Towards multimodality along the Hungarian-Ukrainian border:

the case of the East-West Gate Intermodal Terminal

Dr. Klára Czimre – assistant professor Zsófia Szaniszló – PhD student Department of Social Geography and Regional Development Planning



sabud and the same and the same

Visegrad Fund



Sources

- National Road Network Information Scoreboards (February 2021)
- Special Report 09/2020: The EU core road network
- CSO statistics on transport
- Data from the National Tax and Customs Administration
- In-depth interview with the CEO of the TrInvest (Owner 1 of the East West Gate Terminal)
- In-depth interview with the Terminal Manager of the East West Gate





- <u>https://www.mlszksz.hu/nott-az-intermodalis-fuvarozas-volumene-tavaly-de-nem-elegge/?v=35b5282113b8</u>
- <u>https://trans.info/hu/novekedes-az-intermodalis-aruforgalomban-278381</u>
- https://www.napi.hu/magyar-gazdasag/aruszallitaskereskedelem-kozut-vasut-aruforgalom.768531.html
- <u>https://www.zaol.hu/helyi-kozelet/2021/09/letettek-az-metrans-kontenerterminal-alapkovet</u>
- <u>https://www.kozlekedesvilag.hu/ujsag/navigatorvilag/met</u> <u>rans-5/</u>
- <u>https://www.containercenter.hu/mcc_csepel/bemutatkoz</u> as/iranyvonat_projektek/index.php
- <u>https://www.containercenter.hu/mcc_csepel/bemutatkoz</u> <u>as/barka_projektek/index.php</u>
- <u>https://www.scmonitor.hu/webgalamb/files/download/33</u> /Supply_Chain_Monitor_2022_november.pdf
- <u>https://www.scmonitor.hu/cikk/20190808/a-csepeli-</u> terminal-sikertortenet
- <u>https://www.containercenter.hu/mcc_csepel/bemutatkoz</u> <u>as/forgalmi_adatok/index.php</u>
 - Visegrad Fund

Transport networks connecting Hungary with Ukraine



Railway networks connecting Hungary with Ukraine





• Visegrad Fund





Transport network: public road network and border crossings along the borders of Hungary



Vehicle traffic on main roads and motorways in Hungary (2019)



Source: National Road Network Information Scoreboards (February 2021)



• Visegrad Fund

6

sentation infras

Heavy vehicle traffic on main roads and motorways in Hungary (2019)







Road access time to the nearest motorway interchange on the fastest route, 2019

Road access time to the nearest train station by the fastest route, 2019

• Visegrad Fund

8

Data source: National Spatial Development and Planning Information System (TEIR)







Source: KTI-Institute for Transport Sciences





- net turnover of the logistics service providers: 3 400 billion HUF (9.19 billion euro) (nearly 5% of the total net turnover of the national economy)
- 40 thousand logistics companies (mostly small and medium-sized enterprises)
- employees: 259 thousand (which is 6.5% of the total employment)
- logistics sector: accounts for **6.3% of** the Hungarian gross domestic product (**GDP**)
- World Bank's Logistics Performance Index: 31st place (2016)

• Visegrad Fund

q



Rail freight transport by direction of traffic in Hungary - weight of goods carried



Rail freight transport by direction of traffic in Hungary - freight tonne-kilometres, million

• Visegrad Fund



General features of intermodal transport in Hungary - 2021





General features of intermodal transport in Hungary - 2021



General features of intermodal transport in Hungary - 2022





• Visegrad Fund

Total Hungarian goods traffic output per tonne transported in 2022





Total Hungarian goods traffic output per tonne-km of goods in 2022

Source: Central Statistical Office (CSO) and Association of Hungarian Logistics Service Centres (AHLSC)





• Visegrad Fund

Subsector changes in total Hungarian intermodal traffic in 2022







- further expanded after its growth in 2021
- carried more than 750 thousand 20 feet TEU
- mainly railway-road
- traffic decreased at the rual terminals
 - Záhony: Russian-Ukrainian war
 - Sopron: restructuring of traffic
- Budapest terminals contributed to intermodal traffic growth

Visegrad Fund

- BILK
- BUCS
- MCC

Budapest Intermodal Logistics Center (BILK)







- handling of combined transport consignments
 - from rail to road and vice versa
- has a separate exit from the M0 motorway, close to the intersection of all major international destination and transit routes
- water and flight connections are also available within 20 km (Csepel Freeport, Liszt Ferenc International Airport)
- more than 207,000 m2 of warehouse and office space
- 25-building warehouse base operated by professional facility management is a refrigerated, tempered, ADR, cross dock, high and normal warehouse developed with high technical content, as well as a property with direct siding connection covering the all modern logistics needs
 - Visegrad Fund
 - 17

BUCS METRANS Budapest-Csepel (BUCS)



- own network of state-of-the-art container terminals
- strategic objective is to organise global container traffic to Central and Eastern European countries via European ports
- exclusively engaged in containerised transport, in a socalled shuttle system, in a closed system without disconnections or connections, in some cases with depot
 - Visegrad Fund
 - 18

MAHART Container Centre (MCC)



Konténer forgalom TEU-ra vetítve

- trimodal distribution centre for intermodal transport processes
- provides transhipment, storage, repair and other ancillary services for its customers
- has been in operation for some 40 years
- since its establishment, MCC has been a Hungarian, privately owned, neutral, open terminal, independent of rail companies and shipping lines
- 12.7 ha total area (127 000 m²)
- 10.9 ha storage area (109 000 m²)
- 2×690 m + 3×300 m loading track, 220 m loading quay
- 1 container gantry crane (30 t), 6 telescopic handlers (Kalmar, 45 t), 4 telescopic empty container handlers (Kalmar, 10 t), 3 Kalmar terminal tractors, 74 electrical connections,
- services: repair workshop, dangerous (ADR/RID) containerised goods storage area, container customs inspection, transhipment area
- statistics for 2022:
 - 228.000 TEU container turnover
 - 446.400 TEU container handlings
 - 2.360 container blocktrains
 - 59.7% loaded containers
 - 40.3% empty containers

- Visegrad Fund
 - 19

MAHART Container Centre (MCC)



- the terminal manages a wide range of train projects across Europe through the rail operator companies it works with
- from Mahart Container Center, through the rail operator companies cooperating with the terminal, there are closed express trains to
 - on a regular basis
 - Trieste
 - Koper
 - Rijeka
 - Hamburg
 - Bremerhaven
 - Herne
 - Cologne
 - Rotterdam
 - on an occasional basis
 - Salzburg
 - Linz
 - Paskov
 - China

- Visegrad Fund
 - 20



- Socialist years: transhipment hub in the Záhony area – a good alternative for transport
- After change of regime: in Hungary both the railways and Eastern Hungary were devalued

• Summer 2020

- Záhony Logistics and Industrial Belt
- CECZ Central European Ltd.

Aim: to join the Chinese government-backed Belt and Road Initiative and create a logistics, rail and freight hub



21

• Visegrad Fund

Fényeslitke: the largest intermodal terminal in Central Europe







P21



www.eastwestil.com



https://www.napi.hu/magyar-vallalatok/east-west-gate-ewg-intermodalis-terminal-east-west-intermodalis-logisztikai-szolgaltato-zrt-fenyeslitke logisztikai-kozpont-vasuti-fejlesztes-logisztika-atrako.742547.html

• Visegrad Fund

- Area: 85 hectare
- Grain, crude cooking oil, fertilisers
- From where? China, Japan, South Korea and Central Asian countries
- Where **to**? Europe, Germany, Italy, Austria, Croatia and Slovenia











Competitive advantages of the intermodal terminal:

(1) use of state-of-the art technology (2) provides unique services that other terminals cannot: special materials, such as gas container tanks and chemicals can be transferred (3) the terminal is suitable for loading conventional road semi-trailers on rails
(4) in the industrial park next to the terminal area there is an opportunity to construct warehouses and even plants





• Visegrad Fund



Road transport:

January E February March April May June July August September October November December







Rail freight transport:

■ January ■ February ■ March ■ April ■ May ■ June ■ July ■ August ■ September ■ October ■ November ■ December

Source: based on data from National Tax and Customs Administration

• Visegrad Fund



Road transport:

Rail freight transport: trend of import- weight of goods



January EFebruary March April May June July August September October November December





Source: based on data from National Tax and Customs Administration

• Visegrad Fund

"Since the outbreak of the war in Ukraine, RailCargoGroup has transported between 100,000 and 150,000 tonnes of agricultural cargo from Ukraine to Europe. What used to be a dominantly ocean-driven supply chain is now partially transiting to Europe by rail, with Hungary as the main transit country for the Austrian operator." (20 December 2022)





Conclusion: a new economic opportunity for the eastern border region?

- World economic events
- Modern investment a good example (best practice)
- Debrecen, surrounding background logistics
- Industrial park establishment of Eastern companies





- Pandemic
- World economic events
- World political events
- Construction of agricultural fields and green areas

Visegrad Fund

28

• Pollution

Thank you for your attention

Dr. Klára Czimre – assistant professor Zsófia Szaniszló – PhD student Department of Social Geography and Regional Development Planning





- Visegrad Fund