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# Seventh AVSEC/FAL/RG/7 MEETING Travel Identification Programme ICAO TRIP What is Evidence of Identity?

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# Identity Management

- Managing identity data, documents and security
- Managing identity through 'the ecosystem' – establishment, verification, cessation
- Understanding the various components of identity, and their relevance to the service provided



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# What is Evidence of Identity (EOI)?

- Information used to establish or verify a unique identity
- Gaining a specific level of confidence
- Balancing risk and facilitation
- Applicable to any identity-based product or service (including travel documents).



- Now more difficult to produce counterfeit travel documents
- As quality and integrity of physical documents improves, weaknesses in their issuance processes are being targeted
- Poor issuance processes can undermine the integrity of the travel document and the State's investment in secure technology

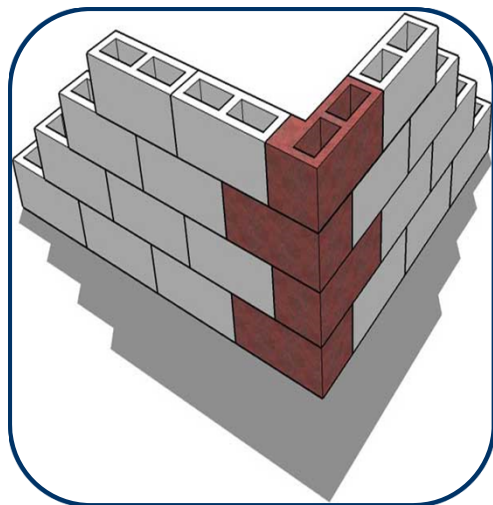




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Using robust processes to establish the identity of an applicant is **THE** cornerstone of secure travel document issuance ... *but* robust and reliable processes need to be considered carefully and systematically when establishing or validating identity in any context where a high degree of security and confidence is needed.



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EOI requirements should be relative to the risks and downstream effects of providing the product or service



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High Level of  
EOI  
Confidence  
Required





# Risk based EOI

- Individual risks  
Identity theft, terrorism,  
financial fraud
- National reputation  
Extra scrutiny of documents,  
undue attention at borders,  
more difficult for citizens to  
get visas.

Potential Risk Area	None	Low	Low-Medium	Medium	Medium-High	High	Weight
Financial Loss or Liability							High
Inconvenience, distress or damage to existing reputation							Low
Harm to Public Programs or Public Interest							Low
Unauthorised Release of Sensitive Information							High
Domino Effect of an Improper Identity Document							High
Personal or Public Safety							High
Overall risk level							



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## EOI Authentication Principles

Identity Exists  
and is Living

Applicant  
Links to  
Identity and is  
UNIQUE to  
the system

Applicant  
Uses Identity  
in the  
Community

First-time interaction **MUST** be robust so that  
subsequent contact can leverage off initial EOI

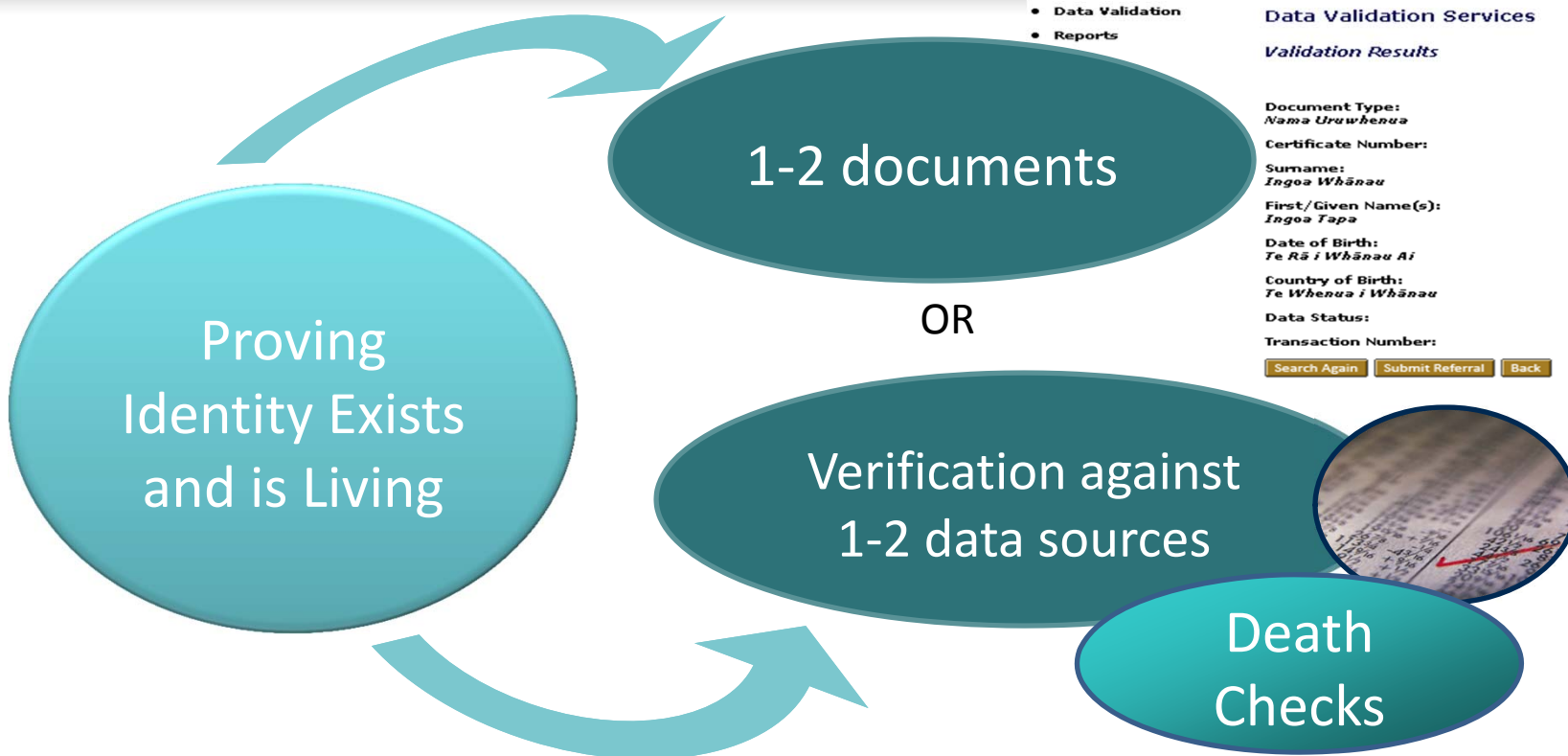




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Determine  
if Applicant  
Links to  
Identity

Applicant is the  
Sole Claimant: the  
identity is UNIQUE  
to the system

Provide confidence of  
applicant's 'social  
footprint'

Applicant Uses  
Identity in the  
Community



In-person verification, trusted  
referee, interview

Check against agency records  
(use data and/or biometric  
matching to ensure only one  
identity exists)



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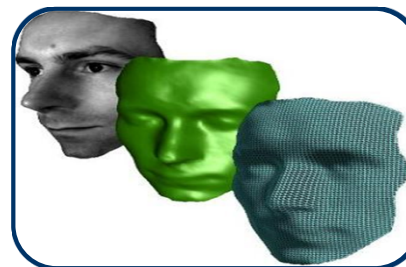
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## Final Step: Binding

Binding to  
Biometric



Associating the  
record/data with  
one or more  
biometrics



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- Different challenges for different authorities
- Legislative environment can have an impact on information sharing/validation
- No “one-size-fits-all” solution.



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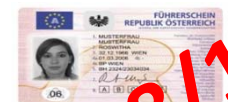
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# EOI Information Stock-take

- Follow EOI principles to systematically document and understand your ‘identity ecosystem’ and key risks
- Analyse ALL potential document, record or information sources available and its value in an EOI process (a matrix is helpful)
- Understand the security of “foundational” records, data and the issuance process that sits behind them





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High degree of identity confidence requires a range of evidence

There are different risks and mitigations depending on the context

#### Example 1

- Information from village chiefs/elders, educators and employees
- Staff knowledge of local accents, dialects and physical features etc.
- Evidence from other government sources like social services

#### Example 2

- Electronic access to source data from national civil registries
- Centralised database of applications
- Biometrics of every applicant for 1:1/1:M matching
- Large group of trusted witnesses/referee



# Keys to Building EOI Confidence

- Establishing **UNIQUENESS** of an identity in your system is key – without using biometrics (one to many match), this is becoming increasingly challenging
- Confidence that an identity is operating in community is becoming more important to issuing authorities ('social footprint')







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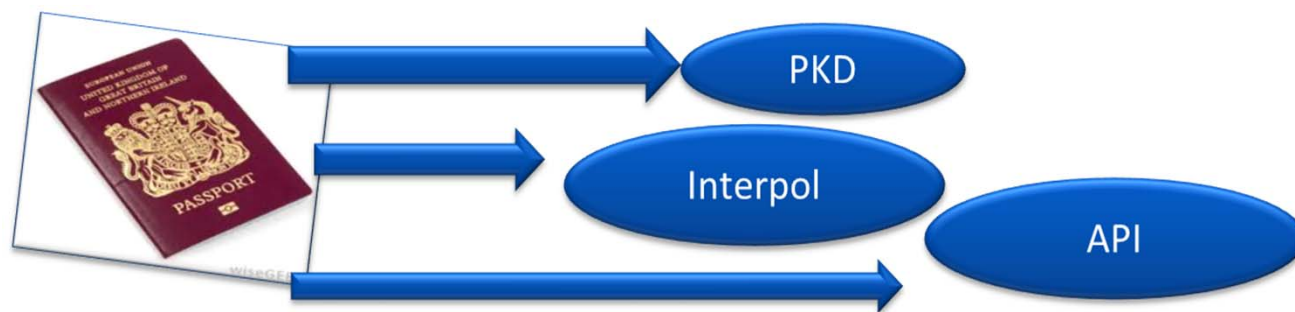


- Less confidence in civil registry information may result in need to increase EOI confidence in other areas
  - electoral role
  - school and hospital records
  - driver and firearms license
  - utility bills / bank records
- Longevity of footprint is key (e.g. knowing date of driver license first registered gives confidence)





- **All** physical documents are vulnerable to counterfeit, and making physical documents truly secure involves validation against authoritative databases



- Yes/No validation of foundational “breeder” records is secure, effective and privacy protective when looking to prove an ‘identity exists’



# Evolving EOI

- Applying EOI is an evolving process – as technology/environment changes, States need to adjust to new risks and threats
- EOI and technology must move forward together





# Summary

- Broad EOI concepts are applicable to any organization with an identity component
- Passport and Border authorities need to develop a framework – approach EOI in a systematic way
- Evaluate and understand EOI environment

Identity  
Exists and is  
Living

Applicant  
Links to  
Identity and  
is Unique to  
system

Applicant  
Uses  
Identity in  
the  
Community



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## EOI Guidance material

- New Zealand EOI Standard (available at [www.dia.govt.nz](http://www.dia.govt.nz))
  - Australia Gold Standard Framework
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- ICAO ICBWG Guidance on Evidence of Identity
  - ICAO Implementation and Capacity Building Working Group can assist with assessments and developing robust EOI processes for TD issuance



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**Thank you for your attention.**