

Press release

Inauguration of Paris metro extensions for Line 14:

NGE led France first tunnel boring operation under an operational airport.

Paris, June 24, 2024 – The northern and southern extensions of Line 14 were inaugurated today. For this project, NGE was responsible for the construction of 4 km of tunnel using a tunnel boring machine, with 3 km passing under the Orly airport area. This marked the first time in France that a tunnel boring machine operated under an operational airport. The work, which lasted 37 months, was completed without interrupting operations and within the planned timeframe, despite a pause during the Covid-19 pandemic.

For this project, NGE, in a consortium with Webuild, for RATP Group completed the final section of the southern extension of Line 14 between Pont de Rungis station and the Morangis maintenance and storage site.

The scope of work included 4 km of tunnel, the construction of three ancillary structures, and 700 meters of cut-and-cover and open trench.

The project was completed on time despite a one-and-a-half-month interruption during the Covid-19 pandemic, thanks to an efficient organization planned in close collaboration with RATP Group.

Jean Bernadet, CEO of NGE Group comments its particular project: *"NGE Group played an important role in the southern extension of Line 14 by executing a tunnel section with unprecedented characteristics in a unique environment, under Orly International Airport! This was the first operation of boring a railway tunnel in France under an operational airport. It mobilized 300 employees and required just over three years of civil engineering and excavation work, with the highest quality standards, without any disruption to airport operations. With the recent commissioning of the EOLE project and the extension of Line 11, the NGE Group is proud to have supported SNCF Réseau, RATP, and the Société des Grands Projets in meeting the deadlines for the commissioning of these strategic lines before the opening of the Olympic Games. Building on these experiences with complex urban mobility projects and ongoing construction on other lines of the Grand Paris, our teams are already looking towards a new significant challenge: the €1.38bn project to design and build lot 2 of Line 15, western section."*

First tunnel boring machine in France to operate under an airport

Thanks to the tunnel boring machine (TBM) 'Koumba', named in honor of the French wrestler Koumba Larroque (qualified for the Paris 2024 Olympics), the 4 km section of tunnel was completed, including 3 km bored under sensitive structures at Orly Airport, a first in France. The TBM passed under the airport, the new Terminal 3, and the Orlyval viaduct.

Another unique aspect of the project was the descent of the TBM into its launch shaft, at a depth of 17 meters, in a single piece. This was the first time in France that such a lift was performed for a TBM, which weighed 880 tons, was 11 meters long, and had a diameter of 8.8 meters.

These works, which lasted three years, were meticulously planned and executed to ensure the continuity of airport operations without any disruption. The teams installed targets to monitor the structures at various locations throughout the airport, including Terminal 3, duty-free shops, baggage sorting areas, and the tarmac. These areas were constantly monitored to ensure the integrity of the structures. One of the major challenges was to carry out these operations under airport security and safety constraints for the teams.

The complete success of this operation, essential for the commissioning of Line 14 for the Olympic Games, served as a model for subsequent tunnel boring projects: Line 18 under Orly and Line 17 under Charles-de-Gaulle.

In brief:

- Group: NGE (lead contractor) – Webuild
- 4 km of tunnel
- 3 ancillary structures (March 2018 – March 2021)
- 330 meters of cut-and-cover trench
- 3 years of construction
- 300 people mobilized
- 69,200 hours of integration work completed

About NGE www.nge.fr/en/

NGE – New Generations of Entrepreneurs – the fourth largest construction group in France, builds major infrastructures and urban or local projects. With its expertise in financing, design, construction, and maintenance, the Group is a key player in delivering infrastructures that address the economic and ecological challenges of the territories. Its entrepreneurial drive is supported by a strong employee ownership structure (the founders, management, and employees hold 72% of the Group's capital) reinforced by Montefiore Investment, a leading French investment firm (28% of the capital). With a turnover of 4 billion euros, NGE operates in 17 countries, supporting private and public clients in financing, designing, and building their transition projects in water, mobility, urban renovation, energy, and telecommunications. NGE's 23,000 employees are proud to contribute to building infrastructures that change the world.

Press contact: Eloi Fouquoire eloi.fouquoire@gmail.com +33 (0) 6 76 77 11 56