

Harmony Gold's wireless communication initiative progresses well

By: Guy Copans
Published 21 November 2008

A major upgrade of gold company Harmony Gold's communications network to wireless communication by Communication Solutions (Comsol) has resulted in a substantial increase in the capacity of the network.

Mining Weekly, earlier this year reported on the project, which involved upgrading Harmony's 150 mine shafts and offices to wireless communication. Comsol sales manager, Darren Morgan, says that since then, the operation, despite being complex to implement, with a high bandwidth required for it to work well, has run smoothly.

Morgan says that Harmony has bought equipment that still needs to be installed, and is replacing equipment as it runs through the process. When a link fails, it is replaced with an upgraded link immediately. However, he says, to not disrupt operations excessively, it is being implemented on a case-by-case basis.

Morgan says that the operation is doing well, and that Harmony has asked Comsol to convert two new mines to wireless communication, including the Kalgold mine, in the North West.

He admits, however, that there have been teething problems in the network owing to the distance of linking up mines, such as Virginia and Randfontein, which have a distance of 450 km between them. Oil on the weatherproof headgear has also required a lot of servicing and cleaning, while theft of equipment has also been a challenge, he notes.

Linking up mines wirelessly, such as Harmony has done, ensures that money is saved and higher bandwidths are achieved. As an example of this, says Morgan, Virginia and Randfontein have received 60-Mb/s from Comsol, which is six times more than what they could receive from Telkom. In fact, Telkom has become the back-up network provider, while Comsol is the primary network provider.

"If one uses Telkom or Neotel, one is limited to receive the amount of megabits they have available in their network, no matter what one can afford, while, with Comsol, a client can ask for as many megabits as they wish for," says Morgan.

Morgan says that these faster speeds ensure that applications run more quickly, blasts are not missed and requisitions go through quicker. He says, therefore, that wireless communication ensures more efficient performance and better stability throughout

the entire network.

Morgan says that many companies are unaware of what exactly wireless communications can offer, and hence, are often taken advantage of, with inferior wireless communication products. He says that Harmony was sold a solution by the previous wireless provider that did not work well, was not scoped well, and had poor radio frequency planning and design.

While mining has always been a strong vertical market for Comsol, it has gradually become more important, and mining now constitutes almost 40% of the company's business, having constituted only 20% last year.

Morgan notes that, in the last year or two, the wireless communication industry has become more competitive. However, he says that Comsol has the advantage of having been in the market for much longer than its competitors (ten years), which has prevented it from being "swallowed up" by larger competitors.

Comsol has also completed networks for Barplats at the Kennedy's Vale project, in Mpumalanga, which has a similar setup to Harmony Gold. In addition to mining, it has also completed work for PBMR, Murray & Roberts, Hatch, as well as projects such as the Gautrain, and the Medupi power station.



DARREN MORGAN
Linking up mines wirelessly ensures that money is saved and higher bandwidths are achieved

