

## Industrial Internet of Things IIoT for Mining Peñoles Mexico

### Executive Summary

#### Challenge

Industrias Peñoles required to connect many mining locations around Mexico through a satellite network with high availability, supporting both star and mesh connectivity for their mining activities of natural minerals, provide a highly reliable connectivity was a key factor while sharing critical data, voice and video between all locations and the headquarter.

#### The Solution

SpaceBridge, has deployed a fully redundant satellite network supporting: star and mesh connectivity between all sites. The ASAT™ platform was installed in two main locations connected by Fiber Optic to provide a Geo-redundancy disaster recovery solution and increase the overall availability of the network.



Using Spacebridge U7400-M and 2.4 meter Ku band antennas in the remote sites was possible provide fast and full connectivity between all locations without satellite double hop delay thanks of mesh single hop operation.

## Success Story

### Challenge

Indutrias Peñoles is one of the two world's largest producers of refined silver with most mines located in difficult access areas where the communication is critical. It is crucial not just for their business but also to keep safe the personnel working in those areas. A highly reliable network with high availability is part of their values as company.

### Benefits of SpaceBridge

Thanks to the Star-Mesh dual operation supported by the ASAT™ platform and the capability to support geo redundancy on the same platform, it was possible to increase the availability of the network, reduce the Operational Cost (OPEX) related to the satellite space segment, provide a network with high performance and low delay.

Today, Industrias Peñoles resulted with a private, upgradable and flexible network with full control to modify or prioritize the traffic between all remotes sites according to their needs.

### Results

SpaceBridge provided a turnkey system in time, cost and quality according to the high standards required for remote mining location as Industrial Peñoles. Recently and after few years in services, Industrias Peñoles extended the support contract to 6 years and reassure the trust in the SpaceBridge infrastructure