

Mine: AGD DIAMONDS – Griba mine

Project

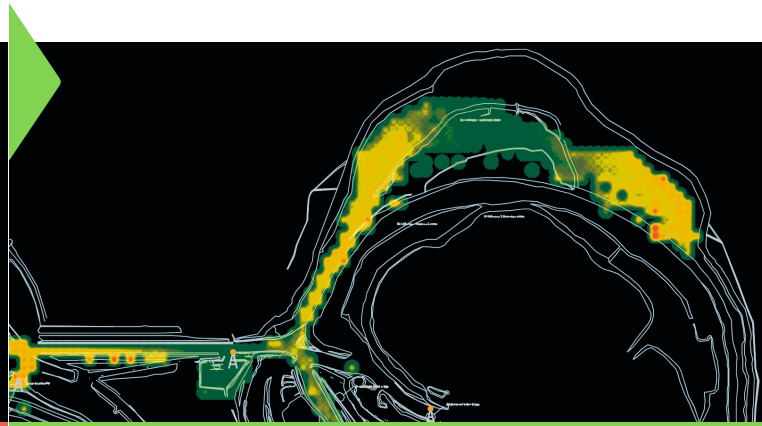
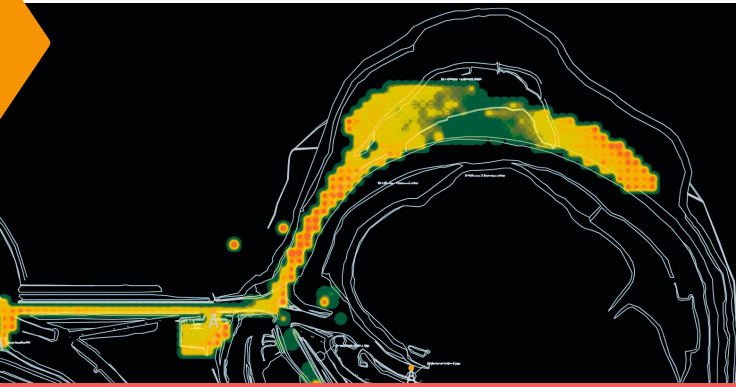
Fleet Management System (FMS) - wireless network improvement

Business Need

Recurrent issues of no communication at loading/dumping areas and on road segments. Lack of hardware to support the network. Network is built on Ubiquiti AirMax.

Results

September 2018 – packet loss reduced in twice, from 10 to 5%. All mining areas are covered by the wireless network. Total number of used Access Points reduced from 14 to 12.



Aleksey Karavaev, Mine Automation Manager, AGD DIAMONDS

– GeoWlan was really helpful to define and fix the existing issues in wireless network within a short time. Installation was very fast with no additional hardware and a zero loss of equipment production time. We'll continue using GeoWlan to maintain and further enhance the already achieved results during the project.

Solution

GeoWlan software was installed on all FMS mining equipment in August 2018 and registered average packet loss of 10 %.

During 6 weeks the following activities completed to improve network performance:

- Disabled unused access points to reduce noise level;
- Gradually increased power rate on mining equipment radio devices;
- Relocated Access Points (AP) to the most efficient places;
- Selected the most suitable antennas for each AP;
- Optimized radio frequencies distribution plan;
- Fixed radio hardware issues on mining equipment.

