TRBOnet
Digital Technologies

The Company:

Ampla Energia e Servicos

is an Enel Group company operating in the electricity distribution to residential, commercial and industrial customers in several municipalities of the Brazilian State of Rio de Janeiro. It supplies 2.7mn consumer units in 66 municipalities and has a concession area of 32,188km2, covering 73.3% of the state. Ampla has a network of 51,761km distribution lines, 116 substations and 3,769km of transmission lines. The company was founded in 1908 and is headquartered in Niteroi, Brazil.

Total Repeaters:	8
Total Dispatchers:	50
Total Rádios:	402
Total Swift Agent:	7

THE CHALLENGE

Ampla works with digital radio network since 2009, when NewTech - Exclusive distributor of TRBOnet in Brazil - implemented digital radio network technology and helped migrate VHF-analog system to a digital DMR Mototrbo system.

Ampla's control center is located in one location, but the company wanted to decentralize the operation in various sites for better performance and local monitoring. It was important for the company to assign multiple regions for different dispatch operators.

Also, the initially deployed server capacity could no longer cope with constant growth of the system, GPS data and channel load. It had to be solved as well.

"We wanted to move our servers from communications room to our CPD" - says Omar Antonio Castello Macedo, technical engineer at Ampla. "It was obvious that our system, that worked so well since 2009, needed to be updated to meet ever-growing amounts of data. We are pleased with the performance of MOTOTRBO and TRBOnet platforms, so we wanted to make updates based on these two products."

In some of Ampla repeater sites, it was not possible to provide IP communication to the Mototrbo repeater. Therefore, Ampla always used the TRBOnet REMOTE AGENT to communicate with these isolated sites.

While planning the upgrade, the SWIFT AGENT module, manufactured by Neocom especially for Mototrbo digital systems, was chosen to replace all computers using Remote Agent software.

"With the strength and reliability of TRBOnet Swift Agent, I dont need to move a team of technicians to restart or turn on a computer. Swift just does not stop. "-says Ewaldo Correa, IT coordinator TIVIT.

"We have been very satisfied with the support and deep knowledge of the local partner – NewTech. We asked for their help in the project and help us get the results as soon as possible."

SOLUTIONS

The project started in early 2015 and was completed in 10 days.

The main challenge of the project was to optimize system performance, so Ampla purchased a TRBOnet reserve server operating in 'Hot-Backup' mode, and a new server dedicated to TRBOnet Watch - diagnostics and network maintenance tool.

The operation runs 24/7, so the migration from the old server to the new ones had to be smooth and without interruption of service. As soon as the new servers were installed and configured, the migration was done in a twinkle of an eye, thanks to great support from NewTech and TRBOnet.

With TRBOnet capabilities, the dispatch operators are able to access the system from anywhere on the Ampla's corporate network and dynamically assign conversation groups in different regions.

"Our operation is divided by regions", - says Marcus Vinícius Fernandes Martins, Telecomunications and Project Specialist at Ampla. "In emergency situations, when many urgent tasks needed to be done at the same time, we can assign more operators to the region. On the other hand, during the low work load period, more than one region can be assigned to a single dispatcher. It works just perfect for us. "

"We also implemented GPS positioning with Google Earth integration. The Google Street View integrated to TRBOnet console helps operators see what the current situation is."

TRBOnet Enterprise gives the opportunity to record and store all conversations and data for an unlimited period of time was one of Ampla's needs as it is required by law. It also makes it possible to send and exchange short messages from radio to radio and dispatcher.

Another module was acquired: TRBOnet Telephone Interconnect. The Dispatch operators moved their extensions into the TRBOnet console, making phone calls much easier to handle.

"Now all our resources are managed by TRBOnet. We only use one headset for both talking at the radio network and to originate and answer phone calls. "-says Rafael Rohling, Dispatcher Operator at Ampla.

"We needed a reliable radio dispatch system for operation and maintenance in the State of Rio de Janeiro, and the TRBOnet was our choice from the great experience started in 2009", - says Macedo. TRBOnet gave us all the flexibility and reliability we need to operate our VHF DMR radio network".

RESULTS

1. **Flexible and reliable digital radio platform** based on reliable products. Ampla has worked with TRBOnet since 2009 and TRBOnet proved to be a reliable partner for many years.

2. **Dynamic distribution system with efficient access.** TRBOnet Enterprise provides the ability to quickly assign multiple agents and groups to a region in an emergency for a better and quicker response. Moreover, an operator can take care of several regions, if necessary.

3. **A radio network that does more than just voice communication.** Ampla uses digital radio network with TRBOnet for accurate GPS data, voice and recording data for reporting and detailed statistics.

Sales and Support

For Sales and Support contact your local TRBOnet dealer or visit www.trbonet.com for a complete list of available dealers in your area.