

Passenger Data

—

API & PNR Programs

Airline Implementation



The global
trade association
of the world's
airlines



About IATA

Founded in Havana, Cuba in **April 1945**

Some **330** passenger and cargo member airlines, representing **83%** of global air traffic

65 member airlines operate different business models from full-service carriers

Head Office: **Montreal, Canada**

Executive Office: **Geneva, Switzerland**

Regional Offices: **Amman, Beijing, Madrid, Miami, Singapore**



To represent,
lead and serve
the airline
industry

Mission



Working together to shape the future
growth of a safe, secure and sustainable
air transport industry that connects and
enriches our world

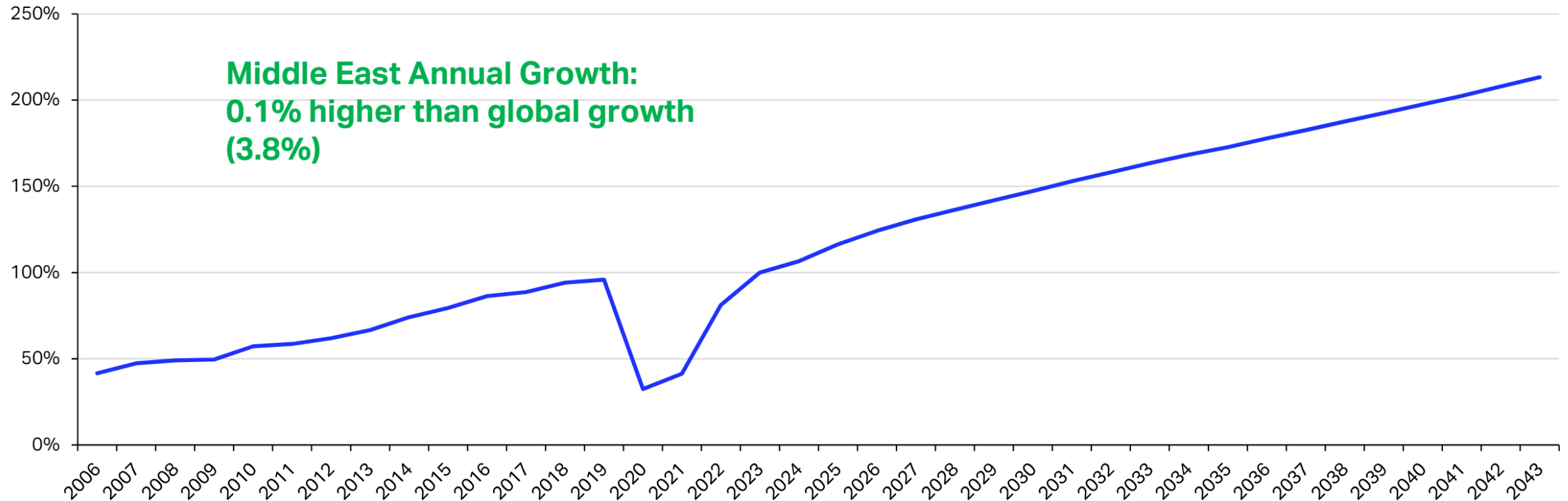
Vision



Middle East passenger numbers will double, reaching 530 million in 2043

Traffic will grow at an average annual rate of 3.9% over the 2023 – 2043 period

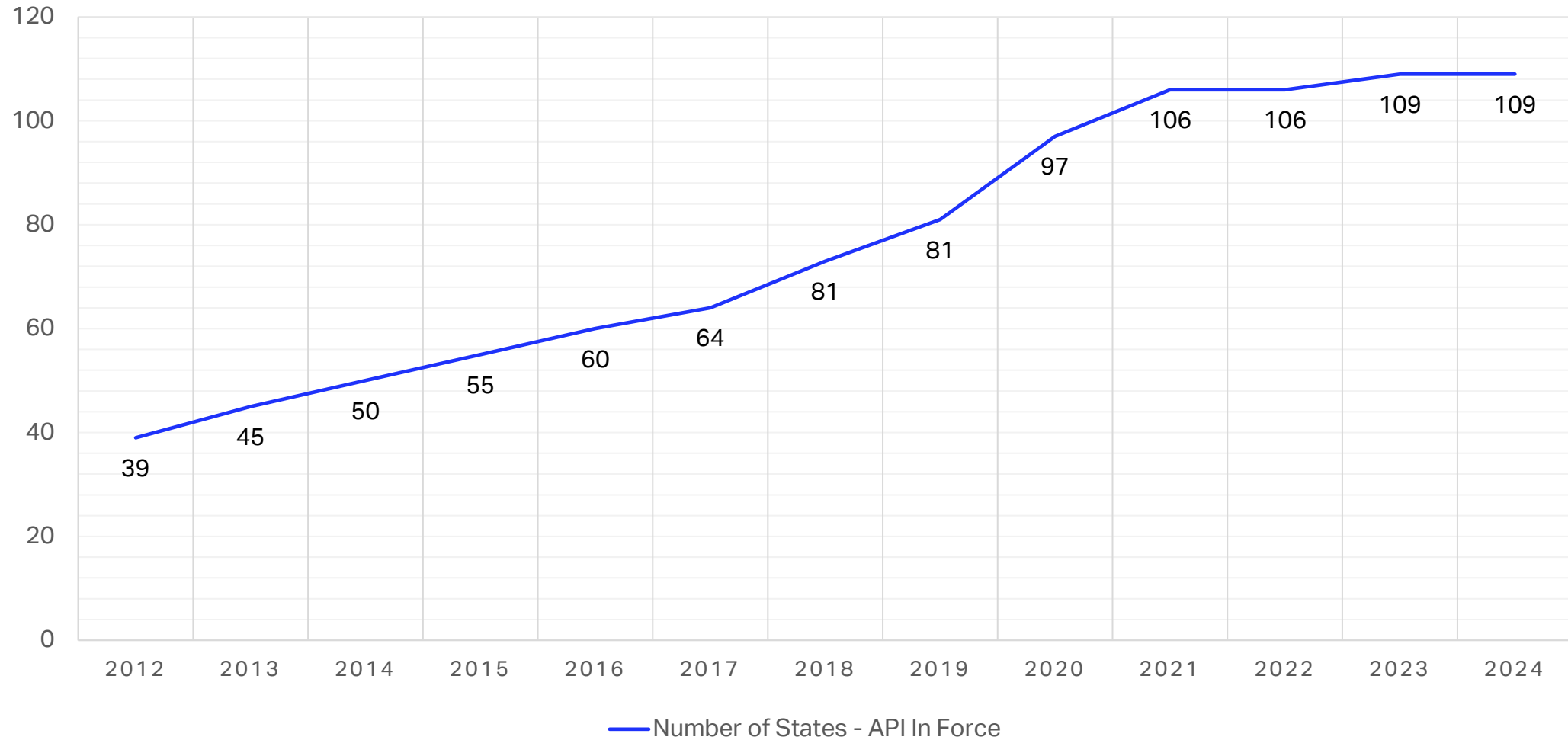
Passengers, % share of 2023



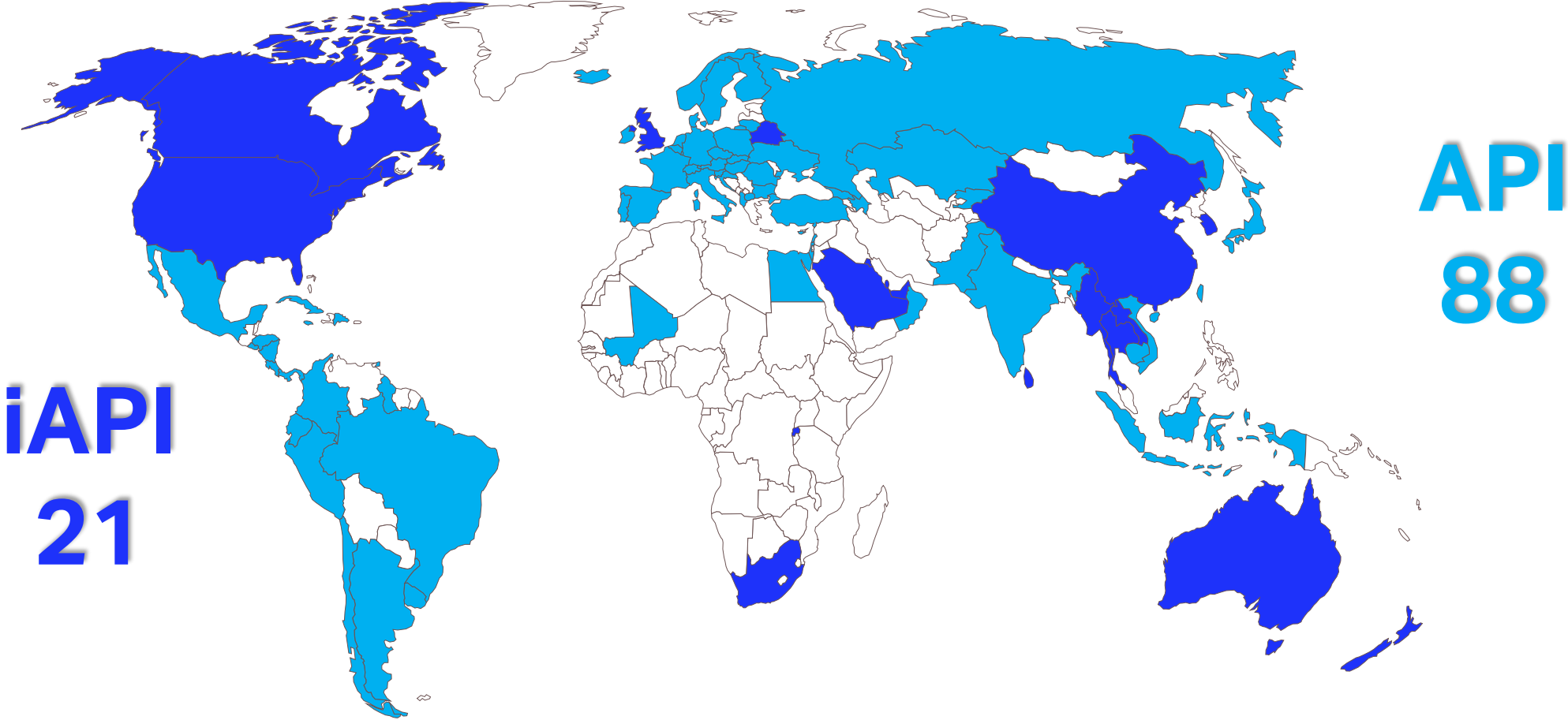
The State of API and PNR Implementations Worldwide



API Implementation Rate



Global API / iAPI Implementation Status



API: 77 UN States – 11 Territories
iAPI: 19 UN States – 2 Territories

Legend
■ iAPI in force (total: 21)
■ API in force (total: 88)

Source: IATA API PNR World Tracker



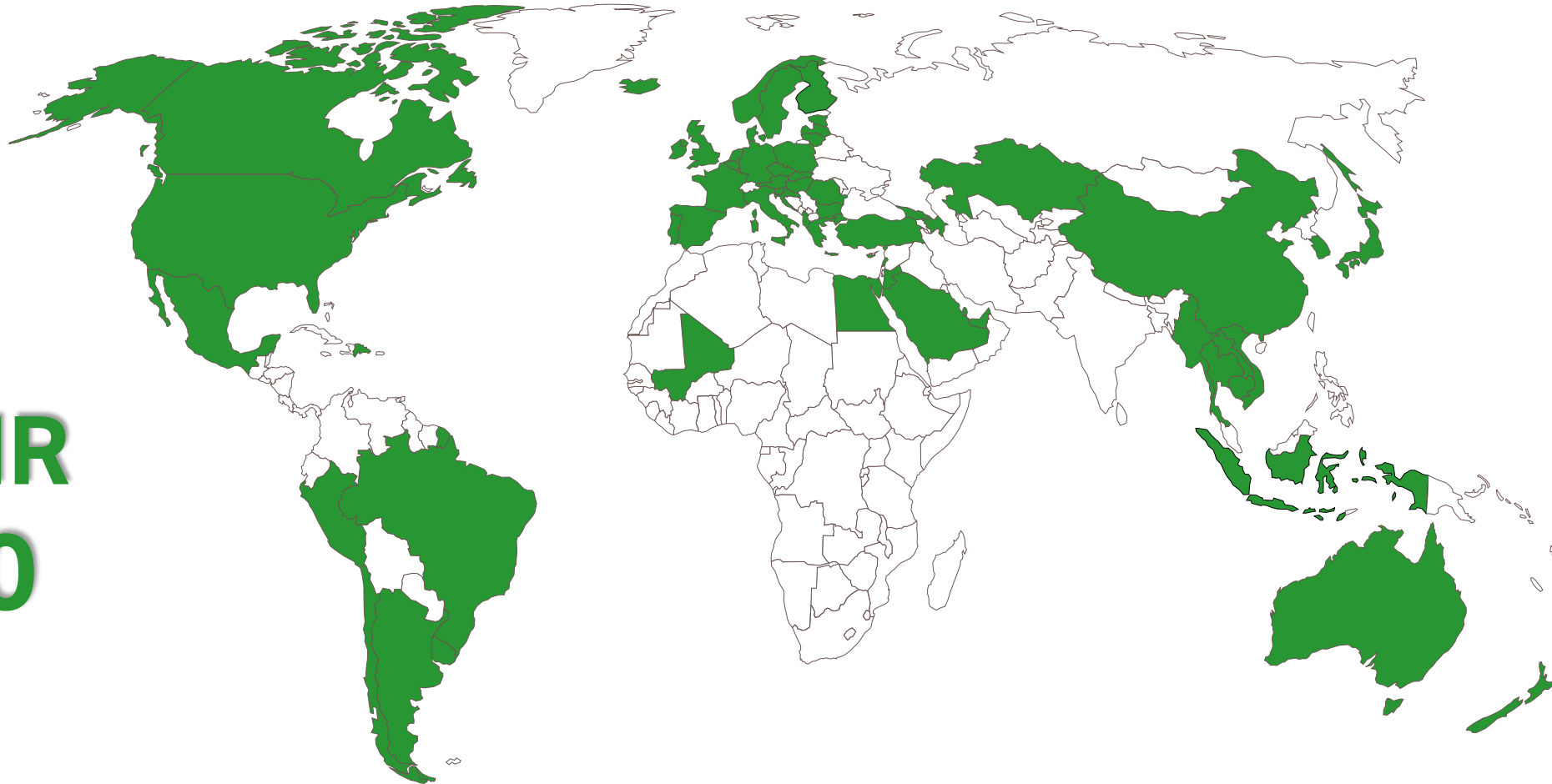
API Implementation Rate

	API In Force (iAPI)	API Authorized, Not in Force	API Anticipated	API Not Required
Africa	5 (2)	3	12	29
Asia-Pacific	16 (8)	3	6	11
Europe	32 (1)	8	0	2
Latin America	36	4	7	1
MENA	9 (4)	3	2	5
North America	2 (2)	0	0	0
North Asia	2 (2)	3	0	1
Russia / CIS	6 (1)	1	2	0
<u>Total</u>	<u>109 (21)</u>	<u>25</u>	<u>29</u>	<u>49</u>



Global PNR Implementation Status

**PNR
70**



Legend

 PNR in Force (total: 70)

PNR: 66 UN States – 4 Territories

Source: IATA API PNR World Tracker



PNR Implementation Rate

	PNR In Force	PNR Auth, Not in Force	PNR Anticipated	PNR Not Required
Africa	2	6	4	38
Asia-Pacific	14	4	6	14
Europe	33	5	0	5
Latin America	9	10	1	28
MENA	6	2	0	11
North America	2	0	0	0
North Asia	1	2	0	3
Russia / CIS	3	0	0	6
<u>Total</u>	<u>70</u>	<u>29</u>	<u>11</u>	<u>105</u>

Passenger Data – Airline Implementation





330+ airlines
transmit passenger
data to more than
100 States..

..adherence to internationally agreed-upon Standards ensures efficiency and interoperability





Airline Systems

Many actors are in play:

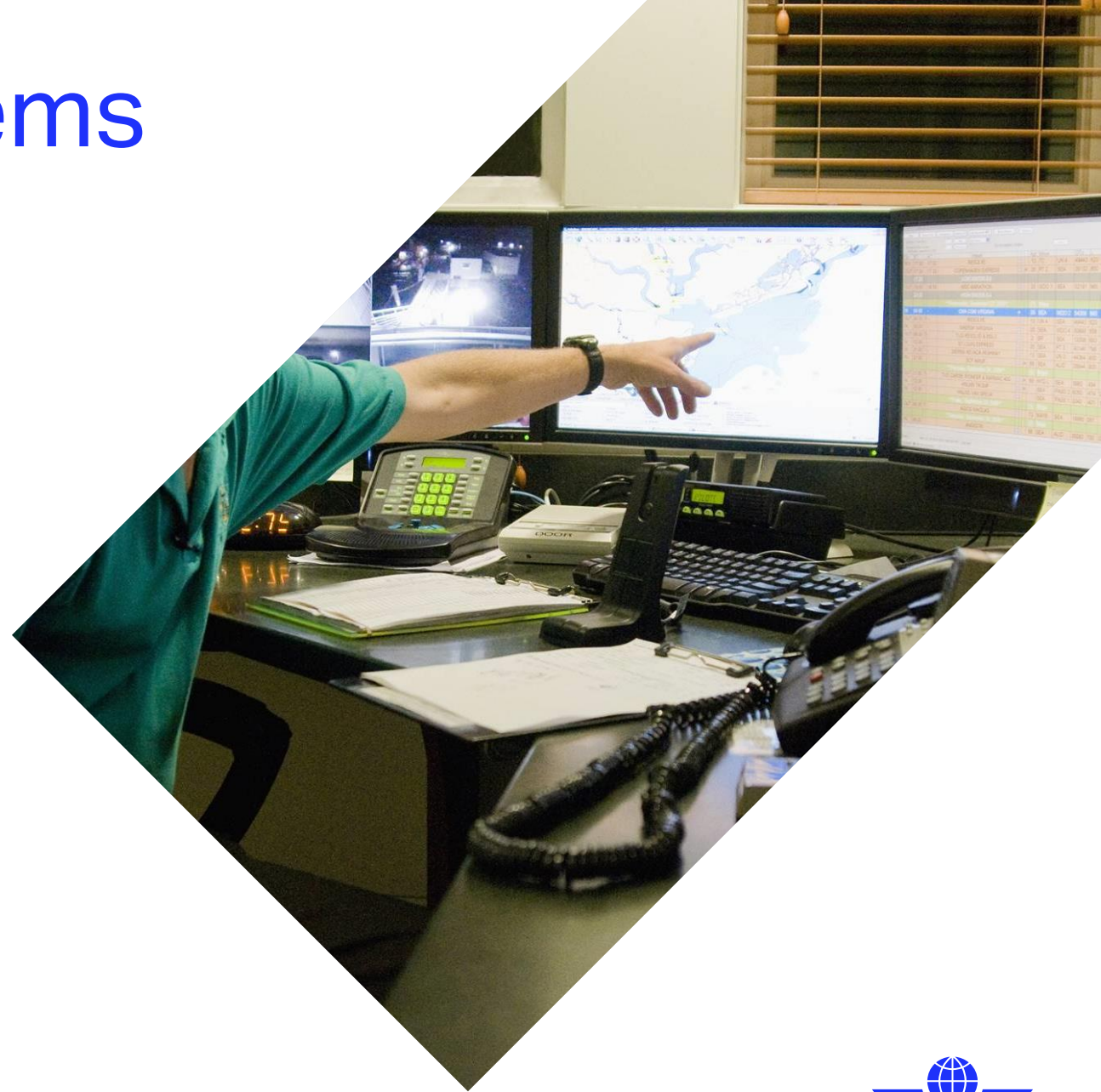
- Passenger Service System Providers
- Message Brokers
- Travel Agents / GDS
- Code Share / Interline Partners
- Websites / Mobile Apps
- Self-Service Platforms
- Ground Handling Environment
- Departure Control Systems
- Crew Management Systems

...



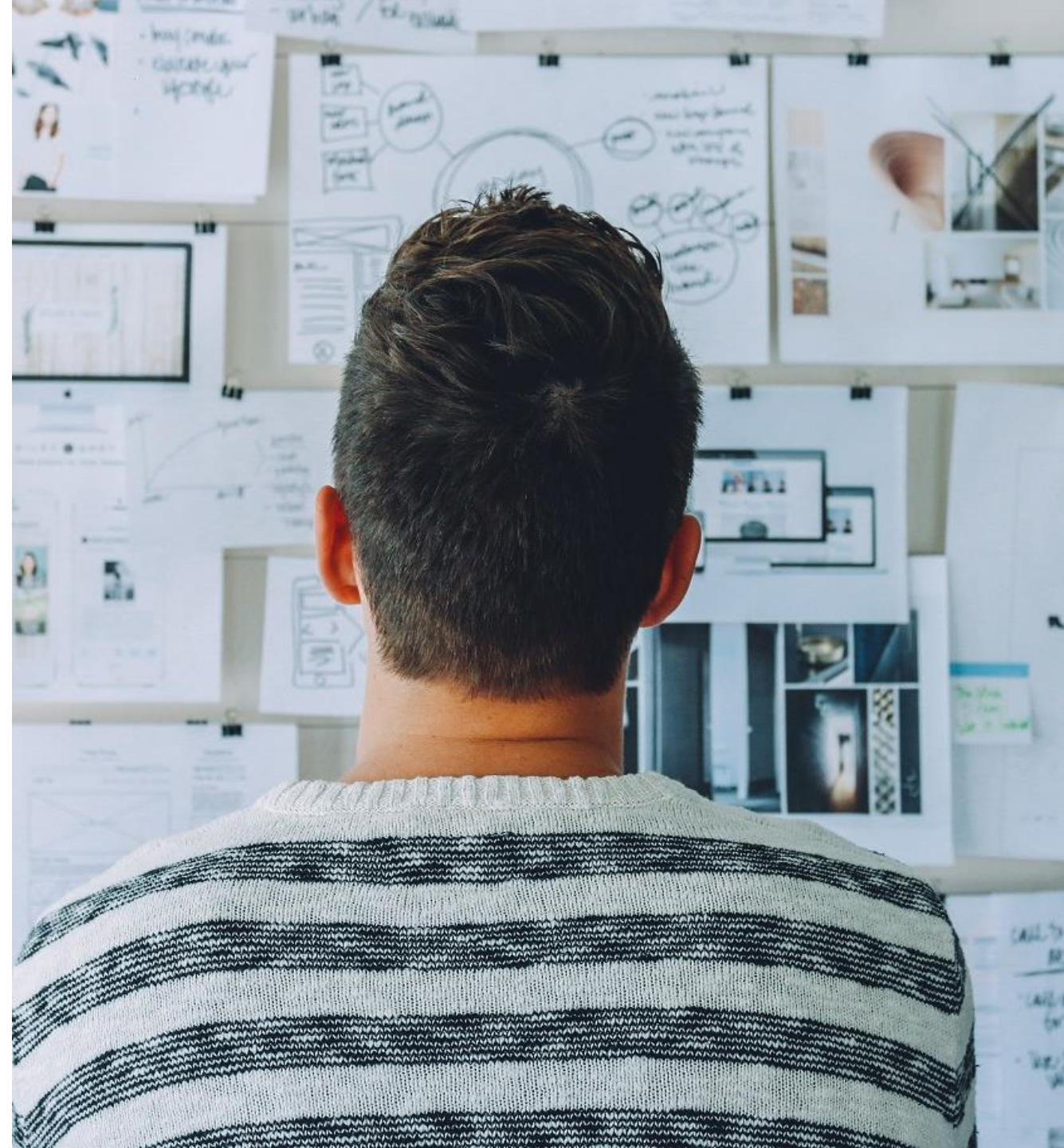
Modifications to Systems

- Airlines generally rely on 3rd Party Providers for software solutions and system-to-system communications, both for Reservation and Departure Control Systems
- Changes on systems are costly and take time to plan, prioritize and implement – also not possible on all instances
- Each requirement also introduces changes on operational procedures
- Non-standard requests dramatically increase the duration for compliance



Key Principles

- The airline industry supports passenger data programs that are in line with **standards**
 - Enhancing external border management and internal security while **improving passenger** facilitation
- Key **principles** for a swift **implementation**
 - Alignment with Standards
 - Close cooperation between Industry and States across all stages
 - Flexibility



Standardization



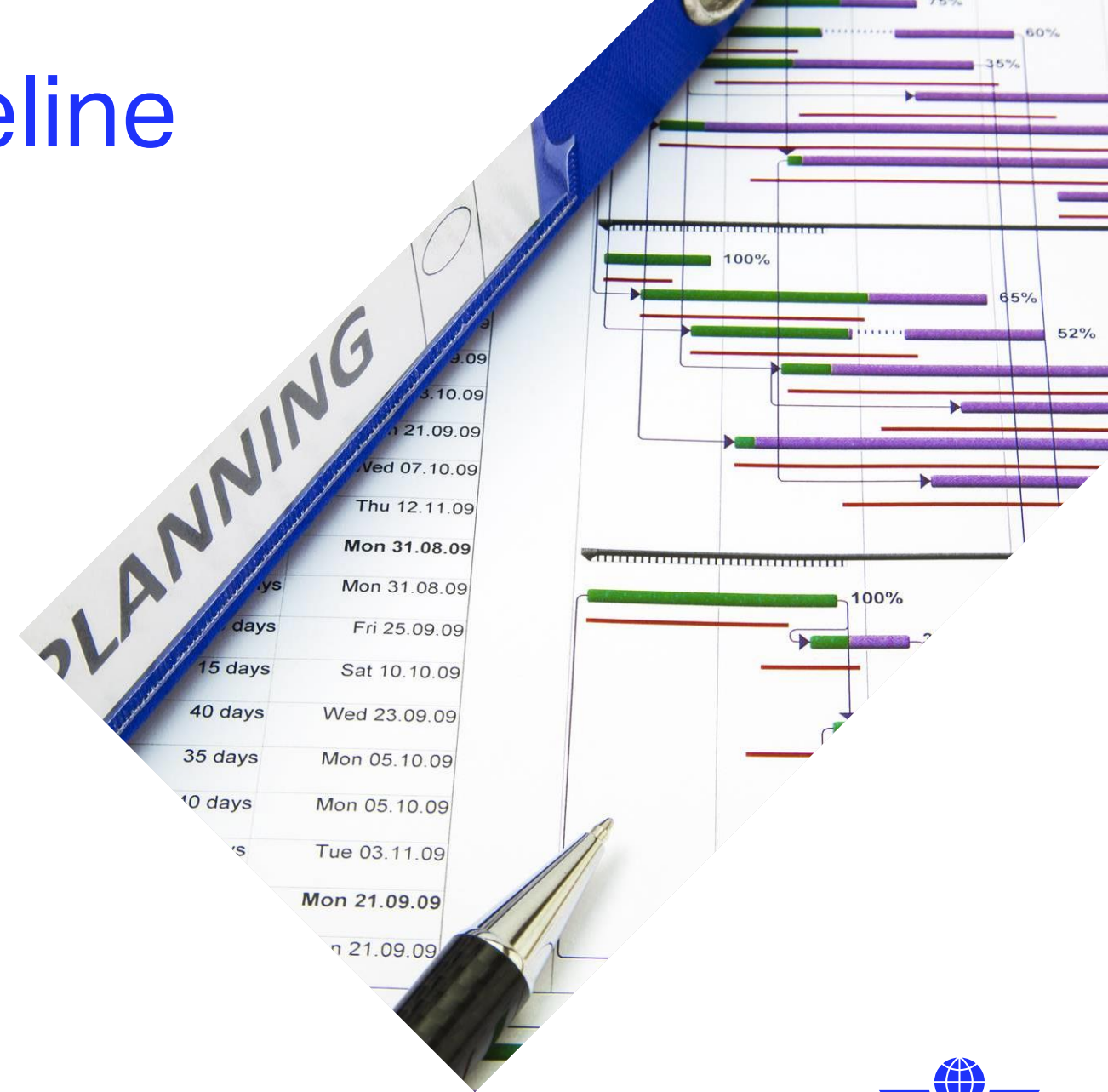
- Proper **legal framework** taking into account applicable data privacy and protection regulations upfront, as applicable
- Use existing **standard data format and commonly used communication protocols**
- Standardization **benefits**
 - ✓ Faster implementation
 - ✓ Better compliance
 - ✓ Cost control
 - ✓ Reliable data

Impact of Non-Standard Requirements

- Non-standard programs defeat the purpose of global standards, and ignore capabilities built over decades
- Non-standard programs result in significant costs and delayed implementation
 - Fully aligned programs: 3 to 6 months
 - Non-standard programs: 12 months+
- Airlines are forced to maintain multiple systems to meet the non-standard requirements that increase complexity

Implementation - Timeline

- Engaging with industry at an **early stage** of the Passenger Data Program set up
- Airlines should be provided with **detailed information** (technical specifications including communication links) consistent with international standards, in a timely manner
- **Phased implementation** approach on pre-agreed timescale highly recommended



Implementation – Timeline (Cont.)

- The timeframe for implementation of API or PNR for an airline is **6 months** for standard programs and **up to 24 months** for non-standard programs that require system or procedural changes.
 - The timeline **includes** legal review, business and operational requirements, reflection of these requirements to all involved computer systems and other stakeholders in the process (such as partner airlines, travel agencies, mobile app, web sites, etc.), as well as staff training.
 - This timeframe **excludes** the setup of these systems by the government (typically about **12 months**)
- IATA encourages States to start with implementing Batch API, before integrating PNR and further move to iAPI.
- API and PNR are systems addressing border and national security requirements.
 - States should **not** charge airlines (or passengers) to finance implementation costs of these systems.



Issues & Challenges

- Requiring API and / or PNR without any legislation in place
- Requests from multiple agencies within the same government for the same/different data
- Unrealistic deadlines
- Changes to requirements after programming has begun
- Governments requesting API or PNR data through channels with which airlines cannot comply; such as direct access to airline systems, E-Mail, Fax, Paper, etc.
- Governments demanding information which does not exist in the passport's MRZ (Machine Readable Zone), or not included in the standards; such as:
 - Passport issue date
 - Passenger Address
 - Emergency Contact Information
 - Place of Birth ...etc.

eVisas – The 'new' challenge for airlines

The collage displays a variety of e-visa documents:

- REPUBLICUE GABONNE**: Includes fields for 'TYPE DE VISA' (Tourist, Transit, etc.), 'DUREE DE VALIDITE', and 'DUREE DE SEJOUR'. It features a QR code and a photo of the applicant.
- Kingdom of Lesotho**: Shows 'Personal Information' and 'Passport Information' sections.
- Kingdom of Cambodia**: Features a 'Visa Information' section with 'Visa Type' (Tourist, Business, etc.) and 'Length of Stay'.
- India**: Displays 'VISA INFORMATION' and 'PERSON INFORMATION'.
- Kingdom of Cameroon**: Shows 'Personal Information' and 'Passport Information'.
- SULTANATE OF OMAN**: Includes 'Personal Information' and 'Passport Information'.
- REPUBLIC OF ZAMBIA**: Features a 'VISA INFORMATION' section and a 'VISA APPROVAL LETTER'.
- Ivory Coast**: Shows 'VISA INFORMATION' and 'PERSON INFORMATION'.

Other elements include a 'VISA GRANT NOTICE' from the State of Kuwait, a 'VISA FEDERAL REPUBLIC OF BRAZIL' form, and a 'GBAO PERMIT' from the Republic of Gabon. The documents are presented in a grid-like fashion, illustrating the complexity and volume of e-visa processing for airlines.



eVisa Printout Verification

Challenges

- Lack of verifiable security feature
- No harmonization of display, barcodes not interoperable
- Carrier's liability with Document Check
- Checking website >> Not supported
- Time-sensitive Check-In Process
- No automation or digitalization of Document Check possible

Solutions

- Interactive Advance Passenger Information (iAPI)
- ICAO Digital Travel Authorization (DTA)



Operational Considerations

Operational impact of manual data acquisition:

- 30 sec x 360 passengers = 3 hours of additional processing time

Manual entry = Human error

- The quality of manually collected data is lower than data collected through an MRZ scan
- Data in MRZ sufficient to match passenger records in State databases



Points for Consideration

- Determine needs and expectations, set realistic goals (short, medium, long-term)
- Define the lead agency to be Point of Contact and run the program – Single Window
- Approach foreign States and Organizations for cooperation
- Utilize existing databases – make use of existing and collected data
- Assess budget constraints and opportunities
- Include private stakeholders early – solicit feedback
- Cooperate with air carriers and remain flexible



IATA - Industry Support

❖ IATA Monthly Facilitation Exchange Call

The call takes place every 4th Wednesday of each month (next call: 26 June).

During these calls, IATA Airline Members, Strategic Partners, International Organizations and States discuss and share information pertaining to passenger data exchange, travel and entry requirements and other facilitation matters that influence the air transport industry.

❖ IATA API-PNR World Tracker

A repository containing fact sheets, legislations and technical specifications relating to any API or PNR regime that a country has implemented or is considering to implement.

❖ IATA API-PNR Toolkit

Introductory presentations and videos, dynamic checklists and reference material to help designing passenger data programs that are harmonized, efficient and valuable.

API-PNR World Tracker

[+ new item](#) or [edit this list](#)

By Country	ID	All Items	...	Find an item									
✓					Country	Region	API Status	API / IAPI	PNR Status	API charge	API charge (USD)	US VWP	Gen Declarat
							Count= 211	Count= 211	Count= 211			Count= 104	
					Afghanistan	Middle East & North Africa	API Not Required	n.a.	PNR Not Required			No	Not Require
					Albania	Europe	API Auth, Not In Force	API	PNR Not Required			No	Not Require
					Algeria	Middle East & North Africa	API Not Required	n.a.	PNR Not Required				Inbound, Ou
					Angola	Africa	API Anticipated	API	PNR Not Required				Not Require
					Anguilla (UK)	Latin America	API Anticipated	API	PNR Not Required	No		No	Inbound
					Antigua and Barbuda	Latin America	API In Force	API	PNR Auth, Not In Force				Inbound, Ou
					Argentina	Latin	API In	API	PNR Auth,				Not Require

API-PNR Toolkit

Passenger Data Document Library

[ABOUT](#) [ADVANCE PASSENGER INFORMATION](#) [PASSENGER NAME RECORDS](#)

What is Passenger Data?

Passenger data comprises of Advance Passenger Information (API) and Passenger Name Records (PNR). This data can be a useful tool for governments' border control or security processing as it can help them pre-identify travelers and patterns.

Strong global standards and guidelines are in place to assist States. It is essential that States understand and follow them to ensure swift compliance by the airlines and maintain smooth passenger movements at airports.

IATA, International Civil Aviation Organization (ICAO) and World Customs Organization (WCO) have developed a toolkit which include introductory presentations and videos, dynamic checklists and reference material to help you design passenger data programs that are harmonized, efficient and valuable.

- [Passenger Data Exchange - The Basics](#) The objective of this presentation is to understand the complexities of passenger data programs, increase awareness of existing international standards and airlines' capabilities and understand that ICAO, WCO and IATA can offer assistance and expertise
- [Passenger Data Brochure](#) This brochure is a quick guide to Advance Passenger Information (API) and Passenger Name Records (PNR)



IATA Consulting

Expertise and Experience

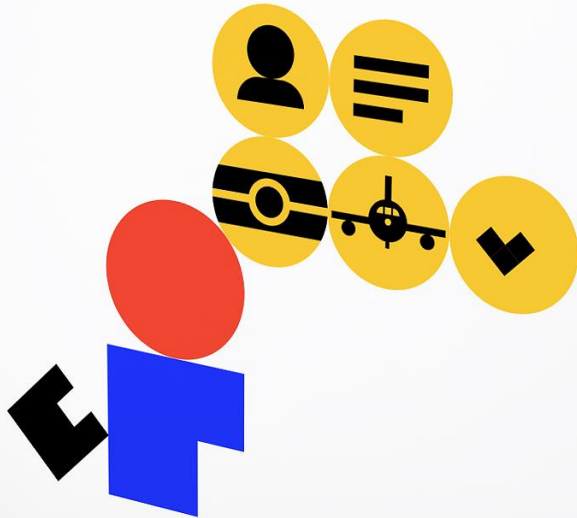
- We set standards and support the aviation industry
- We collaborate with several international and inter-governmental organizations, addressing counter terrorism, information technology, customs, and migration issues.
- We know the dos, the don'ts, and critical elements to be included in legislation
- Our consulting services assist States to develop an API / PNR roadmap and support implementation, based on the Standards and Recommended Practices set forth by ICAO, IATA and WCO.



Effective 1 February 2021

Secured and Simplified Borders

Edition 1



IATA Manual on Secured and Simplified Borders

- ✓ Providing governments and aviation stakeholders a practical tool that can support the implementation of efficient border security programs
- ✓ Passenger data exchange - a key pillar of ICAO Annex 9 SARPs
- ✓ Other topics: Travel documents, Travel authorizations, Airport processes, Seamless travel
- ✓ Free to Access through [iata.org](https://www.iata.org)



Vision: Passengers arrive at the airport ‘**Ready to Fly**’ – all documents have been checked remotely and in advance – and experience a **contactless journey** through biometric identification

One ID aims to transform passenger processing using **Digital Identity** technologies

* One ID is the name of the initiative and does not refer to any specific identifier.



IATA Training

Passenger Data Exchange Programs (API/PNR)

Classroom and Virtual Course

Understand and review efficient implementation of Passenger Data programs, the legal framework as well as the associated operational and messaging standards

Passenger Facilitation

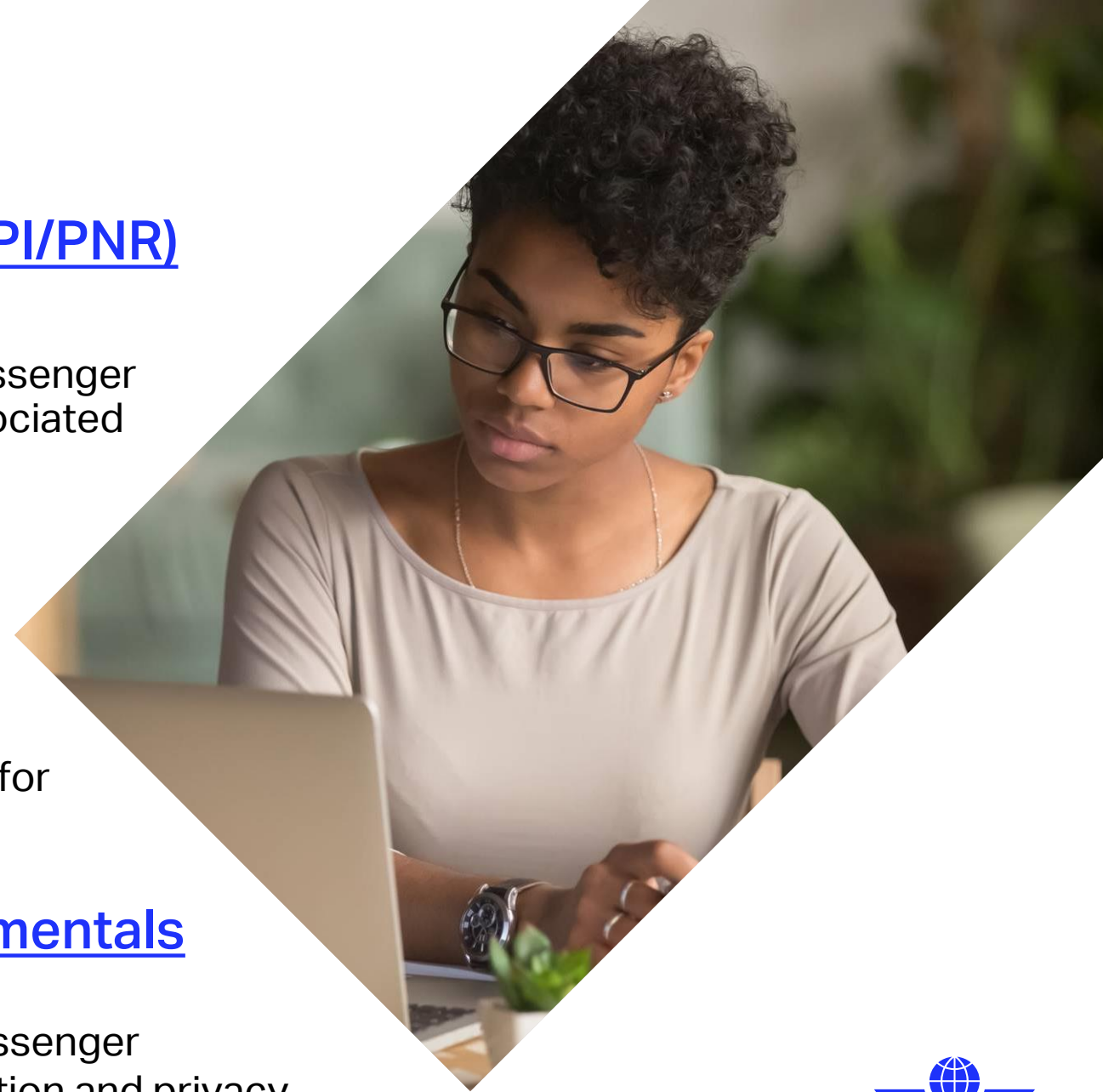
Classroom course

Border control tools, systems, policies, technological advancements, lessons learned from COVID-19 and collaboration among multiple stakeholders necessary for efficient aviation facilitation.

One ID: Digital ID and Biometrics Fundamentals

Classroom course

Fundamentals on digital identity and biometrics for passenger identification in air travel, while respecting data protection and privacy.





Conclusion

- ❖ API and PNR data are usually generated by different systems and used for different purposes
- ❖ Most airline systems are ready to support programs that are in line with Standards
- ❖ API – PNR systems take time to set up and operationalize
- ❖ Early engagement with airlines is critical for timely compliance
- ❖ IATA is available to assist

Thank You

Mohammad Almansour

Regional Manager
Customer Experience and Passenger Facilitation

IATA

almansourm@iata.org

 www.iata.org/passenger-data

