



# ABU DHABI INTERNATIONAL AIRPORT

Abu Dhabi

## Southside Master Plan Program T1, T2, T3 and TBF Systems

Abu Dhabi Airports Company (ADAC) | 2008 – 2009



ASSOCIATES, INC.

### BNP PROJECT TEAM

Damien Breier, Principal  
Brian Swales, Project Director

### REFERENCE

Frans Bouterse  
T: +971 2 505 6234  
M: +971 50 818 8792  
F: +971 2 509 5059  
Email: fbouterse@pd.adac.ae

### SCOPE OF SERVICES

Analysis Study  
Conceptual Design  
Design Development  
Ergonomic Improvements  
Bid Documentation  
Construction Administration  
Testing & Commissioning

In October 2008, BNP was retained by the Abu Dhabi Airports Company (ADAC) to provide a comprehensive capacity study of the existing baggage handling facilities at Terminal 1 (T1), Terminal 2 (T2), Terminal 3 (T3) and the stand-alone Transfer Baggage Facility (TBF). The objective of the study was to holistically review the airport baggage handling facilities and determine the required expansions to cater to the increasing traffic demand until the opening of the new Midfield Terminal Complex (MTC).

A demand forecast study was performed to determine the baggage processing requirements for a number of different development scenarios. The study included forecasting demand figures for: originating baggage, transfer baggage, security screening, manual encoding, early baggage storage, baggage make-up requirement, and arrival baggage for each of the terminal facilities as well as for a consolidated central baggage facility.

Demand figures were translated into design concepts considering the existing terminal buildings and baggage handling system into account. The concepts considered such varying issues as:

- Automated and manual screening including various methods for automated screening
- Automated and manual sortation
- Various types of automated sortation systems including tilt tray sorting and belt and diverter sorting
- Separate baggage handling facilities for each terminal and a transfer facility
- Central baggage facility to cater to multiple terminals and transfer baggage
- "Tail to Tail" transfer screening facilities and mobile screening devices
- Common use reclaim facilities for multiple terminals

The study determined Minimum Connection Time (MCT) along with power requirements, scheduling and costing for the various concepts.

The results of the study were summarized into Project Definition Documents and presented to Stake Holders and Board of Directors.