Remote pre-enrolment for eTAs, eVisas and Trusted Traveller Systems

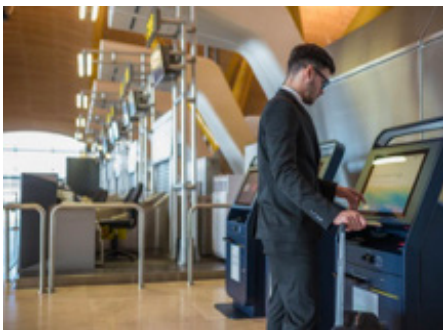
REMOTE PRE-ENROLMENT

Now is the time for a digital transformation

By Carl Gohringer, WorldReach Software

Travellers are accustomed to using e-Gates and kiosks that utilise ePassports and facial recognition at border control and immigration. This is no longer novel and is readily accepted by most.

However, Governments' interaction with foreign nationals remotely, at a distance and before they travel, is ripe for digital transformation. Given the significant level of cooperation, standardisation and effort made by passport agencies worldwide to embed a secure chip into almost every passport, there is an opportunity to enable a remote digital identity verification channel.



The Potential Benefits are Significant

Benefits can broadly be categorised as:

- **Reduced Friction and Cost**
  Reducing friction and cost in the process of interacting with travellers, before their journey starts.
- **Enhanced Security through Remote and Early Capture of Biographic and Biometric Data**
  Capturing accurate, secure and verified data earlier, before the visitor arrives.
- **Maximum Flexibility in Defining Passenger Segmentation and Policy**
  Allows rapid flexible policy adjustments based on earlier access to trusted and secure traveller details; enables enhanced ability to segment and facilitate processing on arrival.

There is potential to digitally transform the way in which governments interact with travellers.

Traveller Segmentation

The following serves as a broad categorisation of how travellers may be segmented:

Citizens

Returning residents or citizens travelling or living abroad that are entitled to unconditional entry.

Beneficiaries of a Free Travel Zone

Citizens of another nation participating in an international treaty allowing freedom of movement with the receiving nation that are not subject to any pre-processing.

Examples include:

- Republic of Ireland / United Kingdom Common Travel Area.
- Australia / New Zealand (ANZ) Trans-Tasman Travel Arrangement.
- Member States of the European Union.

Visa Nationals

Individuals who need a visa to enter, even for short periods. The application process can be onerous.

Non-Visa Nationals

Individuals who do not need a visa to enter for short periods.

Trusted Travellers

Individuals from other countries who have enrolled into Trusted Traveller and expedited border control programmes designed for pre-approved, low-risk travellers.

The Advance Capture of Passenger Details Before Travel: eTA Programmes

Governments are increasingly looking to capture information about Non-Visa Nationals before they travel, using Electronic Travel Authorisation (eTA) programmes.

Examples include:

- The USA Electronic System for Travel Authorisation

(ESTA).
- Canada, Australia, and New Zealand eTAs.

Other Governments have announced plans to implement eTA programmes, in conjunction with enhanced entry-exist systems.

Examples include:
- The European Commission's European Travel Information & Authorisation System (ETIAS).
- The United Kingdom's eTA programme.

Existing eTA programmes rely on manual data entry by the traveller and are prone to data quality issues.

Today, new eTA programmes have significantly enhanced capability available to them.

Expect More: The Current State of Technological Capability

New eTA systems can benefit from technology and experiences learned from significant Government programmes.

Recent advancements easily and affordably enable a remote traveller enrolment capability, using travellers' own mobile phones and ePassports. This is due to rapid innovation in multiple areas:
- Pervasive availability of NFC to read ePassport chips.
- Readily available cloud computing resources.
- Remote facial biometric capture and genuine presence assurance.

WorldReach Software has developed solutions to enable travellers to unlock the power of the chip embedded in their ePassports, using their own mobile phones.

eTA, eVisa and Trusted Traveller systems can benefit from remote pre-enrolment of trusted, validated and secure digital data sourced from ePassports coupled with genuine presence assured biometric data.

Overview: Different Levels of Reliability and Security of eTA Systems

eTA systems entail the traveller supplying their passport data to the destination government before they travel.

Legacy eTA Systems: Manual Entry of Data

Legacy systems do not rely on automated and secure data retrieval from passengers' travel documents.
- Passengers typically type in their own data.
- There is minimal data validity checking.
- There is no capture of biometrics.
- It is highly prone to data entry errors (as high as 20-25%).
- Inaccurately entered data results in airline check-in failure.
- This results in high exception handling cost and bad PR.

Level 0 Mobile Phone Digital: Passport MRZ and Data Page Capture

Early digital systems can employ remote optical capture of a passport's data page with optical character recognition (OCR) of the Machine-Readable Zone (MRZ).
- This resolves many data quality issues.
- It reduces exception handling issues at airline check-in.
- It is not secure as it is prone to document tampering.
- Fraud may not detected until inspected by a border guard.
- There are higher rates of manual adjudication.

Level 1 Mobile Phone Digital: Remote Digital Chip Read Using NFC

Remotely reading ePassports' embedded chips has only become viable recently with the advent of this capability on iPhones. This is now immediately and widely available using passengers' own mobile phones.
- Reading data directly from ePassports' chips resolves almost all data quality issues.
- It eliminates most exception handling issues at airline check-in.
- Document authenticity is assured using digital signatures on the chip.
- Earlier opening of the chip results in earlier accurate traveller information.
- Allows the capture of the biometrics from the chip resulting in more accurate biometric matching.
- There is no assurance that the person applying is the valid owner of the document until passenger's arrival at the receiving border.

Level 2 Mobile Phone Digital: Remote Digital Chip Read + Genuine Presence + Live Biometric

The strongest possible assurances are achieved by coupling Level 1 Digital with the capture of passengers' live, genuine presence assured

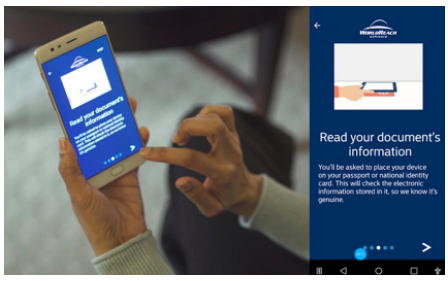
biometrics during the application.

This:

- Incorporates a genuine presence test to ensure the right person was present.
- Captures a live biometric.
- Provides assurance that the applicant is the genuine owner of the document.

- Provides the highest possible level of checks at the point of application.
- Detects fraudulent applications before the applicant travels.
- Enables cross-referencing captured biometrics across multiple applications.
- Allows maximum flexibility in passenger segmentation and expedited border control programmes for pre-approved, low-risk travellers.

Watch it in Action



https://vimeo.com/331228478

Is it Viable?

WorldReach Software has been directly involved in the deployment of relevant systems:

Canada's Chain of Trust Demonstrators

In Canada, IRCC (Immigration, Refugees and Citizenship Canada) and CBSA (Canada Border Services Agency) have been building a demonstrator called the Chain of Trust. Using WorldReach's eIDV service, low-risk travellers will be able to register remotely using only a mobile phone, allowing them to use automated border clearance systems upon arrival.

UK Home Office EU Settlement Scheme (EUSS)

3 to 4 million EU Nationals residing in the UK need apply for a new "Settled Status". The Home Office chose to offer a digital application process using WorldReach's eIDV service without the need for in-person document checks.

Following the release of the service in March of 2019, more than 3.3M people have applied as of 31st March 2020.

Writing in The Guardian on 6 September, the Home Office Minister, Brandon Lewis, said: "More than three-quarters of applicants are choosing to use a specially created app to prove their identity".

The high rate of digital adoption of this service is a testament to its ease of use and the public's trust and acceptance of the digital capability.

The Home Office's EUSS eIDV service is likely the single largest digital programme in the world to date enabling individuals to remotely assert and supply their identity in a self-service manner using their own mobile phone and government issued document.

In Summary

Travellers are familiar with automated, self-service immigration systems using their ePassports and facial recognition. They are increasingly demanding convenient, remote, digital service provision from Government. Border Agencies already benefit by operationally segmenting arriving travellers. Many are looking to capture information about Non-Visa Nationals prior to their travel using Electronic Travel Authorisation (eTA) programmes.

New eTA, eVisa and Trusted Traveller systems can now benefit from remote pre-enrolment of trusted, validated and secure digital data sourced from ePassports coupled with genuine presence assured biometric data.

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