    - ▶ Storing the buses between the peak times
  - ▶ The solution: intermodal terminal



# Problems in the regional bus transport system

- ▶ It's difficult to understand the timetable in some case
- ▶ The timetable is very complex (e.g. to service very small villages in the countryside)
  - ▶ Solve the problem: DRT
  - ▶ Connection problems / Intermodality
    - ▶ Between
      - ▶ Regional bus and regional bus
      - ▶ Regional bus and local bus
      - ▶ Regional bus and train
      - ▶ Local bus and train

## BÁTONYTERENYE VÁROS HELYI JÁRATI MENETRENDJE

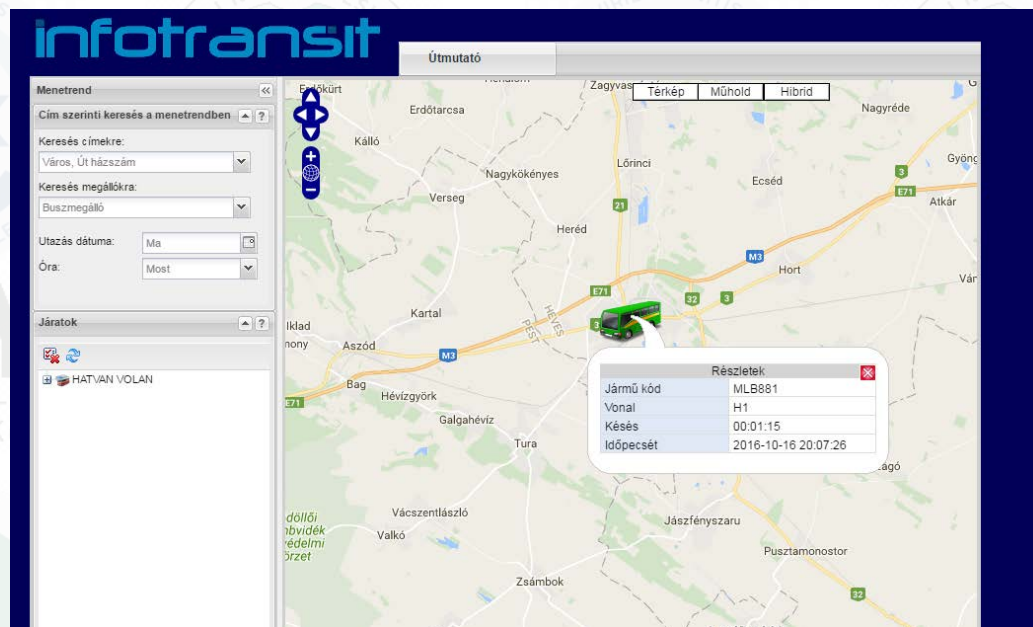
Érvényes: 2016. január 4-től

MUNKANAP	SZABADNAP	MUNKASZUNETI NAP
1 NAGYBÁTONY, VÁ. - ALSÓ-KATALIN-SZOROSPÁTAK		
▲ 8:00, ▲ 10:00, 19:00	6:55, 19:00	6:55, 19:00
1 NAGYBÁTONY, VÁ. - NAGYBÁTONY, FALU - ALSÓ-KATALIN-SZOROSPÁTAK		
10:00		
1 BEKE ÚT - ALSÓ-KATALIN - SZOROSPÁTAK		
5:52, ▲ 6:55, ▲ 7:10, ▲ 15:00		
1 BEKE ÚT - NAGYBÁTONY, FALU - ALSÓ-KATALIN - SZOROSPÁTAK		
▲ 8:00	9:00	9:00
1 SZOROSPÁTAK-ALSÓ-KATALIN-NAGYBÁTONY, VÁ.		
▲ 19:15		
1 SZOROSPÁTAK-ALSÓ-KATALIN-NAGYBÁTONY, FALU - BEKE ÚT		
▲ 6:10, ▲ 19:15		
1 SZOROSPÁTAK - ALSÓ-KATALIN - BEKE ÚT		
▲ 13:30, ▲ 14:40, ▲ 16:00,	13:50	
1 ALSÓ-KATALIN- NAGYBÁTONY, VÁ.		
▲ 17:00		
1 ALSÓ-KATALIN - BEKE ÚT		
		13:45
2 NAGYBÁTONY, ÖZDI ÚT 10 - MACONKA, ÚJTELEP		
▲ 12:15, ▲ 15:30		
2 MACONKA, ÚJTELEP- NAGYBÁTONY, VÁ.	9:45	9:45
2 MACONKA, ÚJTELEP- NAGYBÁTONY, ÖZDI ÚT 10.		
▲ 6:35, ▲ 8:45, ▲ 14:20	10:45	19:45
3 SZOROSPÁTAK - NAGYBÁTONY FALU - KISTERENYE, VÁ.	7:15	7:15
3 SZOROSPÁTAK- MACONKA, ÚJTELEP		
▲ 8:15, ▲ 14:00		
3 SZOROSPÁTAK-NAGYBÁTONY, FALU- MACONKA, ÚJTELEP		
	9:20, 19:20	9:20, 19:20
3 SZOROSPÁTAK-NAGYBÁTONY, FALU - EÜ. KÖZPONT- MACONKA, ÚJTELEP		
▲ 8:15		
3 SZOROSPÁTAK- MACONKA, ÚJTELEP - KISTERENYE, VÁ.		
▲ 16:00	7:15	7:15
3. SZOROSPÁTAK - NAGYBÁTONY ÖZDI ÚT 10		
▲ 15:15		



# Problems in the regional bus transport system

- ▶ Missing the communication between the operators
- ▶ Shadowing the vehicle



**06:50 Indulás** Debrecen autóbusz-állomás  
134.8 km | 175 perc | Helyből indul Eger felé | Járatszám: 1447/213  
Üzemelteti: ÉMKK  
Jegyár: 2520 Ft  
Közlekedik: a hét utolsó munkanapja kivételével munkanapokon és szabadnapokon

**09:45** Eger autóbusz-állomás  
Átszállás  
Átszállásra rendelkezésre álló idő: 00 óra 00 perc, ebből 1 perc gyaloglás  
Átszállási idő 0 perc. Érdeklődjön az illetékes közlekedési szolgáltatónál, hogy a csatlakozás biztosított-e.

**09:45** Eger autóbusz-állomás  
128.3 km | 130 perc | Helyből indul Budapest felé | Járatszám: 1050/128  
Üzemelteti: Volánbusz  
Jegyár: 2725 Ft (ebből pótkjegy 205 Ft)  
Közlekedik: mindennap

**11:55 Érkezés** Budapest Stadion autóbusz-pályaudvar

10° célállomáson

# Problems in the regional bus transport system

- ▶ Booking tickets in the Internet
  - ▶ Only for buses, which depart or arrive from/to Budapest (mainly operated by Volánbusz)
- ▶ Bus stops
  - ▶ Same bus stops have different names in local and regional service
  - ▶ Some bus stops have meaningless names (e.g. Éva restaurant -> Who is Éva? 😊)
  - ▶ There isn't a „name sing” in every stop



# The future

- ▶ Liberalization from 2020 (?)
  - ▶ Every company can buy lines from the government
  - ▶ How do the Hungarian government-owned companies prepare for the liberalization:
    - ▶ Buying new or second-hand buses
    - ▶ Is that all??
- ▶ **Dinamic pricing!**





# Local public transport systems in Hungary

## ▶ Sustainer

- ▶ Self-government
- ▶ Self-government together with the government

## ▶ Types of companies

- ▶ Traffic organizer
- ▶ Public transport (bus) operators

## ▶ Company owner:

- ▶ Government
- ▶ Self-government
- ▶ Private company

## ▶ Usually in bigger cities



# Self-government owned companies

## ▶ In the capital city (Budapest)

### ▶ BKK („Budapest Traffic Center): traffic organizer



BUDAPESTI  
KÖZLEKEDÉSI  
KÖZPONT

### ▶ In the past: organizing all of the traffic modes

#### ▶ Public transport modes (tram, bus, agglomeration bus, suburban railway, trolleybus etc.)

#### ▶ Ordering the service from the traffic operators (e.g. VT-Arriva Ltd., BKV Ltd., T&J Bus-Projekt Ltd.)

#### ▶ Making an unified corporate identity („Sky-blue” buses)

#### ▶ Individual traffic (bike-sharing system „BUBI”, parking lots, parking areas etc.)

#### ▶ Traffic Engineering Systems (programs of the traffic lights, traffic order etc.)

#### ▶ Deciding the main transport-investment projects in the future (e.g. Balázs Mór Plan)

### ▶ Nowadays: organizing the public transport modes within the city borders

# Self-government owned companies

## ▶ In other big cities

### ▶ Pécs: Tüke-Busz Ltd.

- ▶ Ca. 150.000 inhabitants
- ▶ Only bus transport system

### ▶ Debrecen: DKV Ltd.

- ▶ Ca. 200.000 inhabitants
- ▶ Bus, trolley bus and tramway services too

### ▶ Szeged: SZKT Ltd. (self-government owned) + DAKK Ltd. (government owned)

- ▶ Ca. 160.000 inhabitants
- ▶ SZKT: trolleybus and tramway services, DAKK: bus service



# Self-government owned companies



## ► In other big cities

► Miskolc: MVK Ltd.

► Ca. 160.000 inhabitants

► Bus and tramway services

► Kaposvár: KT Ltd.

► Ca. 70.000 inhabitants

► Only bus service



# Government owned companies

- ▶ Most of the Hungarian big or smaller cities
- ▶ Operators: Regional Bus Transport Centers

## Advantages

- ▶ Can guarantee reserve buses from the regional service
- ▶ Have a garage, basis with skilled human resource/employees
- ▶ Have a large amount of employees (holiday, sick-leave etc.)
- ▶ Own a petrol station

## Disadvantages

- ▶ Not so flexible
- ▶ Quite expensive



# Local or regional?

- ▶ Combine the local and regional public transport systems
- ▶ Use the regional buses within the border of the city
  - ▶ Government and self-government makes a contract
  - ▶ Combined tickets, passes
  - ▶ In Hungary, there is a sign from of the bus [H]
  - ▶ Optimize the local and regional parallel lines (e.g. Keszthely)



# Private companies

- ▶ In smaller cities (ca. 10-20.000 inhabitants)
  - ▶ With few buses
  - ▶ Small, family-owned companies
  - ▶ Advantages:
    - ▶ Cheap
    - ▶ Flexible
  - ▶ Disadvantages:
    - ▶ There are no reserve buses, employees (e.g. Zirc)
    - ▶ Lack of maintenance (garage, basis etc.)
    - ▶ Older, second-hand buses



# Future

- ▶ Might be
  - ▶ Regional transport organizer companies
  - ▶ Tasks:
    - ▶ Organize and order both the regional and the local public transport systems
      - ▶ Transport companies as operators
      - ▶ In association with the railway (integrated timetables)
      - ▶ Optimize the parallel lines
  - ▶ BKK??





Thanks your attention!

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