



# 2<sup>nd</sup> Symposium on ICAO-Standard MRTDs, Biometrics and Security

## *Singapore Biometric Passport*

Tam Chek Fran  
Immigration & Checkpoints Authority  
Singapore

MRTD Symposium  
ICAO Headquarters, Montréal  
6 – 7 September 2006

# Singapore Biometric Passport

## ☀ Scope

- ✓ Purpose of Singapore Biometric Passport (BioPass)
- ✓ Features of BioPass
- ✓ Key Project Milestone
- ✓ Local Trial
- ✓ International Live Test (ILT)
- ✓ Application & Collection
- ✓ Lesson learnt & Experience



# Singapore Biometric Passport

## ☀ Purpose

- ✓ Enhance the Security and Integrity of Singapore passports
- ✓ Ensure seamless and hassle-free Immigration clearance for Singaporeans overseas
- ✓ Meet US requirement to issue ICAO-compliant biometric passports by 26 October 2006



# Singapore Biometric Passport

## ✱ Features

- ✓ 5 years validity
- ✓ Passport Number is the Book Control Number
- ✓ SGD\$80 (Application in Person), \$10 rebate for application by post or via Internet
- ✓ 72 Kb, Type A -Contactless Chip embedded in the polycarbonate data page



# Singapore Biometric Passport

## ☀ Features

- ✓ Chip contains the following:
  - ☀ Facial Image
  - ☀ Fingerprint Data
  - ☀ Machine Readable Zone Data
- ✓ Basic Access Control (BAC) enabled
- ✓ Further protected by Extended Access Control (EAC)





# ☀ Datapage Design

- |   |                      |   |                       |  |
|---|----------------------|---|-----------------------|--|
| PASSPORT  |                      |  | REPUBLIC OF SINGAPORE |  |
| Type  | Country Code         | Passport No   |                       |  |
| PA  | SGP                  | X00130410   |                       |  |
| Name  |                      |   |                       |  |
| LINDA NG ZEE ZEE  |                      |   |                       |  |
|  | Sex      Nationality |   |                       |  |
|   | F                    | SINGAPORE   |                       |  |
|   | Date of birth        |   | Place of birth        |  |
|   | 27 JUN 1977          |   | SINGAPORE             |  |
|   | Date of issue        |   | Date of expiry        |  |
|   | 25 AUG 2005          |   | 25 AUG 2010           |  |
|   | Modifications        |   | Authority             |  |
| SEE PAGE 2  |                      | MINISTRY OF HOME AFFAIRS  |                       |  |
| National ID No  |                      |   |                       |  |
| S778888H  |                      |   |                       |  |

# Singapore Biometric Passport

## ☀ BioPass Project Milestone

### ➤ 21 Mar 2005

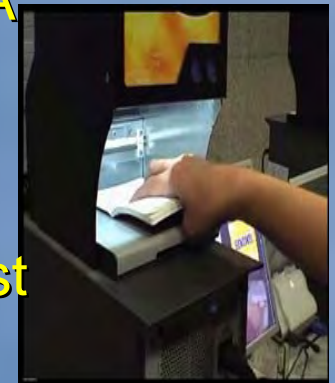
Singapore Biometric Passport (BioPass) project was awarded to the Consortium led by NEC Solutions Asia Pacific Pte Ltd

### ➤ Aug 05 – Feb 06

➤ 6 months local BioPass Trial involving ICA officers & SIA Crew

### ➤ 15 Dec 05 – 15 April 06

➤ Participated in the 3 months Int'l Live Test with US, New Zealand & Australia



# Singapore Biometric Passport

## ✱ BioPass Project Milestone

### ➤ 31 March 2006

- Deputy PM and Minister of Home Affairs, Mr Wong Kan Seng, unveiled the BioPass Design

### ➤ 29 April 2006

- Launch of BioPass to a selected group of citizens

### ➤ 15 Aug 2006

- Public Launch of BioPass



# Singapore Biometric Passport

## ☀ Local Trial ( Aug 2005 – Feb 06)

- 6 months local trial involving ICA officers
- Over 1600 Trial BioPass was issued to ICA officers
- About 2000 SIA Crew members were also issued with Trial BioPass
- Standalone ePassport readers and automated gate was deployed to test the readability of the BioPass
- Results gathered from the Trial were used to track the performance of the reliability and interoperability of the BioPass



# Singapore Biometric Passport

## ☀ International Live Test (ILT) (15 Jan 06 – 15 Apr 06)

- Singapore participated in a 3 months ILT together with the US, New Zealand and Australia
- SIA Crew members issued with the trial BioPass were involved in the ILT
- The Trial BioPass were successfully read at the readers deployed at San Francisco Airport, US (SFO), Sydney Airport, Australia (SYD) and Changi Airport, Singapore.
- Results & Experience gathered from the ILT was helpful in the planning & preparation of the public launch of BioPass



# Singapore Biometric Passport

## ☀ Application

✓ No change to existing application modes

☀ In Person – Over the Counter  
(SGD\$80)

☀ By Mail – via Post or Deposit Box  
(SGD\$70)

☀ Internet – APPLES e-Service  
(SGD\$70)

✓ Capturing of Fingerprints



# Singapore Biometric Passport

## ☀ Collection

- ✓ Need only to come to ICA once
- ✓ For application received via post & Internet
  - ☀ Fingerprint verification/capturing will be carried out during passport collection
- ✓ Verification of identity by fingerprint matching with national database
- ✓ Convenient without compromising security





# Singapore Biometric Passport

## ✿ Lesson Learnt & Experience

- Involvement in the ICAO-NTWG meetings and interoperability tests to keep abreast of the latest development in the e-passport arena
- Local trials with our officers allowed for real-life testing
- Participation in Overseas Trials (ILT) enabled us to confirm the interoperability of the passports



# Singapore Biometric Passport

## ☀ Lesson Learnt & Experience

- Internal Staff Training & Preparation is important
- Involve familiarisation of officers with new work processes, particularly in the enrollment and registration
- Include training officers at the checkpoints on the reading and verification of BioPass

# Singapore Biometric Passport



# Thank You