## Are E-Passports ready for primetime?

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October 10,2014

MRTD Symposium 2014

# The Chip in the passport

- Added as an "additional" security feature.
- Not mandated
  - High Deployment costs
  - Possible chip read errors

## The Chip in the Passport

- Fact
  - 100 120 countries are issuing E-Passports
  - Adoption rate of E-Passports outstrips the adoption rate for MRPs
  - Based on recognition of the benefits of the cryptographically protected data in the chip
- So, should E-Passports be made mandatory?
- Are E-Passports ready for primetime?

# Reality Check

- 100 120 countries issue E-Passports
- How many actually read the E-Passport at the border?
  - 1 country reads at primary in airport
  - 2 countries use it for own citizens
  - 2 countries use it at secondary
  - Europe intends to do reading at ABCs.

Why the gap between the exuberance of the Issuers and the lethargy of Border Control?

Are we missing something?

## Issues

- Chip reading time
  - 8 seconds to 14 seconds in the initial days
- Change in Border Control Terminal Applications
  - Training issues
  - Don't frighten the border guard

### Issues

- E-Passport verification requires
  - CSCA
  - DSC
  - CRL
- Furthermore there can be encoding errors and personalisation errors
- We identified 28 possible outcomes of E-Passport validation

## Issues

- Initial software rollout
  - Displayed all 28 outcomes to officer to make decision
  - High training costs, unnecessary complexity
- Changed to trust levels map 28 outcomes to trust levels
  - -1 Fraudulent document
  - 0 Not an E-Passport
  - 1 Fully verified

### Issues

- All E-Passports are not equal
- Verification of authenticity is not indication of trust
- More nuanced approach to trust level
  - -1 Fraudulent document
  - 0 Not an E-Passport
  - 1 Some Issues
  - 2 Almost good
  - 3 Perfect

## New Requirements

- Need custom mapping on a per country basis
- Want flexibility in mapping based on which border
- Central control of policies

## Traveller profile

- Possibility that traveller has E-Passport depends on traveller demographics at border
- If you do get an e-Passport, chances that you have the CSCA, DSC and CRL to validate it are small

## Traveller profile

- In initial days, 1 of 20 travellers was e-Passport
- 1 in 10 e-Passports could be verified using available data
- Hit rate of 1 in 200!!!!! Not an attractive proposition
- Now the hit rate is 1 in 2. More attractive proposition

## What about the new requirements?

- Problem is in focusing on Passport validation instead of looking at identifying traveller
- A more holistic approach to discerning trusted travellers instead of focusing only on the chip
- Verification and validation as a business process, not a technical point solution

## So?

Are e-Passports ready for primetime?

Not unless border control is part of the equation

Without involvement of border control – TRIP has a whole new meaning..

### **THANK YOU**

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