

IATA API-PNR Day – Middle East Cairo, Egypt 25 Feb 2014



#### Welcome

#### Mr. Robert A. (Bob) Davidson Asst. Director, Border Security Policy International Air Transport Association

Davidsonr@iata.org



IATA API-PNR Day – Middle East Cairo, Egypt 25 Feb 2014



## Today's Agenda

- Implementing Data Exchange: Government Experiences
- **API and PNR Implementation from Airlines' Perspective**
- ↗ Introducing a Tool that we can all use
- Open Forum: Questions, comments and observations from all participants
- **7** Closing Remarks



## **Opening Remarks**



IATA API-PNR Day – Middle East Cairo, Egypt 25 Feb 2014



## API and PNR: ICAO's Perspectives

## Mr. Jitu Thaker Technical Officer – Facilitation

## International Civil Aviation Organization Montreal, Canada



#### INTERNATIONAL CIVIL AVIATION ORGANIZATION

A United Nations Specialized Agency

## ICAO Regional FAL Seminar Cairo, Egypt 24-27 February 2014

Advance Passenger Information (API) & Passenger Name Record (PNR): The ICAO Perspective

25 February 2014

#### **API & PNR: OVERVIEW**



#### 1. API & PNR: Why?

#### 2. ICAO's interest in API and PNR

3. Regulatory Framework

#### 4. Guidelines

#### **1. WHY DO STATES WANT DATA?**



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

#### **1. WHY STATES WANT DATA?**



# improve/enhance security (generally) & aviation security (in particular)

threat assessment value from analysis of data

#### fight against terrorism

#### 2. ICAO's INTEREST IN API & PNR



• Art. 22, Chicago: Facilitation of formalities

→Prevent unnecessary delays: Administration of immigration, customs, clearance laws

• Art. 13, Chicago: Entry & clearance regulations

→Compliance of entry, clearance, immigration, customs regulations by/behalf of passengers, crews

 Std. 1.4, Annex 9: States: use I.T. to increase efficiency & effectiveness of procedures at airports

#### 2. ICAO's INTEREST IN API & PNR



• Art. 23, Chicago: C & I procedures

→States to establish C & I procedures recommended pursuant to Convention

• Art. 37, Chicago: Adoption of standards

→States to secure uniformity in regulations, standards, procedures

Uniformity in laws & regulations (Annex 9)

#### **API & PNR: OVERVIEW**



1.API & PNR: Why?

#### 2. ICAO's interest in API and PNR

3. Regulatory Framework

#### 4. Guidelines



<u>Annex 9: States' obligation to standardize API</u> <u>requirements</u>

- 1. Standard 3.47
- 2. Standard 3.47.1
- 3. Standard 3.47.2
- 4. Standard 3.47.5
- 5. Standard 3.47.7

\*All Mandatory\*



Standard 3.47: State to adhere to int'. Standards

- ► Note 1: Brief description of API
- ► Note 2: Information on UN/EDIFACT
- ► Note 3: Non-applicability to general aviation

#### • Standard 3.47.1

Personal & TD information: Doc 9303

► All information: conform to PaxIst Message



• <u>Standard 3.47.2</u>:

More information than 3.47.1 required, restrict to PaxIst Message elements, or

Request DMR process [ API CC]

- <u>Standard 3.47.5</u>: States to limit burden on airlines
- <u>Standard 3.47.7</u>: If electronic API, then no paper passenger manifest [>2.13+Appendix 2]

	PASSENGER MAN	IFEST		
Operator				
Marks of Nationality and Registration*		Data		
	Point of c lace)	Point of disembarkation		
Surname and initials	For use by o	perator only	For official use only	
	••••••			
	••••••			

\* To be completed only when required by the State.

210 mm (or 8 1/4 inches)

OACI



#### Summary of 3.47, 3.47.1, 3.47.2

States obliged to:

- 1. adhere to international recognized API standards;
- 2. require only data elements available in MRTDs, and information to conform to the PAXLST message structure; and,
- 3. only data elements found in the PAXLST message to be included in API requirements; if additional elements required, then the DMR process to be used.



• <u>Recommended Practice 3.47.3</u>:

► If State unable to use PaxIst, consult users on operational and cost impact

• <u>Recommended Practice 3.47.4</u>:

► State to minimize number of times API is transmitted for a specific flight

• <u>Recommended Practice 3.47.6</u>:

State to refrain from fines/penalties for errors due to system failures: transmission of data



#### Amendment 24

- 3 new RPs address operational issues:
  - $\rightarrow$  24/7 operation
  - → procedures for system outage/failure
  - → tech support, notification & recovery procedures
- iAPI: a) RP: consult & work with aircraft operators & conform to WCO/ICAO/IATA Guidelines



5 December 2011

State Letter EC6/3-11/76

"Implementation of Standard 3.47"

States encouraged to ensure adherence to international recognized standards for API transmission



Annex 9: **RP 3.48** on PNR data:

Contracting States requiring Passenger Name Record (PNR) access should conform their data requirements and their handling of such data to guidelines developed by ICAO.



#### Amendment 24

→ 3.48 Amended: <u>Specific reference</u> to 9944 & PNRGOV message implementation guidance

→ (new 3.48.1): States & Operators: provide 24/7 support

→ (new 3.48.2): When requiring PNR data, States should consider the <u>adoption and implementation</u> of the <u>PNRGOV</u> <u>message</u> as a method of transferral of PNR data.



<u>High-Level Conference on Aviation Security (HLCAS,</u> <u>September 2012)</u>

#### **1. Conclusions on API/iAPI & PNR:**

 $\rightarrow$  international <u>standardization</u> would contribute to the <u>viability</u> of the air transport industry;

 $\rightarrow$  a <u>lack of harmonization</u> can <u>reduce the effectiveness</u> of the use of such data;

→ essential that States <u>standardize their data requirements</u> and <u>adopt a standard format</u> for the electronic transmission of passenger data;

→ ICAO+States should promote and enhance global <u>harmonization</u> of PNR systems;

→ States should ensure the protection of passengers' privacy.



#### 2. Recommendations on API/iAPI & PNR:

→ States develop a <u>single API & iAPI reporting requirement</u> based on international standards, and a <u>single agency</u> be identified to receive data and for internal dissemination to other agencies;

→ States <u>align</u> the various data exchange systems with the international data transmission <u>standards adopted by relevant United Nations</u> agencies . . .;

→ PNR systems, <u>based on the PNRGOV message format</u>, require only those data elements collected and stored in aircraft operator systems, as described in *Guidelines on Passenger Name Record (PNR) Data* (Doc 9944);

→ ICAO incorporate <u>new SARPs into Annex 9</u>; [▶]

→ ICAO provide States with <u>assistance and training</u> on the implementation of API



HLCAS (September 2012)

+ Recommendation:

States seeking to achieve <u>enhanced aviation</u> <u>security</u>, and to <u>prevent illegal migration</u> and the movement of potentially <u>inadmissible persons</u>, should consider <u>implementing iAPI</u> systems



38<sup>th</sup> Assembly (2013) Resolutions

A38-15 (Avsec Resolution)

- States urged to use API
- Declaration on Aviation Security

States urged to use API & PNR as an aid to aviation security

•A38-16, Appendix C

States to ensure passenger data requirements conform to international standards adopted by UN



27 February 2014

#### 4. GUIDELINES: DOC 9944



- Meaning of PNR; Why States want access
- Data elements; Processing of data
- Filtering & storage of PNR data
- Data protection; security and integrity of data
- What PNRs should NOT contain
- Sensitive data
- Laws & regulations
- Methods of PNR data transfer
- Frequency, timing of data transfer
- Transparency & Passenger Redress
- Conflict of laws between States

Obligation of airlines to provide data

#### **3. WCO/IATA/ICAO API GUIDELINES**



#### **API Guidelines & PNR Reporting Standards:**

►ICAO Public Site → Strategic Objectives → Security → Facilitation → <u>Publications</u>

http://www2.icao.int/en/AVSEC/FAL/Pages /Publications.aspx

#### **5. PNR: REGULATORY FRAMEWORK**



#### API & PNR: What Next?

- → State Letter (April 2014)
- → FAL Panel (24-28 November 2014)
- $\rightarrow$  Follow-up: IATA (+ ICAO, WCO)





#### QUESTIONS?

27 February 2014

Page 32



IATA API-PNR Day – Middle East Cairo, Egypt 25 Feb 2014



## Passenger Data Exchange The Basics

Robert A. (Bob) Davidson IATA

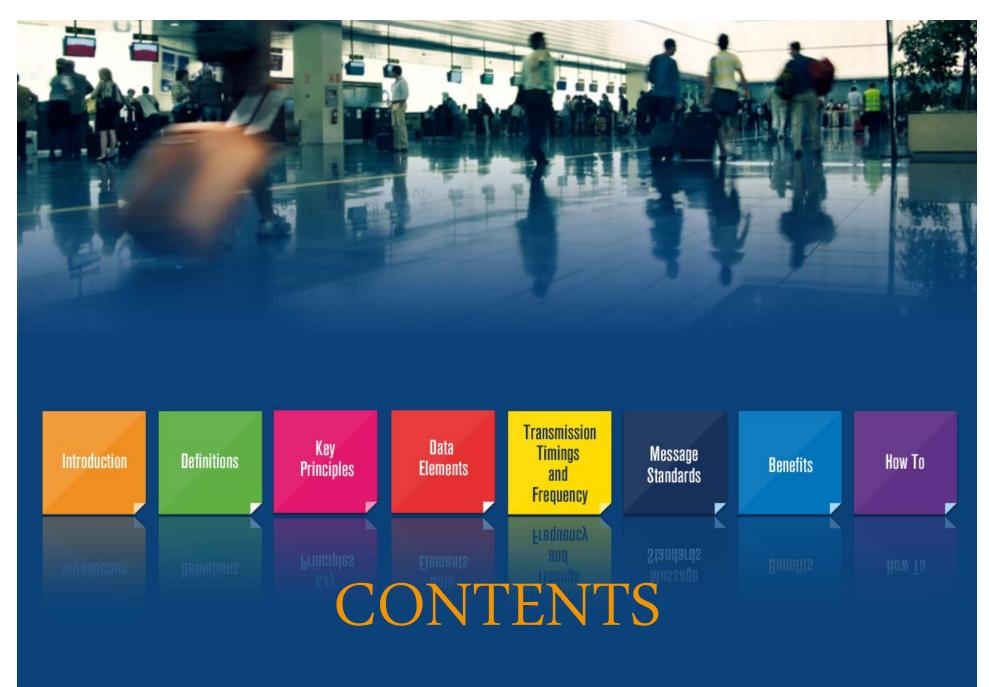
Davidsonr@iata.org

## Passenger Data Exchange

THE BASICS

Immigration





Introduction

#### **INCREASING NON-STANDARD REQUESTS**



### **REQUIREMENTS IN EARLY 2000**

Introduction



### **REQUIREMENTS TODAY**

5

as of September 2013

Introduction



## OBJECTIVE

- Understand the complexities of passenger data programs
- Increase awareness of existing international standards and airlines' capabilities

Introduction

 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

PNR VS

Definitions





# ADVANCE PASSENGER INFORMATION (API)





### API - TRANSMISSION

#### Legacy (Batch) API





### API – TRANSMISSION

#### Interactive API (iAPI)

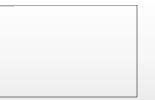


### PASSENGER NAME RECORD (PNR)

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

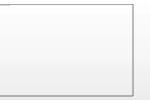
- For customs, law enforcement, security
- To help identify contraband, smuggling, etc
- To assist in risk assessment





## KEY PRINCIPLES





### **KEY PRINCIPLES**

#### "ACE" stands for

- <u>A</u>lignment with standards
- <u>C</u>ooperation with industry and other States (data protection)
- Efficiency: necessary data only







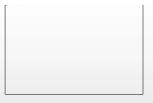
## DATA ELEMENTS



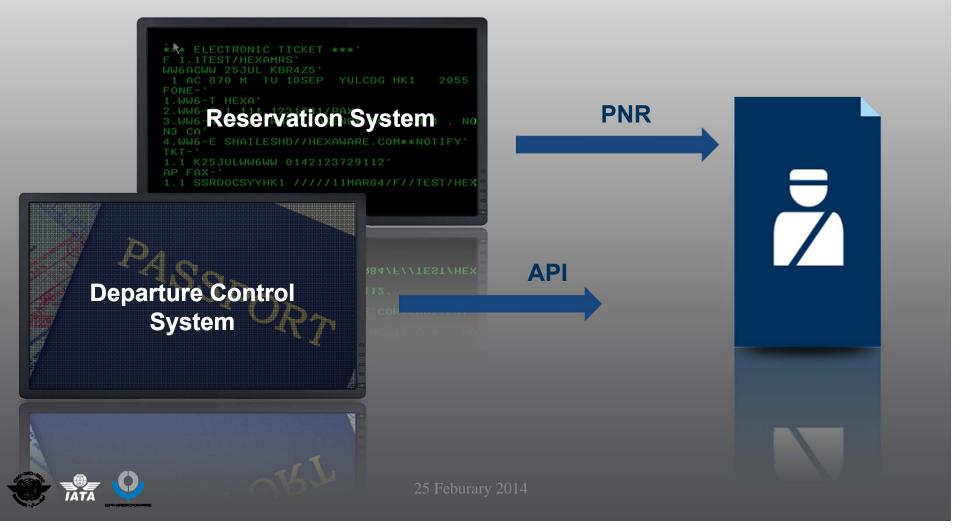
## AIRLINES' SYSTEMS ARE COMPLEX AND DIFFERENT

- API or PNR data may be stored in different airline systems, no two of which are exactly alike
- PNR may look completely different from one airline to the other





#### AIRLINES WITH SEPARATE SYSTEMS



#### AIRLINES WITH INTEGRATED SYSTEMS





#### WHERE TO FIND THE LIST OF DATA ELEMENTS

GUIDELINES

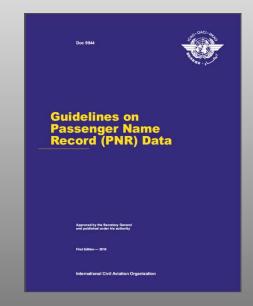
ADVANCE PASSENGER INFORMATION (API)



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)



2010 and iAPI data ents are listed



**Benefits** 

## BENEFITS



#### BENEFITS OF STANDARD TRANSMISSION

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



How to

## HOW TO



#### 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



FLEXIBILITY

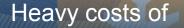
## LEAD TIME FOR API

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

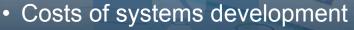
- Configure systems incl. peripheral systems like internet check-in and selfservice kiosks
- Test connectivity
- Train staff



## COST AND FUNDING



- Capturing
- Formatting
- Transmitting data



 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.





**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

	FORMAT	TRANSMISSION MODE
<b>TRADITIONAL/LEGACY</b> Still the most common and widely recognized by the industry	UN EDIFACT Paxlst	Examples include : Type B and MATIP
NEW Can be provided by some air carriers (standard under development)	XML	For example: Internet Web Services
Can be provided by some air carriers (standard under development)	ХМГ	Internet Web Services





INTERACTIVE API



iapi

## 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

iapi



#### 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



# 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



iapi

# TRANSMISSION TIMINGS AND FREQUENCY



#### iAPI TRANSMISSION TIMINGS AND FREQUENC



### TIMING

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

iapi

#### FREQUENCY

One transmission at time of passenger check-in

+ Potentially a final message confirming passengers on board

iapi

# MESSAGE

# STANDARDS



iapi

## MESSAGE STANDARDS FOR iAPI

## UN/EDIFACT

PAXLST

CUSRES

(Customs Response)





PNR



#### PRIVACY AND DATA PROTECTION

- PNR contains personal data
- Countries have different perspectives on how much is "private" or how much can be shared

PNR

- State to State agreement may be necessary
- Sensitive data should not be required



# DATA ELEMENTS

PNR



PNR





PNR

## 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 adhoc 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)

25 Feburary 2014



PNR



# can provide ASSISTANCE and EXPERTISE

CAO. OACI. 44

家民航组织

Contact email: passengerdata@iata.org



IATA



#### passengerdata@iata.org Alignment, Cooperation, Efficiency

FOR MORE INFORMATION CONTACT

Immigration



IATA API-PNR Day – Middle East Cairo, Egypt 25 Feb 2014

# API and PNR:

# Discussion of experiences by States in the Region



IATA API-PNR Day – Middle East Cairo, Egypt 25 Feb 2014

## API and PNR: The Airlines' Perspective

# APIS and PNR (Advance Passenger Information System & Passenger Name Record)

**Airline Perspective** 

# Why APIS and/or PNR

- Border Protection
- Facilitate the entry and exit of travellers
- Cope with the increase in travellers
  - In 2013: 8 million air travellers every day, and 3 billion people travelled by air in one year for the first time
  - In 2014: 5% more = 400,000 more per day

# Challenges with Developing APIS and PNR

- In spite of having the IATA/ICAO/WCO standards:
  - APIS standard: UN/EDIFACT PAXLST
  - PNR standard: PNRGOV (airline to government system)
    - Governments develop proprietary systems to receive API or PNR data with which airlines cannot comply:
      - CD data deliver
      - Direct access to our systems
      - Email
      - Fax
      - Paper

# Challenges with developing APIS and PNR – Continued

 Governments demand information which does not exist in the passport's MRZ (Machine Readable Zone), or which is not included in the standards:

Passport issue date

- Baggage weight
- Requests from multiple governments at the same time
- Requests from multiple agencies within the same government for the same/different data, at the same/different time(s)
  - Single Window Concept makes life easier

# Challenges with developing APIS and PNR – Continued

- Unrealistic deadlines between introduction and mandatory application
- Changes to requirements after programming has begun
- Requiring APIS and/or PNR without any legislation in place
- Non-application of the same requirements for all modes of transport (i.e. different processes applied for land, sea and air transport)
- Cost both to for Government and for the Transport Operators

# Challenges with developing APIS and PNR – Continued

- Robust system required
  - Reliable
  - Fast
  - Effective
  - Fall-back procedures in case of system failure (government, airport, airline, etc.)
  - Error reporting
  - Recognition that errors will occur human and technical

# Portion of a Sample UN/EDIFACT Message for a single passenger on a given flight

- UNA:+.? \*)
- UNB+UNOA:4+API123+NZCS+080708:0545+000000011'
- UNG+PAXLST+123 AIRLINES+ NZCS+080708:0545+11+UN+D:05B'
- UNH+PAX11+PAXLST:D:05B:UN:IATA'
- BGM+745'
- RFF+TN:BART34567890:::1'
- NAD+MS+++A123 CUSTOMER SVC'
- COM+043 555 1212:TE+043 555 4545:FX'
- TDT+20+QQ827+++QQ'
- LOC+125+CDG'DTM+189:0808080900:201'
- LOC+87+AKL'DTM+232:0808081445:201'
- NAD+FL+++BARRET:TODD+123 RUE LE MONDE+PARIS+++FRA'
- ATT+2++M' DTM+329:680223'MEA+CR++:2'
- GEI+4+ZZZ'FTX+BAG+++BA987654'
- LOC+22+AKL'LOC+178+CDG' LOC+179+AKL'LOC+174+FRA
- COM+514 874 0202:TE+514 874 1779:FX'
- NAT+2+FRA'RFF+AVF:GJIO3RT'
- RFF+ABO:UUI34T543'
- DOC+P:110:111+YY3478621G
- DTM+36:081230'LOC+91+FRA'
- CNT+42:1'
- UNT+29+PAX11'
- UNE+1+11'UNZ+1+000000011'
- UNZ+1+000000011'

# Challenges with developing PNR

- Data privacy and protection concerns
- PNR contains sensitive, personally identifiable information
  - The EU requires an adequacy finding
  - Airlines are global companies serving many markets
    - Each country has its own laws with which airlines must comply
    - Airlines cannot be placed "between a rock and a hard place" where complying with one country's law results in carriers violating the law of another country.

#### **APIS and PNR – The Future**

- Collaboration with other countries to improve border control processes
- Development of "Known Traveler" programs which are recognized by all countries.
- Enhanced border control processes, such as expedited inspections, automated inspection lanes, etc.

#### APIS and PNR – In Conclusion

- UN/EDIFACT PAXLST and PNRGOV are our friends!
- Collaborate with IATA, regional airline associations and all modes of transportation as early as possible
- Recognize that for airlines, our local team may not be the APIS or PNR experts, and the experts at Headquarters will need to be engaged for guidance
- Understand the risk to your border and what you really want APIS and/or PNR to accomplish in order to better manage that risk, and facilitate travel

# Thank you !

#### Any questions ?



IATA API-PNR Day – Middle East Cairo, Egypt 25 Feb 2014



### **API-PNR Day: Africa**

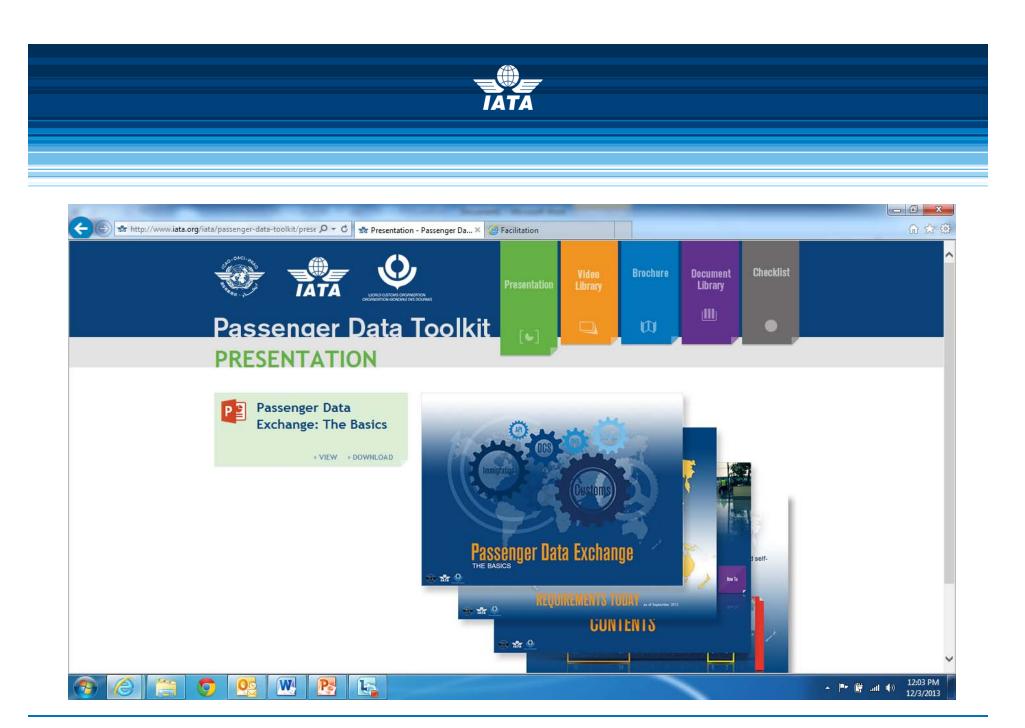




## Where can you find it?

http://www.iata.org/publications/Pages/api-pnr-toolkit.aspx

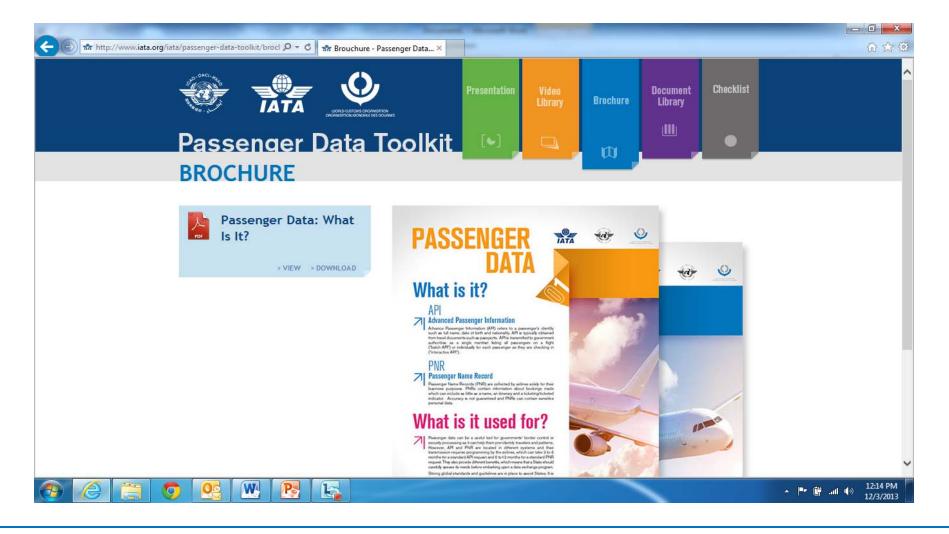








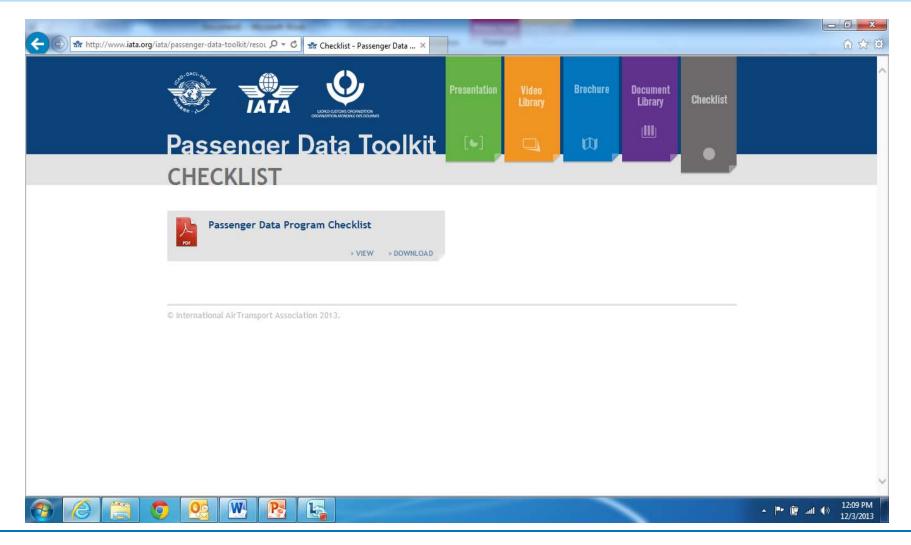






🗲 🛞 🐭 http://www.iata.org/iata/passenge	r-data-toolkit/librar 🔎 🕆 🖒 📅 Document Library - Passen 🗙	-		_				合分感
		Presentation	Video Library	Brochure	Document Library	Checklist		^
Pas	ssenger Data Toolkit	[•]		ល	Ш	•		
DO	DOCUMENT LIBRARY							
w	Pax Data Exchange Umbrella Document				DOWNL EVERYTI			
	Guidelines on Advance Passenger Information		CAO State Le	etter on Data	a Exchange Do	C 2011		
- NOF	PAXLST Message Implementation Guide (05B) > VIEW > DOWNLOAD		TA/CAWG	API Statemer	nt of Principle	S DOWNLOAD		~
							• 🏴 🛱 al 🏟	12:17 PM 12/3/2013









## The API-PNR Toolkit

- A "living" resource that will be updated as standards and best practices change
- ↗ Is fully supported by IATA, the WCO and ICAO
- Is the tool we all need to align and harmonize passenger data exchange across the globe





#### IATA API-PNR Day – Middle East Cairo, Egypt 25 Feb 2014



## Open Forum

Now, it is your turn to ask questions and seek additional clarifications from today's panel, and to speak about your own State's or Airline's experiences relating to Passenger Data Exchange program consideration or implementation.