



| ICAO

SECURITY & FACILITATION



API: Annex 9 provisions and implementation steps

CHRISTOPHER HORNEK
Passenger Data Exchange Expert
Project Manager, 9303 Compliance
ICAO



What is API?

... collection of passenger's and/or crew member's biographic data and flight details by the aircraft operator;

... electronic transmission of the data to border control agencies upon flight departure;

... verified data from State issued travel documents, collected by airlines when flights “open” for check-in (-24 hours before the flight)

P<SWE SPECIMEN<<SVEN<<<<<<<<<<<<<<<<<<<<<<
45123456<4SWE6103213M1004256196103213499<<46



| ICAO

SECURITY & FACILITATION



Benefits of API

- Information about a person's identity
- **API helps identify people you know about**
 - For instance, people on a watchlist
- Improve clearance at border controls
- Combat illegal migration
- Identify passengers who are a known immigration or security threat
- More effective allocation of border control and law enforcement resources
- Improve/enhance security (generally) & aviation security
- Threat assessment value from analysis of data





| ICAO

SECURITY & FACILITATION



API Global Situation (212 territories)

- API in Force = 77 (17 of which are interactive)
- API Authorized, Not in Force (Legal basis in place) = 26
- API Anticipated = 47
- API Not required = 62



| ICAO

SECURITY & FACILITATION



API Data Relating to the Flight (Header Data)

- Airline Code and Flight Number
- Scheduled Local Departure Dates/Times
- Scheduled Local Arrival Dates/Time
- Last Place/Port of Call for Aircraft
- Place/Port of Initial Arrival for Aircraft (AMS-**YUL**-YYZ-YVR)
- Subsequent Place(s)/Port(s) of Call within the Country (**YYZ**)
- Number of Passengers and Number of Crew Members



API Biographic Data Elements in MRZ (Footer Data)

See also Annex 9 Standard 9.8

1. Travel Document Number
2. Issuing State or Organization
3. Travel Document Type
4. Expiration Date of Document
5. Surname/Given names(s) of holder
6. Nationality
7. Date of Birth
8. Sex of holder

P<SWESPECIMEN<<SVEN<<<<<<<<<<<<<<<<<<<<<<<<<
45123456<4SWE6103213M1004256196103213499<<46



| ICAO

SECURITY & FACILITATION



API Additional Data Elements Normally Found in Airline Systems (Footer Data)

- Seating Information
- Baggage Information
- Traveller Status
- Place/Port of Original Embarkation (passenger)
- Place/Port of Clearance (Immigration)
- Place/Port of Onward Foreign Destination (AMS-YUL-BOS)
- Passenger Name Record Locator Number



| ICAO

SECURITY & FACILITATION



API Additional Data Elements NOT Normally Found in Airline Systems (Footer Data)

- Visa Number
- Issue Date of the Visa
- Place of Issuance of the Visa
- Other Document Number Used for Travel
- Type of Other Document Used for Travel
- Primary Residence
- Destination Address
- Place of Birth



| ICAO

SECURITY & FACILITATION



API

- ICAO Annex 9 Standards and Recommended Practices (SARPs) for API (9.1, 9.5, 9.6, 9.8)
 - Single Window (currently RP 9.1, Standard expected in new Edition)
 - Batch API mandatory for all States (Standard 9.5)
 - Legal basis must be in place (Standard 9.6)
 - UN/EDIFACT PAXLST message (Standard 9.8)
 - Passport data according to ICAO Doc 9303 (MRTD) (Standard 9.8)
 - Data elements according to WCO/IATA/ICAO Guidelines on API (Standard 9.8)
 - PAXLST Message Implementation Guide



| ICAO

SECURITY & FACILITATION



API

- ICAO Annex 9 SARPs for API (9.7, 9.9, 9.10, 9.11, 9.12, 9.13)
 - Consider the needs of all agencies (Single Window) (RP 9.7)
 - New data field!! (only via WCO API-PNR Contact Committee) (Standard 9.9)
 - Minimize the number of transmissions (RP 9.10)
 - Limit operational and administrative burden on airlines (Standard 9.11)
 - States should refrain from fines and penalties (RP 9.12)
 - Don't also request a paper manifest (Standard 9.13)



| ICAO

SECURITY & FACILITATION



Batch API vs. Interactive API

Batch API

- The simplest form of API to implement: carriers automatically transmit a single list with details for all persons (or separately for all crew) for a given flight at a given time.
- All passenger details are transmitted as a single data file, or “batch” (though this message can be parcelled).

Interactive API

- Airlines provide passengers’ biographical data in real time on a passenger-by-passenger basis to the authorities, while check-in is taking place.
- Real-time answer from States in the form of CUSRES:
 - OK
 - NOT OK
 - ? – clarification requested



| ICAO

SECURITY & FACILITATION



Interactive API

- ICAO Annex 9 Recommended Practices for interactive API (9.14, 9.15, 9.16)
 - Consider introduction of interactive API (RP 9.14)
 - Should minimize impact on existing aircraft operator systems and technical infrastructure before development and implementation of an iAPI system (RP 9.15)
 - Work with aircraft operators to develop iAPI systems that integrate into the aircraft operator's departure control interfaces (RP 9.15)
 - Conform to WCO/ICAO/IATA API Guidelines when requiring iAPI (RP 9.15)
 - Contracting States' and aircraft operators' API systems, including iAPI, should be capable of 24/7 operation, with procedures in place to minimize disruption in the event of a system outage or failure (RP 9.16)



| ICAO

SECURITY & FACILITATION



Pax Data Implementation Checklist

1. Why? Benefits and International Requirement
2. Initial Steps:
 - a. Which agencies receive data (Single Window)
 - b. Establish National Air Transport Facilitation Committee
 - c. Costs and budget
 - d. Single Window
3. Comply with Standards
4. Set a National Legal Framework
5. Include Stakeholders Early (airlines)
6. External Cooperation (ICAO, UN, WCO, IOM)
7. Budget Constraints and Funding (bilateral assistance)
8. Flexibility



| ICAO

SECURITY & FACILITATION



National Air Transport Facilitation Programme (NATFP)

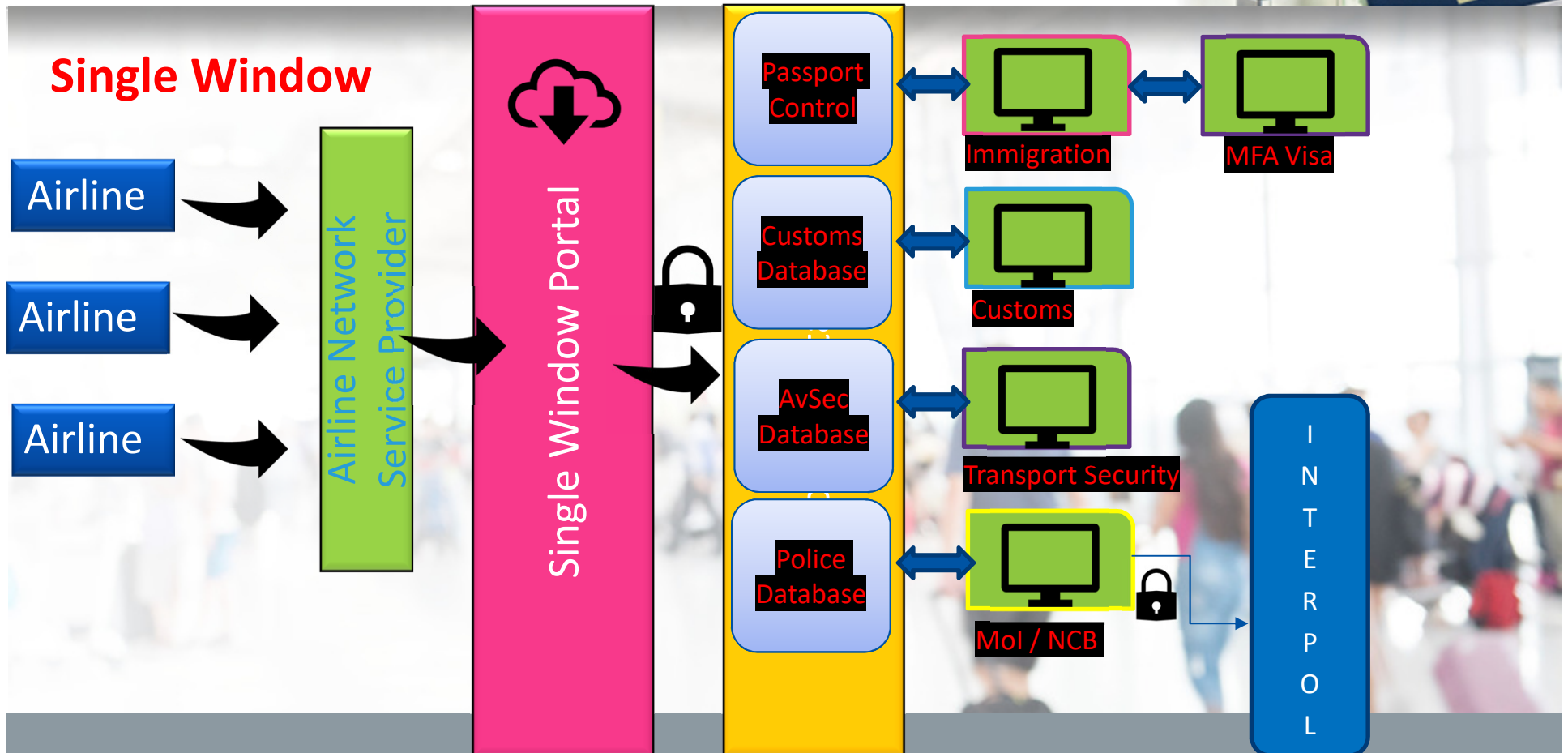
National Air Transport Facilitation Committee (NATFC)

- ICAO Annex 9 SARPs for NATFP/NATFC (8.17, 8.18, 8.18.1, 8.19, 8.20, 8.21)
 - NATFP is mandatory (Standard 8.17)
 - NATFP facilitates movement of aircraft, crews, pax, cargo, mail (Standard 8.18)
 - NATFP to be based on ICAO Model NATFP, ICAO Doc 10042 (RP 8.18.1)
 - Establish a NATFC to coordinate inter-agency activities (Standard 8.19)
 - Coordination between Avsec and Facilitation (RP 8.20)
 - Use Appendices 11 (Model Airport FAL Programme) and 12 (Model National FAL Programme) to ICAO Annex 9 (RP 8.21)



| ICAO

SECURITY & FACILITATION





| ICAO

SECURITY & FACILITATION



PNR: Status and challenges

CHRISTOPHER HORNEK
Passenger Data Exchange Expert
Project Manager, 9303 Compliance
ICAO



| ICAO

SECURITY & FACILITATION



API vs PNR

- ▶ **API:** Information about a person's identity. Used for

- ▶ For front-line
- ▶ Immigration, Customs and Security watch-lists

**“SIMPLE
MESSAGE”**

- ▶ **Messages:** PAXLST (batch or interactive), CUSRES
- ▶ **Messaging Standards:** UN/EDIFACT (no XML)

- ▶ **PNR:** Information about a person's travel reservation.

- ▶ For risk assessment & analysis
- ▶ To help identify contraband, smuggling, etc.

**“COMPLEX
MESSAGE”**

- ▶ **Messages:** PNRGOV, GOVREQ, ACKRES
- ▶ **Messaging Standards:** IATA PADIS EDIFACT & XML



| ICAO

SECURITY & FACILITATION



PNR Global Situation

- PNR in Force = 29
- PNR Authorized, Not in Force (Legal basis in place) = 36
- PNR Anticipated = 11
- PNR Not required = 136



| ICAO

SECURITY & FACILITATION



PNR

- ICAO Annex 9 Standards and Recommended Practices for PNR (9.1, 9.22, 9.22.1, 9.23)
 - Single Window (currently RP 9.1, Standard expected in new Edition)
 - All PNR Programmes must align with Standards (9.22 is a conditional Standard)
 - Data elements according to ICAO Guidelines on PNR Data (Doc 9944)
 - PNRGOV Message Implementation Guide(s) for EDIFACT and XML
 - Primarily EDIFACT-based transmission protocol (XML also developed) (Standard 9.22.1)
 - Privacy impact, alignment of legal requirements between States (RP 9.23)



PNR and possible conflict of laws:

- UNSCR 2396 (2017) urges ICAO to establish a standard for the collection, use, processing and protection of PNR data.
- The Chicago Convention Annex 9 is the coherent, harmonized legal framework to regulate (API &) PNR transfer (ICAO Annex 9 SARPs, PNR Guidelines and PNRGOV specifications).
- However, there is no harmonized legal framework to overcome possible conflict of laws relating to data privacy and the transfer of PNR data.
- Currently PNR not mandatory under Annex 9



| ICAO

SECURITY & FACILITATION



Contact Details

Name: Christopher Hornek

Email: chornek@icao.int



| ICAO

SECURITY & FACILITATION



API Mandatory Standard

- 9.5 Each Contracting State shall establish an Advance Passenger Information (API) system.



| ICAO

SECURITY & FACILITATION



API Legal Basis Standard

- 9.6 The API system of each Contracting State shall be supported by appropriate legal authority (such as, inter alia, legislation, regulation or decree) and be consistent with internationally recognized standards for API.

Note 1: Brief description of API

Note 2: Information on UN/PAXLST message of UN/EDIFACT

Note 3: Non-applicability to general aviation

Note 4: The UN/EDIFACT PAXLST msg is defined by WCO/IATA/ICAO guidelines



| ICAO

SECURITY & FACILITATION



API Legal Basis

- **9.7 Recommended Practice.**— *Each Contracting State developing legislation for the purpose of implementing an API system should consider developing aligned regulations that meet the needs of all involved agencies, define a common set of API data elements required for that jurisdiction in accordance with message construction standards and appoint one government agency to receive API data on behalf of all other agencies.*



API Data Content and Formatting Standard

- 9.8 When specifying the identifying information on passengers to be transmitted, Contracting States shall require only data elements that are available in machine readable form in travel documents conforming to the specifications contained in Doc 9303. All information required shall conform to specifications for UN/EDIFACT PAXLST messages found in the WCO/IATA/ICAO API Guidelines.

P<SWESPECIMEN<<SVEN<<<<<<<<<<<<<<<<<<<<<<
45123456<4SWE6103213M1004256196103213499<<46



| ICAO

SECURITY & FACILITATION



API Operational Provisions

- 9.9 When seeking to implement a national API programme, Contracting States that are unable to comply fully with the provisions contained in 9.8 with respect to data element requirements shall ensure that only those data elements that have been defined for incorporation into the UN/EDIFACT PAXLST message are included in the national programme's requirement or follow the WCO's Data Maintenance Request (DMR) process for any deviation from the standard.



| ICAO

SECURITY & FACILITATION



API Operational Provisions

- **9.10 Recommended Practice.**— *Contracting States should seek to minimize the number of times API data is transmitted for a specific flight.*
- **9.11** If a Contracting State requires API data interchange, then it shall seek, to the greatest extent possible, to limit the operational and administrative burdens on aircraft operators, while enhancing passenger facilitation.



| ICAO

SECURITY & FACILITATION



API Operational Provisions

- **9.12 Recommended Practice.**— *Contracting States should refrain from imposing fines and penalties on aircraft operators for any errors caused by a systems failure which may have resulted in the transmission of no, or corrupted, data to the public authorities in accordance with API systems.*
- **9.13** Contracting States requiring that passenger data be transmitted electronically through an API system shall not also require a passenger manifest in paper form.



| ICAO

SECURITY & FACILITATION



Interactive API Recommended Practice

- **9.14 Recommended Practice.** — *Each Contracting State should consider the introduction of an interactive Advance Passenger Information (iAPI) system.*



| ICAO

SECURITY & FACILITATION



Interactive API Operational, Data Content and Formatting Provision

- **9.15 Recommended Practice.**— *Contracting States seeking to implement an iAPI system should:*
 - a) *seek to minimize the impact on existing aircraft operator systems and technical infrastructure by consulting aircraft operators before development and implementation of an iAPI system;*
 - b) *work together with aircraft operators to develop iAPI systems that integrate into the aircraft operator's departure control interfaces; and*
 - c) *conform to the Guidelines on Advance Passenger Information (API) adopted by WCO/ICAO/IATA when requiring iAPI.*



| ICAO

SECURITY & FACILITATION



Interactive API Operational Provision

- **9.16 Recommended Practice.**— *Contracting States' and aircraft operators' API systems, including iAPI, should be capable of 24/7 operation, with procedures in place to minimize disruption in the event of a system outage or failure.*