



SUMMARY PRESENTATION

eMRTD Programme Makes Major Contribution to National Security and Aviation Security

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The Third Symposium and Exhibition on ICAO MRTDs, Biometrics and Security Standards

eMRTD Programme

- INTENDED BENEFITS for States, Issuing Authorities, Control Authorities, Airlines, Airports and MRTD Holders are SIGNIFICANT
- eMRTD Programme has also set the standard for a New Generation Identification Credential as well as a Systemic Technology / Best Practice Toolbox that realize substantial benefits for:
 - NATIONAL SECURITY
 - AVIATION SECURITY



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- Standardized "Holder Details Page" layout



Machine Readable Summary

Country Code	Doc Number	Name	Nationality	Date of Birth	Sex	Date of Issue	Date of Expiry
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INTEROPERABILITY

Human and Machine Interpretation



Benefits Contributed: Basic MRTD

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- Citizen access to world-wide installed base of facilitating machine readers:
 - Frontier (Border) Controls
 - Airline check-in
 - Aircraft boarding



Enhanced Security + Improved Facilitation



Benefits Contributed: Basic MRTD

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➤ Enhanced Frontier (Border) Controls:

- Facilitates the inspection process
- Strengthens security
- Guarantees the integrity of the LOOKOUT CHECK
- Facilitates recording of arrival and departure details



Enhanced Security + Improved Facilitation



eMRTD

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New Generation MRTD



eMRTD

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Basic MRTD

Plus:

- Trusted way of confirming their Rightful Holder status
- Access to emerging population of facilitating Kiosks





eMRTD

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- Strengthened security for issuance of MRTDs **through introduction of machine assisted,**
- Positive Identity Confirmation VERIFICATION CHECK for processing renewal applications
 - WATCH (Security) LIST CHECK(s)
 - FRAUD CHECK(s) (Entire Database)



eMRTD

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- Greatly enhanced security profile
 - PKI based security scheme provides,
 - way of confirming authenticity of details
 - way of detecting alterations to details
 - Realizes strong counterfeit deterrent
 - Private Keys would have to be stolen to allow creation of undetected counterfeit
- Theft of blank eMRTDs has diminished value



[illegible]

- Enhanced ability to confirm identity of person seeking entry
 - Frontier (Border) Controls
 - Airline Check-In and Boarding
 - Applying for a visa
- Opens Door for "eManifests" (e.g. eAPI)
- Allows controls to be carried out "off-shore"



[illegible]

- Enables Deployment of series of escalating security measures:
 - Pre-Emptive Measure: enhanced checks to control access to an MRTD
 - Immediate Detection Measure: face biometric based Lookout Check at border
 - Escalating Measure: confirmation of document presenter as the Rightful Holder



eMRTD

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MANAGEMENT FRAMEWORK

Legislation

Policies

Regulations

Procedures

IDENTIFICATION DOCUMENTS

Issuing Authority

Passport(s)

Visa(s)

Official Documents of Identity

Holder

BORDER CONTROL INFRASTRUCTURE

Monitoring & Detection Infrastructure

Proactive Identification at a Distance

Inspection Infrastructure (Documents and Persons)

Passive Capture of Biometric

Response Infrastructure

Human Interpretable Details

Global Biometric (Face) Addresses System-Wide Needs



The logo features the letters "eMRTD" in a large, bold font where the blue and red colors are interwoven. Above the letters are several concentric rectangular outlines representing stacked documents or windows.

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Better means of confirming a person's true identity (via biometrics) **improves ability to successfully undertake and conclude a criminal proceeding, inquiry and adjudication**



ICAO eMRTD Programme

- ICAO's eMRTD Programme contributes more than a set of standardized travel documents
- Sets the standard for a New Generation Identification Credential
- Contributes technology and recommended practices for:
 - securing the issuance of all Identification Credentials (e.g. Passport, Official Documents of Identity, range of breeder documents); and
 - securing and facilitating the inspection of persons presenting all forms of travel and identification documents

MRTD

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The logo for eMRTD (Electronic Machine Readable Travel Document) features the text "eMRTD" in a large, bold, orange font with a blue outline. Below the text is a stylized orange graphic of a passport cover with a yellow chip icon.

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Benefits Go Well Beyond Original Intended Purpose!

As Confirmation we need only look at the
changing needs of National Security
and Aviation Security



The Nature of Terrorism Has Changed Globally

- Evolved to suicide terrorism and non-conventional terrorism
- Non-Conventional Terrorism uses a nation's critical infrastructure to create disruptions, effect economic havoc and cause death and destruction



Threats to Critical Infrastructure On the Rise

Madrid, March 2004



London, July 2005



India, July 2006



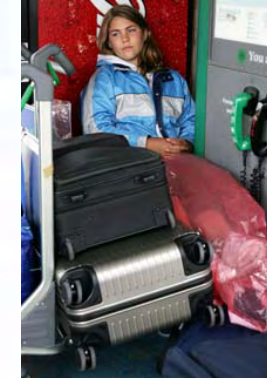
ENERGY
Saudi Arabia,
February 2006



TRANSPORTATION



Ever Changing Threat Continues to Impact on Air Passenger Processing



Civil Aviation and National Security are Intertwined

- Civil Aviation is a vital component of:
 - a nation's critical infrastructure
 - the world's critical infrastructure
- Air travel is vital to dispensing terrorism
- Given the change in modus operandi of terrorism, "Identifying people" has become critical to dealing with terrorism
- Identifying people seeking official travel documents and traveling is crucial to detection and prevention



ICAO eMRTD Programme

- ICAO's eMRTD Programme contributes set of next generation identification credentials, technology and recommended practices that when deployed:
- enhance National Security; and
 - enhance a range of other Aviation Security related processes in place at world airports.
- They also realize greater benefit for the Holder.

MRTD

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eMRTD

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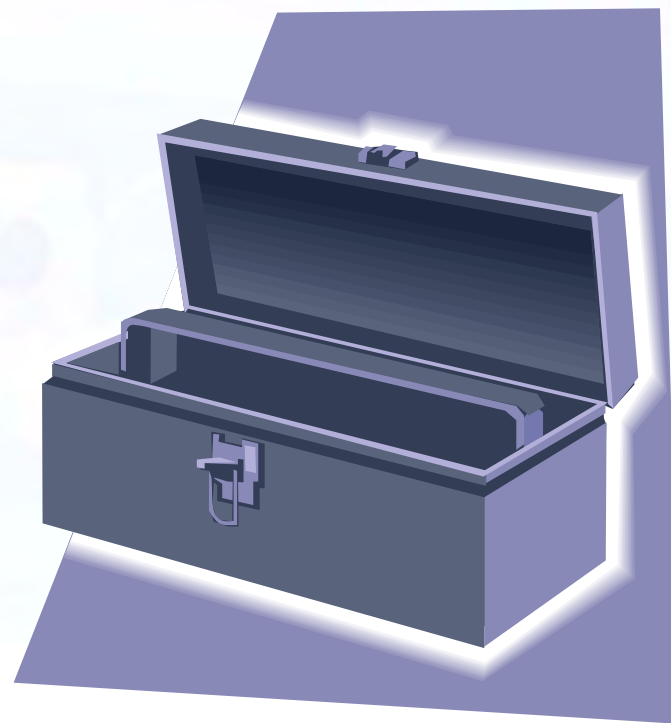


"The Contribution"

- ICAO eMRTD Programme created a SYSTEMIC TOOLBOX, containing:

SKILLS

TOOLS



SKILLS in Systemic Toolbox



- Creation of a new, globally interoperable means of personal identification
 - One that uses biometric details that are human and machine interoperable ("Globally Interoperable")



SKILLS in Systemic Toolbox



- Creation of a new, globally interoperable means of personal identification
 - One that can be applied to a wide range of real-world business processes - *including those delivered through machine assistance (e.g. Kiosks)* - to secure and facilitate value exchange



SKILLS in Systemic Toolbox



- Creation of a new, globally interoperable means of personal identification,
 - One that enables "positive identity confirmation" as well as proactive detection of persons attempting to conceal their true identity



SKILLS in Systemic Toolbox



- Creation of a new, globally interoperable means of personal identification,
 - One offering the potential - *as the result of progressive technological advancement* - to be successfully and securely performed at greater and greater distance without the need for the person to participate in any overt way



SKILLS in Systemic Toolbox



- Creation of a new, globally interoperable means of personal identification,
 - One that supports (empowers) direct human participation in the identification process should machine assisted identity confirmation:
 - Prove difficult or impossible; or
 - Trigger an alert requiring "first responder support".



TOOLS in Systemic Toolbox



- Foundation Specifications,
 - Representation and interchange of human and machine interoperable identification details ("**Globally Interoperable**")
 - Secure carriage (transport) of Globally Interoperable Identification Details on a IDentification Document
 - Use of the most advanced, facilitating form of IDentification Document technology (i.e. contactless)



TOOLS in Systemic Toolbox



➤ Best Practices,

- Capture of sustainable human and machine interoperable identification sample(s)
- Capture of highest quality human and machine interoperable identification sample(s)
- Use of the Globally Interoperable Identification sample(s) to:
 - Confirm claimed identity;
 - Confirm they are not a person that should be denied the value exchange, for whatever reason
 - Confirm that they are not attempting to commit fraud



CRITICAL INFRASTRUCTURE & KEY ASSET PROTECTION

National Infrastructure Protection

Business Infrastructure Protection

*Standard
Component*

*Key
Assets*

Agriculture & Food

Water

Public Health

Emergency Services

Defense Industrial Base

Telecommunications

Energy

Transportation

Banking & Finance

**Chemical Industry &
Hazardous Materials**

Post and Shipping

**National Monuments &
Icons**

Nuclear Power Plants

Dams

Government Facilities

**Commercial Key
Assets**

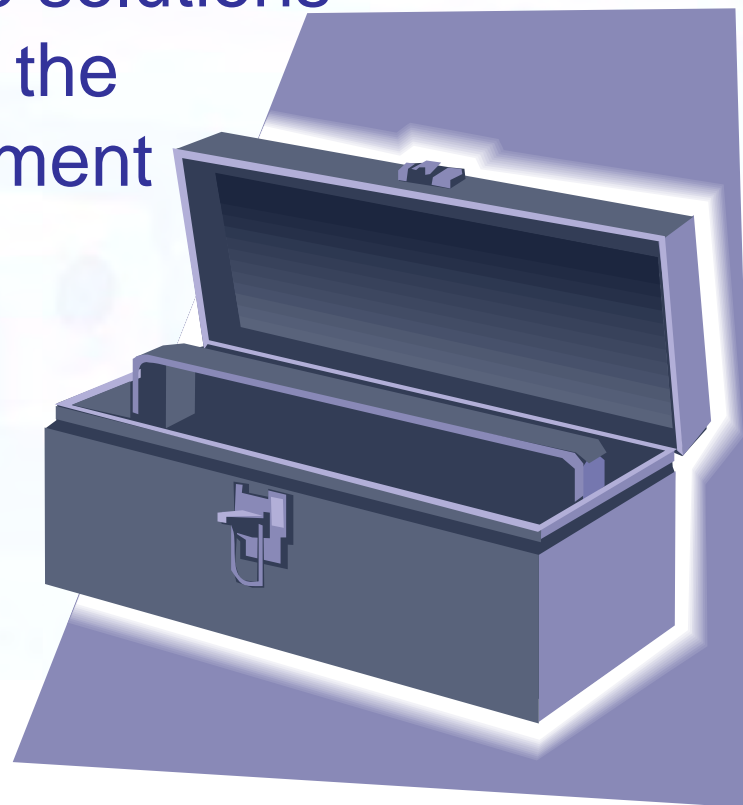


➤ The **SYSTEMIC TOOLBOX** can be used to create solutions designed to facilitate, secure and proactively protect a wide range of business processes deemed to be critical infrastructure



Long Term Societal Benefit of eMRTD Programme

- The SYSTEMIC TOOLBOX can be used to create solutions in which facilitation is the predominant requirement



Conclusions

- 1. eMRTD Programme has realized and will continue to realize very significant BENEFITS for States, Issuing Authorities, Control Authorities, Airlines, Airports and MRTD Holders

Objectives Are:

- Security
- Facilitation and
- Proactive Preventive Protection



Conclusions

- 2. eMRTD Programme provides a Systemic Toolbox founded on a new form of identification that is biometric enabled that contributes substantial benefits for:
 - NATIONAL SECURITY
 - AVIATION SECURITY



Conclusions

- 3. eMRTD Programme provides a wide range of security, protection and facilitation benefits for the traveler



Thank You

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