



Data Quality & Interoperability

Curing the 'Rubbish In – Rubbish Out' Paradigm

Andy Smith 4th November 2020

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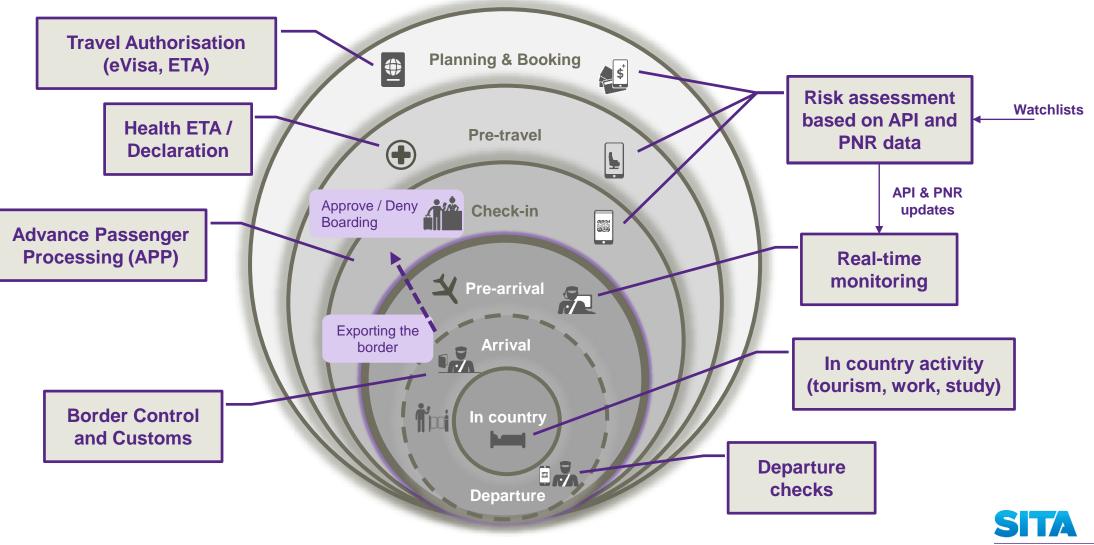


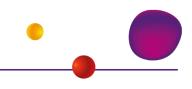
Border Management Layers

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AT BORDERS

Qualified & Quality Data is required at every layer of an integrated border management approach









Passenger Locator Form

- + Standard
- + Complete
- Paper based
- Not scalable

Health Declarations & Contact Tracing forms

- + Info-packed
- + Complete
- Paper based
- Not standard



Mobile Apps

- + Big data ready
- Not standard
- Not universal
- Limited range



API/PNR

- + Digital
- + Established
- * Req. collaboration



SITA Travel Authorization

Health ETA

	< Back to Home / Make a new heat	th declaration				
			Before ye	ou get started		
	Do not complete a l reminder email 7 da	Health Declaration unless	you are entering or	ou are <u>not</u> travelling in the next 7 reaving Antarctica in the next 7 day the Health.aero website to complet <u>< Back to Home</u>	s. Your airline or travel operator will send a	
-		What you	'll need to cor	mplete your Health Declar	ation	
	You will need your par other travel document) your flight or other trave Pieze ensure you are d	along with vel details.	Declarations family mer	reate multiple Health for example for other mbers or dependants. Health aero account.	Once your details have been submitted, you will receive a Health Declaration to print or download, Please store it safely for	
	the next 7 day:			ou will need to create a alth Declaration for each person.	presentation to government agents when you travel.	
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Protecting the nation's health:

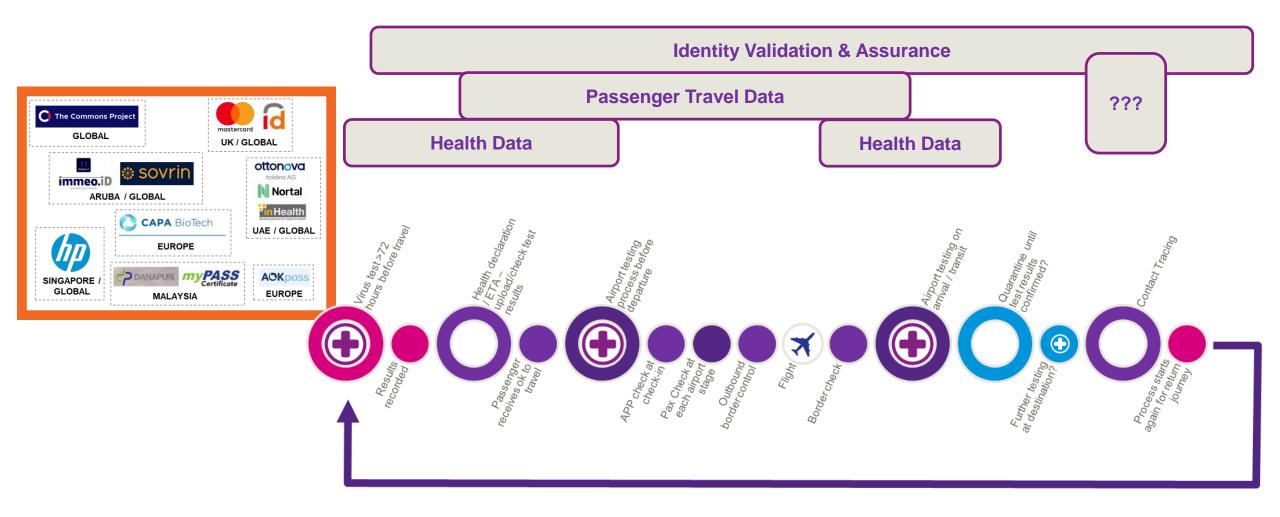
- open up their borders in a controlled manner considering for example the health status of points of embarkation
- make decisions whether to permit entry of an individual prior to them traveling – this is known as 'exporting the border'
- use an information driven approach based on real-time data
- be able to stop high-risk individuals or groups checking-in and boarding their flight

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 quickly implement the solution with minimal impact on carriers

Health certification and Passenger Process

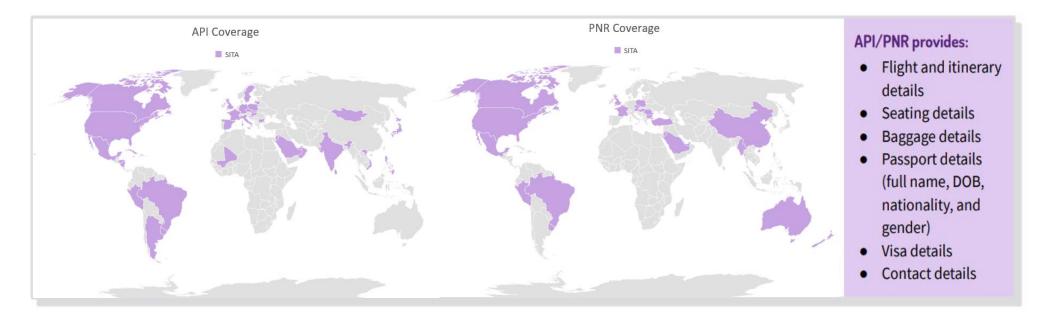
Multiple potential points of testing before, during and after the journey





New Questions from Old Data Sets

API (APP) and PNR already provide valuable information for contact tracing



- Has someone travelled in the last XX days?
- Who was on the same flight?
- Who was on the same booking?
- Who was sitting next to them?

- Who were the crew?
- Are they still in the country?
- What are their contact details?



Leveraging Data for Contact Tracing

Booking Segments	Booking Segments								
Associated Travellers									
VIEW ALL 298				OTHERS 273		CREW 7			
Travellers in close proximity									
Full Name	Nationality	Gender	Document Num	ber Date of Birth	Seat Number				
LETITIA CASS ELWYN	GBR	FEMALE	000961076	1960-09-23	23B	\square			
REED JADE CHRISTIANSON	GBR	MALE	000985848	1997-10-05	23C	⊻ &	CREW		
BROCK GARRETT NILES	IND	MALE	000016942	1991-05-17	23D	⊠ &			
REX COLBERT UNDERHILL	GBR	MALE	009310838	1950-08-15	24B		^		
UNIQUE TRACEY IANSON	GBR	FEMALE	004795327	1993-10-24	24C	M &			
YOLONDA RAELYNN BELLAMY	GBR	FEMALE	000944481	1962-09-28	24D	⊠ &	21		
ABBI TRISH PETIT	IND	FEMALE	000131321	1995-11-10	25B		22		
DAVID MURGATROYD	GBR	MALE	544784343	1978-01-01	25C		23 🖩 🛑 🖷 🗄 🗧 🖬 🖬 🗧 🗧		
SANDY EMMIE KNAGGS	GBR	FEMALE	002240794	1980-06-20	25E		24		
EDWARD MORTIMER HURST	IND	MALE	000028028	1998-06-24	25F				
KAIDEN ALPHONSO STANFORD	GBR	MALE	000954451	1952-11-28	26B		27		
BRYCE CONNIE GARROD	IND	MALE	000010189	1950-12-19	26C		28		
							29		
RENNAY LINDSTROMB	IND	MALE	64655466	1968-08-19	26D		30		
DWEEZIL JONES	NPL	MALE	58996542	1990-08-14	26E		×		
LAMONT KELSEY MIDGLEY	GBR	MALE	004474975	1949-10-03	27B	\square			

Improving data quality

Governments are focusing on how the quality of API PNR data can be improved to enable accurate risk assessment

Governments rely on API PNR data to look for potential threats to their countries, the quality of the data is of central importance to their risk analysis.

There are many reasons for poor API and PNR data quality:

- Human error, re-keying data
- Different people entering data @ different time
- Varying governments requirements
- Check-in applications
- Airline IT system changes
- Changing global standards

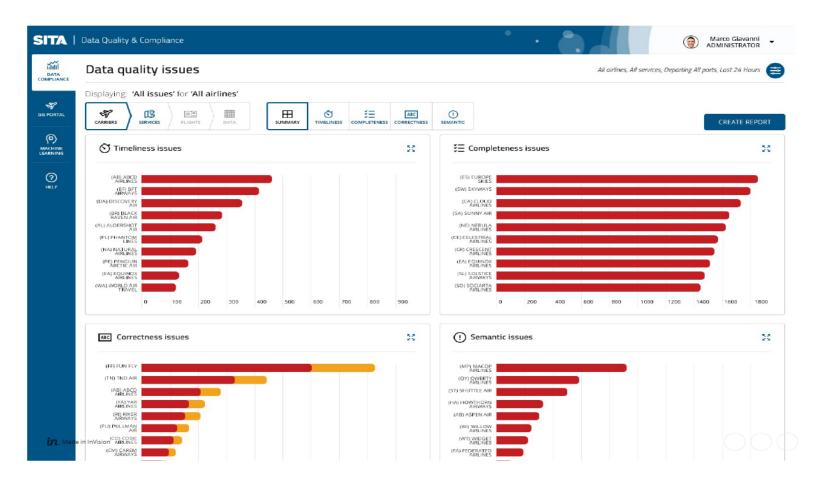
Many Governments don't have a clear view on their data quality, and this need to be resolved before they can improve

Data quality has several different dimensions. These include completeness, time, format and meaning.





Data Quality User Interface Option



Your data validated

Governments rely on data provided by carriers to perform a risk assessment on all travellers arriving or departing the country

Poor quality data or late data can affect the border security

SITA API PNR Gateway runs your data against the four pillars of data quality Time Completeness Correctness Semantic (Machine Learning)

The result is **visualised** in an **interactive User Interface** where **trend analysis** per carrier and per service can be performed







For airlines, airports and ground handlers at the airport

Spanning **operational and business processes**, baggage and passenger management

Focus:

- Smarter, more collaborative and efficient airports
- Better on-time performance, streamlined processes and greater capacity
- A seamless automated
 passenger journey



For **governments** and **border** management **agencies**

Spanning **border management**, traveler **identity** and **risk**, **operations** & **automation**

Focus:

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- Enabling governments to strike the **balance** between **security** and **facilitation**
- Making travel **safer** and **easier** across and within borders, and building **trust** in travel
- Making borders **smarter**, **more secure** and more **seamless**



For airlines, ANSPs, airframers, OEMs and MROs

Spanning **aircraft** & **flight ops**, **data management**, **cockpit** comms and **inflight** connectivity

Focus:

- Reinventing operations & the on-board experience
- Unlocking aircraft data, whatever platform, onboard, in-flight, on the ground
- Delivering **safer**, more **efficient**, **sustainable** and enjoyable flying experiences

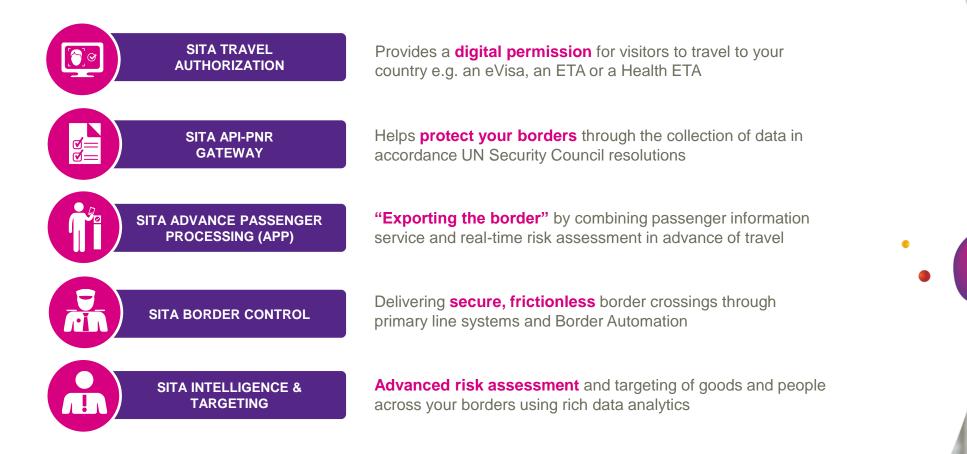


DOMAINS OF EXPERTISE



SITA Border Management Portfolio

Our border management ecosystem responds to both todays demands and adapts to tomorrow's developing landscape. It offers a range of flexible solutions to guarantee your land, sea and air border security delivers for your country 24/7.



AT BORDER

SITA Border Management

Over **20 years** of border management heritage – including the first Electronic Travel Authorization programme for Australia in 1996

In-depth **knowledge and expertise** of both border operations and the international travel industry

Worlds leading provider of **iAPI solutions** with Advance Passenger Processing (APP)

> 2 billion travelers processed each year with our border solutions

~700 airlines connected to our 'single window' gateway

A unique perspective from the sole provider of **end-to-end** border management solutions

SITA Border Management Customers

BORDERS

We place the utmost importance in conducting our business in a responsible, sustainable and ethical manner, ensuring that we can continue to hold our head high as a respected and trusted corporate citizen.

Our ethics charter is therefore very important to us and covers the following key areas:









Happy to Answer any Questions.....

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