

Digital announcement system for modern International Airport at Bahrain



BOSCH
Invented for life

Industry:

Transportation

End User:

Bahrain International Airport, Muharraq

Bahrain International Airport is an important regional hub for all aviation activities because of its geographical location in the Middle East. The busy airport which is served through 30 different international carriers has around 8 million passengers every year. In order to handle a passenger capacity of 12 million in the near future there are plans to upgrade the airport with an additional terminal.

Business Objective:

To provide announcements throughout the airport with high clarity on a zone wise selection basis, the system in consideration had to provide the following essential functions:

- Digital base platform with full scalability
- Integrated digital audio database providing natural sounding announcements in Arabic, English and Hindi
- Allowance for the automatic broadcast of Islamic Prayer Calls (Aadhan = call to prayer) at 5 different times a day, varying with each day throughout the whole year
- Allowance to be integrated to a "Flight Information Display System"

Solution:

Given the critical nature of the project it was essential for the customer "Civil Aviation Authority Bahrain" to award the contract to an integrator with a high standing in the local market, based on solutions provided through using an international manufacturer of repute with proven track record in similar installations.

The fact that the earlier solution which was based on Philips SM40 equipment (Philips-CSI was acquired by Bosch Security Systems in 2003) had served well over the last 12 years made the choice for a follow-up system fairly simple. An integrated Bosch Praesideo solution offered by the installer Mohammed Fakhroo & Bros was finally selected by the customer.

For meeting the requirements as well as the objectives of the customer, the following equipment design was defined:

1. An equipment rack consisting of a Praesideo network controller and an assortment of 22 Praesideo amplifiers, providing the possibility to integrate additional units as well
2. More than 1150 constant directivity ceiling loudspeakers distributed in 20 zones
3. 13 Praesideo call stations to be used in gates for local or common area announcements
4. A PC Master call station with geographic lay-out for selecting the particular required zone



Bahrain International Airport

5. A special audio server, with a customised audiodata base as well as the relevant interface to the Praesideo platform and "Flight Information Display Systems" (FIDS) supported by a XML file exchange mechanism

Through using the "Object linking and embedding protocol open architecture Interface" (OPC) of the Bosch Praesideo system, the unique software and hardware integration was achieved. Thus, important zoning and priority requirements for the calls could be easily considered.

Result:

Thanks to the installed Bosch solution clear passenger communication was achieved abundantly. Moreover, operational ease for multiple staff handling different shift duties was given.

Thus, the Air Navigation directorate, an entity of "Civil Aviation Authority Bahrain", which was responsible for the selection of the system, was more than pleased to have the Bosch Praesideo up and working in such a short time frame.

Even the long time wish for an automated Aadhan prayer call announcement system for the airport became finally reality in 2008.

Indeed, Mohammed Fakhroo & Bros are well justified in making the very right decision for the very right reasons with the help of excellent Bosch solutions!

Installed by:

Mohammed Fakhroo & Bros
P.O.Box - 439
Manama, Kingdom of Bahrain
www.fakhroo.com

Robert Bosch Middle East FZE

Bosch Security Systems
PO Box 54307, Dubai, UAE
Tel: +971 4 2123350
www.boschsecurity.com/export