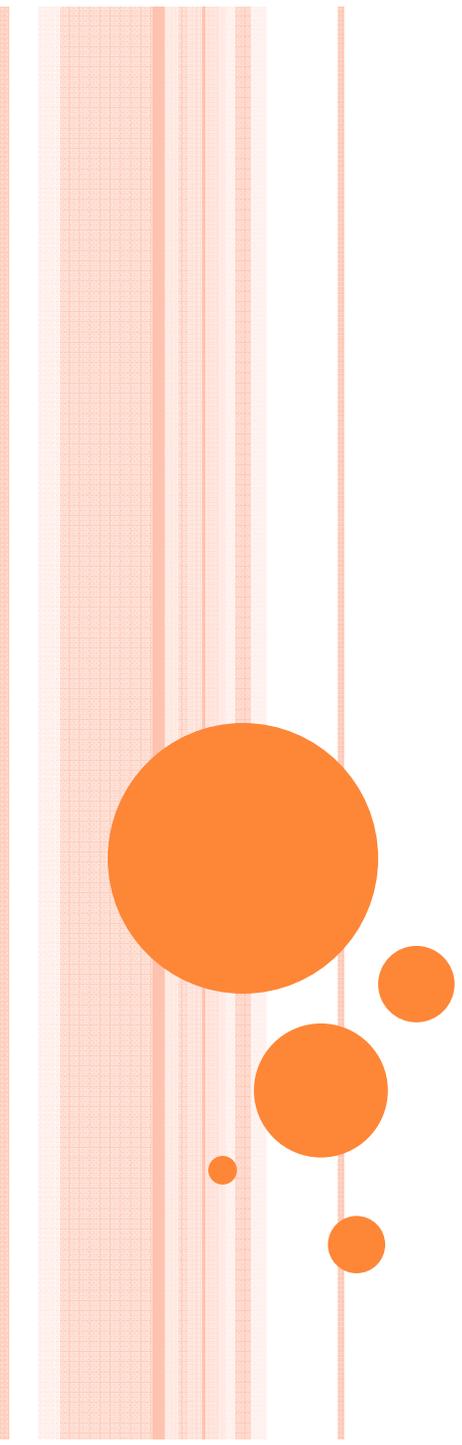


TENTH SYMPOSIUM AND EXHIBITION ON MACHINE READABLE TRAVEL DOCUMENTS  
(MRTDs) AND BORDER SECURITY  
OCTOBER 7-9, 2014

***Border Controls in Hong Kong:  
Challenges Solved and  
Lessons Learned***

Mr. Eric K K CHAN, IDSM  
Director of Immigration  
Hong Kong Special Administrative Region



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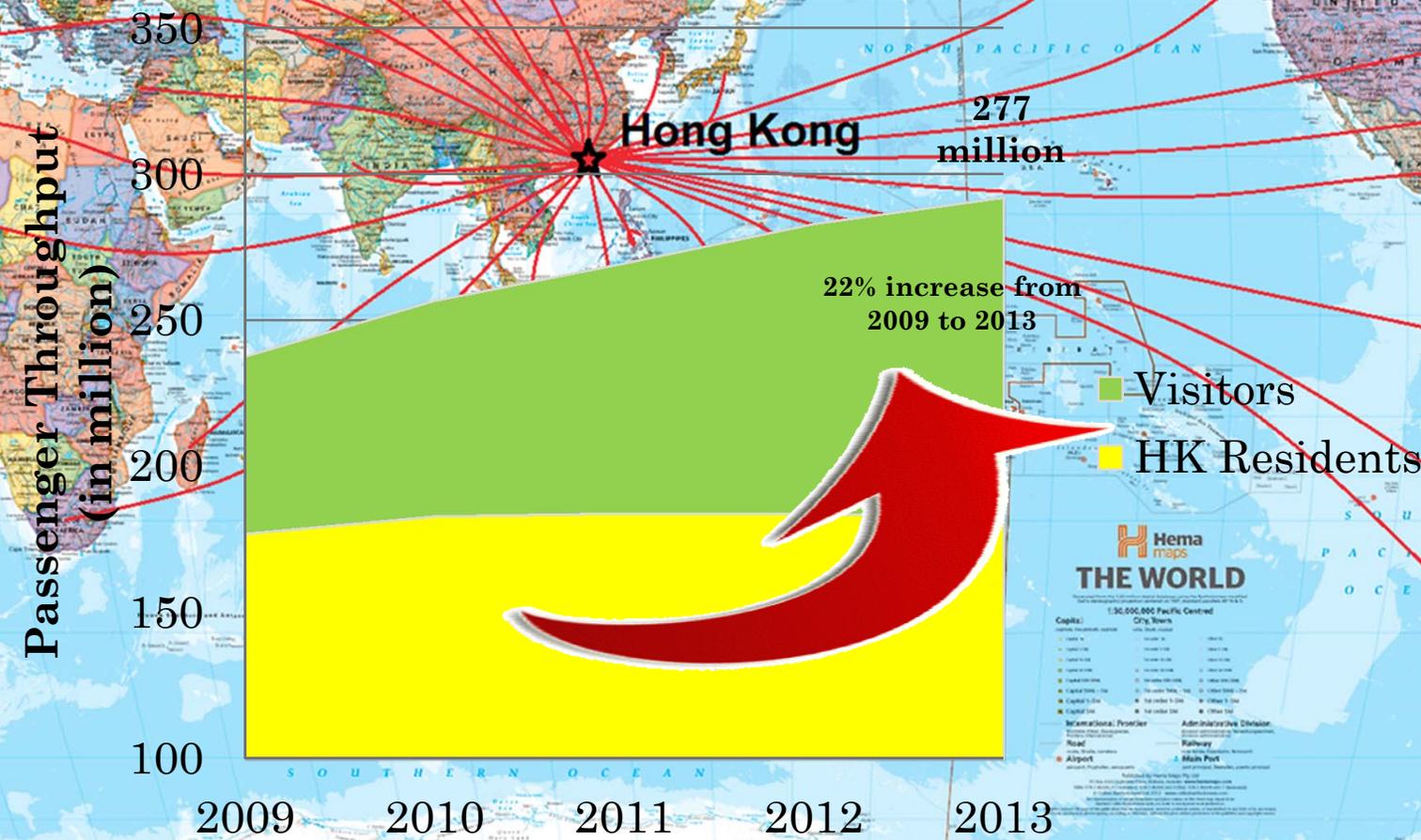
# CONTENT

- ◆ Introduction
- ◆ Facilitation
  - Streamlining of Counter Clearance Procedures
  - Automated Clearance Service
  - Mobile Application
- ◆ Security
  - Investigation into Forged Documents
- ◆ Challenges Arising from Automated Clearance Service
- ◆ Roadmap of Border Control

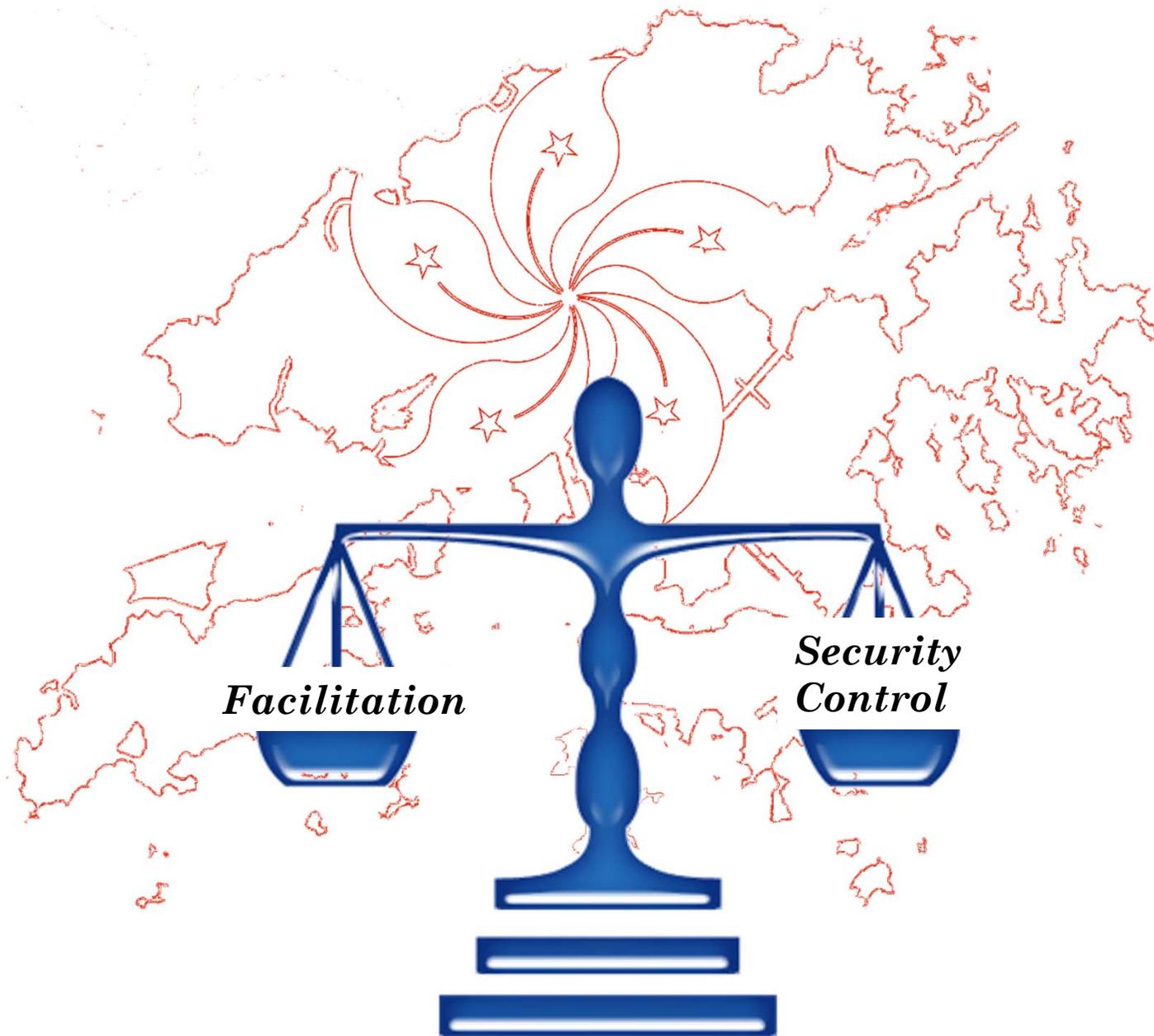


# INTRODUCTION

## Passenger Throughput of HKSAR



Hema maps THE WORLD





## *STREAMLINING OF COUNTER CLEARANCE PROCEDURES*

- ◆ Non-stamping immigration clearance service
  - Visitors
  - Non-permanent Residents





## *AUTOMATED CLEARANCE SERVICE*

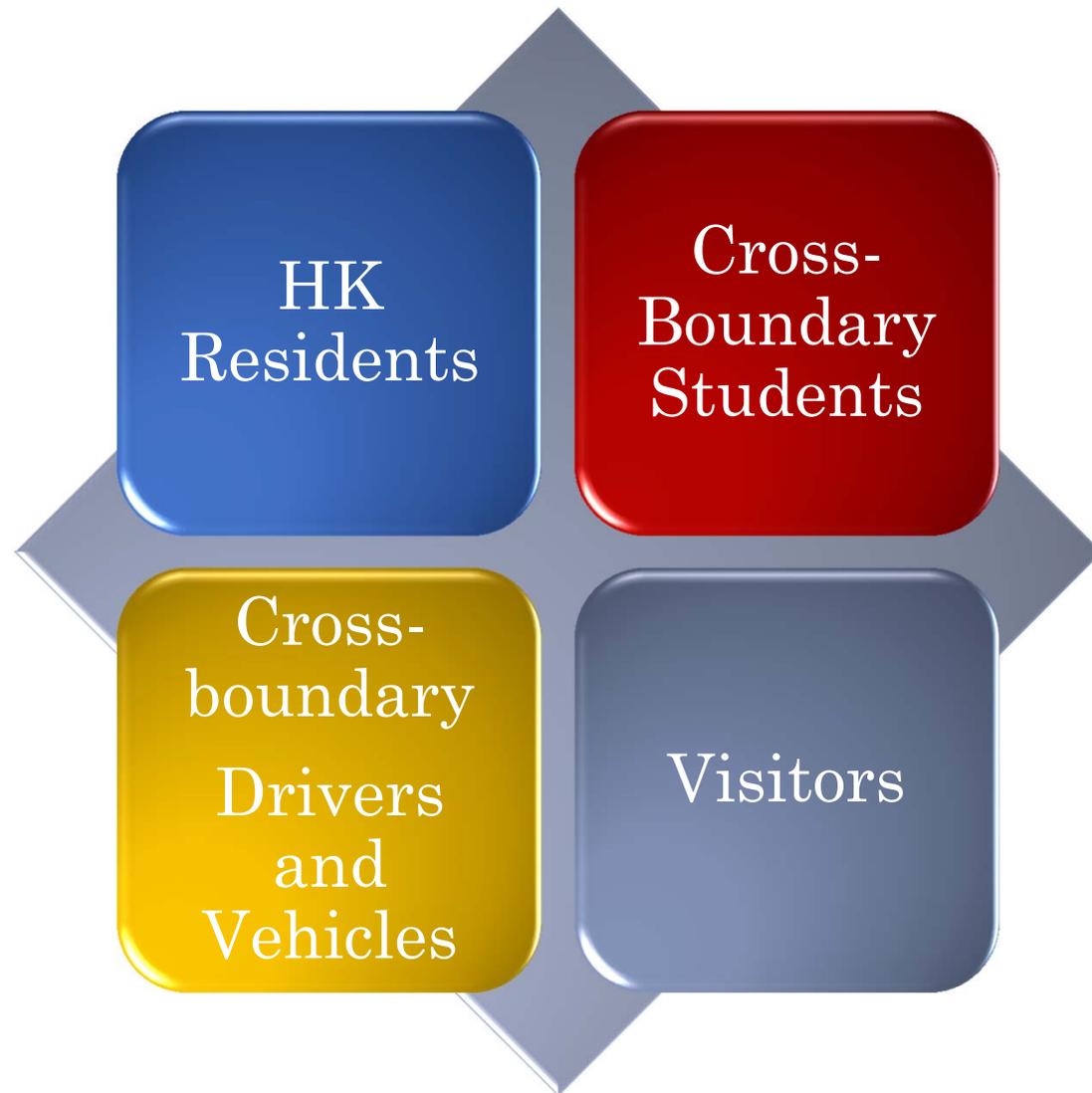
- ◆ e-Gate launched in 2004 for HK Residents



- ◆ Spatial Efficiency
- ◆ Manpower Efficiency
- ◆ Processing Speed and Capacity
- ◆ Immigration Control



# E-GATE SYSTEM





# CROSS-BOUNDARY STUDENTS

- ◆ Residents attending schools in Hong Kong
- ◆ Around 20,000





# CROSS-BOUNDARY STUDENTS

## On-board Clearance

### Dedicated e-Gates



### Simplified Clearance Procedure



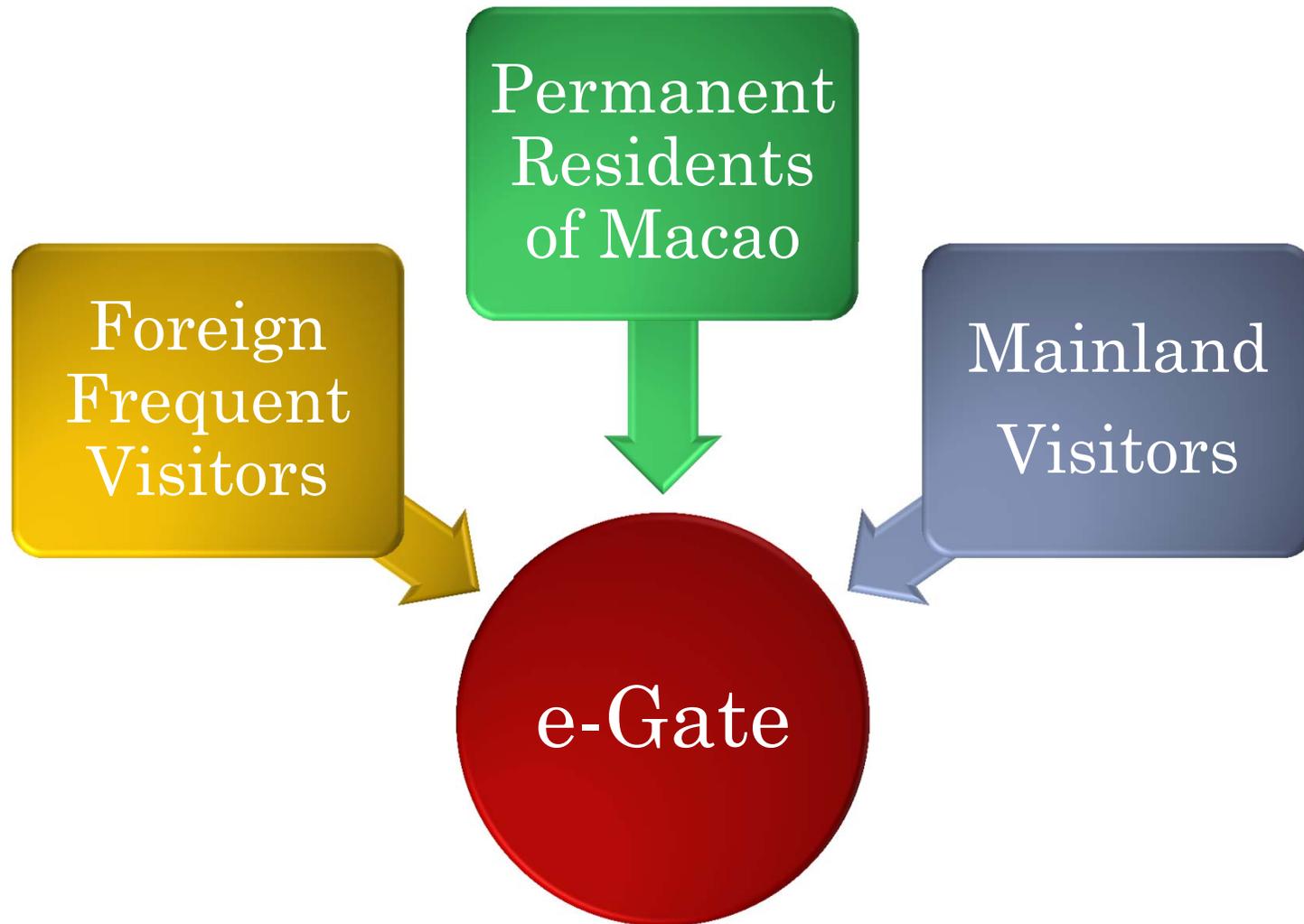
# E-GATES FOR CROSS-BOUNDARY DRIVERS AND VEHICLES

- ◆ License Plate Recognition Technology
- ◆ Height Detection Technology





## E-GATES FOR VISITORS





## E-GATES FOR VISITORS

- ◆ Mainland visitors holding Electronic Exit and Entry Permit (e-EEP)
- ◆ Simplified enrolment and activation process
- ◆ Shorten the clearance time substantially





# IMMIGRATION CONTROL AT E-GATES

## Upon enrolment:

- ◆ Face-to-Face screening of documents and identity;
- ◆ Record checks

## Upon clearance:

- ◆ Monitoring and alert mechanisms against undesirables;
- ◆ e.g. watchlist, lost and stolen travel document list and doubtful visitor index



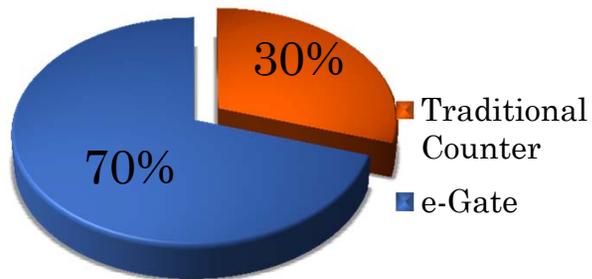
**Spot  
check !**



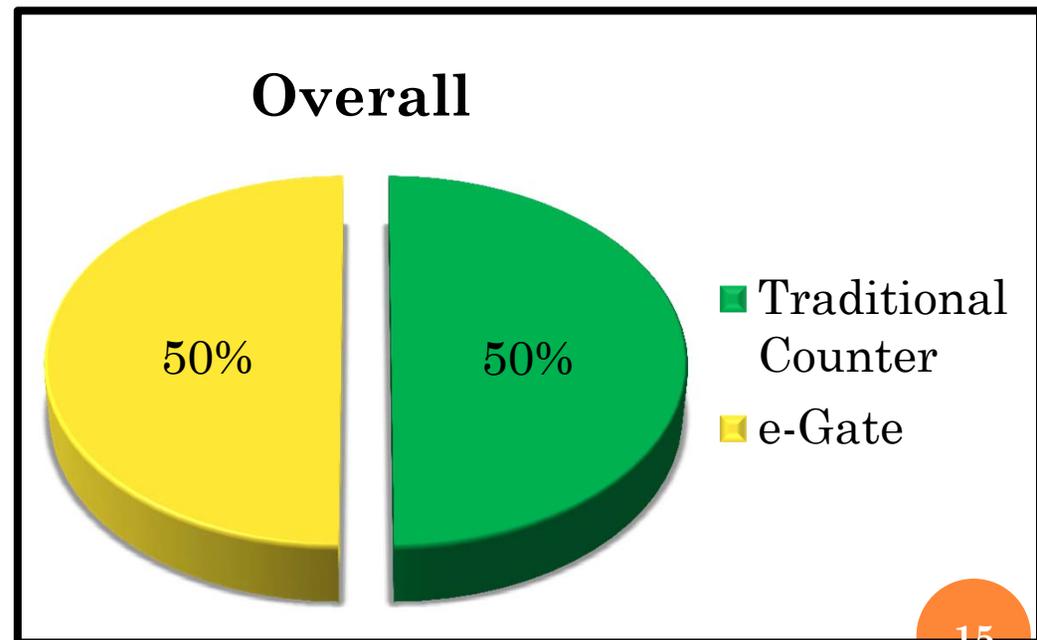
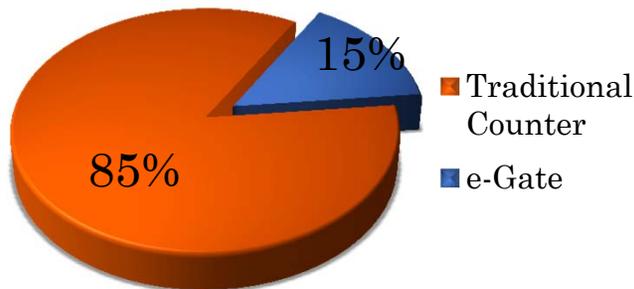
# BENEFITS OF AUTOMATED BORDER CONTROL

- ◆ Total passenger throughput in 2013: **277 million**
- ◆ 425 e-Gates for passengers and 80 for vehicles

**HK Residents: 169 million**



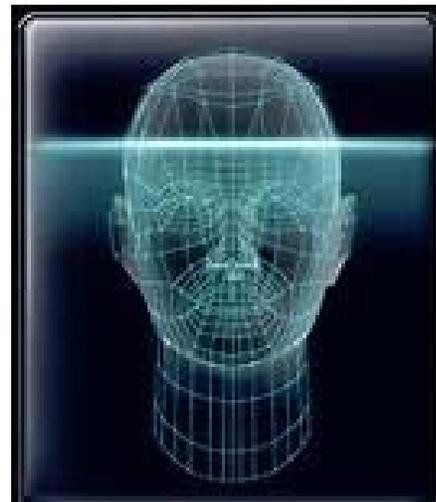
**Visitors: 108 million**





## FURTHER EXTENSION OF E-GATE SERVICE

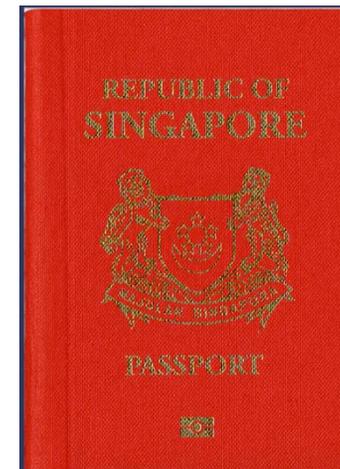
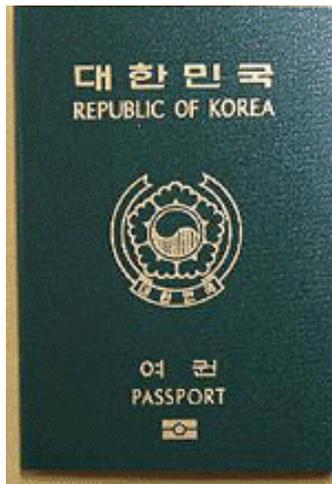
- ◆ ICAO-compliant electronic passport holders
- ◆ Advanced facial recognition technology upon departure





## MUTUAL USE OF E-GATE SERVICE

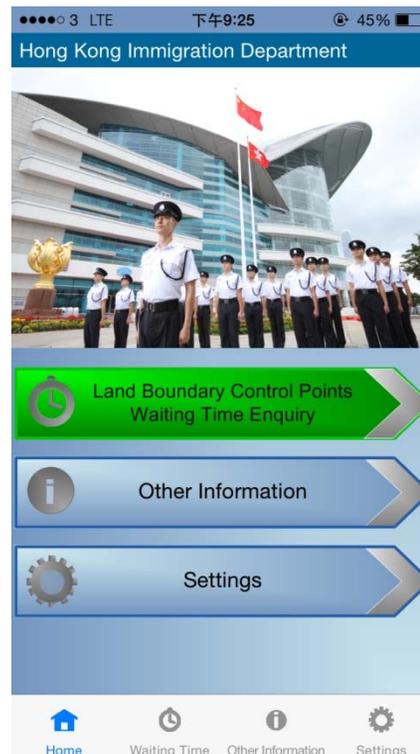
- ◆ The Republic of Korea
- ◆ Germany
- ◆ Singapore
- ◆ More mutual agreements with other countries to come soon





# MOBILE APPLICATION

- ◆ Access via smart-phones or mobile electronic devices
- ◆ Real-time estimated waiting time at major land boundary control points





## *INVESTIGATIONS INTO FORGED DOCUMENTS*

- ◆ Prevention and detection of forged travel documents for illegal migration, crimes or terrorism
- ◆ Intelligence-led operation strategy with other outside law enforcement agencies
- ◆ Intelligence-based watchlist mechanism
- ◆ Sharing data (e.g. counter fraud measures of HK travel documents) with counterparts
- ◆ Keeping out undesirables and criminals





# CHALLENGES ARISING FROM AUTOMATED CLEARANCE SERVICE

1. Fingerprint capture performance
2. Anti-Spoofing performance
3. Physical and environmental constraint



## 1) *FINGERPRINT CAPTURE PERFORMANCE*

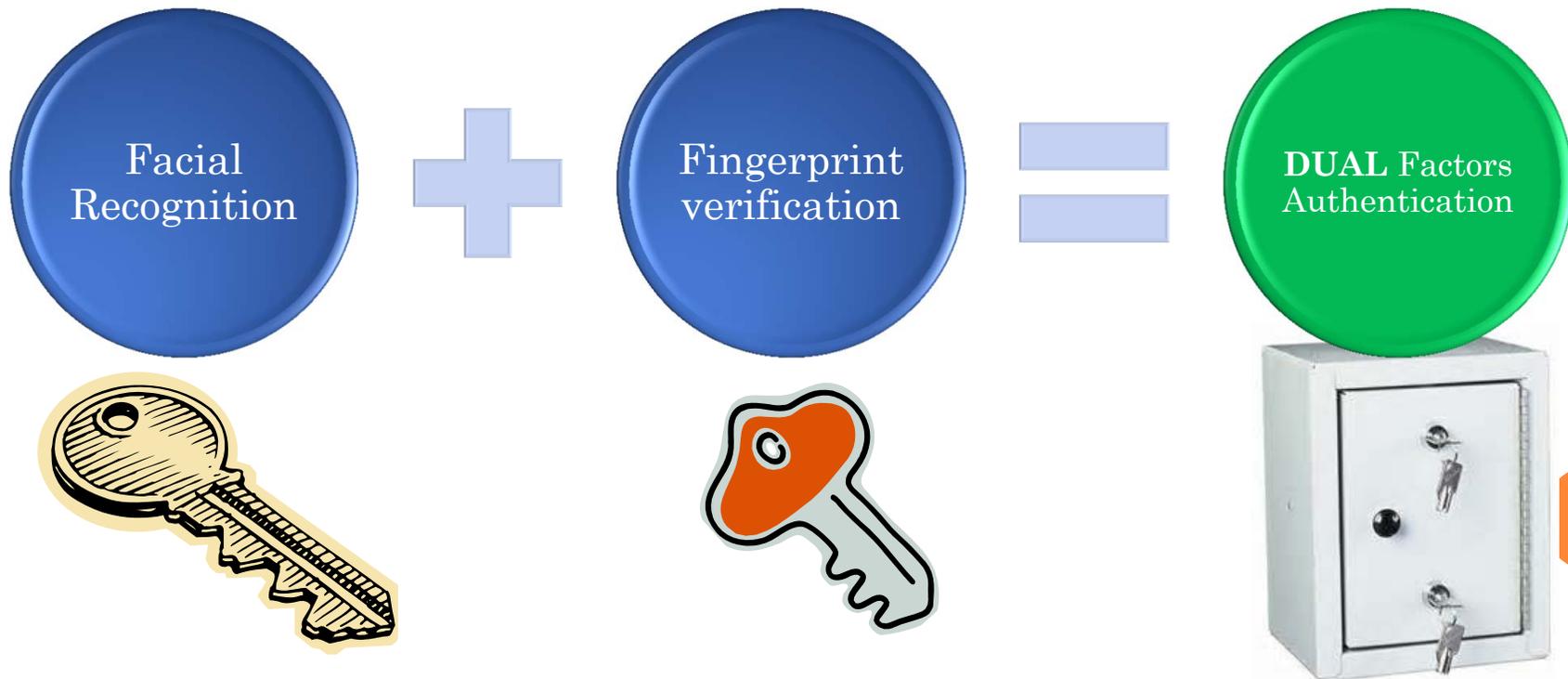
- ◆ Scanning performance affected by wet and dry finger of passengers
- ◆ Measures:
  - Placing wet sponge inside e-Gates
  - Frequent cleaning of scanners
  - Gate-keepers to offer assistance





## 2) ANTI-SPOOFING PERFORMANCE

- ◆ Affected by dust and humidity
- ◆ Measures:
  - Sourcing new spoofing technologies in the market
  - Introducing Dual factors authentication





### 3) *PHYSICAL AND ENVIRONMENTAL CONSTRAINT*

- ◆ Difficult to expand existing infrastructure
- ◆ Balancing between the provision of e-Gates and tradition counters to allow suitable flexibility





# ROADMAP OF OUR BORDER CONTROL

- ◆ Continuous adoption of information and communication technologies
- ◆ Increase e-Gates from **425** to about **600** by 2016



# ROADMAP OF OUR BORDER CONTROL

- ◆ Promoting bi-lateral and multi-lateral use of e-Gates
- ◆ Harmonisation and standardisation of ABC system globally
- ◆ Continuous support and participation in the ICAO Public Key Directory



THANK YOU!