

REFURBISHMENT OF ANGOLA'S RAILWAY NETWORK

2007-2015

Location

Angola

Client

Ministry of Transportation of Angola

Estimated Cost

3.5 billion USD

Stage

Supervision
Design Review

Extension

2700 km

A1V2 is responsible for providing supervision and technical assistance to the refurbishment works of Angola's entire railway network, intervening in a total length of approximately 2700 km. Works began in 2007 and are scheduled to be completed in 2017.

Angola's railway network is defined by three structural lines:

Benguela railway line

This is the longest railway line in Angola, with a total length of 1340 km. It connects the Port of Lobito, on the Atlantic coast, to the border town of Luau, in the eastern region of the country, bordering the Democratic Republic of the Congo. It also includes a railway branch of 28 km that connects the Port of Lobito to Benguela. Works include the full refurbishment of the existing infrastructure, the construction of 22 new bridges and the refurbishment of 29 existing bridges. Currently, part of the railway line is already in commercial operation.

CATUMBELA BRIDGE





LOBITO STATION
PLATFORM

Luanda railway line

The Luanda railway line connects Luanda, the capital city of Angola, to Malanje, the capital of the eponymous province, extending over a total length of 445 km. The refurbishment project encompassed two types of works, given that the paths in the Baia–Dondo and Cacuso–Malanje sections were fully renovated. In these interventions, the existing infrastructure was lifted, the ballast was renewed and the permanent track equipment replaced, which allowed the maximum track speed to increase up to 120 km/h. In the remaining line, in the Zenza–Cacuso section, the existing material was not renewed, but rather recovered, being that only the damaged elements were replaced. Works were concluded in late 2010 and the line has been in operation since.

Moçâmedes railway line

The Moçâmedes railway line connects the coastal town of Namibe to Menongue, in the Cuando Cubango province, extending over a total length of 860 km. This line also encompasses two railway branches between the Entroncamento station (in Dongo) and the mining areas of Tchamutete and of Jamba. Works covered the full refurbishment of the existing infrastructure, including interventions in 33 engineering structures, 10 of which new. Works were concluded in 2015 and the line has been in operation since.

TAMPING MACHINE



AERIAL VIEW





MAIN FRONT
OF THE LOBITO STATION

AERIAL VIEW



The works carried out in the three lines included: corrections to the geometry of the railway design (horizontal and vertical alignments); the construction of a total of 139 train stations for passengers, comprising a construction area of 116 670 m²; interventions on 114 engineering structures (bridges, flyovers and tunnels); the recovery/construction of over 3000 culverts; the installation of 815 railway switches; the moving of over 30 000 000 m³ of earth; the construction of 510 level crossings.

It should also be noted that nine factories were constructed for the production of concrete sleepers and the exploration of 12 quarries and crushing plants by the building contractor.