

New Technologies and Travel Documents

ICAO

12th Meeting of the Facilitation Division

Cairo

March 23, 2004



Outline

- # Vision and strategy
 - # PKI
 - # GOL
 - # Accomplishments
 - # Future steps
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NTWG

- # Incorporation of new technologies into travel documents and visa
 - # Meet approximately 3-4 times per year
 - # Currently chaired by Gary McDonald (Canada)
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NGOs

ISO

- SC17/WG3
- SC37

Airport Council International (ACI)

IATA

- Simplifying Passenger Travel (SPT)

INTERPOL

Vision

Goals

- Improve document security
 - Machine authentication
 - Positive ID of individuals
 - Secure document issuing processes
 - Improve facilitation
 - Minimize time spent on inspection of legitimate travelers
 - Segmentation of low-high risk travelers
 - Minimize waiting times for traveler
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Vision (Cont...)

Approaches

- Positive ID
 - Unattended access
 - Maintain machine readability
 - Standards for advanced technology
 - Co-existence of technologies
 - Expand data storage capacity
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Accomplishments

- # Improved photo, signature specs
 - # Co-existing technologies standards for ID and Passport Cards
 - # Technical Reports
 - Available on the ICAO/MRTD website
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Current Activities

Technical reports

- Logical data structure
 - Machine-assisted identity confirmation
 - Electronic visas
 - Encryption and PKI
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Global Interoperability

- # Global interoperability is the primary goal
 - # Biometrics cannot stand alone
 - Common data storage device
 - Common data structure
 - Common method of securing the data
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Data Storage

- # Review of data storage technologies started in 1997
 - # Limitation of paper
 - Detailed review of plastic cards
 - ICAO Doc 9303, Part 3
 - # Contactless RF chip embedded in traditional paper books
 - ISO 14443 standards apply
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Logical Data Structure

- # Type of data
 - Data page information is mandatory
 - All other data is optional

 - # Order of appearance

 - # Includes electronic visas
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Encryption and PKI

- # Major challenge
 - # Concept paper on the web
 - # Detailed PKI Technical Report drafted
 - Will be submitted to TAG 15 in May
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Machine-assisted Identity Verification

- # Review of biometrics
 - # Facial recognition
 - Optional additional biometrics:
 - Iris
 - Fingerprint
 - # Technical reports available on the web
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Electronic Visas

- # 3 approaches
 - Data stored in advanced technology
 - Data that exists only in cyberspace (i.e. ETA)
 - Stand alone visa card
 - # Future efforts on data that exist only in cyberspace
 - # Use of biometrics in visa counterfoils
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Issues

- # Focus on requirements, not technology
 - Ensure backward compatibility
 - # Public acceptance and privacy
 - # Robustness of the new standards
 - Are we moving too quickly?
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Next steps

- # New versions of Technical Reports
 - Goal is to have these complete for TAG-15 in May 2004

 - # Focus on APP and real-time data sharing

 - # Further refinement of the PKI approach
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Questions

