

An Introduction to API and PNR Data



Christopher Hornek, ICAO Facilitation (FAL) Subject Matter Expert

chornek@icao.int

What is Passenger Data?

Overview of presentation

- Advance Passenger Information (API)
 - Basics
 - Batch vs. Interactive
 - Data Elements
- Passenger Name Record (PNR) Data
 - Basics
 - Data Elements
- Passenger Data Single Window





What is Advance Passenger Information (API)?

- API consists of biographical data about passengers, plus information concerning the flight involved that is transmitted to a border agency in a PAXLST message before, or as the aircraft departs.
- The data is generated during airline check-in by the Departure Control System (DCS).
- API may apply to arriving and departing flights, and in some cases for overflight.
- In some cases, the same data is also required for flight crew members, but in a separate message.

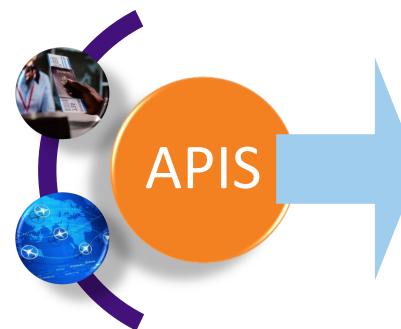


Description of an API System (APIS)

Capturing passport information <u>prior to</u> <u>departure</u>;







Transmitted

Electronic PAXLST message to border control agencies in advance;

Processed for:

- Border integrity;
- Facilitation;
- Watchlisting.





Batch API Transmission



Aircraft operators

• Collect and transmit all passports and other check-in data as a Batch message.

PAXLST



Border agencies

• Receive





Batch API

- Simpler and cheaper form of API to implement.
- All passenger details are transmitted as a single data file, or "batch".
- Batch API is designed originally for the control of arriving passengers by the destination or transit country.
- Data is usually transmitted upon closure of the flight boarding process, government intervention is limited to the time of arrival.
- Data quality validation is limited, no-real time correction can be requested.



Interactive API Transmission









Aircraft operators

• Collect and transmit <u>each passport</u> per check-in transaction



Border agencies

- Receive
- Respond



Interactive API

- More complex and costly form of API to implement.
- Passenger details are transmitted in real-time on a per passenger/passenger group basis as check-in is taking place, government intervention is immediate (response message).
- Receiving State must determine if any issues are preventing the passenger from entering the destination country, leaving the origin country or boarding an aircraft.
- Enhances aviation security and reduces the number of inadmissible passengers.



API Data Elements (API Guidelines) **PAXLST Message**

- Data relating to the Flight (Header Data);
- Data relating to each individual passenger (Item Data)
 - a. Core Data Elements as may be found in the MRZ of the Official Travel Document.
 - b. Additional data as available in Airline systems.
 - c. Additional data not normally found in Airline systems and which must be collected by, or on behalf of the Airline.



API Data Elements (API Guidelines) **PAXLST Message**

Data relating to each individual passenger (Item Data)

Additional data as available in Airline systems.

- Seating Information (Specific seat assignment not reserved seat)
- Baggage Information
- Traveller's Status (Passenger, In-Transit, Crew)
- Place/Port of Original Embarkation (foreign port where travel started)
- Place/Port of Clearance (where traveller is cleared by immigreation)
- Place/Port of Onward Foreign Destination (in case of transit)
- Passenger Name Record (PNR) Locator Number
- Unique Identifier (only in interactive API)



ICA(

API Data Elements (API Guidelines) PAXLST Message

Data relating to each individual passenger (Item Data)

Additional data *not normally found* in Airlines systems

- 1. Visa Number
- 2. Issue Date of the Visa
- 3. Place of Issuance of the Visa
- 4. Other Document Number Used for Travel
- 5. Type of Other Document Used for Travel
- 6. Passenger Contact Information (telephone numbers, emergency contact, email, primary residence, destination address)
- 7. Place of birth

What is Passenger Name Record (PNR) data?

```
*:X* ELECTRONIC TICKET
  1.1TEST/HEXAMRS
WW6ACWW 25JUL KBR4Z5'
   AC 870 M
           TU 10SEP YULCDO
FONE-'
1.WW6-T HEXA
2.WW6-C 1
              1231231/PAX'
 .WW6-A TEST TRAVEL AGENCY
N3 CA'
 .WW6-E SHAILESHD//HEXAWARE.
    K25JULWW6WW 014212372911
AP FAX-'
1.1 SSRDOCSYYHK1 ////11MAR8
```



- Consists of reservation data recorded by airline and/or other commercial reservation systems for each journey booked by or on behalf of any passenger.
- PNR data are used by airlines for their own commercial and operational purposes.
- PNR data provide a mechanism for all the different parties within the aviation industry (including travel agents, aircraft operators and handling agents at airports) to recognise each passenger in a common format and to access all relevant information related to the passenger's journey, i.e. (connecting) flights and special service requests.



What is PNR data?

- Data content varies greatly.
- PNR contains only as much as the airline or booking agency collects in the process of its travel bookings.
- PNR data content varies from airline to airline and even from passenger to passenger.
- Includes changes to requested seating, special meals and additional services requested.
- No PNR for crew.



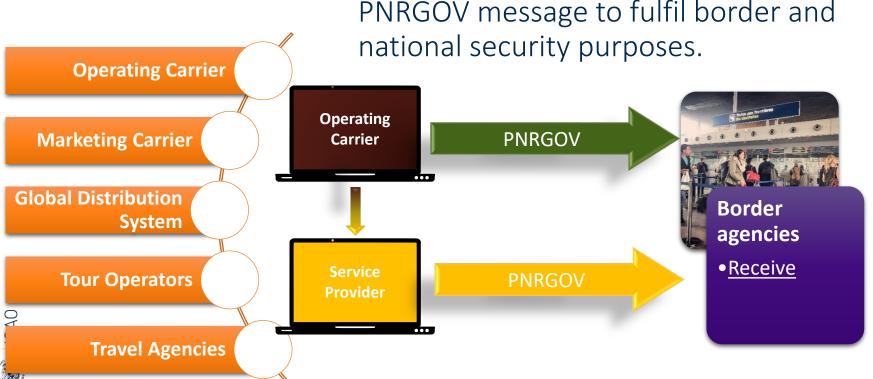
What is PNR data?

- A PNR may contain as little information as a name, itinerary, ticketing information, general contact information and form of payment.
- Alternatively, a PNR may contain full address, contact details, credit card information and all data pertaining to the booking.
- The airline industry cannot guarantee the accuracy of information contained in PNR data, as reservation data is filled with self-asserted and unverified data collected for commercial purposes during time of booking.



PNR Transmission

The data is being sent to States in a PNRGOV message to fulfil border and



- A PNR message contains data captured in many ways.
- Reservations may be created by various marketing organizations, with only pertinent details of the PNR then transmitted to the operating carrier(s), who in turn transmit the details to States.
- Non-filtering airline industry systems are programmed to transfer the entire contents of a PNR they have in their systems to States, meaning that States must protect data which may be considered sensitive.



PNR Data Elements (ICAO PNR Guidelines)

- PNR Name Details
- Address Details
- 3. Contact Telephone Number(s)
- Any collected API data
- 5. Frequent flyer information
- PNR locator code
- Number of passengers on PNR
- Passenger travel status Standby information 8.
- All date information PNR creation date, booking date, reservation date, departure date, arrival date
- 10. Split/divided PNR information Multiple passengers on PNR
- 11. All ticketing field information Date of ticket issue/purchase, selling class of travel, issue city, ticket number



PNR Data Elements (ICAO PNR Guidelines)

- 12. All travel itinerary for PNR
- 14. Form of payment (FoP) information
- 15. All check-in information*
- 16. All seat information Seats requested in advance; actual information*
- 16. All baggage information*
- 17. Travel agent information
- 18. Received from information Name of person making the booking
- 19. Go-show information stand-by without reservation
- 20. No-show information only available after flight close-out
- 21. General remarks all information in general remarks section
- 22. Free text code fields in Other Service Information (OSI), Special Service Requests (SSR), Special Service Information (OSI) – all IATA codes

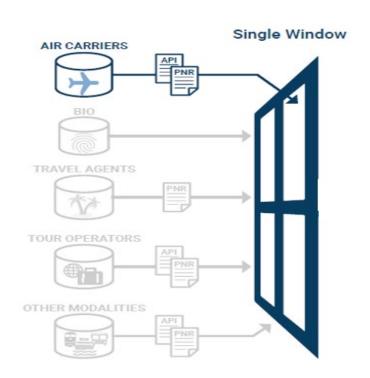


Passenger Data Stakeholders

- 1. Passport Control (immigration)
- 2. Customs
- 3. Counter-Terrorism/National Security
- 4. Counter-Narcotics
- 5. Aviation Security



Passenger Data Single Window

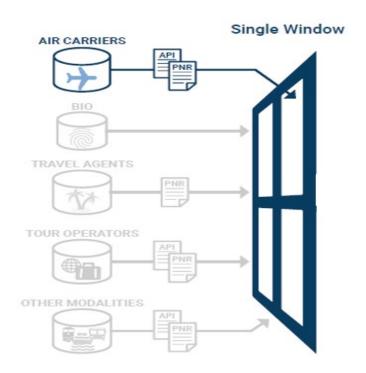


A facility that allows parties involved in passenger transport by air to lodge standardized passenger information (i.e. API, iAPI and/or PNR) through a single data entry point to fulfil all regulatory requirements relating to the entry and/or exit of passengers that may be imposed by various agencies of the Contracting State

Single Window for API/iAPI transmissions does not necessarily need to be the same facility used to support PNR data exchange.

Includes public health authorities.

Single Window Options



- → Allows for separate processing of API & PNR
- → State must have established Single Window facility/facilities
- → Standard*

- → Joint processing of API & PNR in one Single Window facility encouraged
- $\rightarrow RP$





