



ENERGY DISTRIBUTION COMPANY IN THE SOUTH OF BRAZIL SPEEDS UP OPERATIONS

CASE STUDY | CELESC DISTRIBUIÇÃO S.A.



MOTOROLA SOLUTIONS



ENERGY DISTRIBUTION COMPANY IN THE SOUTH OF BRAZIL SPEEDS UP OPERATIONS

WITH A COMMUNICATIONS SYSTEM FROM MOTOROLA SOLUTIONS

Celesc Distribuição decided to extend their digital coverage and radio communications interconnectivity across the entire 36,813 sq. mi. of the State of Santa Catarina, in the South of Brazil.

DEPLOYMENT SUMMARY

Company:
Celesc Distribuição S.A.

Location:
Santa Catarina, Brasil

Vertical Market:
Energy – Energy Distribution

Project:
Deploy radio system from
Motorola Solutions

Motorola Solutions Products

DGR™6175 – 62 units
SLR 5100 – 15 units
DGM™4100 – 260 units
DGM™6100+ – 130 units
DGP™4150 – 20 units
DGM™8000 – 32 units
DGM™8500 – 276 units
DGP™8550 – 32 units
IP Site Connect licenses – 65 licenses
for DGR™6175 and 270 for DGM™4100

Remota Tecnologia Products

TXRoIP Console – 11 units
TXRoIP Gateway – 16 units
TXRoIP Radar Software – 2 units
TXRoIP Server System – 1 unit

System Integrator:
DRJ Radiocomunicação -
DMR VHF System Integrator

Association

Remota Tecnologia
TXRoIP Dispatch Console manufacturer
Responsible for console management

Benefits:

- Improvements in speed and productivity
- Reduced response times
- Cost reduction through centralized operations
- Higher quality of customer service



THE COMPANY

Celesc Distribuição, founded in 2006, is a subsidiary of Celesc, a state company responsible for providing electricity to 2.8M consumer units. One of the main energy distributors in the country, it is recognized throughout for the quality of their services. The company's concession area covers the entire territory of Santa Catarina and the municipality of Rio Negro, in the State of Parana, home to a highly qualified and diversified consumer market.

THE CHALLENGE

The system is divided in 16 micro regions that, traditionally, conducted isolated and independent operations without the ability to be interconnected or remotely controlled. Additionally, there was a radio coverage deficiency that prompted the need to have the Center of Distribution Operations (COSD), located in the capital city, take over the radio dispatch operation of the Regional Control Centers during certain hours when local operators were not available.

THE SOLUTION

The client already had a small digital VHF communication network from Motorola Solutions. After reviewing a few providers in the market, Motorola Solutions was the company that best complied with the technical

operating requirements of Celesc's VHF system. They hired the services of DRJ Radiocomunicação, a Motorola Solutions Platinum Reseller, who inspected the system failure points and made changes and adjustments to the radio system. All this enabled them to expand coverage when necessary, interconnect repeaters through data link to IP Site Connect within each of the 16 micro regions and perfectly serve the needs of the operation.

The Capital City Supervision Center remote radio dispatch operates with the TXRoIP consoles and TXRoIP System server via IP with the gateways connected to a MOTOTRBO™ base station in each of the Control Centers of the 16 base cities. All that interconnectivity was completed in 120 days.

The radio network was accessed through mobile radio and the TXRoIP console, enabling the complete range of voice and data functionality. Additionally, this allowed for real-time monitoring, complete radio system graphic recording, managed by Radar software that can generate reports and export audio.

DRJ managed the irradiating system coverage projects from each location, while Remota Tecnologia deployed the gateways and consoles.

“Excellent quality equipment, functionality and services that satisfy the company’s operating needs and, mainly, the presence of the local representative providing high quality deployment and technical support services. Regarding the brand, I would recommend Motorola Solutions, prior research of a local representative with proven commitment, experience, technical competence and service structure in the regional market.”

– Ricardo G. Trentin
CELESC Distribuição S.A.
Division of Telecommunications
Engineering – DVET
Department of Projects and
Construction of the Electrical
System – DPPC



THE BENEFITS

Field maintenance teams, control center operators and third parties are the main users of the solution that brought countless benefits to Celesc. There was great improvement in field teams dispatch agility and productivity, reducing response time to incidents. On the other hand, centralized Operation Centers reduced headcount costs and enabled better dispatch procedures and better intelligence in field team direction to avoid unnecessary trips.

The solution increased service orders quality and safety with better communications and more clarity and confidence in dispatch voice message to field teams.

The company is currently operating and monitoring 16 micro regions in the state and took control of stable radio dispatch operations via IP from any Control Center, thus optimizing resources and personnel.

FUTURE PLANS

Celesc is planning a fleet expansion in the coming years, together with an increase in traffic and network coverage due to plant expansion. They will also include data and message transmission over a VHF network. They are also considering a migration to the MOTOTRBO™ Capacity Max system.

For more information, please visit
www.motorolasolutions.com

