

De Beers to Expand 5G-Ready Mining



De Beers' Jwaneng deposit in Botswana has become the world's first "5G-oriented" diamond mine, with the company planning to launch the technology at other sites across the country.

Debswana, [De Beers'](#) 50:50 joint venture with the government, is using network technology from Huawei, the Chinese telecommunications giant said in a statement last week.

"5G-oriented" means the hardware equipment supports network upgrades to the 5G wireless standard, Huawei explained. Such advances could enable new technologies such as autonomous driving, it noted.

The system, which Huawei refers to as a "smart-mine solution," has been in operation at the Jwaneng open-pit deposit since December 2021.

Debswana wanted to review the system performance before publicizing it and has used the experience to prepare for a rollout at its Orapa, Letlhakane and Damtshaa mines this year, a De Beers spokesperson said Thursday.

Smart mining can improve the resilience and sustainability of diamond production, enable the automation of certain processes, and improve safety and productivity, the spokesperson added.

“The focus is on real-time monitoring of equipment performance, anticipation of potential failures before they occur, and optimization of both material and equipment movement,” she added. “The solution thus provides stable, reliable connectivity with pervasive coverage in a complex mining environment.”

Debswana also said it had “robust cybersecurity controls” in place.

Image: The Jwaneng mine. (Ben Perry/Armoury Films/De Beers)