

Customer Case Study: SNIM

The Client:

SNIM is Africa's second-largest producer of iron ore. Because of their unique demands and the scale of their operation the company owns and operates its own railway to transport the ore. It is a 704-kilometer railway line linking the iron mining center of Zouerate with the port of Nouadhibou.

Ore freight trains are up to 2.5 km in length, with gross tonnage of 22,000 tons. To put this in context this means trains carrying more than enough ore to build the Eiffel Tower. The trains on this private railway are among the longest and heaviest trains in the world.

The Challenge:

SNIM needed a reliable radio network to coordinate daily operations, to ensure the safety and security of personnel and manage train transit. This was made particularly challenging by extremely harsh weather conditions, with the railway running through a desert with a hot and arid climate.

The Solution:

SNIM chose Etelm to help them with their critical communication requirements.

Etelm implemented a TETRA Solution comprising of 21 TETRA radio sites along the railway lineable to cope with harsh environments and the strong performances expectations.

To tackle the large network range required, Etelm provided extended coverage for each cell, offering coverage distances of 25+ km per cell. They also installed a control room for train and personnel localisation, track detectors providing signaling information and additional systems providing technical maintenance information on equipment condition.

The Result:

SNIM now have a comprehensive, reliable and secure critical communications network spanning the length of the private railway. Train operatives remain in constant contact while mobile and can communicate with central control teams and colleagues working trackside. This ensure staff safety and an efficient means of managing the transportation of the ore between Zouerate and Nouadhibou.