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# **Revision History**

The following is a record of additions and amendments to this document.

Version	Date	Description	Author
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Introduction

### 1.1 Background

1.

The Egyptian Civil Aviation Authority (ECAA) of Republic of Egypt is adopting an APIS and PNR/DCS to ensure public safety and enhance national security.

This document describes the process for being compliant with the government's requirements for provision of APIS and PNR/DCS.

#### 1.2 Document Control

This document is prepared, and will be maintained, by SITA. Should there be any queries or questions on the contents of this document, please contact



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## 2. Project Description

The ECAA has mandated that all airlines comply with their APIS and PNR/DCS requirements.

#### **2.1 APIS**

Egypt requires airlines to provide API data for passenger and crew for flights arriving to and departing from Egypt (Including transit flights) at boarding close. This is required in UN-Edifact format via the SITA type B network. Main details of Egypt APIS are as follow:

APIS version:

API PAXLST Version 2003 (UN set 03B)

API PAXLST Version 2010 (UN set 05B)

API PAXLST Version 2013 (UN Set 12B)

Test address: CAICAXS

Production address: CAIEGXS

UNB: Interchange Header: EGYAPIS

UNG: Group Header: EGYAPIS

The "API UN-Edifact Implementation Guide" provided by SITA can be used as a technical reference by airlines and host providers for implementing this message type.

#### 2.2 PNR and DCS (Check-in) Data

A traveler provides reservation information at the time of booking a trip. The reservation information is contained in a Passenger Name Record (PNR), which usually resides in the airline's Reservation System (RES), or potentially in a Global Distribution System (GDS). DCS (Check-in) information is gathered at the time of passenger check-in. The check-in information usually resides in the airline's Departure Control System (DCS) or in another DCS handling the Check-in operations for the flight.

The PNR data needs to be provided for flights arriving to and departing from Egypt Republic (including transit flights). The PNR and DCS data must be provided in the PNRGOV format using an authorized method of push transmission at specified times for each flight. Airlines can send to SITA Gateway PNRGOV EDIFACT V 11.1, PNRGOV EDIFACT V 12.1, PNRGOV EDIFACT V13.1, PNRGOV EDIFACT V15.1.





The PNRGOV EDIFACT (above versions) Implementation Guide" can be provided by SITA and can be used as a technical reference by airlines and host providers for implementing this message type.

Airline Reservation Systems are expected to push PNRGOV messages over an IBM websphere/MQ connection, at specified time intervals T-72, T-24, T-0. This is a server-to -server connectivity. DCS data should be provided at T-0.

Airlines who are unable to provide which DCS information in their PNRGOV message may provide DCS check-in data to Egypt using a PRL message format over a SITA Type B transmission method. The Type B address is **CAIEGXS** Type B address.

#### 2.3 Traveller Scope

Airlines must provide APIS, PNR and DCS data to the Egypt authorities for all international and domestic inbound/outbound flights to/from Egypt, including transit/transfer flights. APIS must also be provided for crew.

#### 2.4 Code-Share Responsibilities

Code sharing refers to a practice where a flight operated by a Carrier is jointly marketed as a flight for one or more other Carriers. For example, Carrier A may sell tickets on Flight A123, and Carrier B may sell tickets on flight B456. Only one flight occurs, and this is flown by one of the code share partners, known as the operating Carrier. The other Carriers that sell seats on this flight are known as marketing Carriers.

The operating airline carrier is responsible for transmission of APIS, PNR and DCS data for the flights of interest, including any code share travelers. The operating airlines are encouraged to ensure that their code share partner is aware of the APIS, PNR and DCS data requirements in this Bulletin.

#### 2.5 Timing for the provision of APIS, PNR and DCS information

Egypt requires the APIS, PNR and DCS data to be provided on actual time of departure and PNR data at specified times before scheduled departure of a flight as shown below:

When required	PNR (booking) Data	DCS (check-in) Data	APIS
T-72 hours	✓		
T-24 hours	<b>√</b> *	✓	
T-4 hours	<b>/</b> *	<b>/</b> *	
T-0/ATD (Actual time of departure)	<b>√</b> *	✓	✓



\* PNR data provided at T-24/T-4/T-0 (ATD) may contain new PNRs (not previously provided at (T-72) and changes to previously transmitted PNRs as agreed between the airline and SITA Airline Engagement team. In case of changes to previously transmitted PNR data, the airlines must provide all data elements for an updated PNR rather than providing the updated elements only.

It must be noted that the Egypt Government can hold further reviews of the APIS, PNR and DCS data submission timings. Any changes to the current requirement will be notified to the airlines accordingly.

### 2.6 Communication Links to RES and DCS systems

Egypt will support the following connectivity options for the Push method:

- Airline Type B to SITA Type B address
   This option is used for providing the APIS message and can also be used to provide DCS data in PRL format.
- Airline MQ Hub server to SITA MQ server

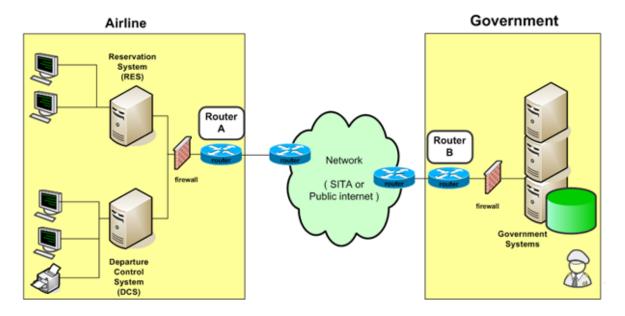
IBM MQ is Message Oriented Middleware software that implements guaranteed delivery messaging infrastructure. This method will be used by hosts pushing PNR/DCS messages to SITA. MQ connection details will be defined with each airline. SITA will provide an MQ Configuration form to airlines.

For security reasons, transmission will be over the SITA network via the GovIDnet ServiceNet. Or Over IPSec Connection.



#### 3. PNR and DCS Data

Airlines must provide PNR and DCS data to the government for each flight. This is achieved using a network connection between the airline's system(s) and the government's system, as shown below.



The connection from Router A to Router B will use SITA's VPN ServiceNet called "GovIDnet"

Airlines will need an IPVPN Connection to connect to SITA Cloud and a Subscription to GovIDnet Service. For further details about how to get a connection to SITA the Airline can contact the SITA Local Sales Representative or Account Manager.

If the airline is already connected to the SITA network, then they can use their existing SITA connection by subscribing to "GovIDnet and corrected".

Airlines Can use the IPsec connection to connect to SITA Gateway

Airlines providing PNR and DCS data will choose the following transmission method.

Airline Performs RES Push from airline RES	Airline Performs DCS Push from Airline DCS
RES Push at specified time intervals, using airline MQ to SITA PNR Gateway MQ (over the GovIDnet ServiceNet)  Mandatory MQ server is required as the solution does not accept a client MQ server (Server to Server connectivity)	DCS Push embedded in PNRGOV Message at T-0 DCS Push PRL at specified time, using Type B to the SITA Type B address



# 4. APIS/PNR/DCS Implementation Plan

The airline engagement process is grouped into the main stages highlighted below. It is expected that the same process will be:

#### 4.1 Stage 1 - Contact

The airline engagement includes the following steps:

- Government mandates required data from airlines to SITA
- Airlines provide Service Indication Form (SIF) to SITA
- Initial Kick -Off meeting between the airlines and SITA

#### 4.2 Stage 2 - Development

The stage includes:

- Agree on the method of data transmission
- Agree on the data format of the required data elements
- Ensure there is a successful connection at a Network level (Testing and Production Environments) between Airline/Host and SITA Cloud
- Airline/Host to develop APIS and PNR/DCS Application in a format compliant to IATA Standards and Government requirements

#### 4.3 Stage 3 - Certification

This stage includes:

- Test connection
- Test data samples in accordance with Government requirements
- Discuss and agree on data elements' availability and quality
- Data elements quality sign off by SITA

#### 4.4 Stage 4 - Cutover

The cutover stage includes:

- Agree on a Move to Production date between SITA and Airline
- Ensure the Connectivity to Production is working and a Test Message has been received successfully



- Issue a Change Request to configure the new Airline moving to Production on the Government System
- Move to Production and monitor traffic reception





# Appendix A – Data Elements

#### **PNR Data Element Descriptions**

This section contains the PNR data elements that will be required

The data elements include:

PNR record locator code - the code (normally the unique key) that identifies the booking on the ARS.

Date of reservation / issue of ticket - the date the booking was created on the ARS and also the date of ticket issuance (this field explicitly covers date fields mentioned elsewhere (e.g. ticket information) and includes the last modification date of the PNR)

Date(s) of intended travel

Passenger name – the family name, given name plus any title and initial/middle name Available frequent flyer and benefit information (i.e. free tickets, upgrades, etc.) - includes number and address.

Other names on PNR, including number of travellers on PNR – a booking can contain multiple Passengers (e.g. a family would normally book together).

All available contact information (including originator information)

All available payment/billing information (not including other transaction details linked to a credit card or account and not connected to the travel transaction) –includes cash, cheque, credit card numbers and other forms of payment

Travel itinerary for specific PNR - the entire itinerary including dates, routes and flights (whether flown or to be flown). This also can include:

- ARNK segments (Carrier definition meaning that it is not known how the Passenger(s) will travel between the two airport/city codes).
- All incoming and onward segments (flown by a different Carrier to the one whose ARS provided the PNR) Non-air segments (car, hotel, etc.)
- Open segments (i.e. no flight details supplied)
- Lay over information (location, duration)

Travel agency/travel agent. The travel agency should include the industry identifier (the IATA number) and the system identifier (pseudo-city code) if available. For the travel agent: the name and contact details of the agent.

Code share information

Split/divided information - related to 'Other Names on PNR'. People who book together can change their plans resulting in several bookings. This field links the passenger in question to other bookings for people that are connected in some sense with that passenger Travel status of passenger (including confirmations and check-in status)



Ticketing information, including ticket number (the unique key for each ticket), one-way tickets and Automated Ticket Fare Quote. Includes the various ticket types (exchange, re-issued, conjunction), and additional information provided for e-tickets. Sub fields include: date of purchase, date of issue, where issued, ticket number, automated fare quote.

All baggage information

Seat information, including seat number – the reserved seat number or stated seating preference in the ARS

General remarks including other supplementary information (OSI), special service information (SSI) and special service request (SSR) information. OSIs and SSRs typically have coded information (often followed by free format text) and are used for specific purposes (example SSRs include wheelchair requests, seating requests, document declarations; a common use of OSI is to record contact information). General remarks are used for a variety of purposes (not covered by SSRs or OSIs).

Any collected APP or APIS information

All historical changes to the PNR listed in numbers 1 to 18

#### DCS (check-in) Data Element Descriptions

The following list details the most common items that are found in DCS records within Airline Departure Control Systems:

Seat number – actual seat number allocated at check-in

Go-show information – information (from the DCS) on a 'go-show'. (Someone who travels but who did not have a booking).

Number of bags – number of bags the Passenger has checked-in

Bag tag number(s) – bag tag number for each bag

Bag weight(s) - weight of each bag

Bag destination – destination of each bag

Standby - Passenger status field from DCS

Order at check-in – includes security number, check-in sequence number, time and status.

Booking reference – the locator of the associated PNR record in the reservation system SSR/OSI – as PNR.

Current flight – the flight being check in.

Incoming flight – the flight (if any) that the passenger arrives on before continuing his/her journey on the current flight.

Onwards flight – the flight (if any) that the passenger plans to catch after the current flight.

#### **APIS Data Element Descriptions**

This section describes the important data elements that should be present in APIS declarations:

1

Service Information	Field	Mandatory/Optional
Traveller Type (Pax/Crew)	Traveller Type	Mandatory
Service Type (Air/GA/Sea/Land)	Service Type	Mandatory
Service Number	Service Number	Mandatory
Departure Port	Departure Port	Mandatory
Departure Date/Time	Departure Date Departure Time	Mandatory
Arrival Port	Arrival Port	Mandatory
Arrival Date/Time	Arrival Date Arrival Time	Mandatory
Traveller Information	Field	Mandatory/Optional
Document Type	Document Type	Mandatory
Document Subtype	Document Subtype	Optional
Nationality	Nationality	Mandatory
Document Number	Document Number	Mandatory
Document Issue Date	Document Issue Date	Optional
Document Expiry Date	Document Expiry Date	Mandatory
Issuing State	Issuing State	Mandatory
Family Name	Family Name	Mandatory
Given Names	Given Names	Mandatory
Date of Birth	Date of Birth	Mandatory
Gender	Gender	Mandatory
Country of Birth	Country of Birth	Optional
Place of Birth	Place of Birth	Optional
Secondary Document	Additional Document Type	Optional
Secondary Document	Additional Document Subtype	Optional
Secondary Document	Additional Document Number	Optional
Secondary Document	Additional Document Issue Date	Optional
Secondary Document	Additional Document Expiry Date	Optional
Secondary Document	Additional Document Issuing State	Optional
Phone Number	Phone Number	Optional
Fax Number	Fax Number	Optional
Email Address	Email Address	Optional
Address (Number, Street, City, Country, Postal Code)	Address	Optional

1	

Passenger Information Status	Passenger Information Status	Optional
Traveller Journey Information	Field	Mandatory/Optional
Reservation Code	Record Locator	Optional
Seat Number	Seat Number	Must be included in the Manifest, if API data is sent at flight departure
Journey Info	Board Point	Optional
Journey Info	Off Point	Optional
Clearance Port	Clearance Port	Optional
Journey Info	Transfer at Origin	Optional
Journey Info	Transfer at Destination	Optional
Baggage Information	Field	Mandatory/Optional
Expected Hold Bag Count	Expected Hold Bag Count	Must be included in the Manifest, if API data is sent at flight departure and information is available.
Hold Bag Count	Hold Bag Count	Must be included in the Manifest, if API data is sent at flight departure and information is available
Baggage Tag Information	Baggage Tag Information	Must be included in the Manifest, if API data is sent at flight departure and information is available
Other References	Field	Mandatory/Optional
Passenger Reference	Passenger Reference	Optional
Agency Reference	Agency Reference	Optional
Customer reference	Customer reference	Optional
APIS Submission Information	Field	Mandatory/Optional
Reporting party	Party reporting the manifest	Optional
Reporting party contact info	Contact information for the reporting party	Optional