2nd Symposium on ICAO-Standard MRTDs, Biometrics and Security

MRTD/eMRTD PROGRAMME

Intended Benefits / Societal Impact

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eMRTD Programme

☀ **INTENDED BENEFITS** for States, Issuing Authorities, Control Authorities, Airlines, Airports and MRTD Holders are **SIGNIFICANT and BENEFICIAL**

☀ **eMRTD Programme** has established the foundation – **a Toolbox** – that can be used to realize substantial benefits for **SOCIETY AS A WHOLE**!

MRTD

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eMRTD

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The Global Standard

Intended Benefits Realized: Basic MRTD

Travel Document offering:

➢ Standardized "Holder Details Page" layout

Photo

Machine Readable Summary

Country Code

Doc Number

Name

Nationality

Date of Birth

Sex

Date of Issue

Date of Expiry

Intended Benefits Realized: Basic MRTD

Travel Document offering:

➢ Standardized "Holder Details Page" layout

➢ Feature rich security profile

➢ Machine supported reading (OCR)

➢ **GLOBAL INTEROPERABILITY**

Human and Machine Interpretation

Intended Benefits Realized: Basic MRTD

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

Enhanced Security + Improved Facilitation

Intended Benefits Realized: Basic MRTD

☀ 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

Intended Benefits Realized: *eMRTD*

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☀ Citizen receives Travel Document offering all beneficial features of the **Basic MRTD**,

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Plus:

➢ Trusted way of confirming their Rightful Holder status

➢ Access to emerging population of facilitating Kiosks

Intended Benefits Realized: eMRTD
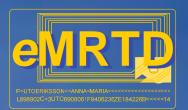
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☀ Strengthened security for issuance of MRTDs **through introduction of machine assisted**,

- ➢ Positive Identity Confirmation **VERIFICATION CHECK** for processing renewal applications
- ➢ **WATCH (Security) LIST CHECK(s)**
- ➢ **FRAUD CHECK(s) (Entire Database)**

Intended Benefits Realized: eMRTD

- **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
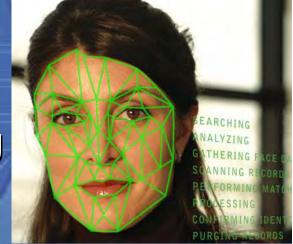- **Theft of blank eMRTDs rendered as having NO VALUE ….. and NO USE!**

Intended Benefits Realized: eMRTD

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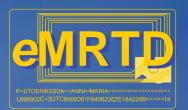 - Airline Check-In and Boarding
  - Applying for a visa
- Opens Door for "eManifests" (e.g. eAPI)
- Allows controls to be carried out "off-shore"

Intended Benefits Realized: eMRTD

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- 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

Intended Benefits Realized: eMRTD

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COMPREHENSIVE BORDER MANAGEMENT SYSTEM

MANAGEMENT FRAMEWORK	IDENTIFICATION DOCUMENTS	BORDER CONTROL INFRASTRUCTURE

Issuing Authority

Legislation	Passport(s)	Monitoring & Detection Infrastructure	Proactive Identification at a Distance
Policies	Visa(s)	Inspection Infrastructure (Documents and Persons)	Passive Capture of Biometric
Regulations	Official Documents of Identity	Response Infrastructure	Human Interpretable Details
Procedures			

Holder

Global Biometric (Face) Addresses System-Wide Needs

Intended Benefits Realized: *eMRTD*

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☀ Delivers enhanced Enforcement,

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** more than a set of standardized travel documents

☀ Offers technology and recommended procedures for:

➢ securing the issuance of MRTDs; and

➢ securing and facilitating the inspection of persons presenting travel and identification documents

MRTD

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eMRTD

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Justification
for
IMMEDIATE
IMPLEMENTATION
is
Obvious!

Abuse of Travel Documents

- Abuse of Travel Documents focuses at the extreme end of societal impact
- States must monitor, detect and deter threats to such abuse

Societal Impact →

| Identity Theft | Illegal Migration | Trafficking / Smuggling | Terrorism |

Illegal Migration and Trafficking / Smuggling

* Extremely destabilizing to a State

* Create severe economic hardship

* Create crime to generate sustaining funds

* Pose a real and direct threat to the State

Societal Impact	→		
Identity Theft	**Illegal Migration**	**Trafficking / Smuggling**	**Terrorism**
Crime	→		

Terrorism

One year ago I indicated,

- Recent world events provoke focus on single predominant source (origin) of terrorism

- Terrorism does not derive from a single source (origin)

- Many States experience some form of terrorism having no affiliation to current predominant source

One year later we have

- **Home-Grown Terrorism** emerging as an issue

Modus Operandi of Terrorism Has Changed

- Changed to suicide terrorism and non-conventional terrorism

- **Non-Conventional Terrorism** uses a **nation's critical infrastructure** to create disruptions, effect economic havoc and even 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 Has Once Again Impacted Air Passenger Processing

Civil Aviation is Vital to Dispensing Terrorism

☀ **Civil Aviation** is a <u>vital component</u> of:

➤ a **nation's critical infrastructure**

➤ the **world's critical infrastructure**

☀ Air travel is vital to dispensing terrorism

☀ Identifying people seeking official travel documents and traveling is crucial to detection and prevention

Justification
for
IMMEDIATE
IMPLEMENTATION
is
Obvious!

CAUTION

One Must Look to See If One's Duties Have Changed Before Simply Forging Ahead!

While Society expects **security** and **facilitation** to be addressed, it expects a new and important duty to be fulfilled; that being to provide

PROACTIVE PROTECTION

That obligation is made even more significant since the eMRTD Programme provides a solution to address the much broader and urgent needs of Society to Protect Critical Infrastructure!

Society's Expectation is Well Founded

☀ The outcome of the eMRTD Programme can be characterized as the creation of 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

<u>SKILLS</u> 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)

<u>TOOLS</u> 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 what ever reason

☀ Confirm that they are not attempting to commit fraud

**CRITICAL INFRASTRUCTURE &
KEY ASSET PROTECTION**

**National
Infrastructure
Protection**

**Business
Infrastructure
Protection**

*Standard
Components*

*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 Preventative Protection**

Conclusions

☀ 2. **eMRTD Programme** provides **a Toolbox** founded on a new form of identification (one that is biometric enabled) - that will realize substantial benefits for **SOCIETY – in terms of security, facilitation and proactive protection**!