

IDENTITY DATA IN MOTION: ADVANCE PASSENGER INFORMATION DEMYSTIFIED

ID4Africa

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SITA

Create success. Together

Today's Presentation in Context:

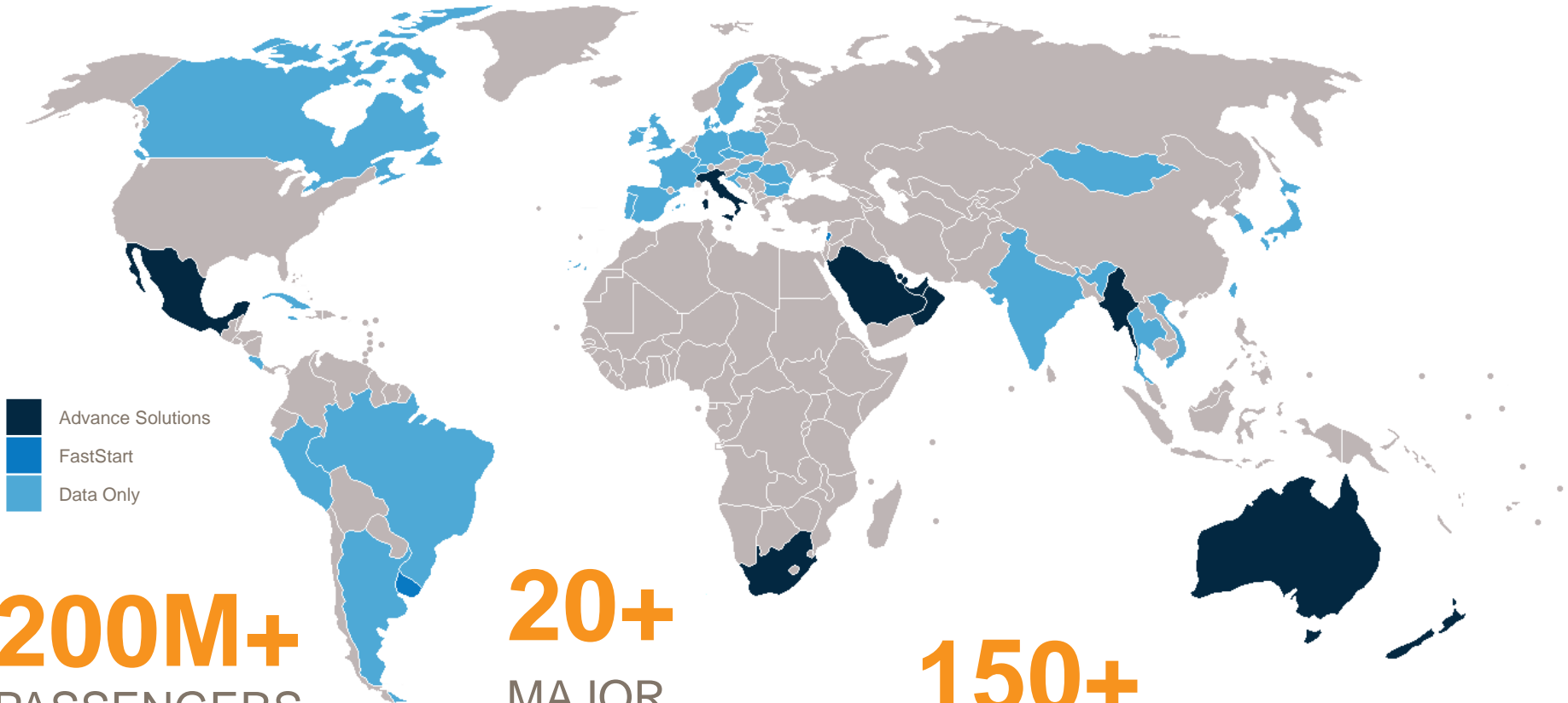
- It is no longer sufficient to capture identity data that will remain stationary in identity repositories.
- There are important circumstances where identity data must be shared in a responsible way to enable positive outcomes for the people it identifies.
- Data sharing has also become a requirement in order to improve security and combat terrorism.
- We are now in a world where identity data necessarily will be dynamically shared among large groups of actors.
- In this presentation we will explore the concept of exchange of identity data within the context the Advance Passenger Information schemes which have become one of the largest domains of identity data exchange operating within a multi-stakeholder environment that requires standards and dynamic exchange of identity data and actionable information

OBJECTIVES

- Exploring the lessons learned for identity data management gained from large scale API experience
- Understanding the complexities of passenger data exchange programs
- Exploring the various standards/technologies that exist today
- Discovering the benefits of implementing such standards
- Understanding the privacy and data protection aspects of handling passenger data

OUR EXPERIENCE

20
YEARS



200M+
PASSENGERS
EVERY YEAR

20+
MAJOR
SOLUTIONS
DELIVERED

150+
CERTIFIED
AIRLINES

WHAT IS TRAVELER DATA?

Electronic data related to traveler's ... :

... identity and
flight details

... booking or
reservations
details (PNR)

... check-in data
(DCS)

- Batch/Passive: API
- Interactive: iAPI / APP



API vs. PNR & DCS

The objective is to ensure government agencies always have the right **information** in the right **place** at the right **time** to **make informed decisions**.



API

Help identify people you know about.
Example: People on your watchlist.
Useful for: Immigration, Security, Customs.

PNR & DCS

Help identify people and trends you did not know about.
Example: Suspicious travel patterns.
Useful for: Law enforcement, Security, Customs.

API vs. iAPI

iAPI

- iAPI is **interactive**
- With iAPI Government can **deny boarding** with integrated risk checks at check-in
- iAPI data is **hard** (from passport MRZ)
- iAPI data has **lower error** rates in data
- Reconciliation of Entry/Exit movements is **automatic** with iAPI
- iAPI can also be used:
 - for **domestic traffic**
 - for **sea and land borders**

API

- API is not interactive
- API checks are done when passenger is already in air
- With API, intervention can only take place when passenger arrives – thus deportation costs
- API data is soft
- API data has higher error rates in data
- With API data, the automatic reconciliation of Entry/Exit movements is very difficult due to quality of data

PASSENGER NAME RECORD (PNR)

PNR RECORD LOCATOR

- Unique for the reservation and the airline
- A six character alphanumeric code
- Recycled over time (usually 12 months)
- A rich source of data on travelers such as:

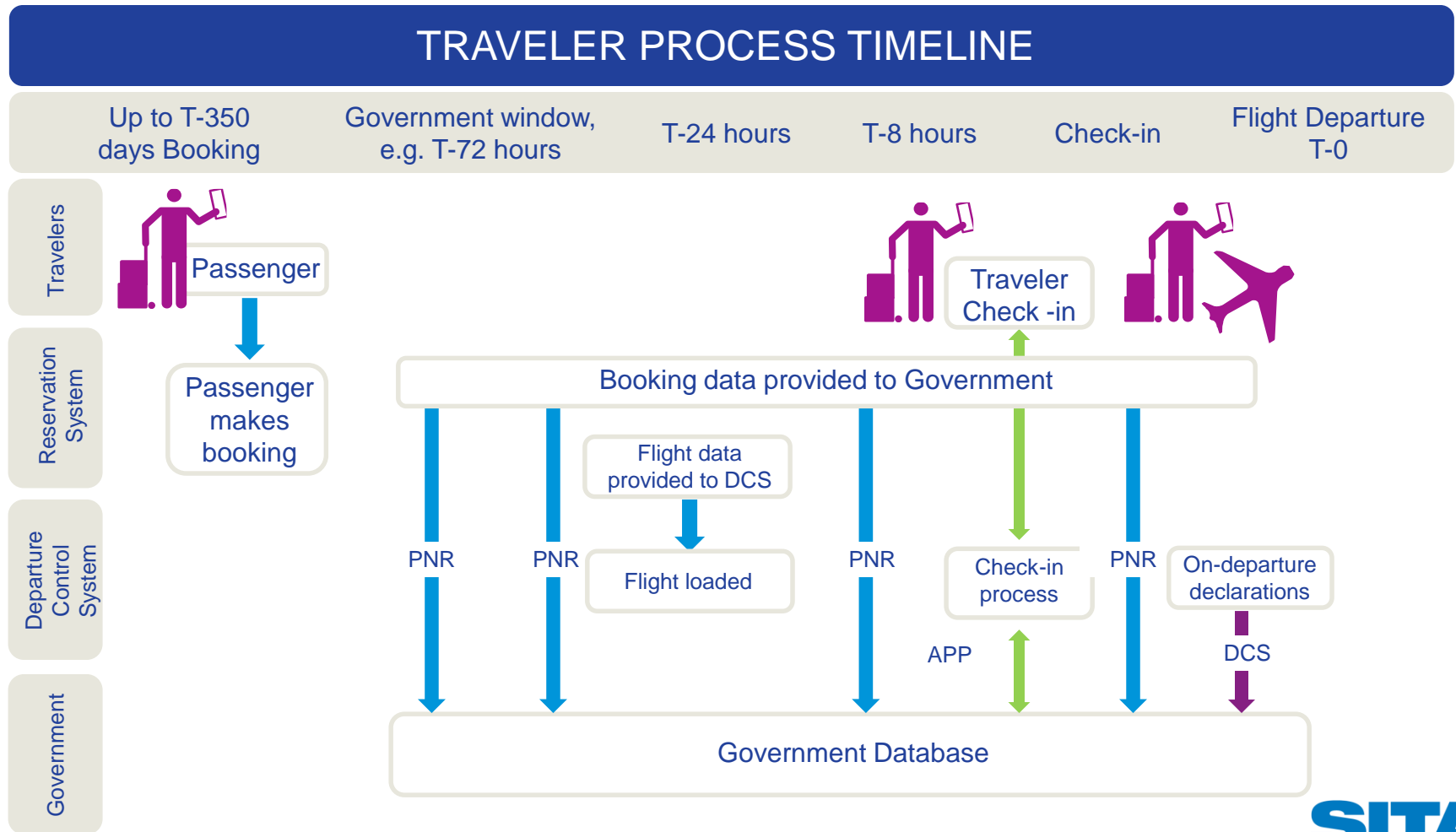
- Full itinerary
- Contact details (phone, address)
- Payment form (e.g. credit card)
- Seat assignment

- Travel companions
- Travel agency information
- Baggage details
- etc....



TRAVELER DATA

TIMELINE



DATA ELEMENTS AND DATA SOURCES

DATA ELEMENT	INTERACTIVE DATA (APP)	BOOKING DATA (PNR)	CHECK-IN DATA (DCS)
NAMES	✓	✓	✓
DATE OF BIRTH	✓	✓	✓
GENDER	✓	✓	✓
TRAVEL DOCUMENT NO	✓	✓	✓
TRAVEL DOCUMENT DETAILS	✓	✓	✓
FLIGHT DETAILS	✓	✓	✓
CHECK-IN STATUS	✓		✓
SEAT NUMBER			✓*
SEAT PREFERENCES		✓*	
BAGGAGE INFORMATION			✓*

* Based on IATA recommended code set

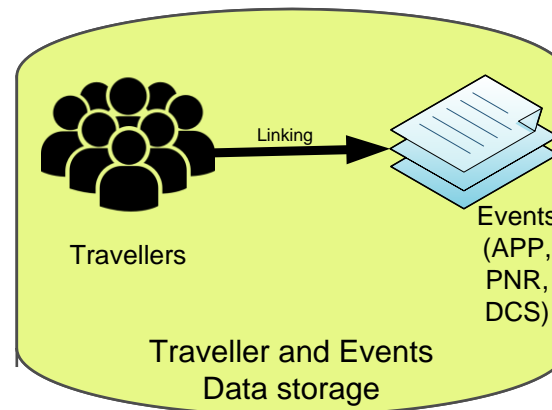
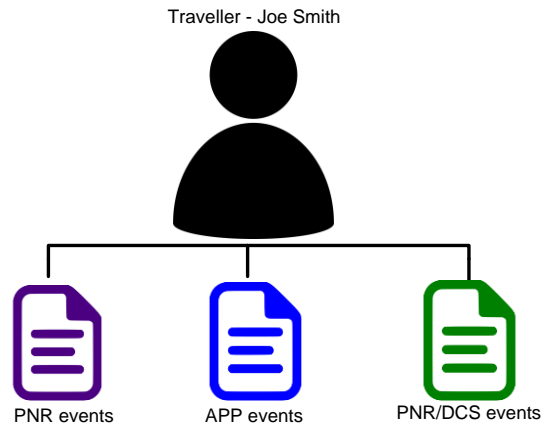
DATA ELEMENTS AND DATA SOURCES

DATA ELEMENT	INTERACTIVE DATA (APP)	BOOKING DATA (PNR)	CHECK-IN DATA (DCS)
PNR LOCATOR	SOME	✓*	✓*
BOOKING DETAILS (DATE, TRAVEL AGENT)		✓*	
ITINERARY DETAILS	CURRENT LEG	FULL ITINERARY*	CURRENT LEG
TICKET INFORMATION		✓*	✓
FORM OF PAYMENT		✓*	
CONTACT DETAILS		✓*	
GENERAL REMARKS (SPECIAL SERVICE REQUESTS/ OTHER SERVICE INFORMATION)		✓*	SOME
FREQUENT TRAVELLER DETAILS		✓*	✓
BOOKING HISTORY (CHANGES TO PNR)		✓*	

* Based on IATA recommended code set

DATA RECONCILIATION AND STORAGE

- All data needs to be linked to a traveler – **Person centric**
- For each type of incoming data, matching algorithms determine if a:
 - New traveler needs to be created **or**
 - New event needs to be linked to an existing traveler



PRIVACY AND DATA PROTECTION

Data privacy laws across the world, aim to protect citizens' privacy and to reshape the way organizations approach data privacy.

- PNR contains personal and sensitive data about travellers
- Countries have different perspectives on how much is “private” and how much can be shared (EU GDPR)
- State to State agreement may be necessary
- Sensitive data should not be required

BENEFITS

RISK ASSESSMENT

The objective is to facilitate border movements and improve traveller experience **by identifying low risk passengers.**

- Incoming data (PNR and DCS) should be risk assessed
- Risk profiles can be setup and checked every time data arrives
- Customs, law enforcement and security agencies can setup their own profiles to help fight terrorism, illegal immigration, smuggling, etc...
- Each agency will be notified if there is a “hit” on a risk profile

INFORMATION USED TO CREATE PROFILES

EXPECTED MOVEMENT EVENT

- Form of Payment
- Credit Cards
- Agent Pseudo City Codes
- IATA agent codes
- Age of the PNR
- Itinerary type
- Nationality
- Age
- Gender
- Locations en Route
- Countries en Route
- Go-show
- Number of bags
- Booking classes
- Co-Travelers on PNR
- Extra seat
- Itinerary Type

BORDER MOVEMENT EVENT

- Nationality
- Age
- Gender
- Document Issuing Country

PROFILING USE CASES

1. Detect links between travelers
2. Detect patterns used by drug smugglers
3. Detect suspicious behavior of certain travelers
4. Detect intentions of over stay
5. Detect intentions of illegal trade
6. Support all types of investigations
7. Monitors the transit/ transfer area of an airport
8. Identify specific bags from tag numbers provided in the PNR/ DCS message
9. Detect black listed travel agencies
10. Profile passengers based on nationality and travel route
11. Configure a profile for a high risk routes

INTELLIGENCE EXAMPLE

TRAVELER DATA PROFILING



Umar Farouk Abdulmutallab a.k.a. the 'Underwear bomber'

- Cash payment of air ticket
- Ticket purchased from airport
- One-way ticket
- No hold luggage
- Suspicious route
- Identified on a US Watch List

CUSTOMS EXAMPLE



A Spanish woman was arrested in Madrid with 12 kg of cocaine hidden in the baggage of her 3 young children.

She was travelling with her children to the Dominican Republic while her husband stayed in Spain.

Authorities utilized API data to identify that the woman had done such trip 9 times within 1 year, and therefore investigated further and found the drugs.





THANK YOU