



INTERNATIONAL CIVIL AVIATION ORGANIZATION



الهيئة العامة للطيران المدني
CIVIL AVIATION AUTHORITY

ICAO Regional Seminar on MRTDs, Biometrics and Border Security

دو ندوة الايكاو الإقليمية عن وثائق السفر المقروءة آلياً، والأدوات البيومترية وأمن الحدود

الدوحة، قطر *

31 October - 2 November 2011, Doha, Qatar

٣١ أكتوبر إلى ٢ نوفمبر ٢٠١١



API and eBorders Solutions: the Case of Qatar

Thomas Marten

Vice President & General Manager,

SITA APP/PNR Project,

Riyadh & Geneva

Jet bomber case – December 2009



- **Warnings from parent**
- **Intercepts of conversations by US National Security**
- **One way ticket**
- **No hold luggage**
- **Identified on a US Watch list**

Yemeni Cargo Case – October 2010



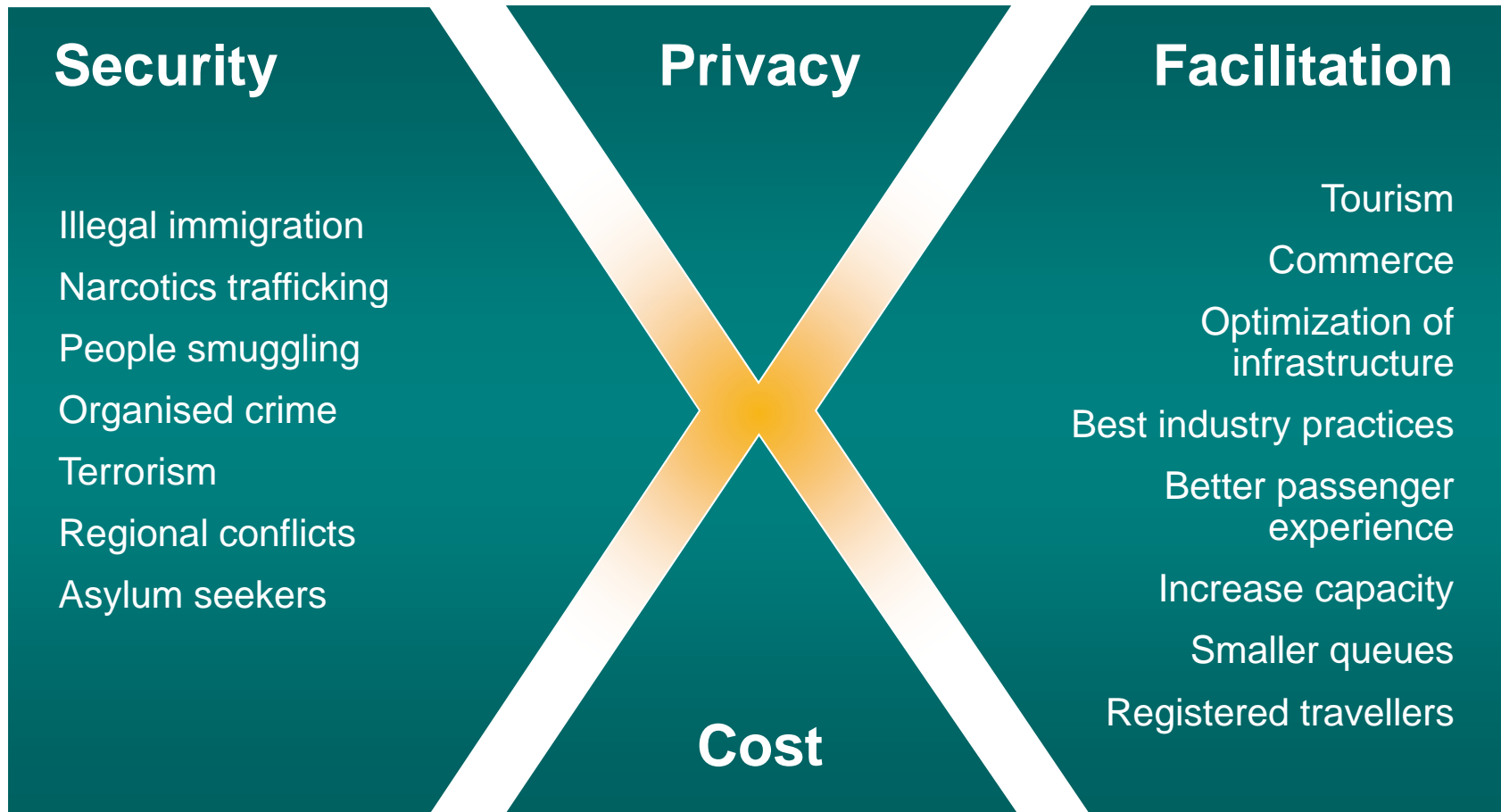
- Warnings of possible attack involving biological or chemical agents (09/10)
- Suspected explosives found on aircraft in Dubai and UK
- Target allegedly synagogue in Chicago

Passenger Facilitation at 2010 FIFA World Cup



- **South African Government saves at least R1.8M per annum by processing more travelers with fewer staff and better technology**
- **Airlines save R54.1M on fines and repatriation costs for improperly documented passengers**

The dynamics of air transport security



Key Technology Trends



□ Advance Passenger Information

- Post Departure Passenger Screening (APIS)
- Pre Departure Passenger Screening (iAPI aka APP)

□ Reservation (PNR) & DCS Data

□ Electronic Travel Authority/eVisa

□ Automated Border Control; Registered Traveler

□ Biometrics; e-Passports

- ☑ **SECURITY** Efficient Controls; Enhanced Risk Assessment
- ☑ **FACILITATION** Self-Service; Automation; Customer Satisfaction
- ☑ **AMBITION** Simplified Passenger Travel ...

Passenger Name Records

Booking & Check-in Data



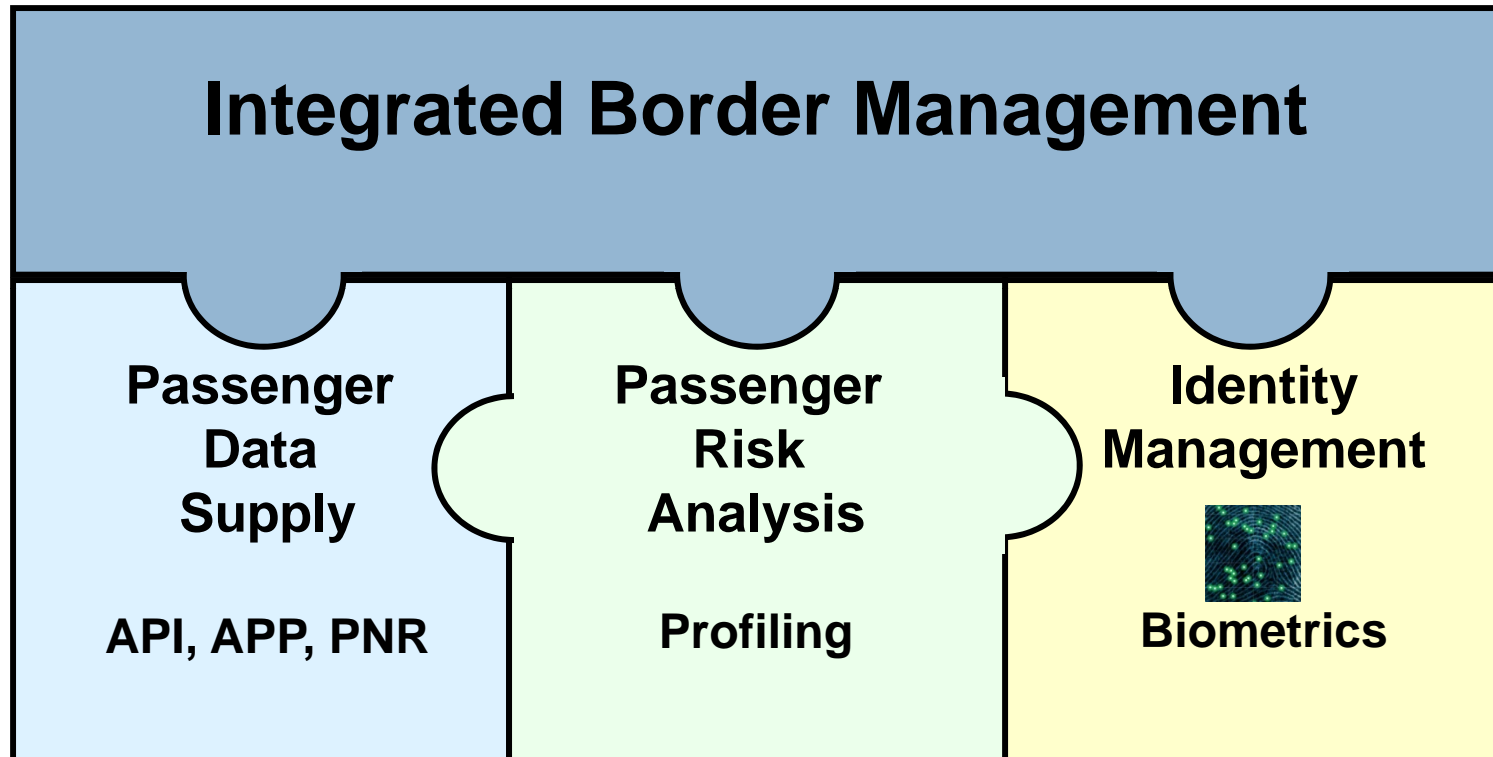
- **Airlines collect a great deal of information as part of their standard booking and check-in processes:**
 - **payment, ticketing, full itinerary (past & future), contact data, accompanying passengers, baggage, seating, etc.**
- **This data is useful for risk assessment and can be used to detect higher risk passengers, suspicious routes or behavior**
- **However, booking data usually lacks ID information**
(passport or visa not provided at time of booking, only at check-in)

Passenger Data Screening

- **Move the border** off-shore
- **Speed up** processing at the border
- Check passengers for eligibility to enter the country **prior to boarding** a flight
- **Analyze** passenger intentions
- **Identify** suspects based on additional information, beyond the Travel Document
- Identify suspects you don't yet know (profiling)
- **Highlight** non-obvious relationships between passengers (reservation, seats, etc)



Biometrics is the missing Piece...



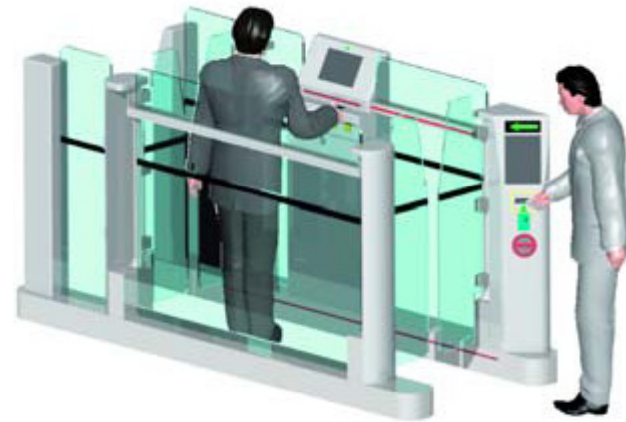
Identify risks

Check unknown individuals

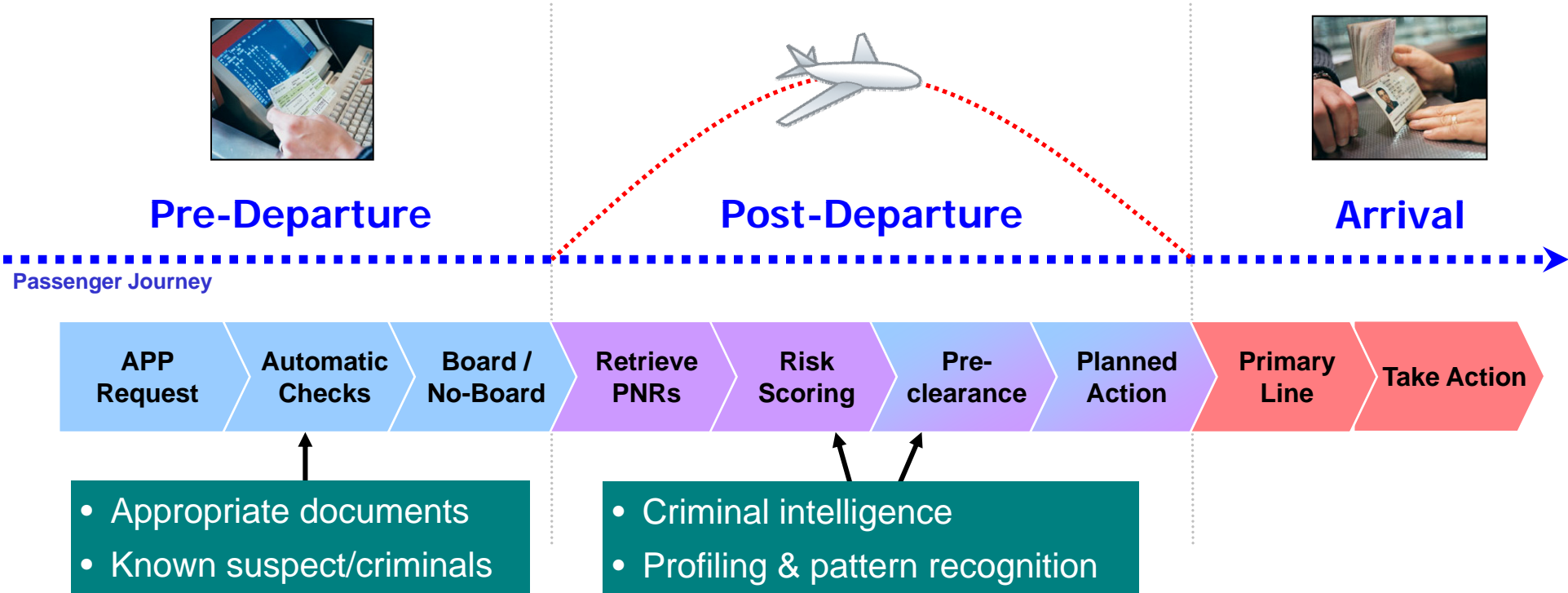
Validate identity

Biometric Border Management/Security Checkpoint

- Governments are increasingly deploying biometric border management systems to improve security and facilitation by
 - Verifying traveler's identities by comparing live biometrics against those previously captured
 - Automating the border crossing using eGates for known travelers, whose identity can be verified using biometrics
 - Matching biometrics against existing databases of known criminals/suspects
 - Integrating the results of passenger data risk assessment



Advance Risk Assessment and Air Passenger Processing

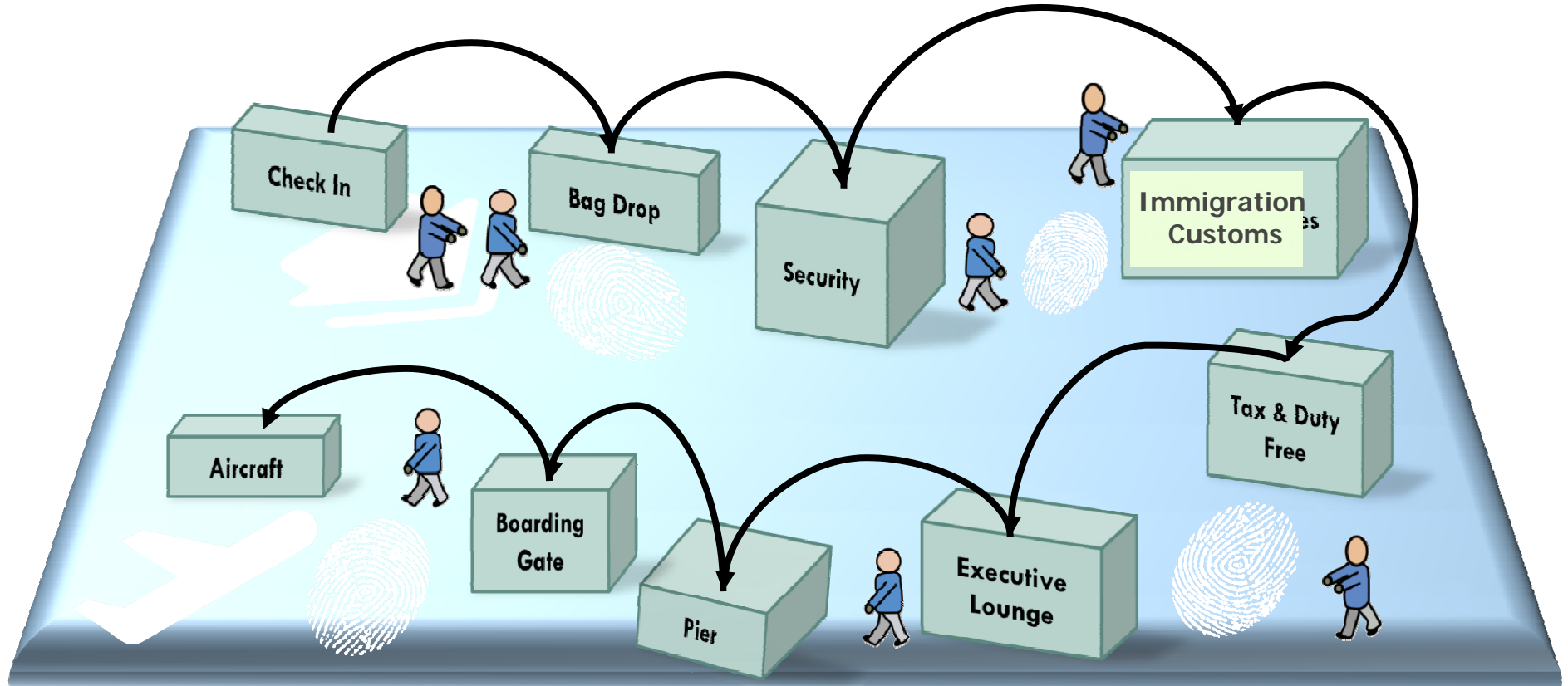


Legend

- APP Processes
- PNR Processes
- Mixed Processes
- Current Processes

Biometrics - beyond Border Management

- Secure self-service
- Security Checkpoint
- Passenger tracking
- eBoarding

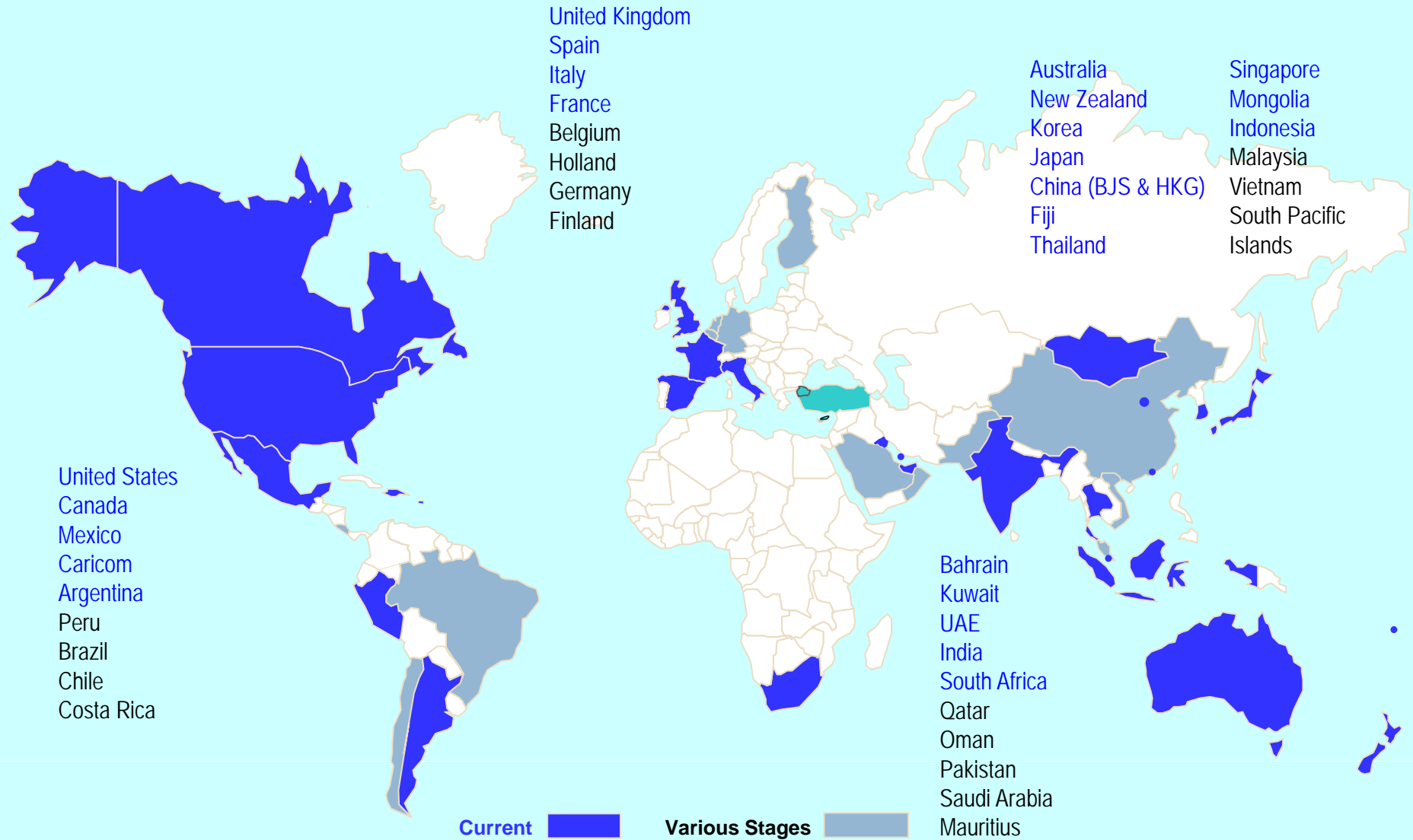


Future ... increased convergence

- **People, Baggage, Cargo**
- **Data Mining and Physical Scanning**
- **Secure Travel Documents**



Global Update in Passenger Data and Biometrics



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THOMAS MARTEN

VICE-PRESIDENT & GENERAL MANAGER
SITA GOVERNMENT & SECURITY SOLUTIONS

RIYADH, GENEVA

THOMAS.MARTEN@SITA.AERO