

# Cost-effective radio network expansion

An EXPLORER Push-To-Talk case story

# COBHAM

The most important thing we build is trust

## Overcoming the challenges of communication white spots with EXPLORER PTT

*South American electricity distribution company's use of sophisticated EXPLORER Push-To-Talk (PTT) solution demonstrates cost-effective method to extend communication coverage.*

### The Issue

Four years ago, a South American electricity distribution company faced a communication challenge. Covering 66,000 miles of distribution lines and a concessional area of 120,000 square kilometers, the utilities company was experiencing very poor radio coverage and occasional outages due to the vast distances and an unstable network.



Their mobile work force consisted of 500+ field engineers who maintained the power grid and served subscribers on a daily basis. The engineers were using a traditional VHF trunked radio system provided by an infrastructure of 180 VHF towers backhauled to the dispatch center.

Faced with high maintenance, poor VHF voice quality and limited coverage, the company was looking for an alternative. On several occasions, extreme weather in the region had rendered one or more VHF towers inoperable, leaving large areas without communication.

They decided to install the 1st generation EXPLORER PTT solution as a cost-effective alternative. The cost of installing and maintaining the number of repeater sites needed to avoid 'white spots' - areas without coverage - was simply too high in comparison to a satellite system.



### The Solution

An EXPLORER 325 satellite terminal, a PTT unit, and two cellular USB modems were installed on the company's service cars to ensure communication in areas with white spots and unreliable coverage.

Today more than 600 EXPLORER PTT solutions are deployed on utilities vehicles in South America.

The EXPLORER PTT solution enables the field engineers to stay connected with the dispatch center when driving in areas that were previously without coverage.

The EXPLORER PTT satellite solution is an IP-based communications device that supports satellite/LTE/3G/LAN backhaul and Land Mobile Radio integration. The solution expands and augments traditional Land Mobile Radio systems to provide beyond line-of-sight voice communication.



*The 2nd generation EXPLORER PTT consists of an EXPLORER 325 BGAN satellite terminal and a PTT unit with a rugged handset.*