

International Civil Aviation Organization

Sixth Symposium and Exhibition on ICAO MRTDs, Biometrics and Security Standards

ICAO Headquarters, Montréal, Canada 1 - 4 November 2010



Ensuring the secure environment in the passport issuance process: physical security and electronic security

Steven G. Grant, P.Eng.
Business Development Manager
Security Systems Division
3M Canada

Food for Thought

- The integrity of passports and other travel documents is a key component of national and international anti-crime and antiterrorism strategies. (e.g. UN SC resolution 1373 obligations)
- Prevention of fraud is undeniably more efficient and much less costly than dealing with the consequences of successful fraud.

Recommended best practice:

The passport issuing process should be recognized as having an impact on national and international security and be included in the governmental security framework.





Need for Passport Issuance Security Standards

- It is very likely that your passport issuance system will be attacked
- Successful attacks threaten social security & have potential for increased criminal activity
- Successful attacks put at risk the international reputation of your passport & its utility to citizens as a travel document
- A respected travel document facilitates travel and economic activity





Best Practices on Secure Issuance of Travel Documents

- Applicable to all ID documents including passports, visas, national ID, etc.
- Recommended Practices include:
 - Organizational and Personnel issues
 - Application, Entitlement and Delivery
 - Handling of Materials
 - Document Security
 - Physical Security and Information Technology Security
 - International (SLTD, Consular, Partners)





STERLING TRUST

Organizational Structure

- Mandate, Responsibilities and Legislation
- Security Framework
- General Security Practices





Treatment of Materials and Blank Books

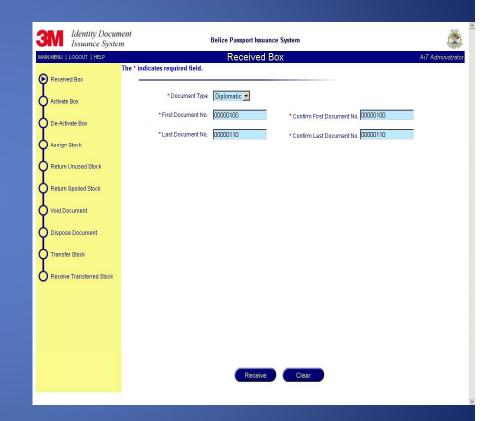
- Book production
- Numbering
- Shipping and Storage
- Accounting
 - Inventory control, daily reconciliation, etc.
- Destruction





Example of Inventory Control

- From shipment arrival to issuance to applicant
- Document cannot be personalized unless
 - Stock activated
 - Assigned to site & operator
- Operator can only personalize documents assigned to them
- Spoiled documents recorded
- Stock reconciled each day
- Destruction of stock witnessed and recorded







Passport Personalization

- Printing equipment should include the capability of producing unique features
 - ability to identify a passport personalized on the system
- Physical security of equipment
- Passwords and secure access for operation
- Tracking who approved and performed steps
 - Audit Trail; periodic/random audits; work sampling





Physical Security

- Physical security of the passport issuing plant
 - controlled buildings/space
 - Presence of security personnel, alarms, TV, surveillance
 - Special requirements for vault & document personalization room
 - Applicants and security
 - Protection of applications in process (privacy)





System Integrity and Security

- Network
- Access control
- Workstations
- Database and database operations
 - e.g. watchlist management
- Reports: production, inventory, audit
- Processes:
 - e.g. supervisor oversight, no single operator





Summary: Best Practices

- The passport issuing process should be recognized as having an impact on national and international security and be included in the governmental security framework.
- The passport issuing authority should have clear mandate and responsibilities, established by legislation or suitably enforced regulations.
- Written security policies and guidelines should be developed and communicated to all. They should be strictly enforced.
- Independent from passport operations, a security team responsible for managing the security framework, should be in place.





Questions?

Steve Grant
3M Security Systems Division
Tel +1 613 722 2070
Fax +1 613 722 2063

sggrant@mmm.com



