Passenger Data Exchange
THE BASICS
INCREASING NON-STANDARD REQUESTS

PNR: State Design

API: Web/Email

iAPI: Commercial Solution

etc.
REQUIREMENTS IN EARLY 2000
OBJECTIVE

- Understand the complexities of passenger data programs
- Increase awareness of existing international standards and airlines’ capabilities
- Understand that ICAO, WCO and IATA can offer assistance and expertise
DEFINITIONS
PASSENGER DATA – WHAT IS IT?

Electronic data concerning passengers’ identity (API) or travel reservations (PNR) which is used by public authorities for border control.
API helps identify people you know about.
For instance: people on a watchlist

PNRGOV (from PNR) helps notice people and trends you did not know about.
For instance: suspicious travel patterns
ADVANCE PASSENGER INFORMATION (API)

Information about a person’s identity.

- API can be useful for:
  - Immigration
  - Customs
  - Security
API – TRANSMISSION

Legacy (Batch) API
API – TRANSMISSION

Interactive API (iAPI)
PASSENGER NAME RECORD (PNR)

Information about a person’s travel reservation.
It can be useful:

• For customs, law enforcement, security
• To help identify contraband, smuggling, etc
• To assist in risk assessment
KEY PRINCIPLES
“ACE” stands for

- Alignment with standards
- Cooperation with industry and other States (data protection)
- Efficiency: necessary data only
SINGLE WINDOW
Airlines’ systems are complex and different

- API or PNR data may be stored in different airline systems
- PNR may look completely different from one airline to the other
AIRLINES WITH SEPARATE SYSTEMS

Reservation System

Departure Control System

PNR

API
AIRLINES WITH INTEGRATED SYSTEMS

Reservation + Departure Control System

Passenger data
WHERE TO FIND THE LIST OF DATA ELEMENTS

Standards and Recommended Practices for API, iAPI and PNR

API and iAPI data elements are listed in the WCO-IATA-ICAO Guidelines on API

PNR data elements are listed in the ICAO Guidelines on PNR Data (Doc. 9944)
BENEFITS OF STANDARD TRANSMISSION

- Faster implementation
- Better compliance
- Cost control
- Reliable data
- Minimum impact on airport infrastructure
HOW TO SET UP A PASSENGER DATA EXCHANGE PROGRAM

- Determine your needs - Is the data necessary?
- Familiarize yourself with global standards
- Include stakeholders early
- Approach foreign States for any data protection issues
- Check that appropriate legislation is in place
- Seek assistance from experts
- Cooperate and remain flexible
LEAD TIME FOR API

For standard API, airlines need at least 3 to 6 months to

- Configure systems incl. peripheral systems like internet check-in and self-service kiosks
- Test connectivity
- Train staff
COST AND FUNDING

Heavy costs of
• Capturing
• Formatting
• Transmitting data

• Costs of systems development
• Interactive API is a sophisticated system that requires particularly heavy investment

API is a border security requirement. States should not charge airlines (or passengers) in a bid to subsidize their own development costs.
can provide

ASSISTANCE and EXPERTISE

Contact email: passengerdata@iata.org
Passenger Data Exchange

BATCH API
DATA ELEMENTS
ADVANCE PASSENGER INFORMATION (API)

• API includes data relating to the flight and to each passenger on that flight
• Data elements are contained in the API Guidelines
• This is an extensive list. States are urged to limit their requests for specific data elements to those deemed essential for their border control needs
• Annex 9 encourages States to limit passenger data to only those elements found in the MRZ
API DATA RELATING TO THE FLIGHT

- Flight Identification
- Scheduled Departure Date
- Scheduled Departure Time
- Scheduled Arrival Date
- Scheduled Arrival Time
- Last Place/Port of Call of Aircraft
- Place/Port of Aircraft Initial Arrival
- Subsequent Place/Port of Call within the country
- Number of Passengers
API DATA ELEMENTS RELATING TO EACH PASSENGER

- Surname/Given Names
- Nationality
- Date of Birth
- Gender
- Official Travel Document Number
- Issuing State or Organization of the Official Travel Document
- Travel Document Type
- Expiration Date of Travel Document
TRANSMISSION TIMINGS AND FREQUENCY
BATCH API TRANSMISSION TIMINGS AND FREQUENCY

**TIMING**
Not earlier than 30 minutes before departure, preferably when the aircraft door has been closed and the aircraft readied for departure.

**FREQUENCY**
Single transmission ideally, or transmissions limited to the extent possible.
MESSAGE STANDARDS
# Batch API Message and Mode of Transmission

<table>
<thead>
<tr>
<th>Traditional/Legacy</th>
<th>Format</th>
<th>Transmission Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Still the most common and widely recognized by the industry</td>
<td>UN EDIFACT, PAXLST</td>
<td>Examples include: Type B and MATIP</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New</th>
<th>Format</th>
<th>For example: Internet Web Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can be provided by some air carriers (standard under development)</td>
<td>XML</td>
<td></td>
</tr>
</tbody>
</table>

Batch API
Passenger Data Exchange
INTERACTIVE API
KEY PRINCIPLES
INTERACTIVE API: BENEFITS

• Live information about passengers checking in
• Potential prevention of inadmissible passengers and related penalties
• Use for aviation security, since the information is available before the flight takes off
INTERACTIVE API: COMPLEXITIES

• State systems must be able to respond in real time to reduce delays at check-in / boarding
• Systems must be available 24/7
• Back-up processes must be in place in case of system failure
• Processes must exist to deal with customers denied boarding
• The responsible authority should have a risk assessment facility to provide appropriate responses and assistance
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TRANSMISSION TIMINGS AND FREQUENCY
iAPI TRANSMISSION TIMINGS AND FREQUENCY

**TIMING**
Usually sent when passenger checks in and presents their travel document (typically 24 hours to 1 hour prior to departure)

**FREQUENCY**
One transmission at time of passenger check-in
+ Potentially a final message confirming passengers on board
MESSAGE STANDARDS
MESSAGE STANDARDS FOR iAPI

UN/EDIFACT PAXLST

CUSRES
(Customs Response)
PRIVACY AND DATA PROTECTION

• PNR contains personal data
• Countries have different perspectives on how much is “private” or how much can be shared
• State to State agreement may be necessary
• Sensitive data should not be required
DATA ELEMENTS
PNR DATA RELATING TO THE FLIGHT

• PNR can contain as little as a name and flight number
• PNRs may or may not include elements such as:
  • Passenger name (may be limited to surname and first initial);
  • Itinerary;
  • Ticketing information;
  • General contact information;
  • Form of payment;
  • And a range of possible additional information/data. Refer to list in Doc 9944
• Penalties should not be imposed for incomplete or inaccurate data
TRANSMISSION TIMINGS AND FREQUENCY
PNR TRANSMISSION TIMINGS AND FREQUENCY

**Timing**
PNR transmission should be required as late as possible prior to flight departure to ensure complete data.

**Frequency**
Repeated scheduled transmission and ad-hoc requests should be limited as much as possible.
Some carriers may be able to transmit updates only, if changes were made.
MESSAGE STANDARDS FOR PNR

PNRGOV

GOVREQ / ACKRES

(Government Request / Acknowledgement of Response)
Alignment, Cooperation, Efficiency

FOR MORE INFORMATION CONTACT
passengerdata@iata.org