

The background of the top half of the page is a photograph of a mining tunnel. On the left, a worker in an orange safety vest and a headlamp is visible. In the center, a large piece of mining machinery is illuminated by bright, warm lights. The floor is wet and reflective, showing the lights and the machinery. The walls are made of rough, brown rock.

Modern, Digital Remote Mining

Telstra and SES

Case study

Industry
Mining

Location
Papua New Guinea



Transforming remote mining sites in Papua New Guinea

The mining industry is experiencing an exciting transformation. New digital technologies and applications offer enormous opportunities to dramatically improve performance across all mining functions, while unlocking new avenues to improve your return on investment.

However, the move toward automation and the use of real-time data and cloud-based services can be challenging. By their nature, mines are highly dispersed, remote locations and often lack access to traditional terrestrial network connectivity. That can have enormous impacts, since connectivity is critical to successful mining, from initial site evaluation to processing and equipment maintenance, employee safety and welfare, and transportation and manufacturing.

Australian telecommunications company Telstra has partnered with SES to develop new applications and services for Newcrest Mining, using our satellite-enabled connectivity solutions.

Newcrest Mining, one of the world's largest gold mining companies with operating mines in Australia, Canada and Papua New Guinea (PNG), faced such limited connectivity challenges in its remote operations in Lihir Island, PNG. After both microwave and submarine fibre optic cables were deemed unviable at Lihir, Newcrest had to look beyond conventional means for better connectivity to drive its business-critical applications and enable the use of digital technologies.

Telstra, an Australian telecommunications company, had provided Newcrest with a full range of network services. By partnering with SES, Telstra was able to provide Newcrest with a cost-effective satellite-enabled solution, delivering robust connectivity to empower digital transformation and drive improvements in productivity and safety.

“The connectivity solution provided by Telstra and SES has proven itself connecting to Newcrest’s remote mining operations in Papua New Guinea, delivering a 600 per cent increase in bandwidth and a 300 per cent improvement in latency.”

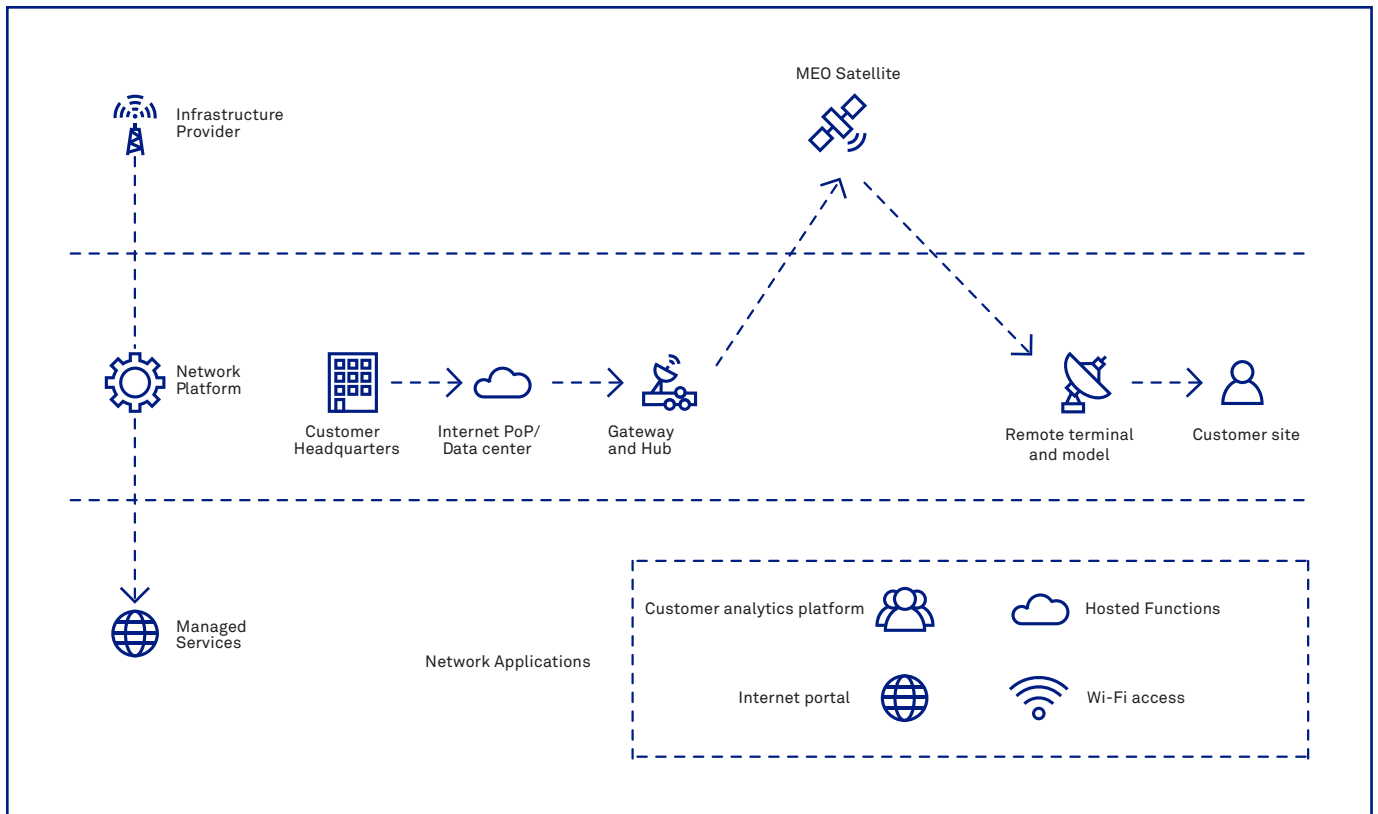
Smart mining is good business

SES and Telstra’s combined services have completely transformed the operations at Newcrest’s PNG location – a location where high-speed bandwidth would previously have been prohibitively expensive. SES’s O3b MEO constellation ensures reliable, consistent coverage with enhanced broadband connectivity that enables high-quality voice, video, and data communications. The satellite-enabled network also provides the low-latency connectivity necessary for the delivery of carrier-grade, cloud-ready services. That means Newcrest can deploy advanced digital technologies including cloud applications, IoT, SAP, and wire sensors, achieving new efficiencies by streamlining and optimising processes. Additionally, the network enables the real-time transfer of data to speed up decision-making, save time, and improve profitability.

What matters most?

In a mine, the staff welfare and safety is priority number one. SES’s O3b solution helps to keep more than 2000 employees stationed at Newcrest’s Lihir mine better connected with their families and friends, which is critical for those staff who regularly spend weeks at a time away from home. The enhanced connectivity has been fully embraced by employees and their families, improving morale and the quality of life for people working at the mine – as well as having a tangible effect on the quality of life for people who live on the island itself.



Newcrest



For more information about SES Mining Solutions:

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