PROJECT- CONSTRUCTION OF NEW BUILDINGS FOR CAPACITY ENHANCEMENT TO DEPARTING PASSENGER, CHECK-IN AND SATELLITE BOARDING GATES

Specification and Technical Requirements for BHS Data Base Management System

1. Statistics Management System

The Statistics Management System, comprised of the Supervisory Computer Terminal (SCT), includes the following functionality;

1) BHS Conveyor System Error Count
2) Departure Baggage Flow Rate / Count
    a. Hourly, and Daily Basis

Provision shall be given for the following, but not limited to,

3) Arrival/Transfer Baggage Flow Rate / Count
    a. Hourly, and Daily Basis
4) Departure/Arrival/Transfer flight
    a. By Flight, By Airline
5) Departure/Arrival/Transfer flight
    a. By Flight, By Airline
6) Check-in Baggage and Transfer Baggage
    a. By Flight, By Airline
7) ATR (Automatic Bag Tag Reader) Reading Rate
    a. Hourly, and Daily Basis
8) File Management for Statistical Information

All statistical data shall be stored and managed so that any kind of information required can be output in the form of a report.

All statistical data shall be capable of regular compilation, editing, and filing
Stored data shall be capable of regular compilation and editing on a daily, weekly, monthly, and annual basis automatically and as designated by the operator.

Data storage capacity shall be sufficiently large to handle all data to be stored and processed by the Static Management System and to serve as a Database for the entire BHS Monitoring and control system.

The IMS shall be capable of data sorting and editing to produce the required file format.
The filing format shall be prepared in an appropriate form.

In addition to the above, any format shall be easily and quickly produced by the operating staff by use of pre-installed tools in the BHS Database Server.

The following statistical information, at a minimum, shall be printed.

a) Baggage count and flow rate for each conveyor line and sorting system
b) Total quantity of each type of baggage
c) Total quantity of baggage per flight/airline per day, week, and year
d) Operation status and Fault information of BHS

All output of statistical information shall be edited as daily, weekly, monthly and annual reports or upon demand by the BHS operator.

2. Information Management System (IMS)

a) The Information Management System (IMS) shall have an interface with the external information system to exchange all necessary information relating to the BHS operation and control.

b) The IMS shall manage all necessary information for the BHS operation and control and exchange necessary information with the BHS Control System.

c) The IMS shall display various information on the monitor on a dynamic time frame basis at the BHS Control system The IMS shall provide the provision to display operational instructions and information including Flight No., Airline Name, etc. allocated for make-up position and breakdown position of reclaim conveyors where necessary.

d) The Information Management System (IMS) shall operate 24 hours/7 days a week. It will be a fully redundant system, including a network.

e) The IMS shall, as a minimum, include the following basic functions:
   1) Flight Management System
   2) Baggage Management System
   3) BHS Monitoring System
   4) Statistics Management System
   5) Interface Management System

f) Each function shall be operable independently while other functions are under processing and operation.

g) The IMS shall comprise of a dual system; one active, the other stand-by.

IMS Functional Requirements

IMS Functional requirements shall include, but not necessarily be limited to, the following items;

Flight Management System

The Flight Management System, comprised of the Information Monitor Terminal (IMT), includes the following functionality;

Departure Flight Schedule Management

- Monthly, Daily Departure Flight Schedule Receiving from FIS
- Monthly, Daily Departure Flight Schedule Viewing
- All Departure Flight Information is updated to BHS IT database table
- Departure Flight Data can be manually edited in this table

Weekly Departure Flight Allocation Master Management

- Management of Departure Flight Allocation for Make-up
- Weekly Basis Master Table for Departure Flight Allocation

Daily Departure Flight Allocation Table Management

- Daily Departure Flight Allocation for Make-up Operation
- Sending Daily Departure Flight Allocation to FIS
- Allocation Change/Open/Close Operation is done to this table both automatically
- and manually
- High-Risk Departure Flight setting

Provision shall be available for the Arrival Flight Schedule Management

Weekly/Daily/ Arrival Flight Allocation Master Management

Baggage Management System

The Baggage Management System, comprised of the IMT and Allocation Monitor Terminal (AMT), includes the following functionality;

A. Departure Baggage Information Message (BIM) Management
Receiving Baggage Source Message (BSM) from Management Information System (MIS)/CUPPS System via Gateway and Entry to BHS IT Database.

B. Departure Baggage Tracking Control
Departure Baggage Tracking Control for both Check-in Baggage and Transfer Baggage.
Departure Baggage Destination Control (EBS, and Departure Makeup

C. Sorting Destination Allocation Schedule Management

The Sort Allocation Computer System (SAC) shall be provided for automatic sorting of baggage to the final sorting destinations.

The SAC system shall interface with and exchange data with several external systems including: Flight Information Display System (FIDS), the Airlines DCS or CUPPS and the Master Clock System.

The Flight Information System (FIS) shall send daily flight schedules and updates to the Sort Allocation Computer (SAC) for use in preparing sorting destinations allocation schedule on a 24-hour plus cutover basis.

The information allocated for baggage by the Airlines DCS or CUPPS shall comprise a 10-digit license plate number, passenger flight itinerary, and other passenger-related details.
The SAC shall download this information to the Sorting Control Computer (SCC). Based on this information and the sorting destination allocation schedule, the SCC shall allocate a sorting destination number for each piece of baggage.
Should the interface with the FIS fail, then it shall be possible to continue to

operate the BHS in "stand-alone mode".

The SAC shall also interface with the various internal systems that comprise the baggage handling control and computer system.

3. Interfaces with External Systems

The Interfaces with External Systems shall be managed by the External System I/F Server as follows;

A. The IMS shall interface with the following external systems;

- Flight Information System (FIS)
- Departure Control System (DCS) of each Airline
- Common User Passenger Processing System (CUPPS)
- Fire Alarm System
- Security System
- Building Management System (BMS)
- Master Clock System (MCS)
- CCTV System

B. Communication of General Information

The IMS shall interface with, at a minimum, the following external systems.

- Building Management System (BMS): Output of Operational Status
- Master Clock System (MCS): Input of Time Information
- Security Systems: Output of baggage ID etc.
- Interface with Existing AASL LAN

STATEMENT OF COMPLIANCE WITH THE SPECIFICATIONS

Description of Specifications	Offered Specs.Complied/ Not Complied	Remarks (if any)
1. Statistics Management System		
2. Information Management System (IMS)		
3. Interfaces with External Systems		

Bill of Quantity

Description of Specifications	**Sub Total**
1. Statistics Management System	
2. Information Management System (IMS)	
3. Interfaces with External Systems	
Total	

*Please provide a detailed system architecture with the proposed items that will be included.