



Type what you want to search

Search

11/19/2019



Vale will operate the first private LTE network in partnership with Vivo

The network will support Vale's Industry 4.0 strategy ? R\$21 million will be invested in this project

Vale has signed an agreement with Vivo to implement a private 4G/LTE network in its operations in Brazil. It will optimize the use of autonomous equipment, which require wide coverage area and high traffic capacity for a significant amount of data. Almost R\$21 million will be invested in this project. Vale and Vivo will be the first companies to deploy a private LTE network with these characteristics in the country.

From the first half of 2020, the network will be available at Carajás (Pará) mine, where three autonomous drills are already operating and autonomous trucks will be adopted soon. Then, this innovation will be applied at Brucutu mine, in São Gonçalo do Rio Abaixo (Minas Gerais), where 13 autonomous trucks operate. This network has the potential to be used to connect dam monitoring instruments.

It will boost Vale's autonomous vehicles program, which aims to increase safety by removing employees from the risk area. Autonomous equipment also generate operational efficiency and sustainability gains increasing equipment useful life by almost 15% and reducing fuel consumption and maintenance costs by almost 10%.

Vivo's industry-leading solution was chosen due to its reliability and experience in private LTE networks. Safety and the possibility of converging different types of traffic on the same network - such as data, voice, and video - have also been considered. At Brucutu mine, for example, the autonomous trucks currently operating on a WiMax network will be migrated to the new network in the future.

"In addition to the benefits regarding data volume and coverage, the use of LTE is also an important investment due to its scalability; all mobile phone technology development must comply with this standard from now on," explains Gustavo Vieira, Vale's IT director. "4G is already being used; thus, technology upgrades will cost less than those for technologies that are not commonly used."

"A private LTE solution meets the specific needs of businesses while meeting the requirements of mission-critical applications that demand high safety, mobility in production lines, free-interference spectrum, and traffic prioritization, as well as connecting a high volume of IoT devices in an open and widely available ecosystem," says Alex Salgado, Vivo B2B vice president.

The partnership will enable Vale to use Vivo's services in these regions. Vivo will also provide 4G coverage, which will help communication among employees of the mine operations.

In Latin America, this partnership model is only available in Chile, which is being tested. Vale also uses private 4G/LTE networks in its operations in Canada and Malaysia.

More information



Media Relations Office

imprensa@vale.com

[Click here](#) to see our contacts

