

Motorola's Canopy Broadband Wireless Solution Outshines Performance of Existing WiFi Systems in Sunny Coastal Spain







Delivering Broadband Connectivity to the Underserved in Catalonia, Spain

Founded in 2001, Corporació Megatel SL specializes in selling broadband services to individuals and companies in both the public and private sectors as well as in developing new consulting services for the telecommunications sector. Using Motorola's broadband wireless Canopy® solution, the Corporació Megatel SL delivers high-speed Internet connectivity and voice over IP under the brand name MegatroWi as well as specialty broadband services such as video surveillance to more than 1,100 residents, businesses and government officials in the Girona province in Catalonia, Spain.

What to Do When WiFi is Just Not Good Enough

Corporació Megatel SL had an impressive goal: Deliver broadband connectivity to individuals, businesses and local authorities located within the Girona province in Catalonia, Spain. The company's targeted customer base included those in rural areas, many of whom currently had no broadband connectivity service options at all, as well as those in more urban areas whose only option was to pay sky-high prices for broadband services.

But the company had a problem: It was relying on WiFi technology. While this technology is ideal for many municipal applications, it simply did not provide the capacity or the reliability required to support Corporació Megatel's business. Specifically, the available WiFi solutions offered inadequate bandwidth and provided connectivity at only very short ranges. With many smaller towns and homes spread out over large distances, this severely limited the number of users that Corporació Megatel could cover using WiFi. The WiFi-based networks also experienced basic maintenance problems due to interference in the few available channels. This resulted in service outages for the users and high personnel costs for Corporació Megatel.

The Solution: Motorola's Canopy Solution® Delivers Superior Network Performance, Low Maintenance and High Reliability

Fortunately, Corporació Megatel found a solution to its problems: wi4 Fixed Point-to-Multipoint Canopy and Point-to-Point backhaul solutions. The range and bandwidth offered by the Canopy platform greatly increased network performance; delivered high levels of service reliability and stability; and required minimal maintenance. The entire network was built using only Motorola equipment, including the end-user connections, which are supported using Motorola Canopy Subscriber Modules.

A high-capacity Motorola Point-to-Point broadband radio link was also installed to carry backbone traffic through the entire network. This link offers high capacity and enables Corporació Megatel to grow the network easily via software.

Customer Profile

Company

Corporació Megatel

Technology Partner WiFiDom

Industry Name WISP

Product Name

- Motorola 5.4 GHz Canopy Point-to-Multipoint Equipment
- Motorola Canopy Subscriber Modules
- Motorola Point-to-Point Backhaul Radio Links
- Solar power driven sites

Solution Features

- Broadband Internet connectivity
- Voice over IP services
- Video Surveillance

Benefits

- Delivers high-performance, cost-effective widespread coverage
- Flexible network design enables service providers to grow with demand
- Network enables priority routing to support service guarantees
- Low-maintenance, easy-toinstall solution

"The Motorola solution enables us to deliver broadband to areas with deficient telecom infrastructure and place our customers on the same level as those in more technologically advanced areas. With minimal investment, we have achieved top-quality, reliable service and also contributed to the economic development of our customers, which was our goal."

Albert Batchellí, Sales Director, Corporació Megatel

Corporació Megatel Forgoes WiFi Frustrations and Delivers Superior Broadband Connectivity

Corporació Megatel SL wanted to provide broadband connectivity and voice services to individuals, businesses and local authorities located in the municipalities within the Girona province in Catalonia, Spain. The company soon found that WiFi technology simply did not provide the capacity or the reliability required to support its business.

Fortunately, Corporació Megatel soon found an alternative in Motorola's Canopy and Point-to-Point solutions, which deliver superior network performance: support high levels of service reliability and stability; and require minimal maintenance. Motorola Canopy system's low energy requirements also made it easy for Corporació Megatel to deliver a "green" service by installing solar stations to power the equipment in some of its base station installations.

WiFiDom Provides Critical Support to Corporació Megatel

The Corporació Megatel project was one of the first – and by far the biggest – project that Motorola's partner WiFiDom implemented using Motorola Canopy products. It clearly shows how delivering the right technology to the right customer can result in immediate success.

In addition, Motorola Canopy system's low energy consumption requirements made it easy for Corporació Megatel to deliver a "green" service by installing solar stations to power the equipment in some of the base station installations. In these cases, several panels were installed with a group of batteries to store the energy generated.

Canopy Delivers Key Advantages in Coverage, Cost, Performance and Ease-of-Installation

The first feature that Corporació Megatel liked about the Motorola Canopy solution was that it provided a good balance between the necessary investment and coverage, both in terms of distance and capacity. Corporació Megatel found that the highly flexible Canopy solution could be easily and cost-effectively extended to areas that were not part of the initial coverage, despite the challenging topography found in the service area.

The second key requirement for Corporació Megatel was that the solution be high-performance enough to offer guaranteed VoIP service to network users. Motorola's Canopy platform allowed the company to prioritize services and traffic, enabling it to provide the guarantees necessary to support its Voice over IP service.

Third, the company was looking for a low-maintenance system that was easy to install. As soon as Corporació Megatel first tested the Motorola Canopy platform, company officials knew that the solution met its requirements and that it was a good fit for the project.

Company officials now say that the Canopy platform has met and often even exceeded their expectations, offering stable, reliable service. Company officials have been extremely pleased with its performance, particularly in light of the high number of customers connected, the geographic dispersion of these customers and the difficulty in accessing some of the stations. Corporació Megatel has even used the equipment to support customers with line-of-sight and connectivity difficulties.







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