



Claro Argentina GSM 2G/EDGE Network expansion Dynamic SCPC

Executive Summary

Challenge

Cellular carrier Claro Argentina needed to replace its SCPC satellite for 2G cellular backhaul with a solution that would save satellite bandwidth costs. The new SpaceBridge VSAT system delivers a nearly 40% reduction in required satellite capacity, while enabling expansion of the network to new locations.

Solution

SpaceBridge deployed its unique Dynamic BM-FDMA / SCPC solution with E1 A.bis and IP optimization devices for 2G & 3G cellular backhaul services. The deployment included a fully-redundant VSAT Hub installed in Cordoba city and 75 remote sites deployed throughout Argentina.

Benefits for Claro.

- Increased network capacity with integrated traffic management.
- Easy deployment, and links with Low latency and jitter.
- Seamless integration, and increased throughput with A.bis optimization.
- 3G/LTE-ready solution for easy future migration.



Introduction

Claro Argentina sought a way to upgrade its SCPC-based satellite cellular backhaul system to a more efficient VSAT network that would reduce satellite capacity consumption and increase Value Added Services to end users.

The Solution

Spacebridge created a Star BM-FDMA (Burst-Mode Frequency Division Multiple Access) / SCPC Hub linked to Claro's C-band Teleport located in Cordoba city, Argentina. The VSAT Hub connects 75 remote GSM 2G/EDGE cell sites. The new satellite links provide better service by dynamically allocating bandwidth to accommodate traffic increases and fluctuations. It also delivers nearly 40% in bandwidth efficiency gains with Abis compression techniques. SpaceBridge 24x7x365 Network Operation Center (NOC) service supports operations with bandwidth management, optimization, report generation, and an SLA that guarantees 99.9% network availability.

Results with Spacebridge

Claro Argentina gained a much more efficient network optimized for satellite cellular backhaul. The SpaceBridge platform supports the full range of industry-standard interfaces, including T1, E1 and IP (Abis, lub,S1), along with end-to-end encryption, traffic prioritization, and various synchronization methodologies. Backhaul capacity allocations are readily configured on an individual cell site basis in both the downlink and uplink directions, based on traffic engineering requirements.