

Comba

Business Case – DAS Solution

New international Airport
El Dorado of Bogotá.
High performance voice
and data for a demanding public.



The new International Airport El Dorado is located in Bogotá metropolitan area and is the main entrance door to Colombia. It operates flights (passengers and cargoes) coming from all over the world and over 200 million passengers used its two terminals in 2011. It also has one of the longest runways in the world and is one of the largest cargo airports in Latin America.

Opened up in 1959, the airport is now undergoing a major upgrade to be completed in 2014 to better meet the increasing demand, thus consolidating the whole required structure in terms of services, meals, shopping, authority reception and convenience in general.

SCENARIO

The airport managing concessionaire, and the main telecom carrier from Colombia intended to offer quality voice and data service as follows:

- Multi-technology: GSM, WCDMA, LTE and iDEN
- Multi-band (MHz): 800, 850, 1900, AWS, 2600
- Multi-operators: network sharing among the carriers **Claro**, **Avantel**, **Movistar**, **Tigo** and **Une**.

COMBA SOLUTION

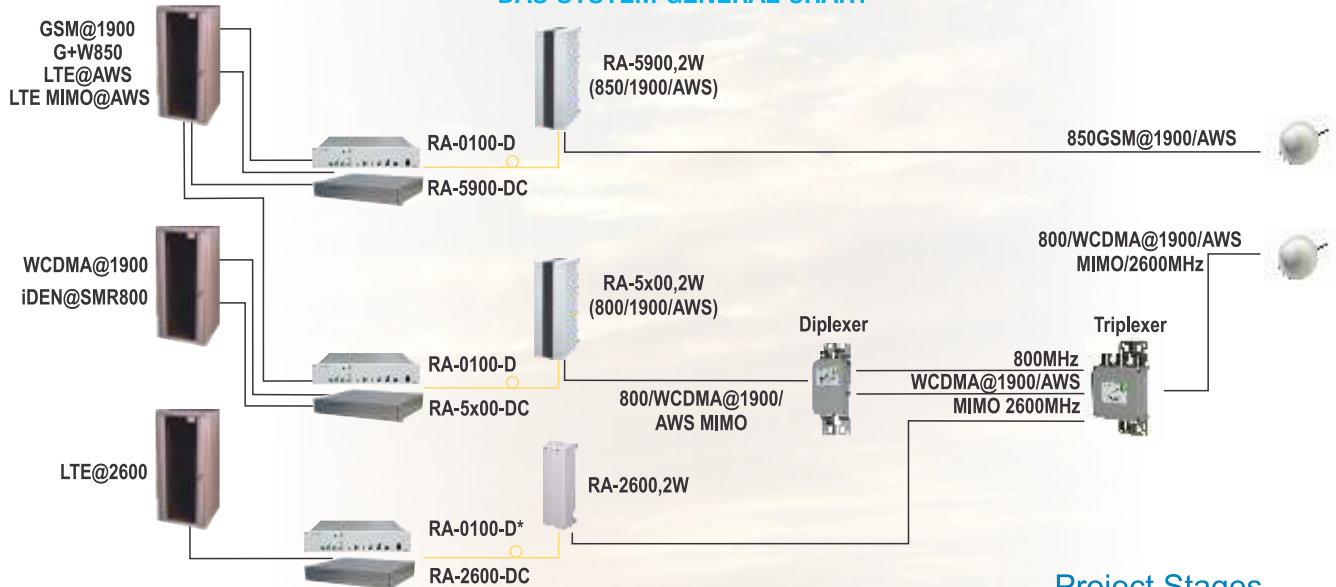
COMBA Telecom's indoor coverage DAS Solution was ideal to overcome the challenges. COMBA design team selected their best:

- 180 panel and omnidirectional antennas (wideband indoor)
- 72 RF repeaters on optical fiber
- Solution management servers
- 12.4 km coaxial cables

COMBA Telecom was in charge of the solution design, equipment and materials supply, system operation and maintenance, partner and project management, deploying the best design management practices through PMBOK methodology.

Managing large and complex projects is part of COMBA Telecom core business, thereby ensuring the delivery of excellent results with high quality.

DAS SYSTEM GENERAL CHART



Project Stages

Preliminary on-site inspection
Quotation and project preparation
Acquisitions
Equipment deployment
Carrier commissioning
System tuning for performance gains



Remote and Master Unit



Master Unit - BTS Hotel



Comba Racks

“The demand for indoor solutions has been increasing. For airports, sport arenas, shopping centers or construction, the provision of quality services on such sites is critical. COMBA is expert in indoor solutions and is ready to meet the demand.

Fernando Nulchis – Latin America Business Manager”

RESULTS

Before the project implementation, the cell mobile coverage at Bogota International Airport was totally deficient. The few antennas installed outside were also in charge of radiating signals to the indoors, not meeting the requirement for quality and comprehensive telecom services. Upon the project completion in 2014, COMBA Telecom will have enabled the upgrade of operators' GSM, WCDMA, LTE and iDEN coverage, thus providing more comfort and agility to users in:

- 5 floors
- 64 air companies' desks
- Public areas such as food courts, duty-free zones
- 163.000m2
- Arrival and Departure areas
- Restricted, technical and support areas