



Dopravní podnik hl. m. Prahy,
akciová společnost



Prague Bus Fleet Electrification

Prague trolleybuses

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Dopravní podnik
hlavního města Prahy

Operational - technical data

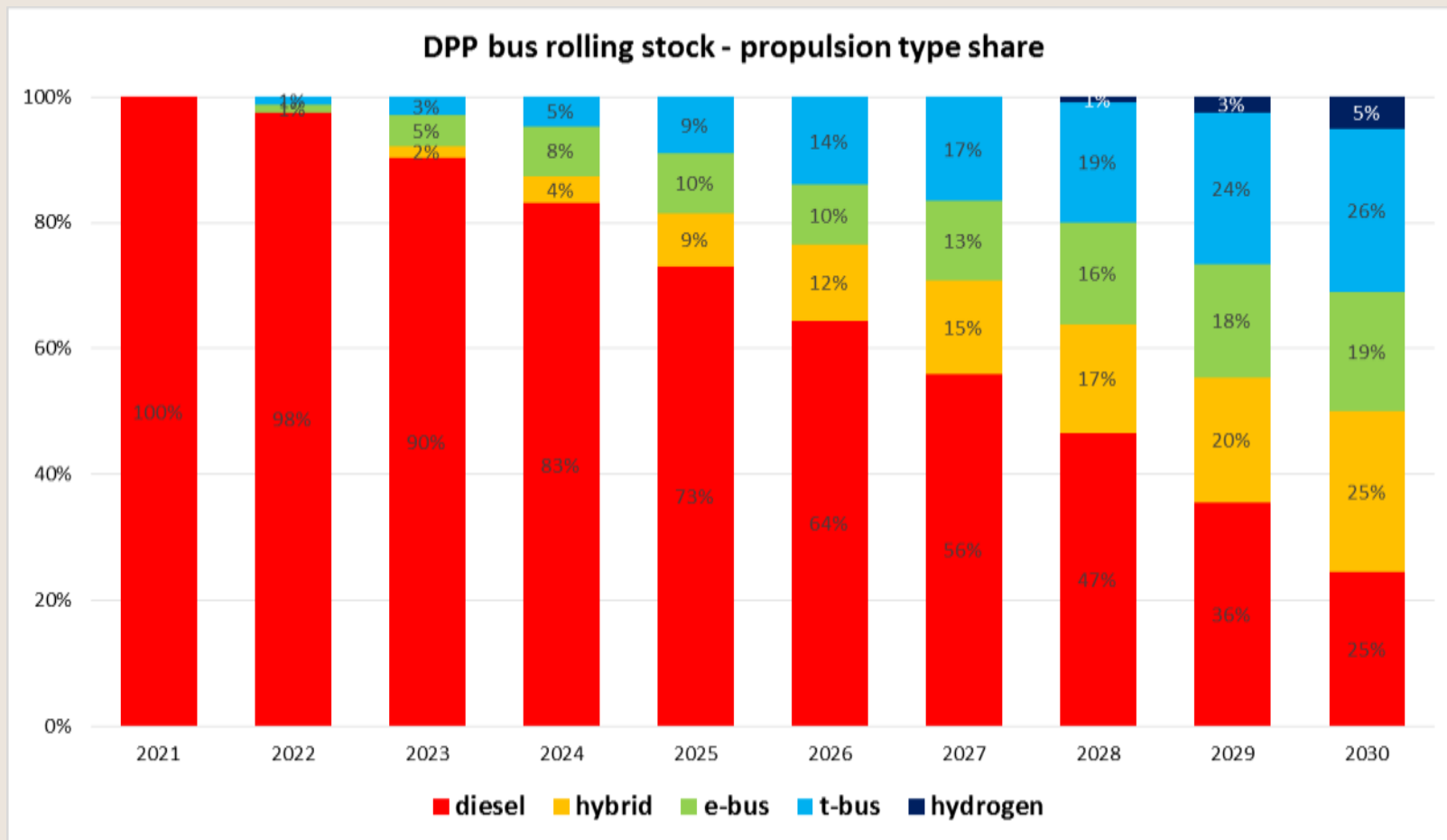
	network length	lines number	vehicles number	Φ age of vehicles
METRO	65 km	3 day lines	730	17,35 years
TRAM	143 km	26 day lines + 9 night lines	802 (441 S + 360 K)	14,35 years
BUS TROLLEYBUS	838 km 1,4 km	128 day lines (+1 TB) + 14 night lines	1 214 (61 M + 40 M+ + 608 S (14 SE2) + 504 K + 1 ST)	6,13 years (34,05 % younger than 3 years)



Prague emission requirements

- **Clean Vehicle Directive** (2009/33/EU) revision 2019
 - requires purchase clean vehicles and zero emission vehicles (trolleybuses included as ZEV)
 - Czech Republic targets:
 - 41% until 2025 and 60% until 2030 (1/2 must be ZEV)
- **Climatic Commitment of Prague** (June 2019)
 - requires reduction CO₂ emission at least by 45 % until 2030 (compared to the year 2010)
 - basement for DPP Bus Fleet Renewal Strategy (2021-2030)
- **Climatic Plan of Prague** (April – May 2021)
 - Green Deal activities reaction
 - Prague targets 2030: **50% ZEV, 25% clean, 25% independent**
 - update Bus Fleet Renewal Strategy (2021-2030)

Prague Bus Fleet Renewal strategy

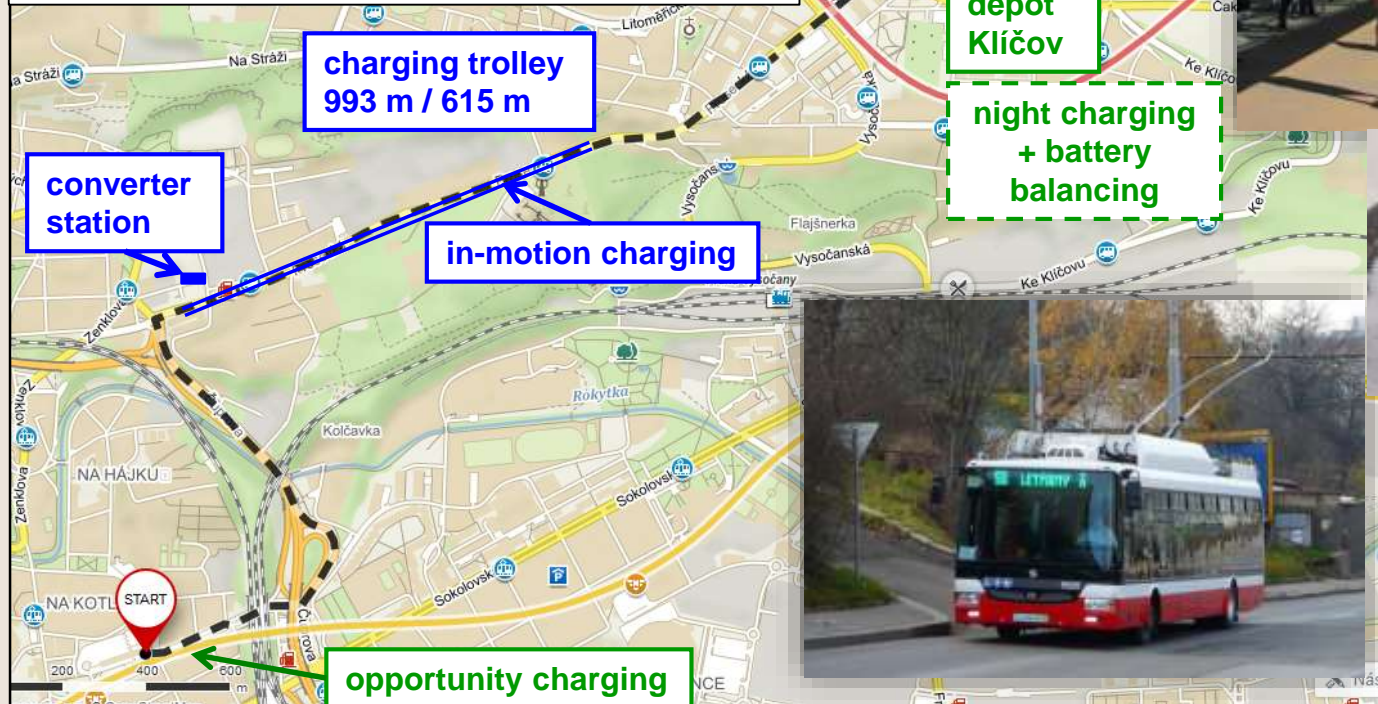


* Hydrogen technology timeline will depend on results of pilot (in preparation to launch 2022/2023)

Prague trolleybuses – from pilot to regular IMC

HISTORY

- **16. 10. 1972** – end of trolleybus operation in Prague
- **15. 10. 2017** – start of new trolleybus operation – tests of battery trolleybuses (IMC)
- **since 1. 7. 2018** - regular operation of the trolleybus line 58 (part of the line 140) – pilot operation (different vehicles)



Prague trolleybuses lines

- Existing
 - hilly line no. 58 from Palmovka to Letňany
- Future
 - flat airport line no. 59 Nádraží Veleslavín - Letiště Václava Havla (Václav Havel Airport) (bus line no. 119)
 - hilly line no. 51 Bořislavka – Hradčanská (bus line no. 131)
 - hilly line no. 52 Na Knížecí – U Waltrovky (bus line no. 137)
 - hilly line no. 53 Stadion Strahov - Karlovo náměstí (bus line no. 176)
 - hilly line no. 56 Letiště Václava Havla (Václav Havel Airport) – Na Knížecí (bus line no. 191)
 - hilly line no. 61 Nádraží Holešovice – Černý Most (bus line no. 201)

Prague trolleybuses – bus line 140

Infrastructure (750 V DC)

- in-motion charging ratio 45%
- 3 changing stations (substations)
 - 2x sections + 1x depot
- opportunity (static) charging
 - 2x terminus
- depot charging and balancing
 - short wire sections on gate

Vehicles (articulated 18 m)

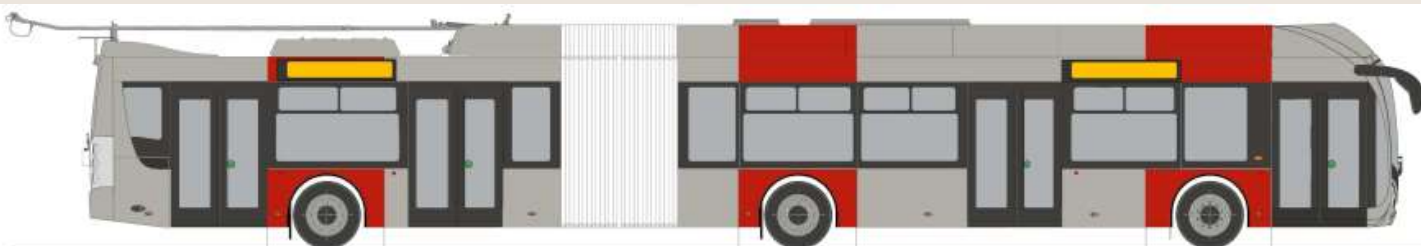
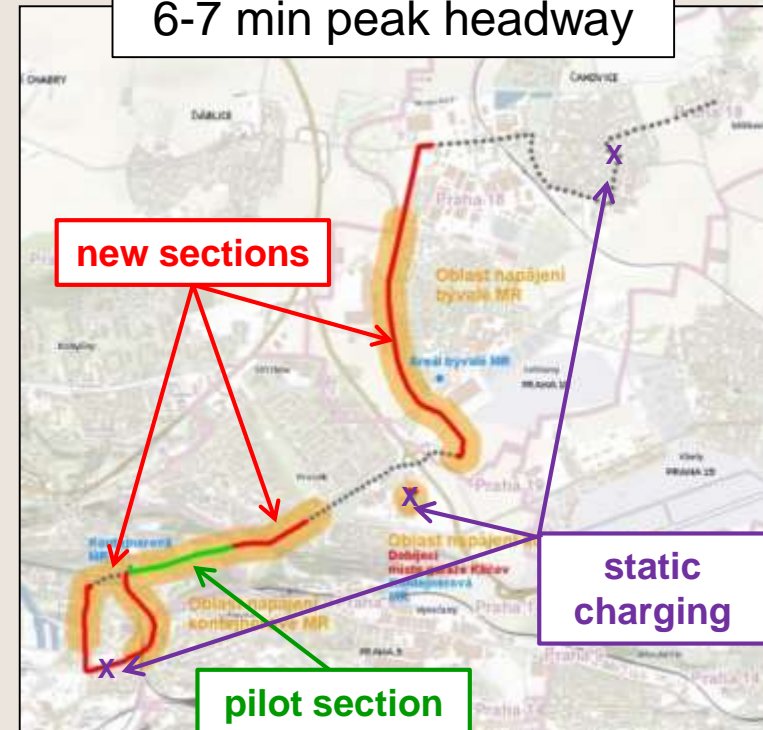
- 15 vehicles SOR TNS 18 (battery mode range requirement is 12 km)

10.1.2022 – infrastructure under construction

7.2.2022 – agreement for vehicles purchase

Operation expected in spring 2023

line No. 140
23 km (both way total)
6-7 min peak headway



Prague trolleybuses – airport line 119

- IMC ratio >50%
- 4 substations, opportunity charging at both terminuses and at depot
- 20 double articulated battery trolleybuses (24 m long) Škoda – Solaris 24



line No. 119
18 km (both way total)
3 min peak headway



January 2022 – building permission issued,
tender for infrastructure in preparation
17.2.2022 – agreement for vehicles purchase
Operation expected in spring 2024

DPP is applying for the inclusion of line 119 in the UITP
E-BRT research project within the European Horizon call.

Prague trolleybuses – lines 131, 137, 176, 191

- Hilly quarters on left bank of Vltava river (former trolleybus lines in 50's and 60's)
- Infrastructure (750 V DC)
 - In-Motion charging ratio approx. 50 %
 - Synergy to tram supply network
 - Opportunity (static) charging – at terminuses
 - Depot charging and batteries balancing – in depot Řepy
- Vehicles
 - 50x battery trolleybuses (12 m long)
 - battery parameters will depend on results of public tender



4 projects in preparation
Vehicle tender – launch spring 2022
Operation expected 2024 - 2025

Prague trolleybuses – line 201

- Hilly quarters on right bank of Vltava river, quite long distance line (one way above 22 km)
- Infrastructure (750 V DC)
 - In-Motion charging ratio approx. 50 %
 - Synergy to tram supply network
 - Opportunity (static) charging – at terminuses
 - Depot charging and batteries balancing – in depot Klíčov
- Vehicles
 - 20-25x battery trolleybuses (12 m long)
 - battery parameters will depend on results of public tender



Project in preparation
Vehicle tender – launch spring 2022
Operation expected 2025 - 2026



**Thank you for
your attention**

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More Information

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