



Enabling high quality security operations in one of Toledo province's biggest municipalities

The local authority selected Intracom Telecom's broadband wireless licensed solution to improve public safety with wireless CCTV connectivity.

The Customer

The Municipality is located in central Spain, in the province of Toledo. Despite the small area it covers, the town hosts two prisons, one of them being one of the biggest prisons in Spain, with the local authorities working very tight with European and worldwide security organizations to ensure compliance with safety measures. The local Police Force is one of the Municipality's main services with its mission being to ensure citizens' security.

The Challenge

The Municipal police department had been looking for a suitable solution to connect the municipal security IP cameras with the police operations/monitoring center. The security camera project was an important part of the effort to improve the police surveillance capabilities given that vandalism incidents were increasing in number during the recent years.

Additionally, the police would benefit from being able to use the cameras' images to perform Optical Character Recognition (OCR) on vehicle number plates at the Municipality area. As the equipment would be installed in street areas, cable-based transport for the cameras would be difficult and slow to implement and the cost of the civil works would be very high.

The Solution

Intracom Telecom's state-of-the-art solution combines WiBAS™ G5, a mmWave Ultra-fast Point-to-MultiPoint (PMP) radio operating in the frequency band of 28 GHz, along with UltraLink™-BX70, a high performance lightweight E-Band (71-76 GHz) TDD radio. The solution can support strict SLA conditions for surveillance networks, along with the superior transport capabilities offered by the Intracom Telecom products which were fully compliant with the customer requirements and particular circumstances.

Case Summary

Customer

- Municipality

Industry

- Public Authority

Region

- Spain

Challenge

- To ensure maximum security communication for IP cameras.
- To assure public safety and perfect management of the vehicles that run over the Municipality area.
- To store video recordings so to be available for penal actions.

Solution

- WiBAS™ G5 Connect+ (PMP system)
- WiBAS™ OSDR (PMP system)
- UltraLink™-BX70 (E-Band PTP system)

“Responding to the Municipality's objective of preventing local vandalism and crime incidents, we deployed state-of-the-art IP cameras that significantly increase citizens' security level, while being able to provide a wide variety of services. The architecture of Intracom Telecom's MW communications systems enables network expansion and a wide range of services that the Municipality may need in the near future, such as IP loudspeaker, Wi-Fi area, lighting control, weather forecast and any other information that may be important to the citizens.”

Raúl Alonso
CEO, ITSA Security

Using the licensed frequency spectrum at 28 GHz, which had been allocated to the Municipality, allowed uninterrupted wireless transport service of the IP cameras' high quality video streaming to the police monitoring center, avoiding all interference problems that occur from operation in ISM frequency bands (2.x and 5.x GHz). Thus, the use of licensed 28 GHz spectrum ensured a reliable framework for the specific service implementation.

WiBAS™ G5 PMP radio system is based on a fully outdoor Software-Defined Radio platform with sophisticated QoS features and robust performance that enables the delivery of personalized, customer-centric ultra-broadband Fixed Wireless Access (FWA) to suburban and rural environments, allowing operators to deploy dense FWA networks, capable of serving up to 240 terminal stations (per hub). The advanced modem technology of the WiBAS™ system provides an aggregated capacity of up to 1 Gbps in distances of up to 8 km. On the terminal site, the new generation of terminals, WiBAS™ G5 Connect+, a lightweight compact fully outdoor radio, blend discreetly with the surrounding environment and offers superior quality Ultra-Broadband Services.

Intracom Telecom's E-Band portfolio, UltraLink™, comprises a series of outdoor Ethernet radio units that exploit the advantages of E-Band technology to offer exceptional data transport performance. UltraLink™-BX70 is a lightweight fully outdoor radio that offers up to 1.6 Gbit/s aggregate capacity, along with a complete set of Carrier Ethernet networking features at a most competitive TCO. Being a TDD radio it provides ideal transport in cases where the traffic load on the two directions is asymmetrical, as in the case of IP camera transport. UltraLink™-BX70 is the best fit for deployment on poles and lamp posts due to its small size and low power consumption. Moreover, its quick and easy installation facilitates the implementation of the roll-out plan.

The installation and deployment of the solution was carried out by ITSA Seguridad, a local engineering company of a highly qualified personnel, assuring excellence in the integration of the CCTV systems and the wireless network.



About Intracom Telecom

Intracom Telecom is a global telecommunication systems and solutions vendor operating for over 40 years in the market. The company has become the benchmark in fixed wireless access and it successfully innovates in the 5G/4G wireless RAN transport and small-cell SON backhaul international arena. Intracom Telecom offers a comprehensive revenue-generating software solutions portfolio and a complete range of ICT services, focusing on IoT, SDN/NFV, Big Data analytics & data-driven intelligence, and Smart City solutions. Moreover, it addresses the Energy & Utilities industry, emphasizing on smart metering and end-to-end IT solutions. Intracom Telecom is also active in the defense systems sector providing security integrated systems for critical infrastructure protection and border surveillance. The company has extensive know-how and a proven track record in the market, serving fixed and mobile telecom operators, public authorities and large public and private enterprises. Intracom Telecom maintains its own R&D and production facilities, and operates subsidiaries worldwide.

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