



Passenger Data Exchange

THE BASICS



WORLD CUSTOMS ORGANIZATION



Introduction

Definitions

Key Principles

Data Elements

Transmission Timings and Frequency

Message Standards

Benefits

How To

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WORLD AIRLINE ORGANIZATION

INCREASING NONSTANDARD REQUESTS

PNR
State Design



AI:
Web/Email



etc.

iAI: Commercial Solution



WORLD AIRLINE ORGANIZATION



REQUIREMENTS IN EARLY 2000



WORLD CUSTOMS ORGANIZATION



REQUIREMENTS TODAY

as of September 2013



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

VS

PNR

Definitions



API helps identify people you know about.

For instance : people on a watchlist

```
*** ELECTRONIC TICKET ***  
F 1.1TEST/HEXAMRS'  
WW6ACWW 25JUL KBR4Z5'  
1 AC 870 M TU 10SEP YULCDO  
FONE-'  
1.WW6-T HEXA'  
2.WW6-C 1 111 1231231/PAX'  
3.WW6-A TEST TRAVEL AGENCY AC  
N3 CA'  
4.WW6-E SHAILESHD//HEXAWARE.C  
TKT-'  
1.1 K25JULWW6WW 0142123729112  
AP FAX-'  
1.1 SSRDOCSYYHK1 //11MAR84
```

PNRGOV (from PNR) helps notice people and trends you did not know about.

For instance: suspicious travel patterns

PASSPORT

ADVANCE PASSENGER INFORMATION (API)

Information about a person's identity.

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

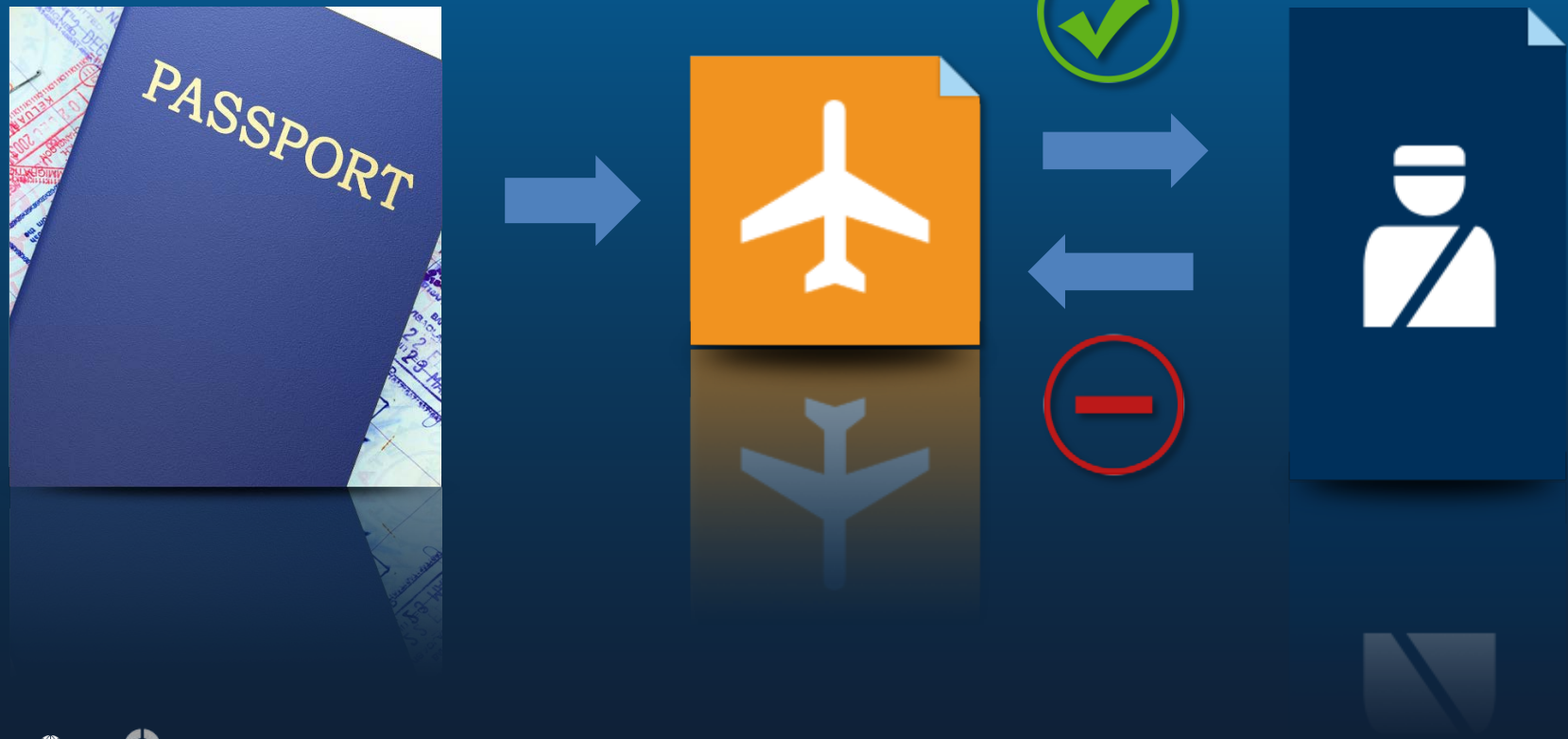
API – TRANSMISSION

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

KEY PRINCIPLES

“ACE” stands for

- Alignment with standards
- Cooperation with industry and other States (data protection)
- Efficiency: necessary data only

SINGLE WINDOW



DATA ELEMENTS

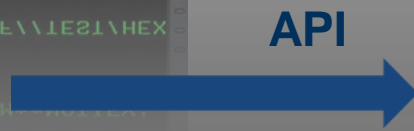
AIRLINES' SYSTEMS ARE COMPLEX AND DIFFERENT

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

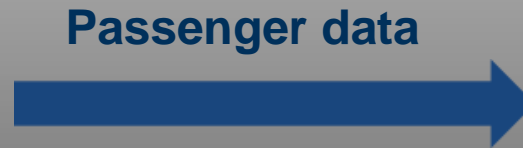
ARLINES WITH SEPARATE SYSTEMS

```
*** ELECTRONIC TICKET ***  
F 1.1TEST/HEXAMRS'  
WW6ACWW 25JUL KBR4Z5'  
1 AC 870 M TU 10SEP YULCDG HK1 2055  
FONE-'  
1.WW6-T HEXA'  
2.WW6-1 111 1231231/PAX  
3.WW6-1 111 1231231/PAX . NO  
N3 CA'  
4.WW6-E SHAILESHD//HEXAWARE.COM**NOTIFY'  
TKT-'  
1.1 K25JULWW6WW 0142123729112'  
AP FAX-'  
1.1 SSRDOCSYYHK1 //11MAR84/F//TEST/HEX
```

Reservation System



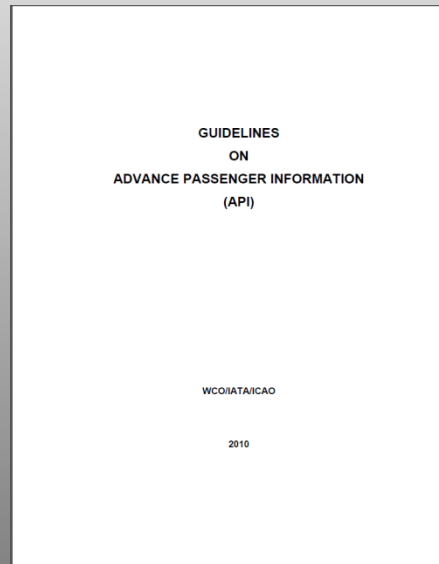
ARLINES WITH INTEGRATED SYSTEMS



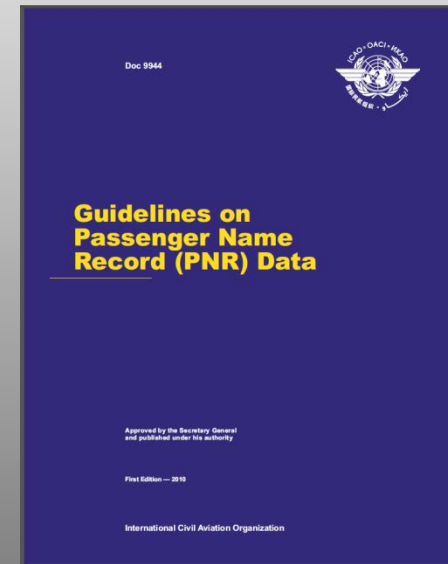
WHERE TO FIND THE LIST OF DATA ELEMENTS



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



BENEFITS OF STANDARD TRANSMISSION

- ✓ Faster implementation
- ✓ Better compliance
- ✓ Cost control
- ✓ Reliable data
- ✓ Minimum impact on airport infrastructure

HOWTO

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

FLEXIBILITY ↗

NON - STANDARD
API

36 30 27 24

↗ MONTHS

STANDARD
API

6 3 0

COST 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.



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can provide

ASSISTANCE and EXPERTISE

Contact email: passengerdata@iata.org

Batch API



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

AIR 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

| | FORMAT | TRANSMISSION MODE |
|--|---|--|
| TRADITIONAL/LEGACY Still the most common and widely recognized by the industry |  | Examples include : Type B and MATIP |
| NEW Can be provided by some air carriers (standard under development) |  | For example: Internet Web Services |

(standard under development)

Can be provided by some air carriers

XML

Internet Web Services



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

DATA ELEMENTS

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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



UNEDIFACTPA1ST



CUSRES

(Customs Response)





Passenger Data Exchange

PNR

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



PNR<GV



<GVREQ/ACKRES

(Government Request /
Acknowledgement of Reponse)



FOR MORE INFORMATION CONTACT
passengerdata@iata.org

Alignment, Cooperation, Efficiency



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