



eWorkshop on Expanding E-Mobility at the Regional Level

10 April, 9:30 – 13:00 CET, Zoom

Cross-border e-buses and shared e-bikes between Hungary and Slovakia

KTI Hungarian Institute for Transport Sciences & Logistics Interreg Europe CROSUSMOB project – Good practice

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Senior researcher, project manager



Background







CROSUSMOB

- Interreg Europe's CROSUSMOB project aims to foster regional cross-border public transport by improving policy instruments
- 7 partners, 6 member states, 36 month (+12 month monitoring)
- Start date 04/2024
- Regional sensibility diagnosis on the following aspects influencing cross-border mobility:
 - cross-border mobility barriers sensibility: The aim of this first diagnosis is to analyze persistent legaladministrative and technical/technological cross-border mobility barriers based on the ongoing work from the European Commission on the EU b-solutions initiative with several projects on CB transports
 - environmental sustainability' sensibility That will focus on the identification of the level of contribution of crossborder sustainable transportation to improving environmental sustainability processes in the analysed region
 - cross-border mobility permeability sensibility as way to understand how current several boundaries, like mobility patterns increase the cross-border mobility barriers
 - socio-political context, that consists of how current Cross border mobility project are accepted, or not by the stakeholders involved in the territory
 - Exchange of good practices:
 - Field visits
 - Good practices and case studies
 - Peer review
 - Thematic workhops
 - + Local stakeholder groups



Zero emission buses in Hungary (as of January 2024)

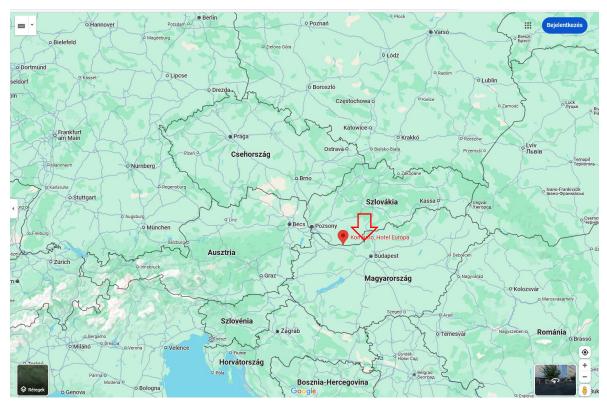






Case study area - Komárom (Hungary pop. - 20k) Komárno (Slovakia - pop. 32k)









Project details – e-bus



- Acronym: Kn-Kn ImproTrans
- Call IDSKHU/1601
- Priority Axis: Enhancing cross-border mobility
- Specific objective: 2.2.1 Improving cross-border public transport services between Komárno (SK) and Komárom (HU)
- Registration No.: SKHU/1601/2.2.1/359
- Total Project budget: 999,766.71 €
- Total ERDF awarded: 849,801.70 €
- Project start date: 01 October 2018
- Project end date: 31 May 2022
- Bus procurement contract signed: 13th November 2020
- First revenue service 15th June 2021

- 1 new zero emission battery powered e-bus
- 2 bidders, second run successful
- Type: BYD K9UB (Chinese manufactured in local factory)
- Range: 300 km, 3,5 hours charging time, route ca. 5 km, flat terrain
- Seats: 36, (+40 standing place)
- Low-entry, wheelchair accesible
- Bus price: 153.500k HUF (ca. 410k EUR)
- Charging infrastructure: 1
- Bus stop renovations and 20 smart panels



Service offer and tariff



- Daily 7 weekend and 11 workday services
- Fare 1 EUR (adults) since 15/12/2024
- 0.50 EUR (14-25 years old)
- Free -14 and 65+
- Monthly pass: 18/9 EUR
- Operator: MÁV Passenger Service (Hu)
- PSO service in Hungary, no domestic (local) travel option in the 3 stops in Slovakia (even with free local PT)
- Alternative taxi ca. 3.5-4 EUR
- It connects the important rail and bus stations and major points of interests





Menetrend / Cestovny poriadok:

Érvényes: 2024. december 15-től Platí od: 15. decembra 2024

228 Komárom ► Komárno [Révkomárom]

Megállóhelyek / Zastávky:	Indulási időpontok / Odchody:										
Meganoneryek / Zastavky.						М				М	М
Komárom, Autóbusz-állomás		6:20	7:15	9:15	12:00	12:45	14:20	15:55	17:55	20:45	22:20
Komárom, Szabadság tér	- 1	- 1		- 1	- 1	- 1	14:22	15:57	17:57	- 1	- 1
Komárom, Fürdő	- 1	- 1		- 1	- 1	- 1	14:25	16:00	18:00	- 1	- 1
Komárom, Tesco áruház	4:42	6:22	7:17	9:17	12:02	12:47	14:28	16:03	18:03	20:47	22:22
Komárom, Vasútállomás	4:45	6:25	7:20	9:20	12:05	12:50	14:31	16:06	18:06	20:50	22:25
Komárno, Hotel Európa	4:50	6:30	7:25	9:25	12:10	12:55	14:36	16:11	18:11	20:55	22:30
Komárno, Nemocnica - Kórház	4:53	6:33	7:28	9:28	12:13	12:58	14:39	16:14	18:14	20:58	22:33
Komárno, Autobusová stanica - Autóbusz-pályaudvar	4:55	6:35	7:30	9:30	12:15	13:00	14:41	16:16	18:16	21:00	22:35

228 Komárno [Révkomárom] ► Komárom

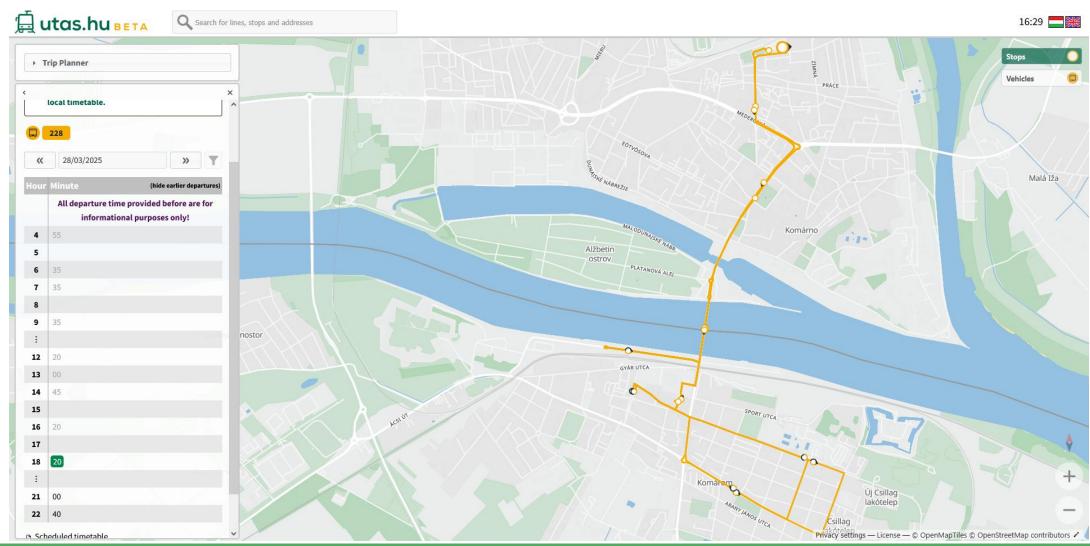
Megállóhelyek / Zastávky:		Indulási időpontok / Odchody:									
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Komárno, Autobusová stanica - Autóbusz-pályaudvar	4:55	6:35	7:35	9:35	12:20	13:00	14:45	16:20	18:20	21:00	22:40
Komárno, Nemocnica - Kórház	4:57	6:37	7:37	9:37	12:22	13:02	14:47	16:22	18:22	21:02	22:42
Komárno, Hotel Európa	5:00	6:40	7:40	9:40	12:25	13:05	14:50	16:25	18:25	21:05	22:45
Komárom, Vasútállomás	5:05	6:45	7:45	9:45	12:30	13:10	14:55	16:30	18:30	21:10	22:50
Komárom, Tesco áruház	5:08	6:48	7:48	9:48	12:33	13:13	14:58	16:33	18:33	21:13	22:53
Komárom, Fürdő	- 1	- 1	7:51	9:51	12:36	- 1		- 1	- 1	- 1	- 1
Komárom, Szabadság tér	- 1	- 1	7:54	9:54	12:39	- 1	- 1	- 1	- 1	- 1	- 1
Komárom, Autóbusz-állomás	5:10	6:50	7:56	9:56	12:41	13:15	15:00	16:35	18:35	21:15	22:55

Az "M"-el jelölt indulásoknál feltüntetett járatok csak munkanapokon közlekednek. Odchody s "M" sú len v pracovné dni.



KTİ Route scheme with stops







Inaugural ride over the new bridge (opened in 2020)









Project details (2) – shared (e-)bikes



- Acronym: Mária Valéria Bike
- Call: IDSKHU/1601
- Priority Axis: Enhancing cross-border mobility
- Specific objective: 2.2.1 Improving crossborder public transport services
- Registration No.: SKHU/1601/2.2.1/127
- Total Project budget: 921,155.00 €
- Total ERDF awarded: 782,981.75 €
- Project start date: 01 November 2017
- Project end date: 31 March 2020
- Website: https://mariavaleriabike.eu/

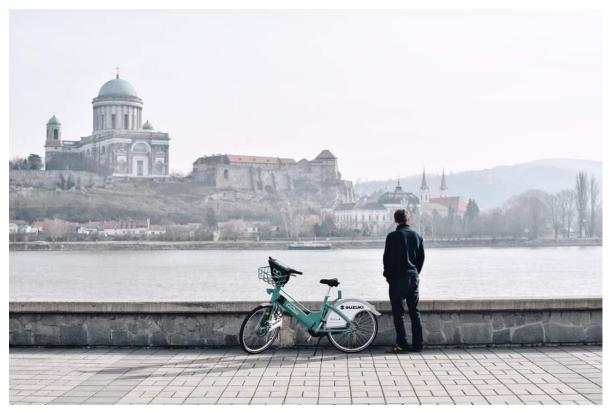
- Two municipalities (Štúrovo/Párkány in Slovakia pop. Ca. 9.8k, Esztergom in Hungary pop. ca. 28k)
- 6+8=14 bicycle storage stations
- 60 conventional and 45 electric bicycles
- Mostly flat terrain with smaller hills in Esztergom, Hungary
- T-Systems Hungary Zrt. with its subcontractor Neuzer Kft. executed the bike sharing system
- Suzuki (Japanese car manufacturer with plant in Esztergom) co-finances the operational losses



Local people and tourist usage as well









Temporary User (incl. 6 other cities) Deposit 15/30 EUR or Regular (pass-holder) user











			Nearest	Bike		
Map Sat	ellite ieska	DIVA		12	Kóspallag	Szokolya
Bistorove Kosiliy	Chelice WHO CORDA BOCKET MAJER	UARIA DIGIS BERM UARIA	Zelezničná stanica (Railway station) Stúrovo Station P S S S S S S S S S S S S S S S S S S	Baltava Lefa Damado vida E poolemand Burbov CMABO Reverse:	Stot	Klamaros Verice Klamaros Verice Dunabogdary
javascript:	Empty station	Station with a few bikes	Station with bikes	Station with a few empty spaces	Full station	Offline station

Price of passes and card						
	EURO	HUF				
Annual pass	20	6500				
Six-month pass	12	4000				
MOnthly pass	2,5	850				
A Mária Valéria Bike card	2	600				

Ticket price		
	EURO	HUF
24 hours ticket	1,3	400
72 hours ticket	3	1.000
Weekly ticket	5	1.500

Rental Price						
	EURO	HUF				
Normal bike						
First half hour free						
every half hour begun	0,5	200				
E-Bike						
every half hour begun	0,5	200				

Source: https://mariavaleriabike.eu/en



Key takeaways





- E-bus is for this range in urban (twin city) traffic works well
- Only 1 bus sometimes needs replacement due to planned maintenance
- Legal easing on EU scale would be helpful to pick-up passenger in the urban/regional cross-border traffic (cabotage rules)
- Shared bike usage depends on the weather with seasonal fluctuations due to tourism
- E-bikes widen the potential user's circle
- Operational financial support need is beyond the municipalities contribution and powerful long-term sponsorship must be secured











THANK YOU FOR YOUR ATTENTION!

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