

## Works on Line 17 of the São Paulo Subway advance to a new phase



Jun 9, 2021 | Car, Traffic & Travel

The first stage, involving safety analysis, should be completed in June

### Contact:

**Joerg Meyer zu Altenschildesche**  
Press officer  
+49 221 806-2255  
[joerg.meyer@de.tuv.com](mailto:joerg.meyer@de.tuv.com)

The construction work on the future Line 17-Ouro of the São Paulo Metro, which began in January of this year, continues at full steam and should start the next phase as early as June 2021. The project consists of a total of four stages and is scheduled to be completed by the beginning of 2024. The total investment should reach R\$ 988 million, which will be covered by the bidders.

The BYD Skyrail Consortium, which won the bid for the supply of trains and energy and telecommunications systems, hired the German, multi-national TÜV Rheinland, already established in Brazil for many years, to carry out the global integration and certification service of the systems, as required in the bid notice. In the first phase, which began in January of this year, the signaling and integration project for the more than 300 interfaces that contribute to the correct operation of the trains was presented.

The 17-Ouro Line will be the second monorail to operate in the city, succeeding the 15-Prata Line, whose services began in 2014. TÜV Rheinland will be in charge of verifying the operation and safety, after the integration of more than 14 systems, including signaling, which controls train speed and acceleration; power supply; telecommunications; track change equipment; communication with operators and control centers, among others.

After the conclusion of this first stage, scheduled for June, the companies will discuss the details, which will serve as the basis for a third phase, involving preliminary design, with tests and manufacturing. Finally, commissioning will be carried out, which consists of a set of engineering techniques and procedures to check, inspect and test each physical element of the enterprise.

"The audit of the main systems on the line will be carried out under the European set of norms EN 50126, which provides demonstration and specification of reliability, availability, maintenance and safety (RAMS) for railway applications, in addition to Safety Integrity Level requirements,

some of which are SIL 4, the strictest level established by CENELEC EN 50126, 50128 and 50129 international regulations," details Marcos Camelo, Regional Manager for TÜV Rheinland's Rail area in Brazil.

### Expansion Plan

The first stretch of the monorail, which will have an extension of 7.7 operational km, will connect CPTM's Line 9-Esmeralda at Morumbi Station, with Metro's Line 5-Lilás (operated by ViaMobilidade) at Campo Belo Station and Congonhas Airport, at Congonhas Station.

Two other stretches, which should pass through the Paraisópolis community to connect the subway to Line 4-Amarela, are still undefined.

According to Joubert Flores, BYD Brazil's Engineering Director, this partnership will bring more security to users, who will be able to count on service with more quality and availability, and with the guarantee that the works will follow all the foreseen regulations and certifications.

"This is BYD's first project in São Paulo, and being able to count on the experience and recognition of TUV Rheinland will certainly help us in future contracts, for which we intend to maintain the partnership," highlights Flores.

For Camelo, this is a unique opportunity for Paulistanos to have a safe system that helps reduce traffic in the city and is accessible to all.

"The tendency is that the next public infrastructure projects will be born with the requirement of an independent accredited certification service, which is the only way to guarantee an impartial quality assessment that meets the maximum safety requirements," adds the executive.

TÜV Rheinland stands for safety and quality in virtually all areas of business and life. Founded almost 150 years ago, the company is one of the world's leading testing service providers with more than 20,000 employees and annual revenues of 2 billion euros. TÜV Rheinland's highly qualified experts test technical systems and products around the world, support innovations in technology and business, train people in numerous professions and certify management systems according to international standards. In doing so, the independent experts generate trust in products as well as processes across global value-adding chains and the flow of commodities. Since 2006, TÜV Rheinland has been a member of the United Nations Global Compact to promote sustainability and combat corruption.  
Website: [www.tuv.com](http://www.tuv.com)