



MOTOROLA SOLUTIONS TECHNOLOGY HELPS METRO DE MEDELLÍN LTDA. MOVE FORWARD WITH COMPREHENSIVE COMMUNICATIONS



A DIGITAL VOICE AND DATA SOLUTION THAT SPEEDS UP COMMUNICATIONS THROUGHOUT ITS NETWORK.

Metro de Medellín Ltda. engaged Motorola Solutions to deploy a digital communication solution based on the standard used by the world's most advanced subway systems.

THE COMPANY

The company Empresa de Transporte Masivo del Valle de Aburrá Ltda. — Metro de Medellín Ltda. — began operations on November 30, 1995 for the purposes of building and administering the mass transport system, generating development and providing better quality of life to the residents of the Aburrá Valley.

The METRO has made over 2 million trips — based on the principle of sustainable mobility through clean energy—, making a great contribution to the community, known internationally as the “METRO culture”. Every day, hundreds of thousands of users travel safely, quickly and well informed, which characterizes the METRO service and generates quality of life.

THE CHALLENGE

As Metro de Medellín Ltda. was operating an analog system without data capability, communications between different transport systems were not possible, causing problems and inconveniences and significantly hindering the ability to provide an efficient service to the community.

THE SOLUTION

To upgrade their communications, Metro de Medellín Ltda. evaluated several solution providers before deciding on the equipment, service and technical proposal offered by Motorola Solutions, as well as on their proven worldwide experience.

The voice and data infrastructure implemented by Motorola covers the entire integrated transport system of the metropolitan Aburrá Valley area, including trains, buses, cable cars and trams, comprising Medellín and its nearby cities.

DEPLOYMENT SUMMARY

Company:

Metro de Medellín Ltda.

Vertical Market:

Government
Transport and Logistics

Project:

A new network and a complete digital communication system implementation

Motorola Solutions Products:

TETRA, System, Dimetra IP Compact

- 5 Triple Diversity repeater sites
- 2 redundant radio links for site interconnection
- 1 MTM5400 Gateway Repeater
- MTS4 with 3BR each
- 10 MCC7500 Consoles (8 co-located and 2 remote)
- 30-channel recording system
- 529 mobile devices
- 354 portable devices

Applications:

- System management and administration
- Console System
- Recording and loudspeaker interconnection system
- Radio-based traffic control and management system
- UNS (GPS software)

Related Companies:

- CAMBIUM (Radiolinks)
- NICE (Recording System)

Benefits:

- Remarkable service improvements
- Voice and data integration
- Centralized operation
- AVL and APL (Automatic location of vehicles and people)

CASE STUDY

METRO DE MEDELLÍN LTDA.

The implementation was completed in about one year and included support services as well as communication network installation for each means of transport. Due to Metro and Motorola collaboration and teamwork, it was possible from early on to have a clear definition of the scope and effectiveness of the proposed solution, which enabled projection completion in record time.

The company plans for the second phase include extending the system to cover a wider geographical area.

THE BENEFITS

Today, Metro de Medellín Ltda. operates a centralized and integrated voice and data communication system, which has greatly enhanced the company's interconnection capabilities across the entire transport network.

In addition, the GPS-based Automatic Vehicle Location (AVL) and Automatic Person Location (APL) applications increase the safety and security of the 3,600,000 users of the transport system.



"Our transport system is world-renowned, and positions Medellín as one of the most sought-after destinations in Colombia for its entrepreneurship, development, and technology. This is the company of the people of Antioquia, —a symbol of culture, civility, and social well-being. Metro de Medellín Ltda. has an ongoing commitment to the quality of its processes, the environment and safety, and stands as an icon for the city of Medellín and its surrounding metropolitan area. It is not just a means of transportation."

Source: www.metrodemedellin.gov.co



To learn more, visit

www.motorolasolutions.com/caribbean/TETRA

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