



DUBAI INTERNATIONAL AIRPORT

Dubai, United Arab Emirates

Cargo Mega Terminal Upgrade & Expansion

Dubai Airports Company | 2015 – 2017

The scope of works included the upgrade and expansion of the existing Cargo Mega Terminal (CMT) at Dubai International Airport to increase the cargo handling capacity of the existing 4 modules (Module E, F, G, and H) to handle the EK Passenger Aircrafts Belly Cargo for an additional 100,000 tons p.a. and upgrade the ASRS inline screening for transit shipments according to the new EU Security Regulation and TSA.

As part of the expansion, an additional Module I was developed for an additional 300,00 tons p.a., for Emirates Sky Cargo by connecting the older Modules together along with providing a West Cross Dock handling system and a new PCHS bridge connecting Freight Gate 1 (FG1) with Module E. All these expansions were upgraded and interconnected with one another physically and with IT to allow system cross over.

BNP was retained to review, compile and validate the previous analysis works performed with regards to the latest EK forecast. This required validation of the ULD storage staging and storage master plan, upgrade and expansion requirements for current and new modules at CMT as part of a feasibility and Concept Design stage. The existing CMT at Dubai Airport had reached or was nearing capacity and had a low level of automation.

BNP studied and process mapped the existing operation at the CMT to propose upgrades and expansions to meet the latest flight schedule. Several options were provided to the Employer and stakeholder which lead to development of the BNP conceptual designs.

Multiple conceptual options were considered and compared and ultimately an option was selected where a significant portion of the existing facility was upgraded but an additional Module I, with connectivity to FG1 and West Cross dock (through FG1-Module E bridge) allowed the system to be interconnected with the mail, perishables, pharmaceuticals, pallet and cargo systems.

The system upgrades and expansions contained the following key pieces of equipment:

- General material handling conveyance (right angle decks, straight roller decks, storage, ball matting, truck docking system)
- ULD and pallet hoists
- Horizontal and Elevating transfer vehicles (ULDS) and T-Cars (Pallets)
- Automated Storage & Retrieval Systems
- Fire shutters
- Cold Storage Solutions

BNP also assisted the Employer in preparation of Contract Documents (including specifications), and the evaluating suppliers during bidding and procurement stages. During execution, BNP performed all site supervision activities including installation, testing, commissioning, handover and closeout.



ASSOCIATES, INC.

BNP PROJECT TEAM

Damien Breier, Principal
Felix Rosbergen, Project Director
Rob Lucier, Senior Designer

MHS CONSTRUCTION AMOUNT

US \$60 Million

SCOPE OF SERVICES

Feasibility Study
Conceptual Design
Design Development
Contract Documents
Bidding & Procurement
Construction Monitoring