

Milestone reached on Riyadh Metro

16 November, 2016 By Colin Foreman



- Tunnel-boring machine arrives at Downtown Station site
- Machine has now excavated 4.34 kilometres of tunnel and is close to ending its 5.35km journey underground

Progress made on Line 3

Italy's Salini Impregilo says it has reached another milestone in the construction of Line 3 of the Riyadh Metro, with a tunnel-boring machine (TBM) arriving at the Downtown Station site.

The TBM, named Jazlah, has now excavated 4.34 kilometres of tunnel and is close to ending its 5.35km journey underground. The machine has a diameter of 10.16 metres, a length of 100 metres and a weight of 1,300 tonnes.

Salini Impregilo is leader of the Arriyadh New Mobility (ANM) consortium that was awarded the deal to deliver Line 3 in 2013. The line, which is also known as the Orange line, is more than 40km, long with about 11km underground. The tunnels will be excavated by TBMs and cut-and-cover. Once completed, Line 3 will have 22 stations.

Located near the Riyadh governor's palace in the heart of the city, the Downtown Station will be among the most iconic, with two lines passing through it. Covering 20,000 square metres, it is being designed by Norwegian architectural firm Snohetta. Its entrance will be covered by a massive inverted cone made of stainless steel, which will provide shade for travellers and channel sunlight into the underground station.

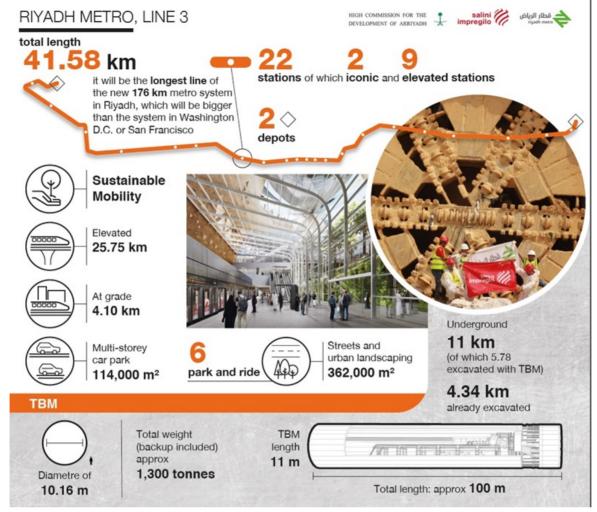
In June this year, tunnel excavation works were <u>completed for Line 5 (Green line)</u> of the Riyadh Metro. It is one of the three lines awarded to the FAST consortium.

<u>Arrivadh Development</u> Authority awarded <u>turnkey contracts</u> for the metro scheme on 28 July 2013.

The six-line metro project has been divided into five major design-and-build packages, with lines 1 and 2 as one package, and the other lines each as single packages. Each package will include the supply of rolling stock.

Spanish firm FCC Construccion heads up the FAST consortium, while US firm Bechtel leads the BACS team. Italian firm Salini Impregilo is the leader of the Arriyadh New Mobility group.

The FAST consortium won lines 4, 5 and 6, which are reported to be valued at \$7.82bn and the BACS team picked up lines 1 and 2 for \$9.45bn, while Arriyadh New Mobility secured Line 3 for \$5.21bn.



Riyadh Metro infographic



Riyadh Metro is one of the many schemes Projacs has carried out work on in the region

Completed network for Saudi Arabia's Riyadh Metro will be 176 kilometres long, with 85 stations

Length of completed network

The completed metro network will be 176.5 kilometres long (7.8km as a common section for Line 4 and Line 6), with underground, elevated and at-grade sections.

Lines

- Blue line (1): Olyaya–Batha–Al-Hayer Road (38.8km)
- Green line (2): King Abdullah Road (25.4km)
- Red line (3): Madina al-Munawra–Amir Saad bin Abdul–Rahman al-Awal Road (40.9km)
- Orange line (4): To King Khaled International airport (29.6km)
- Yellow line (5): King Abdul Aziz Road (12.9km)
- Purple line (6): Abdul Rahman bin Ouf–Sheikh Hassan bin Hussain bin Ali (30km)

(Lines 4 and 6 share 7.8km of network track and four stations)

Stations

The completed metro system will have 85 air-conditioned stations in total, including four main stations and five transfer stations. There will also be 25 park-and-ride locations.

Control centre

The Transportation Control Centre (TCC) will be the centralised point for all customer contact. Using Intelligent Transport Systems, it will coordinate the whole transport network. Each line will also have its own technical Operational Control Centre (OCC).

Speed of transport

The average projected commercial speed of trains on the six lines will be 40 kilometres an hour

Passenger comfort

All stations and carriages will be air-conditioned

The metro carriages will also be divided into three sections: First Class, Family Class, Single Class

Rolling stock

Electric driverless trains