1. OVERVIEW
2. ASSUMPTIONS
3. HIGH LEVEL SCHEMATIC
4. DETAILED COMMENTARY
5. FREQUENTLY ASKED QUESTIONS
6. INTERNATIONAL STANDARDS
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INTRODUCTION

The Ideal Process Flow has been developed by the Simplifying Passenger Travel Interest Group (SPTIG)\(^1\) to provide guidance to airlines, airports, ground handlers, government authorities and technology providers to simplify passenger travel.

The Ideal Process Flow ("IPF") prescribes automation of passenger processes for air travel including security in order to cope with predicted growth in travel and to effectively tackle current and potential security concerns related to air travel. It describes a secure, efficient and simplified model for passenger processing and air travel from the moment the passenger books a flight to completion of arrival processes at their final destination.

The IPF highlights process synergies and the necessity for collaboration amongst stakeholders to shape a more secure, intelligent and simplified travel continuum.

This document includes the following sections: assumptions, high level process schematic, step-by-step process commentary, international standards, frequently asked questions, and a glossary of terms.

SCOPE

- Outlines an ideal view of passenger processing and air travel for the future
- Relies upon international standards
- Supports airline, airports, ground handlers, and governments business processes
- Leverages current technology
- Is derived from the passenger’s perspective
- Is designed to introduce further efficiency and convenience
- Is generic and does not address all eventualities

CONCLUSION

Through the development of this Ideal Process Flow, it is the goal of the SPTIG to:

- Build solutions that promote simplified, secure and automated passenger travel;
- Provide guidance to stakeholders involved in introducing passenger processing enhancements; and,
- Foster greater levels of collaboration amongst industry stakeholders.

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\(^1\) Simplifying Passenger Travel Interest Group (SPTIG) is a unique group of airlines, airports, ground handlers, government authorities and technology suppliers with the common goal to develop a secure, efficient, and simplified passenger travel process.
2. IDEAL PROCESS FLOW ASSUMPTIONS

THE IDEAL PROCESS FLOW IS BASED UPON THE FOLLOWING ASSUMPTIONS:

GENERAL ASSUMPTIONS

- The Ideal Process Flow:
  - demonstrates the “ideal” process for passengers and baggage that successfully pass all airline, government authority and security checks;
  - is based on International Standards;
  - is automated;
  - is not infrastructure-specific; and,
  - encompasses domestic, international and transfer scenarios.
- For departing and transfer passengers, the e-token is validated and the Authority to Carry is confirmed at any one of “Authenticate ID” points in the process.
- There is international recognition of screening at other airports whereby the passenger only has to undergo screening once at the departure airport and is deemed secure at all transfer stations.
- Exit controls are not explicitly identified in the process flow chart. The IPF supports an automated outbound emigration check as may be required by government authorities.
- Existing business practices continue as usual.
- Privacy issues have been acknowledged and addressed.
- Nothing in this document is meant to contradict national legislation, regulations or court decisions.

PASSENGER IDENTIFICATION ASSUMPTIONS

- The passenger has an ICAO standard machine readable travel document (MRTD) or an e-passport.
- The passenger has a biometric identifier which may be stored on an e-token, e-passport, or within a database.
- Where the passenger requires a visa, these shall be electronic and valid for a specific period.
- The passenger authentication process is automated using biometrics.
- Early authentication of passengers reduces risk to the process.

INFORMATION EXCHANGE ASSUMPTIONS

- API data collection takes place at pre-travel.
- An ICAO standard machine-readable travel document (MRTD) or an e-passport will be used to validate the passenger’s identity
- An e-token will be used to automate the transmission of required data.
- iAPI is transmitted to and responses received from departure, transfer and destination government authorities.
- Government authorities use iAPI data to perform checks to determine the eligibility to travel and confirm “Authority to Carry” in real-time at check-in.
- System response for real-time iAPI will, as far as possible, fit within existing business processes.
• Government authorities may have access to API/iAPI/PNR data to allow risk-based streaming of passengers through security screening and border control.
• Government authorities will conduct passenger and baggage risk assessments at the earliest opportunity in the travel process.
• Where government authorities’ declarations are required, they should be submitted electronically prior to departure.
• International standards for data interchange and data security shall be used.
• Government authorities are confident that data supplied by stakeholders is reliable.
• Pre-arrival risk assessment data (per regulation) (passenger & baggage) shall be made available to departure, transfer and destination government authorities.

BAGGAGE ASSUMPTIONS

• Minimum international standards for baggage screening will be applied.
• Hold baggage screening data can be accessed by departure, transfer, and destination government authorities.
• Streaming of arrivals and transfer baggage will be linked to the passenger and baggage pre-arrival risk assessment (per regulation).
3. IDEAL PROCESS FLOW
HIGH LEVEL SCHEMATIC

HIGH LEVEL SCHEMATIC
DEPARTURE, ARRIVALS, AND TRANSFER
PROCESSSES

Please note the numbers on the departure, transfer and arrivals schematics correlate to the commentary in Chapter 4: "Detailed Process Description".
Legend - Lines:
Solid – Physical Movement of Passengers/Baggage
Dashed – Information Exchange
Green – Airlines
Black – Passengers
Blue – Government Authorities
Orange – Baggage
4. IDEAL PROCESS FLOW
DETAILED COMMENTARY

STEP-BY-STEP DETAILED COMMENTARY

DEPARTURE, ARRIVALS AND TRANSFER

PROCESSES

Please note the numbers in the left column of the table correlate to the numbers on the departure, transfer and arrivals schematics in Chapter 3: “High Level Schematic”.
### DEPARTURES

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1   | A passenger may book their ticket via a variety of means – travel agent, internet, or directly with the airline.  
The PNR data is generated by the reservation system upon confirmation of booking. The passenger provides API data to the airline. The PNR and API data are automatically transmitted to government authorities.  
The passenger is responsible for holding/obtaining valid travel documents (passport/visa) prior to departure. The passenger shall complete an automated government authorities’ declaration (per regulation) prior to departure.  
Additional facilitation and services information is made available to the passenger regarding travel documents, health requirements, airport procedures and services, security regulations and government authority requirements. |
| 2   | Upon receipt of the passenger’s API data and payment, the airline confirms the travel reservation and issues an e-ticket. |
| 3   | Government authorities receive certain API and PNR data elements at a specified time prior to departure. Government authorities will use this information to perform checks (background, security, immigration, customs, biosecurity, etc.) prior to departure and throughout the journey. |

### CHECK IN

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
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</table>
| 4 Note: It is necessary to verify the passenger’s identity at least once using a biometric (photograph, fingerprint, iris, etc.) at one of the “Authenticate ID” locations (Box 4, 9, 15, 20) prior to “Boarding”. The specific location depends upon the check-in point (traditional, on/off-airport self-service, bag drop, transfer).  
The passenger’s booking data is retrieved using a machine readable- or e-passport, frequent flyer card, credit card, biometric, bar code, reservation locator, etc. A request to confirm the travel reservation is sent to airlines (“Right to Fly”) and to government authorities to validate travel documents (“Authority to Carry”).  
Once the passenger has checked-in and has authenticated their ID using a biometric (Box 4), they may proceed to either “Drop Bag” (Box 10, with hold baggage), or “Access to Restricted Zone” (Box 15, no hold baggage). |
| 5   | The airline validates the information (flight reservation, identity, ticket payment status, travel documents, airline no-fly list, etc.), and confirms the passenger’s “Right to Fly”. |
| 6   | Using the iAPI data, the government authorities perform checks in real-time to confirm that the passenger is eligible to (a) exit the origin country and (b) arrive at the destination (or transfer) country.  
The passenger’s identity and the validity of the travel documents are confirmed and a real-time “Authority to Carry” notification is generated by the outbound, transfer, and destination government authorities.  
The passenger data is sent to the government authorities for risk-based evaluation and streaming of passengers and their bags. |
<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>The airline activates the e-token to facilitate the passenger’s movement through the airport, security screening, airline facilities, and boarding of the aircraft. A temporary (or disposable) biometric (photograph, fingerprint, iris) could also be used by the e-token to automate this process.</td>
</tr>
<tr>
<td>8</td>
<td>The passenger receives the e-token from the airline. The e-token may be received at different locations depending upon the check-in point (traditional, on/off-airport self-service, bag drop, transfer) (Box 9, 15, 20).</td>
</tr>
<tr>
<td>9</td>
<td>If the passenger has checked-in off airport and has baggage to check, then the passenger proceeds directly to the “Bag Drop” area to complete “Authenticate ID” using a biometric. The passenger’s booking data is retrieved. A request is made to government authorities to validate travel documents and obtain “Authority to Carry”.</td>
</tr>
<tr>
<td>10</td>
<td>The passenger places their hold baggage at a bag drop. The passenger confirms the number of bags and their contents. The appropriate number of bag tags is issued by the airline and attached to the baggage. Where available, the passenger can receive the bag tag from a self-service check-in kiosk that they attach to the bags themselves (self-tagging).</td>
</tr>
<tr>
<td>11</td>
<td>Update baggage information for airline and airport processes (e.g. quantity, weight, etc.).</td>
</tr>
<tr>
<td>12</td>
<td>Initial reading of baggage tag. Hold baggage is sorted for hold bag screening and baggage handling purposes.</td>
</tr>
</tbody>
</table>

**ACCESS TO RESTRICTED ZONE/SECURITY**

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Baggage is then sent to the hold bag screening and baggage handling systems for security screening and sortation. The bags are screened on a risk basis per government authority regulation. All security, customs, and biosecurity data are captured and are automatically sent to the respective government authorities in the outbound, transfer or destination countries for further processing and interpretation (per regulation). Bags can be retrieved on demand from the systems for further inspection by the government authorities.</td>
</tr>
<tr>
<td>14</td>
<td>Hold baggage security screening, biosecurity and customs information is received and assessed by the government authorities. This information (when available) may be used to augment passenger security screening risk assessment (Box 16).</td>
</tr>
<tr>
<td>15</td>
<td>A passenger authenticates their identity by means of the e-token and biometric to ensure that only bona fide passengers enter the restricted zone. Entrance to the restricted zone is governed by security status of the passenger and a valid “Authority-to-Carry”. Passengers with cabin baggage only could proceed directly to this point where their “Authority-to-Carry” can be confirmed by the outbound, destination and transfer government authorities for entry into the restricted zone.</td>
</tr>
<tr>
<td>16</td>
<td>The passenger data and, when available, baggage screening information (Box 14) can be used to risk assess and stream the passengers through security screening according to threat data. The government authorities will issue instructions on the level of security screening required along with any intercept requirements.</td>
</tr>
</tbody>
</table>
| 17  | All passengers and their cabin baggage will be security screened according to minimum international standards. Passengers deemed to be high risk may be
### DEPARTURES

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Hold baggage is sorted to the appropriate pier for loading on to the aircraft. Baggage status messages are updated.</td>
</tr>
<tr>
<td>19</td>
<td>Baggage is loaded on to the aircraft. In the event of a security concern or if the passenger is not onboard, the baggage is off-loaded.</td>
</tr>
</tbody>
</table>

### BOARDING

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>A passenger will confirm their “Right to Fly” using an e-token. The passenger will validate their identity using a biometric to confirm that the “Authority to Carry” is valid. In the event that a “Security All Clear” message has not been received, then the passenger is not permitted to board and their hold baggage is off-loaded.</td>
</tr>
<tr>
<td>21</td>
<td>The passenger boards the aircraft.</td>
</tr>
<tr>
<td>22</td>
<td>The passenger and baggage are reconciled and status messages are updated.</td>
</tr>
<tr>
<td>23</td>
<td>The airline issues a final set of API/iAPI/PNR updates (per regulation) reflecting passenger and hold baggage status. These are sent to transfer and destination government authorities.</td>
</tr>
<tr>
<td>24</td>
<td>The transfer and destination government authorities automatically receive any data required to conduct a pre-arrival risk assessment (per regulation) to establish alerts for the processing of arriving (or transfer) passengers and baggage. Pre-arrival risk assessment data includes passenger data (biometric, security screening, automated government authorities’ declarations, API/iAPI/PNR) and baggage data (biosecurity, security screening, customs).</td>
</tr>
</tbody>
</table>
### ARRIVALS

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>The transfer and destination government authorities automatically receive any data required to conduct a pre-arrival risk assessment (per regulation) to establish alerts for the processing of arriving (or transfer) passengers and baggage. Pre-arrival risk assessment data includes passenger data (biometric, security screening, automated government authorities’ declarations, API/iAPI/PNR) and baggage data (biosecurity, security screening, customs).</td>
</tr>
</tbody>
</table>
| 25  | On arrival, the passenger disembarks from the aircraft and proceeds as follows:  
- Domestic arrival passengers bypass government authorities and collect their bag.  
- Domestic to domestic and international to international transfer passengers bypass government authorities and proceed to the departure gate (unless stated otherwise by government authority regulations).  
- International arrivals passengers, international to domestic and domestic to international transfer passengers (in case of outbound control) proceed to government authorities for processing (Box 30). |
| 26  | Hold baggage is off-loaded from the aircraft and transported to the baggage handling areas at the airport. |
| 27  | Airline API/iAPI/PNR data updates are provided for use by the government authorities for evaluation and risk assessment purposes. |
| 28  | The baggage is directed to (a) government authorities for inspection, (b) inbound screening (per regulation), (c) a transfer pier, or, (d) to a baggage carousel. |
| 29  | Per regulation, additional screening may be conducted on inbound baggage by government authorities for risk assessment and intercept purposes. |

### BORDER CONTROL

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
</table>
| 30  | International arrivals, international to domestic and domestic to international transfer passengers proceed to government authorities for processing.  
The passenger authenticates their identity by means of a biometric and an e-token to confirm their right of entry at the destination (or transfer) country or to ensure that only bona fide passengers enter the restricted zone (in case of transfer).  
Passengers are streamed for processing based on their pre-arrival risk assessment. |
| 31  | Government authorities may intercept and direct passengers and their baggage for additional processing on the basis of their pre-arrival risk assessment data, inbound baggage screening status, government authorities’ declaration data, or on a random basis. Intercept requirements may apply for domestic, international, and transfer passengers. |

### EXIT/ONWARD TRAVEL

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>Baggage arriving at its final destination is sorted. Alert baggage is transferred to the government authorities’ area for processing. All other (non-alert, non-transfer) baggage is sent to a baggage carousel for pick up by the passenger.</td>
</tr>
<tr>
<td>33</td>
<td>The passenger collects their baggage at the carousel and exits the area unless intervention by government authorities is required.</td>
</tr>
<tr>
<td>34</td>
<td>Onward travel services are expedited by automated notifications to the service providers (e.g. hotel, car rental, etc.).</td>
</tr>
</tbody>
</table>
### TRANSFER

<table>
<thead>
<tr>
<th>Box</th>
<th>Description</th>
</tr>
</thead>
</table>
| 35  | Domestic to domestic and international to international transfer passengers bypass government authorities and proceed to the departure gate (Box 37, Departures).  

   International to domestic and domestic to international transfer passengers (in case of outbound control) first proceed to government authorities for processing and then to the departure gate (Box 37, Departures).  

   Transfer passengers may be intercepted at any time by the government authorities depending upon the results of the pre-arrival risk assessment, inbound baggage screening status, or on a random basis. |
| 36  | After arrivals baggage handling and in-bound screening (per regulation), transfer baggage is sorted and sent to the appropriate pier for the passenger’s next flight (Box 18, Departures).  

   Transfer baggage may be intercepted at any time by the government authorities depending upon the results of the pre-arrival risk assessment, inbound baggage screening status, or on a random basis. |
| 37  | Transfer passengers are directed to their departure gate (Box 20, Departures).  

   Transfer passengers may be intercepted at any time by the government authorities depending upon the results of the pre-arrival risk assessment, inbound baggage screening status, or on a random basis. |
| 38  | Transfer baggage is sorted and sent to the appropriate pier for the passenger’s next flight (Box 18, Departures). Baggage status messages are updated.  

   Transfer baggage may be intercepted at any time by the government authorities depending upon the results of the pre-arrival risk assessment, inbound baggage screening status, or on a random basis. |
5. IDEAL PROCESS FLOW
FREQUENTLY ASKED QUESTIONS

API

When will API data be collected?

API data will be collected at the earliest possible opportunity, ideally when a passenger books a ticket.

What about API collection for transit/transfer passengers?

API for the destination should be collected and transmitted via iAPI at the start of the journey. If the data is not transmitted at the point of origin, it would have to be transmitted before the passenger boards the aircraft departing for the ”API requiring” country.

What guidelines exist regarding API data?

Guidance relative to the implementation of API programmes is provided in the recommended practice of the International Air Transport Association (IATA), the International Civil Aviation Organization (ICAO) and the World Customs Organization (WCO) as published in March 2003.

When will iAPI data be transmitted?

iAPI data will be transmitted immediately upon authenticating the passenger identity in the departure process.

What if a passenger’s travel is denied as a result of an iAPI “no board” message?

The passenger would need to contact the nearest embassy/consulate of the relevant government.

Is the passenger eligible for a refund if travel is refused as a result of an iAPI “no board” message?

Eligibility for a refund will depend on the individual carrier policy and reasons for “no board” decision.

AUTHENTICATION

Why is early authentication necessary?

Early authentication is required to ensure that only passengers eligible to fly can continue to the later stages of the departure process e.g. before they drop their bags or proceed airside.
**Why is there need for authentication of identity more than one time?**

Multiple authentication of identity is required for a variety of reasons:

**At check-in,** to determine the passenger’s eligibility to fly.
**At bag drop,** if bag drop area is located far from check-in area, passenger identity is confirmed by means of biometric for baggage reconciliation purposes and a bag tag is issued (if not issued before).
**At access to restricted zone,** to confirm the eligibility of a passenger to proceed to airside, to provide an outbound emigration check, to afford the opportunity to stream passengers through security and potentially to confirm the eligibility to fly of passengers without hold baggage.
**At boarding,** to ensure that only passengers eligible to fly, board the plane and that unaccompanied baggage is not allowed to fly.
**At arrivals (International) and transfer (International/Domestic, Domestic/International),** to ensure that only bonafide passengers have the right to enter/transfer.

**BAGGAGE**

**How and to what standards is baggage screened for security purposes?**

Baggage screening requirements vary from state to state. Appropriate baggage screening will be applied according to national requirements.

**What is self-tagging?**

Self-tagging is where a passenger receives baggage tags from a self-service kiosk, attaches them to hold baggage by themselves, and proceeds to a bag drop location. The availability of self-tagging depends upon local government authority regulations.

**Is pre bag drop/off-site bag collection possible?**

Yes. Advance collection or pre-bag drop of baggage is entirely compatible with the process.

**What happens to baggage in transfer scenario?**

After being processed by the arrivals baggage handling system (and undergoing any inbound screening (expected to be at minimum agreed levels), transfer baggage is transported directly to the pier of the next flight. Transfer baggage may be intercepted at any time by the government authority that relies on pre-arrival risk assessment data to eliminate the need for inbound screening.

**How are bags streamed at final destination?**

On arrival baggage is streamed based on the risk alert status of the passenger or the baggage.
BIOMETRICS

How will biometrics be used to enable the ideal process?

Biometrics stored in ICAO standard e-passports or other e-tokens will help establish identity and eligibility for participation in automated processes. This data, often in combination with other biometrics stored in databases, may be used to automate many of the processes. All processes using such data will be voluntary and subject to applicable data protection requirements.

How will passengers unable to enrol in biometric programs for physical, cultural or religious reasons be handled?

Passengers whose biometric cannot be captured or read for personal reasons, will be required to use the manual process.

Will data privacy issues be addressed?

Automated processes will have to be fully compliant with the applicable laws, policies and regulations governing the protection and use of sensitive personal information.

Will non-government personnel have access to biometrics in passports?

Under strictly controlled conditions airlines might have the ability to verify the biometrics in the e-passport with the passenger. This is subject to government approval of each separate e-passport issuing country.

What are temporary (or disposable) biometrics?

A temporary or disposable biometric is a biometric (photograph, fingerprint, iris) that is captured and valid for a specific (short) period of time and is rendered un-useable beyond the validity period, e.g. a biometric stored in a 2D-barcode printed on a boarding pass for a specific journey.

CHECK-IN

Where can check-in take place?

Check-in can take place anywhere where check-in facilities are accessible. This could be at the airport or via internet at home or hotel or at an off-airport kiosk.

Given that SPT check-in can happen in different ways and in different locations, how do you define the check-in process in terms of the SPT Ideal Flow?

“Check-in” describes the confirmation by the passenger of their intention to fly, confirmation by the airline of the right to fly and the issuance of a valid travel token; and confirmation by the government authorities of the right to board (iAPI).

Can the ideal process accommodate group check-in?

Yes, the ideal process can accommodate group check-in.
**E-PASSPORT AND E-TOKENS**

How can people get a machine readable travel document (MRTD) or an e-passport?

MRTDs and e-passports are issued by government authorities

Will it be necessary to carry more than an ICAO standard machine readable travel document (MRTD) or an e-passport to partake in the ideal process?

As a minimum a passenger will require either:

- An e-passport*; or
- A machine readable passport plus a biometric identifier stored within an e-token or a database.

*In some instances, depending upon the biometric authentication standards required by the states visited during the journey, in addition to an e-passport a passenger may also need to have a biometric identifier stored within an e-token or a database.

How will the ideal process handle dual nationality travellers?

Use of more than one passport on a single journey may preclude automated travel.

**MISCELLANEOUS**

Who is a successful passenger?

In terms of the ideal process flow, the successful passenger is a passenger who has valid travel documents, a registered biometric and who successfully passes all airline, government authority and security checks.

Can the ideal process accommodate standby passengers?

Yes, the ideal process can accommodate standby passengers.

What happens if a passenger books a ticket a very long time in advance?

There should not be a problem even if the ticket is booked well in advance as long as the ticket and passenger’s travel documents are still valid at the time of travel.

Is the ideal process applicable to flights within a particular travel area e.g. Domestic, Schengen, etc?

The principles and philosophy of the ideal process apply to all air travel. However, some of the specific elements of the ideal process may not be required within a particular travel area.

What happens on arrival at the destination airport?

On arrival, the passenger approaches the automated arrivals checkpoint, the passenger authenticates their identity and is instructed how to proceed. Pre-arrival
risk assessment enables facilitation of those passengers and their baggage that do not pose a bio-security, customs or immigration risk.

**Can the ideal process facilitate post-arrival services (e.g. car rental, etc.)?**

Yes. Electronic authentication of the passenger on arrival could trigger onward travel processes such as car rental etc.

**The process is highly automated, what happens in case of technical problems?**

A manual process will be retained to handle exceptions.

**How will this process fit with existing airport infrastructure?**

The process is not infrastructure-specific and individual airport solutions will be required. Discussion with airports, airline and government officials will be necessary to establish the best solution for each location.

**What is “Access to Restricted Zone”?**

“Access to Restricted Zone” is the point at which a number of activities are undertaken to ensure that only legitimate passengers proceed beyond this point and to effect embarkation/ emigration control.

- Passenger identity is authenticated
- “Authority to Carry” is confirmed if this has not already been done so
- The existence of a valid boarding token is confirmed
- The passenger is security screened

**PASSENGER NAME RECORD (PNR)**

**What is PNR?**

A record of each passenger’s travel requirements which contain all information necessary to enable reservations to be processed and controlled by the booking airline and the airlines participating in the carriage. (Source: IATA PSC R.P. 1008)

**When will PNR data be collected?**

PNR data will be collected at the earliest possible opportunity when a passenger books a ticket.

**What data is in the PNR?**

A PNR is built up from data that has been supplied by or on behalf of the passenger concerning all the flight segments of a journey.

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1 The Industry Standards related to PNR creation are detailed in IATA’s Passenger Services Conference Resolutions and in the ATA/IATA Reservations Interline Message Procedures (AIRIMP) Manual.
What guidelines exist regarding the handling of PNR data?

In March 2005, the International Civil Aviation Organization (ICAO) Council adopted the following Recommended Practice for inclusion in Annex 9—Facilitation—of the Chicago Convention: “Recommended Practice. — Contracting States requiring Passenger Name Record (PNR) access should conform their data requirements and their handling of such data to guidelines developed by ICAO.” Final guidelines were issued in June 2005.

When will PNR data be transmitted?

PNR data will be transmitted immediately upon authenticating the passenger identity in the departure process.

What about PNR data collection for transit/transfer passengers?

PNR for the transfer and/or destination authorities (based on regulation) should be collected and transmitted via iAPI at the start of the journey. If the data is not transmitted at the point of origin, it would have to be transmitted before the passenger boards the aircraft departing for the “PNR requiring” country.

What about data protection?

With regard to the processing of personal data, passengers’ rights will be upheld by a national and/or a regional legislative framework.
THE IDEAL PROCESS FLOW IS BASED UPON THESE INTERNATIONAL STANDARDS:

**AT PRE-TRAVEL**

- ICAO standard e-passport
- ICAO standard e-visa (where required)
- IATA standard interline e-ticketing
- WCO/IATA/ICAO standard API
- ICAO PNR guidelines
- ICAO Annex 9 facilitation standards
- ICAO Annex 17 security standards

**AT CHECK-IN AND BOARDING**

- IATA standard passenger messages
- IATA standard bag message
- IATA standard Barcode/RFID bagtag
- IATA standard CUSS
- IATA standard bar-coded boarding pass
- ICAO standard e-passport
- WCO/IATA/ICAO standard iAPI
- IATA baggage services procedures
- ICAO baggage security standards
- ICAO Annex 9 facilitation standards
- ICAO Annex 17 security standards
- Standard Ground Handling Agreement (SGHA)

**AT DEPARTURE BORDER CONTROL (WHERE APPLICABLE)**

- ICAO standard e-passport
- WCO/IATA/ICAO standard iAPI
- ICAO Annex 9 facilitation standards
- ICAO Annex 17 security standards

**AT ACCESS TO RESTRICTED ZONE/SECURITY**

- ICAO standard e-passport
- WCO/IATA/ICAO standard iAPI (for non airport check-in)
- IATA standard bar-coded boarding pass
- ICAO Annex 17 security standards

**AT ARRIVAL / TRANSFER BORDER CONTROL**

- ICAO standard e-passport
- WCO/IATA/ICAO standard iAPI
- IATA baggage services procedures
- ICAO baggage security standards
- ICAO Annex 9 facilitation standards
- ICAO Annex 17 security standards
IATA – Add: 800 Place Victoria, P.O.Box 113, Montreal, Quebec, H4Z 1M1, Canada
Tel: +1 (514) 874 0202  Web: http://www.iata.org

ICAO – Add: 999 University Street, Montreal, Quebec, H3C 5H7, Canada
Tel: +1 (514) 954 8219  Web: http://www.icao.int

WCO – Add: 30, Rue du Marché, B-1210 Brussels, Belgium
Tel: +32 (2) 209 9211  Web: http://www.wcoomd.org
API (Advance Passenger Information)
The provision of core biographical information on a person prior to their arrival in a country. Relative to the passenger, Advance Passenger Information most frequently consists of data that can be found on the biodata-page, in the Machine Readable Zone (MRZ) of ICAO 9303 compliant travel documents or electronically stored in an e-passport (Ref. http://www.icao.int/mrtd/):

- Family Name, Given Name
- Date of Birth
- Gender
- Nationality
- Travel Document Type
- Travel Document Number
- Issuing Country
- Travel Document Expiry Date

Further API data relative to the passenger can consist of country of residence, address information etc. Additional API data elements include basic information about the specific flight.

Authentication
Employs the use of a biometric characteristic for the purpose of verification or identification of an individual. (Source: SC37 WG1 Biometric Vocabulary Corpus, v3.0)

Authority to Carry (ATC)
Notification by outbound, destination and transfer government authorities (in real-time) to the airline confirming that the passenger can be carried on the flight.

Automated Declaration
A declaration for government authority purposes (e.g. customs, biosecurity and immigration), submitted electronically.

Baggage Handling System
An automated baggage system that routes a bag to a handling location based on defined sorting criteria.

Baggage Reconciliation System (BRS)
An automated baggage system that reconciles passenger and baggage data for security purposes.

Baggage Streaming
Streaming of passenger baggage depending on the risk alert status of the passenger/baggage.
**Barcoded Bag Tag**
A bag tag containing a barcode that is capable of holding information related to the bag.

**Biodata**
Core biographical data related to the passenger such as that currently shown on the biodata page of a person’s passport (i.e. full name, date of birth, passport number, place of issue, expiry date and digitised image).

**Biometric**
A measurable biological or behavioural characteristic, which reliably distinguishes one person from another, used to recognize the identity, or verify the claimed identity, of an enrollee. (Source: SC37 WG1 Biometric Vocabulary Corpus, v3.0)

**Biometrics**
A technology that automatically confirms the identity of people by comparing patterns of physical or behavioral characteristics in real-time against enrolled computer records of those patterns. (Source: IBIA)

**Biosecurity**
Border Control process aimed at preventing the introduction of pests, diseases and unwanted species that may have detrimental impacts on plants, animals, humans, marine and indigenous environments.

**Business Processes**
The passenger processing and administration activities that are currently undertaken by airlines, airports, and control authorities.

**CUSS (Common Use Self Service) Kiosk**
A physical self-service kiosk shared by multiple airlines to provide passenger services functionality such as check-in, ticketing etc. (Source: IATA PSC RP1706c).

**e-Passport**
A biometrically enabled passport where a person’s biodata is stored in a smartchip embedded in the passport. This biodata is the same as that currently shown on the biodata page of a person’s passport (e.g. full name, date of birth, passport number, place of issue, expiry date and digitised image.) (Source: ICAO)

**e-ticket (Electronic Ticket)**
The itinerary/receipt issued electronically by or on behalf of a carrier, the electronic coupons and, if applicable, a boarding document (Source: IATA PSC RP1724).

**e-token**
A device, such as a card or biometric, MRTD, e-passport or other technology used to store data or retrieve data stored in a database.

**e-visa**
An e-visa is an electronically stored record equivalent to a visa. Its acquisition, storage, activation and verification are controlled by the issuing country and may also be recorded on MRTDs so as to be apparent to other states.
Government Authorities
Border control agencies such as biosecurity, customs, immigration, quarantine and security.

Hold Baggage Screening (HBS)
The application of technical or other means which are intended to identify and/or detect weapons, explosives, or other dangerous devices in hold baggage which may be used to commit an act of unlawful interference.

iAPI (Interactive Advance Passenger Information)
Also known as “Interactive APIS”, “Advance Passenger Processing”, “APP” “Board/No Board” “Red Light/Green Light System” and “Authority to Carry” - is a system whereby required data elements are collected and transmitted by carriers to border control agencies at the time of check-in. A response message for each passenger and/or crew member (e.g. “OK to Board” or “Not OK to Board”) is, within existing business processing time, transmitted back to the carrier. (Source: IATA/CAWG)

IATA
International Air Transport Association

ICAO
International Civil Aviation Organization

Ideal Process Flow
The Ideal Process Flow demonstrates the SPT “ideal” air travel process for passengers. It is secure, automated, not infrastructure-specific, and is based on the use of biometrics and International Standards.

Identification
The one-to-many process of comparing a submitted biometric sample against some or all of the biometric templates to determine an individual’s identity. (Source: SC37 WG1 Biometric Vocabulary Corpus, v3.0)

MRTD (Machine Readable Travel Document)
An official document issued by a state or organization which is used by the holder for international travel (e.g. passport, visa, official document of identity) and which contains mandatory visual (eye readable) data and a separate mandatory data summary in a format, which is capable of being read by a machine. (Source: ICAO 9303).

Passenger Declarations
Information required by government authorities from passengers to enable departure, transfer or arrivals processes to be undertaken.

PNR (Passenger Name Record)
A record of each passenger’s travel requirements which contain all information necessary to enable reservations to be processed and controlled by the booking airline and the airlines participating in the carriage. (Source: IATA PSC R.P. 1008)
**Passenger Profile**
A passenger profile contains passenger name, passport information, travel information and any other data deemed to be relevant by the government authorities of outbound, inbound and transfer countries and which is collected at the time of check-in or any time prior to the passenger arriving in the destination country.

**Pre-arrival Risk Assessment**
The use by government authorities of data such as API, PNR, automated declaration and bag image data to assess the risk of passengers/baggage prior to their arrival at destination.

**Right to Fly**
Airline checks flight reservation, receipt of payment and API data and confirms to the passenger that they are entitled to travel.

**RFID (Radio Frequency Identification) Bag Tag**
A bag tag containing an electronic device consisting of an integrated circuit and antenna that is embedded in a passenger baggage label and is capable of receiving, holding and transmitting information related to the bag. (Source: IATA PSC R.P 1740c, 4.9)

**Sort to Pier**
System used to direct hold baggage to appropriate pier for loading into bag carts and onto aircraft.

**Transfer**
A passenger connects between two separate point-to-point flights as part of a single journey (which maybe online or interline) within a specified period of time.

**Transit**
The passenger stays on same plane and/or is held in the secure, sterile area.

**Travel Document**
A passport or other official document of identity issued by a country or organisation, which may be used by the rightful holder for international travel. (Source: Proposed definition for ICAO Annex 9)

**Verification**
The process of comparing a submitted biometric sample against the biometric reference template of a single enrollee whose identity is being claimed, to determine whether it matches the enrollee’s template. (Source: SC37 WG1 Biometric Vocabulary Corpus, v3.0).

**WCO**
World Customs Organization