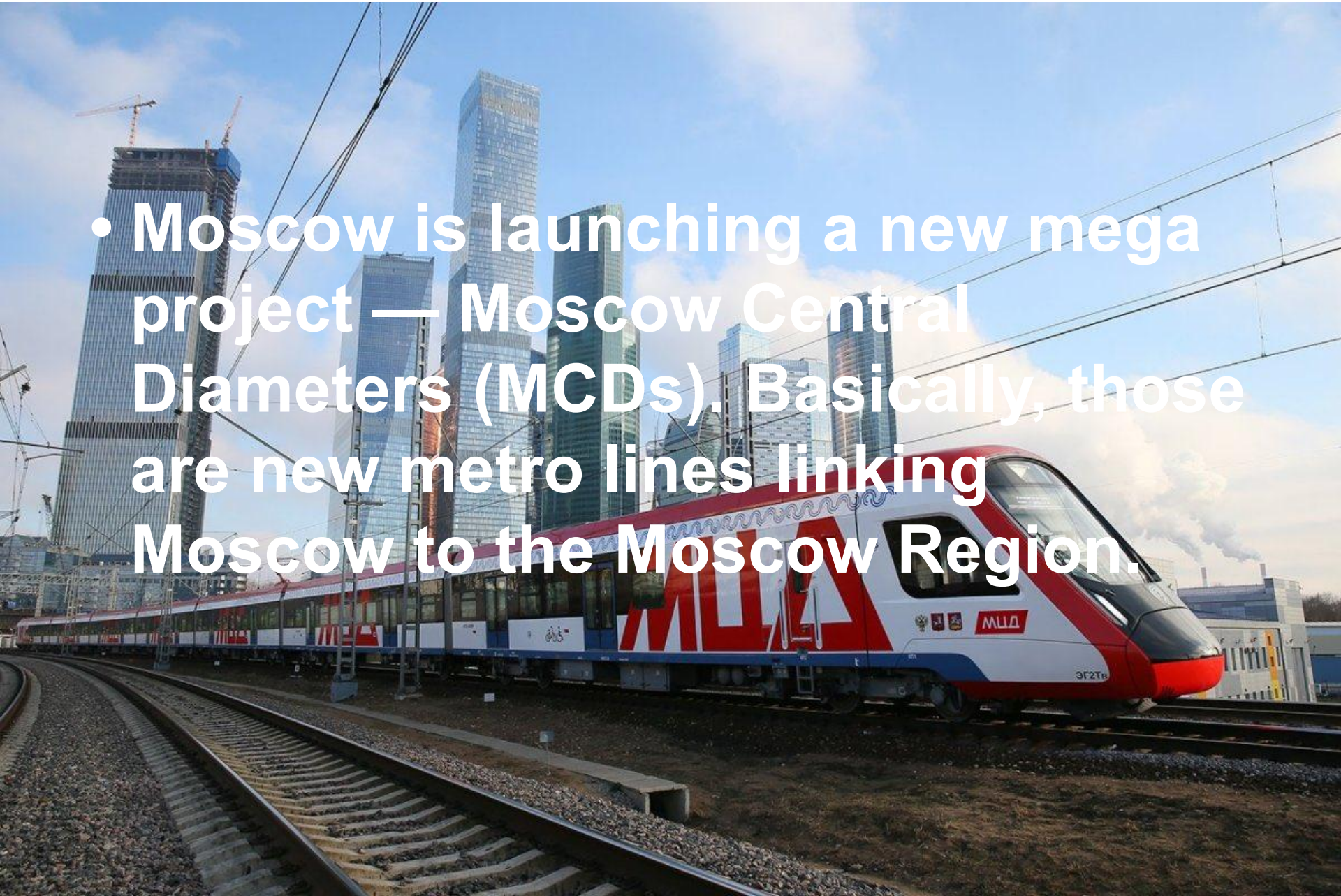


TRANSPORT MEGAPROJECT

The new above-ground metro:
why we need Moscow Central Diameters
Shorter headways, a unified ticketing system,
convenient transfer to other means
of transportation: those are the benefits
of pass-through diameters over the usual commuter
trains



- Moscow is launching a new mega project — Moscow Central Diameters (MCDs). Basically, those are new metro lines linking Moscow to the Moscow Region.



When are the first MCDs going to be launched?

- The first two MCDs were launched in the late 2019 — early 2020. They connect Smolensk and Sverdlovsk directions (Odintsovo — Lobnya), as well as Kursk and Riga directions (Nakhabino — Podolsk). They take up about 30 per cent of the entire program's passenger flow.

They have been chosen, because the railroad infrastructure along them is almost ready for the new mode. Moreover, those directions are the most popular and well-connected to the metro network and the MCG: 25 metro and four MCC transfer stations are planned.

Further, another three diameters are scheduled for launch: Zelenograd — Ramenskoye, Aprelevka — Zheleznodorozhny and Pushkino — Domodedovo. Other routes may be considered for development in the future.





What will the trains be like?

- As is already known, the newest urban Ivolga trains are going to run along the first two MCDs. Ivolga trains are 100% designed and made in Russia. Their engineering level, comfort and business performance are not inferior to the best foreign equivalents, with some parameters even exceeded.

Ivolga trains are quiet, they run smooth and make no vibration. The passenger chairs are placed facing one another, with baggage compartments and coat hangers above them. The trains have more handrails with "warm" insulation, so that even standing passengers could travel in comfort.

The new cars have no vestibules; the new, extra-wide doors (140 cm) open by pressing the button. There are blow heaters at the doors to keep the car warm. The ventilation system, in turn, helps keep up the microclimate and disinfect the air.



Short cuts: City changes with Moscow Central Diametres

- Ivolga trains have all the attributes of a modern passenger service: bike racks, USB chargers for gadgets, video screens, Wi-Fi, convenient information screens and changing tables in the WCs.

The trains are also equipped for passengers with reduced mobility, with secure wheelchair holders and spacious WCs. There are also Braille information signs for visually impaired passengers.

- To smoothly integrate the diameters with other city transport, there will be a convenient ticketing system. Passengers will be able to pay the fare by their Troika cards.



How much will be the travel fare?

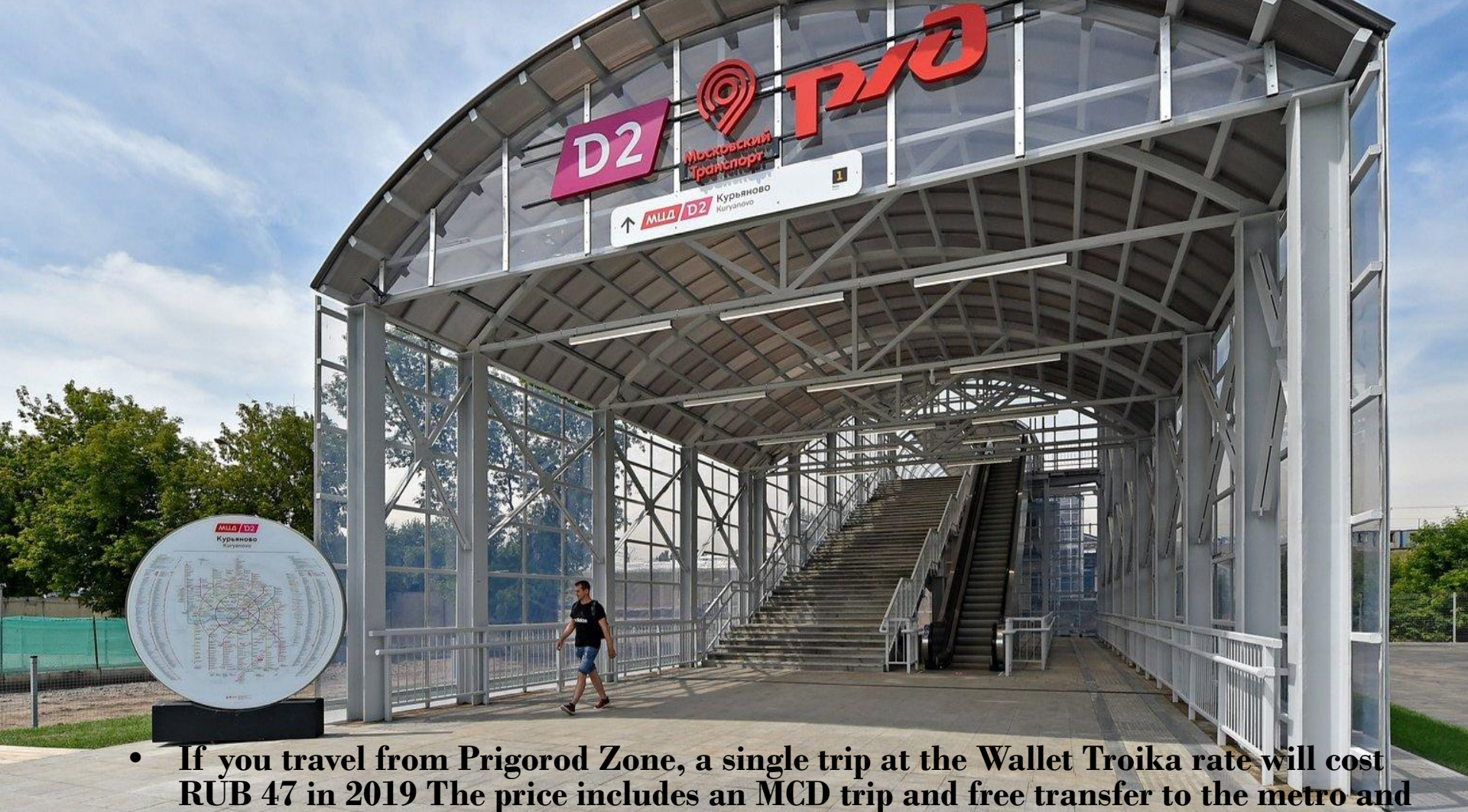
- There will be three tariff zones on MCD:

- — Central Zone for trips inside Moscow (within the boundaries of Mark — Setun and Volokolamskaya — Ostafyevo stations);

- — Prigorod Zone for trips outside Mark — Setun and Volokolamskaya — Ostafyevo stations and to the MCD terminal stations Odintsovo — Lobnya and Nakhabino — Podolsk.

- — Dalnyaya Zone for trips outside the MCD.

The same as with the MCC, Central Zone will be integrated into the unified Moscow tariff zone, with the travel fare for the price of a one-trip metro ticket at the Wallet Troika tariff and a free transfer between the metro, MCC and MCD provided. So, if you travel on the MCD inside Moscow, with Troika Travel Card it will cost RUB 40 (including an MCD, metro or MCC trip).



- **If you travel from Prigorod Zone, a single trip at the Wallet Troika rate will cost RUB 47 in 2019. The price includes an MCD trip and free transfer to the metro and MCC.**

For trips from a Dalnyaya zone station, the cost will have two components: a valid commuter train ticket (RUB 24 for one zone to the MCD boundary) and RUB 47 more. In this case, passengers enjoy free transfer to the MCC, metro and MCD.

Global experience

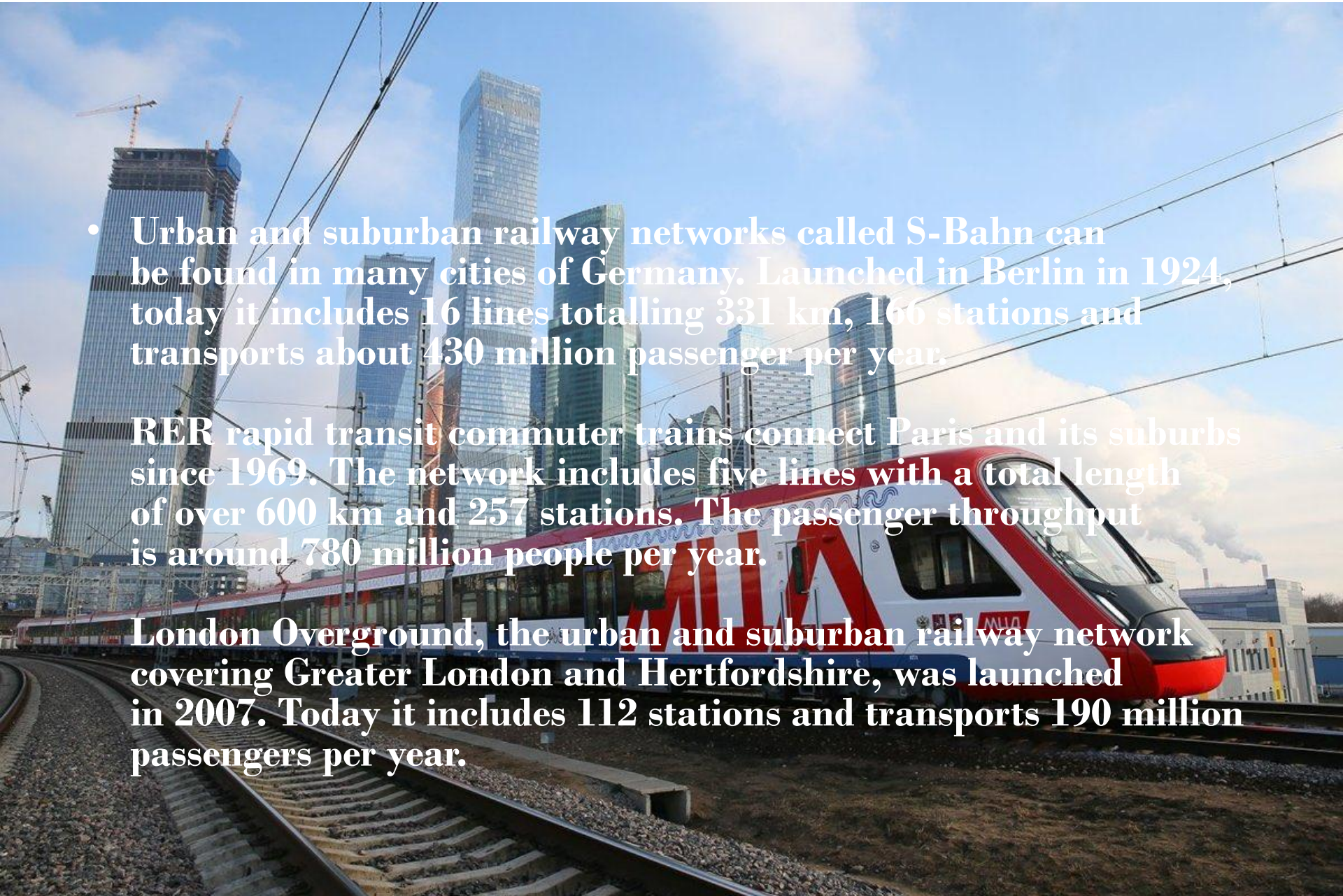
• Similar transport lines have been already successfully implemented in other countries. Nearly all significant European cities have their railway infrastructure integrated with the metro. The examples are S-Bahn in Germany, RER in France, Overground in London.



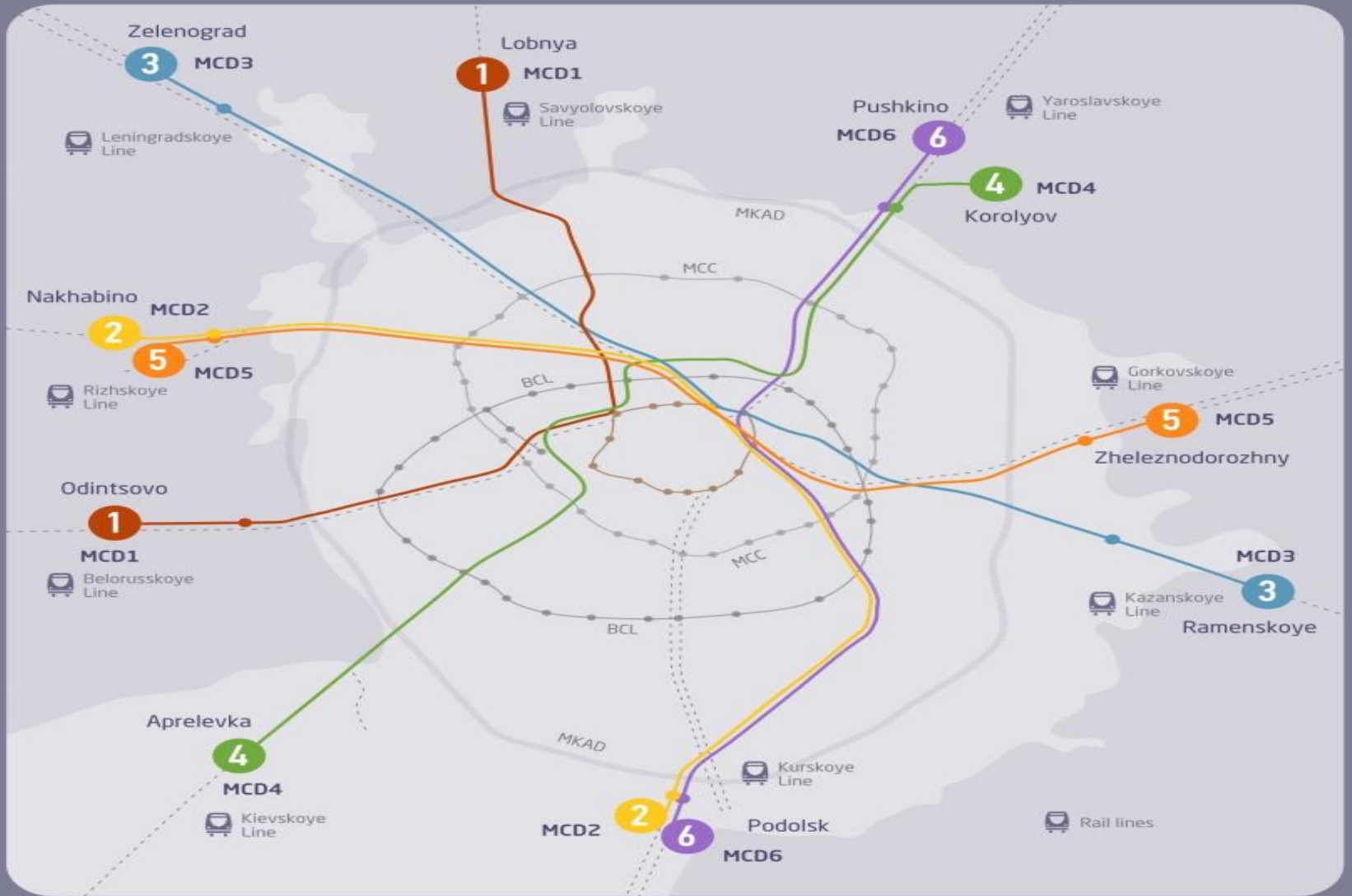
- **Urban and suburban railway networks called S-Bahn can be found in many cities of Germany. Launched in Berlin in 1924, today it includes 16 lines totalling 331 km, 166 stations and transports about 430 million passenger per year.**

RER rapid transit commuter trains connect Paris and its suburbs since 1969. The network includes five lines with a total length of over 600 km and 257 stations. The passenger throughput is around 780 million people per year.

London Overground, the urban and suburban railway network covering Greater London and Hertfordshire, was launched in 2007. Today it includes 112 stations and transports 190 million passengers per year.



Moscow Central Diameters



330 mln
passengers per year



5–6 mins
frequency during
peak hours



Payment by
Troika card



Comfortable
trains