出國報告：(出國類別：會議)

參加第十七屆 ACI 亞太區航空保安委員會議

出國報告書

服務機關：桃園國際機場股份有限公司
派赴國家：日本-東京
出國期間：104 年 10 月 04 日至 104 年 10 月 07 日
報告日期：104 年 12 月 25 日

提要表

計畫編號				
計畫名稱				
報告名稱	ACI 亞太區保安會議報告書			
出國人員	姓名	服務單位	職稱	職等
	彭明榮	桃園國際機場股份有限公司	課長	營運職 第 8 職等
	陳彥任	桃園國際機場股份有限公司	資深業務員	專業職 第 6 職等
	馮義東	桃園國際機場股份有限公司	資深事務員	專業職 第 5 職等
出國類別	會議			
出國期間	民國 104 年 10 月 04 日至 10 月 07 日			
報告日期	民國 104 年 12 月 25 日			
關鍵詞	ACI RASC 保安			
報告書頁數	25			
報告內容摘要	本次參與 Airports Council International(ACI) Regional Aviation Security Committee（RASC)亞太區域保安會議會議，主要在於聽取各國機場現況發展簡報，及協同 ACI 各委員研討國際情勢，關注目前的保安議題。 隨著時代演變科技進步日趨漸益，促使機場硬體不斷的提升。參訪日本成田機場的過程中也了解到，智慧安全機場的概念落實，關於保安管理人員的知識與專業更是應與時俱進，機場公司營運安全處為本次出國負責與會之單位，藉由研討帶回最新保安資訊，提供本公司提升機場服務及航空保安品質。			

目次

壹、目的

參加國際機場協會(ACI，Airports Council International)亞太區域航空保安會議(RASC，Regional Aviation Security Committee)，主要促進本公司國際能見度外，更藉由國際會議加強國際同業交流，並蒐集最新機場發展資訊及未來推行的智慧化安全機場、 Airport Excellence in Safety (APEX)。各委員國於每次會議中都積極的為航空保安法令與各限制規定作意見交換，乃因航空保安議題並非侷限當地國家法令，更牽涉了轉機地、起飛地、降落地之國家保安規定，透過協會的密切交流方能議訂符合效率且安全的規範。本公司亦積極提升保安品質，順應潮流邁向國際標竿機場。

貳、行程規劃

會議時間及與會人員

(一) 會議時間

日期	行程概述
104.10.04	搭機前往日本(會議地點東京-凱悅酒店)
104.10.05	出席 ACI 亞太區保安會議、下午參訪成田機場
104.10.06	出席 ACI 亞太區保安會議
104.10.07	離開東京搭機回台灣

(二) 與會人員名單

姓名	服務單位	職稱
彭明榮	營運安全處	課長
陳彥任	營運安全處	資深業務員
馮義東	營運安全處	資深事務員

會議議程

5 October 2015 (Monday)

0900-1200 RASC Meeting Day 1

1	Welcome and Opening Remarks
2	Membership and Attendance
3	Approval of Minutes of 16th Regional Committee Meeting and Matters Arising
4	Approval of Agenda of 17th Regional Committee Meeting
5	Update on ACI World Security Standing Committee
6	Members' Update (Members are invited to give a short 4-5 minute briefing, with or without powerpoint, on development at their airports.)

1200-1300 Lunch – hosted by Narita Airport

1300-1700 (TBC) Airport tour at Narita Airport

6 October 2015 (Tuesday)

0900 - 1700 RASC Meeting Day 2

6	Members' Update (continued)
7	Engagement with Regulators • OTS Maritime and Aviation Security Awareness Workshop, Bangkok, Aug 2015 • 3rd ICAO Regional Aviation Security Coordination Forum (RASCF/3), Manila, October 2015
8	2015 - 2016 Workplan *8.1 APEX in Security* *8.2 Capacity Building* *8.3 Smart Security* *8.4 Cargo Security*
	Lunch
9	Calendar of Aviation Security Events / Meetings
10	Presentation by Suppliers a. Contactless Biometrics by Hitachi b. SmithsHeimann c. NEC
11	Any other Business
12	Meeting Wrap Up / Closing by Chairman

叁、ACI-RASC 亞太區航空保安會議

ACI 乃全球機場交流貿易組織協會，透過機場間的相互合作，為所有機場獲取共同利益，並協同各國政府和國際組織議定開發標準、政策及建議，且提供資訊、行業知識、 諮詢和援助，促進專業的機場管理與運作。 以 ACI 之功能和資源，提升世界各地航空業服務水準。2014 年 ACI 亞太地區機場已服務 24 億 8000 萬旅運人次及 4630 萬噸貨物。

ACI Asia-Pacific 亞太區的國際機場協會，為 ACI 五大區域 ACI Africa (Casablanca, Morocco) 、ACI Asia-Pacific (Hong Kong, China)、ACI Europe (Brussels, Belgium) 、ACI Latin America-Caribbean (Panama City, Panama)、 ACI North America (Washington, DC, USA) 中之一區。亞太區目前有 99 位代表委員、47 個參與國，共有 580 機場座落於亞太、中東等地區。本公司為 ACI 亞太區委員之一，係以委員身份出席參加該區域保安會議，此次議會於 2015 年 10 月 5 日至 6 日於日本東京凱悅酒店接續召開。茲簡介委員會並綜整會議重要內容如下：

一、 委員會議簡介

1. 區域航空保安委員會(RASC；Regional Aviation Security Committee，以下簡稱區域保安會)，每年亦召集兩次會議，本次會議為第 17 次會議。

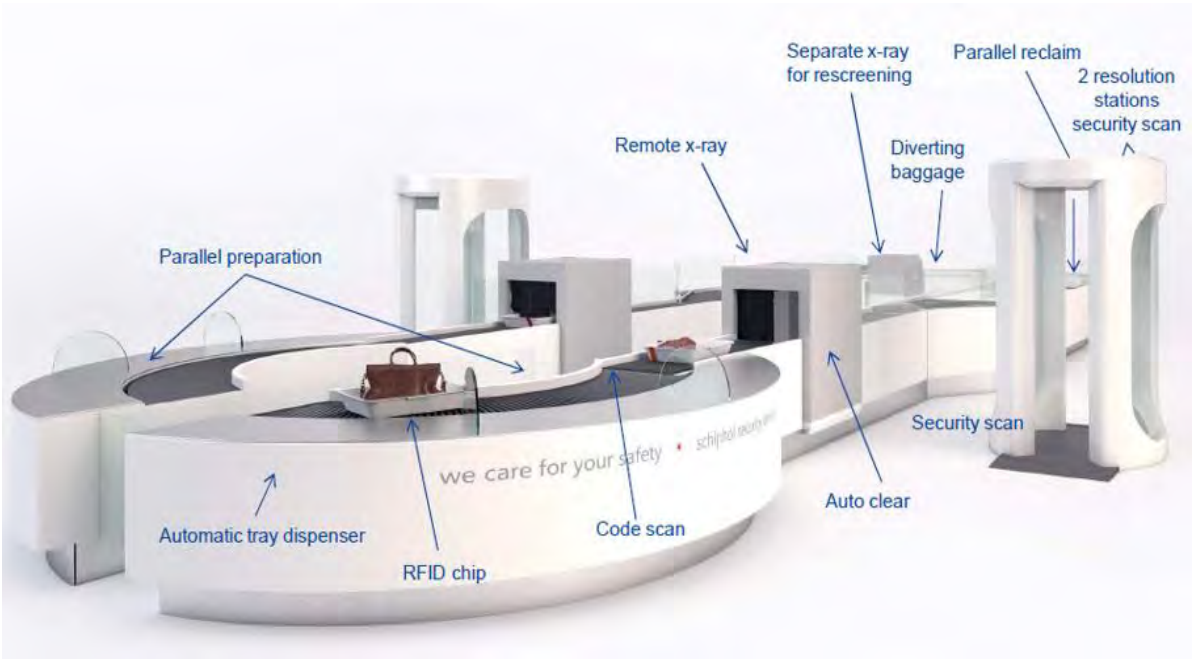
2. 區域保安會(RSAC)需派代表至世界保安會(WSSC)開會更新各該區域保安辦理情形，會後並回各區域轉達世界保安會的最新決議。

二、 本次區域保安會議主要內容：

1. 更新會員國機場最新概況(附件)
2. 推行智慧化安全：

主要係為提高航空保安相關環境與工作效率，於旅客行經之路線，提升改善安全檢查，自進入機場路緣到空側出境，於安檢措施上旅客可能面臨的不便予以最小化，並依據機場所受威脅風險程度，將保安資源及所有設施最適化。也就是縮小安檢設備於動線上之影響，以安全風險控管概念設計規劃機場，並以旅客體驗為主要參考依據。

2013 年日 12 月 12 (日內瓦/蒙特利爾)國際機場協會 (ACI) 和國際航空運輸協會 (IATA) 已簽署備忘錄 (MoU)，聯手發展智慧安全落實於各機場，善用整合的資源及專業知識進行機場優化，Smart Security 亦透過不斷的測試與比較找到最適環境。



如附圖安檢查驗設備，透過現場研討和觀察，找出適當之設置點，將智慧安全融入其中，內容包含機場的具體監管、 業務及操作要求的智慧安全概念。

3. ACI 所推行的機場保安提昇協助計畫(APEX)：

(1) 方案援助

ACI 成員提高機場安全及該機場之法規遵從性，並竭力符合國際民航組織規範之水準。透過現場進行安全審查，ACI 安全審查小組將查明安全漏洞，以及說明如何來解決這些漏洞之行動 。ACI 將協助整個實施計畫，提供支援培訓和專門知識。顧問團隊有國際民航組織及相關保安經驗機場經營經驗之專業人士組成。

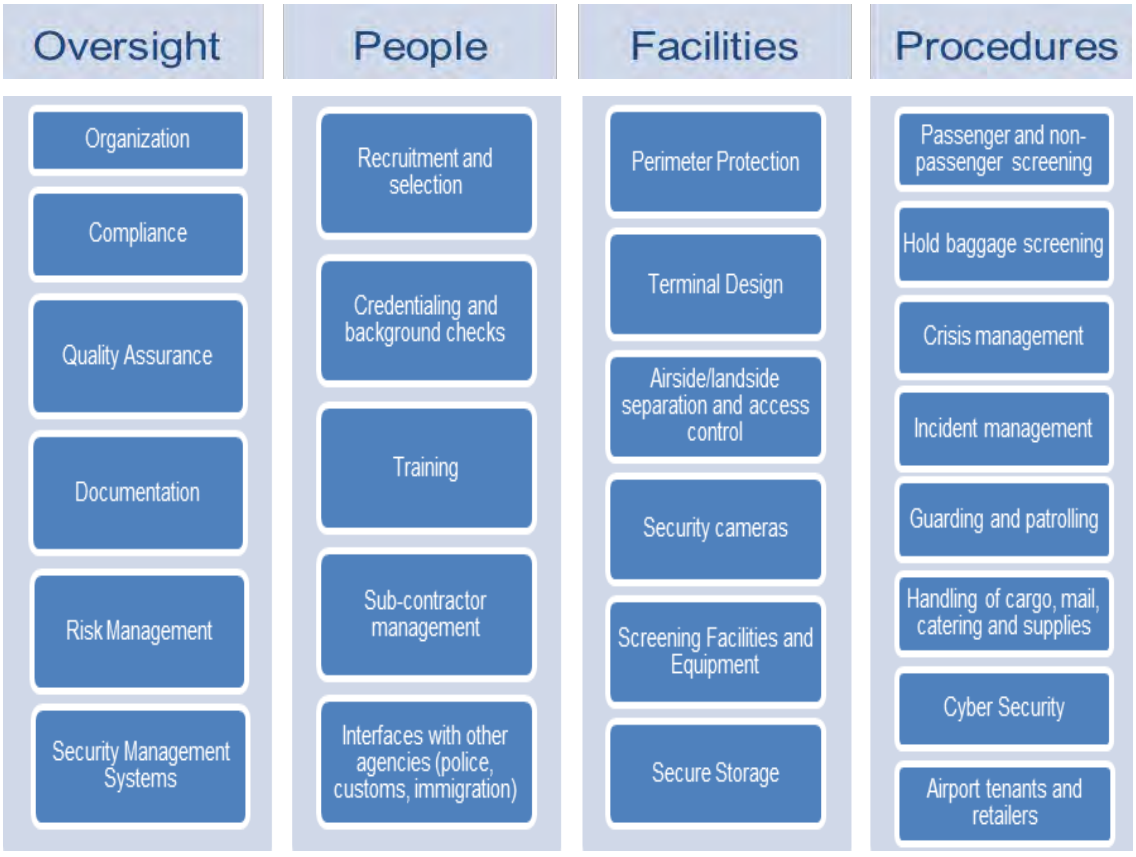
(1) APEX 願景

努力提高機場安全，實施安全管理系統，協助機場建立指標和工具，減少安全事故。 增加遵守適用的標準並促進分享，提升各機場安全。

(2) 安全審查-機制

根據安全的審查機制，ACI 將派遣顧問專家小組到需要協助的機場，在該機場感興趣的安全領域接受專家查訪及評估。

(3) Areas of Focus 計畫項目



合作機場只需提出申請並安排時間，提供顧問團隊宿食即可，APEX 方案不需機場支付額外費用。

APEX 專業團隊分析工作圖

Area of Expertise	Time	Mon Opening Meeting (AM)	Mon (PM)	Tue (AM)	Tue (PM)	Wed (AM)	Wed (PM)	Thu (AM)	Thu (PM)	Fri Closing Meeting (AM) Report Writing (PM)
Organization	0.5 days									
Compliance										
Risk Management										
Security policy	0.5 days									
Security culture										
Quality management										
Cooperation with other stakeholders										
Standard Operating Procedures	1 day									
Recruitment and training	0.5 days									
Background checks										
Incident management	0.5 days									
Crisis management										
Cyber security (High level, policy)	0.5 days									
Terminal design	0.5 days									
Building protection	0.5 days									
Cameras/alarms (internal)										
Traffic flows and parking	0.5 days									
Public areas										
Access control	0.5 days									
Perimeter and fence	0.5 days									
Security cameras and surveillance (external)	0.5 days									
Lighting										
Secure storage	0.5 days									
Passenger Screening (equipment, environment and processes)*	1 day									
Non-passenger screening	0.5 days									
Hold baggage screening	0.5 days									
Cargo Security	0.5 days									
Tenants and retailers	0.5 days									
Vehicle access and searching	0.5 days									

ACI ON-SITE SECURITY REVIEW FORM:
From _____ to _____

AIRPORTS COUNCIL INTERNATIONAL

1. PERIMETER PROTECTION

REF.	ITEM TO OBSERVE/ WHAT ASSESSOR SHOULD ASK	Inspected Y	Inspected N	Notes / Comments
1.1	Is there a well maintained physical fence between all areas of airside and landside?			
1.2	Is the fence of sufficient height to deter scaling? (2.44m or 8ft)			
1.3	Is the fence topped by inclined razor wire or barbed wire?			
1.4	Does the fence have measures to prevent pulling up or burrowing under?			
1.5	Are non-metallic portions of the fence made from suitable materials and of robust construction?			
1.6	Is the fence visible to patrolling guards?			
1.7	Is the fence free from obstructions (lamposts, signposts, equipment)?			
1.8	Is there a patrol road alongside the perimeter fence (clear from obstructions and suitable for vehicular access?)			
1.9	Are vulnerable points (eg. fuel farm, air navigation facility) located airside with additional perimeter protection (fence)?			
1.10	Are gates constructed to the same standard as the fence? Is access control in place?			
1.11	Is there an intrusion detection system (PIDS)?			
1.12	Is CCTV used to monitor the perimeter?			

Oversight | People | Physical Security | Procedures | SeMS

4. April 2015 世界保安會的關注議題

(1) 恐怖攻擊及國家責任

過去恐怖攻擊活動中，襲擊飛行中民用航空飛器的案件頻率相當高，並且造成相當大的損失。由近幾年恐怖攻擊案件中得知，攻擊目標逐漸朝向鐵路運輸系統、公共交通工具、交通運輸紐、民眾聚集之處。所以民用航空器和機場仍是恐怖分子選定的高風險目標。ACI 成員機場有責任關注這些恐怖活動的訊息及動態，並列為最高優先事項於會議中告訴會員哪些地方正處於高風險區。

國際恐怖主義是無特定目標及方向，而國家有保護民眾之責任。國際上各國應密切合作且俱備良好反恐怖情報能力，機場安全之反恐行為與國家政策是息息相關，而安全措施各項資金應由國家負擔。但各國政府將此責任轉由航空業者負擔部份之安全措施並要求業者執行，卻未提供任何資金。並讓機場及航空業者承擔這筆費用，而這些成本在過成中轉嫁了給乘客，這對旅客而言是非常的不公平。國家應負擔相關責任並找到一個更公平的方法來可收回這些成本，提共合理且公平的環境給旅客。

(2) 討論撤銷對運輸的限制液體、 噴霧劑和凝膠 (LAGs)

關於液體凝膠等運輸限制，主要是防止歹徒使用液體炸藥偽裝填充於軟性飲料容器中，待上機後再混合製成爆炸裝置，目前這種威脅攻擊仍然存在，但我們得知歐盟已對內境部分狀況下部影響安全等級為了便利旅客放寬了限制，ACI 也在考慮解除部分限制，若安檢偵測技術可準確探測液體爆炸物，且設置該偵測儀部署於機場，ACI 將重新修訂對液體噴霧劑和凝膠(LAGs)相關作業及規定。

i. 附註參考資料：

歐盟境內轉機的旅客參照下列規定

2014 年 1 月 31 日起，在歐盟境內轉機並符合下列條件者，可攜帶免稅品進入機內。

- 購買的免稅品放置在密封式的塑膠袋內(符合 ICAO 標準的 Security Tamper Evident Bag)並且該產品尚未開封。
- 購買該免稅品的收據證明閉需放入塑膠袋內或提交給安檢人員。

※不只在歐盟境內，預計在其他國家轉機的旅客亦必須符合上述兩項規定。

5. 全球風險評估：

(1)由個人操作的簡易型爆裂裝置－風險提高

(2)乘載裝置高危險貨物－中度風險

(3)機場公共區域等於陸側遭受的攻擊－中度風險

(4)便攜式防空導彈－中度風險偏高

(5)受放射性物質 銫 攻擊－中度風險偏高

(6)網路安全－低度風險

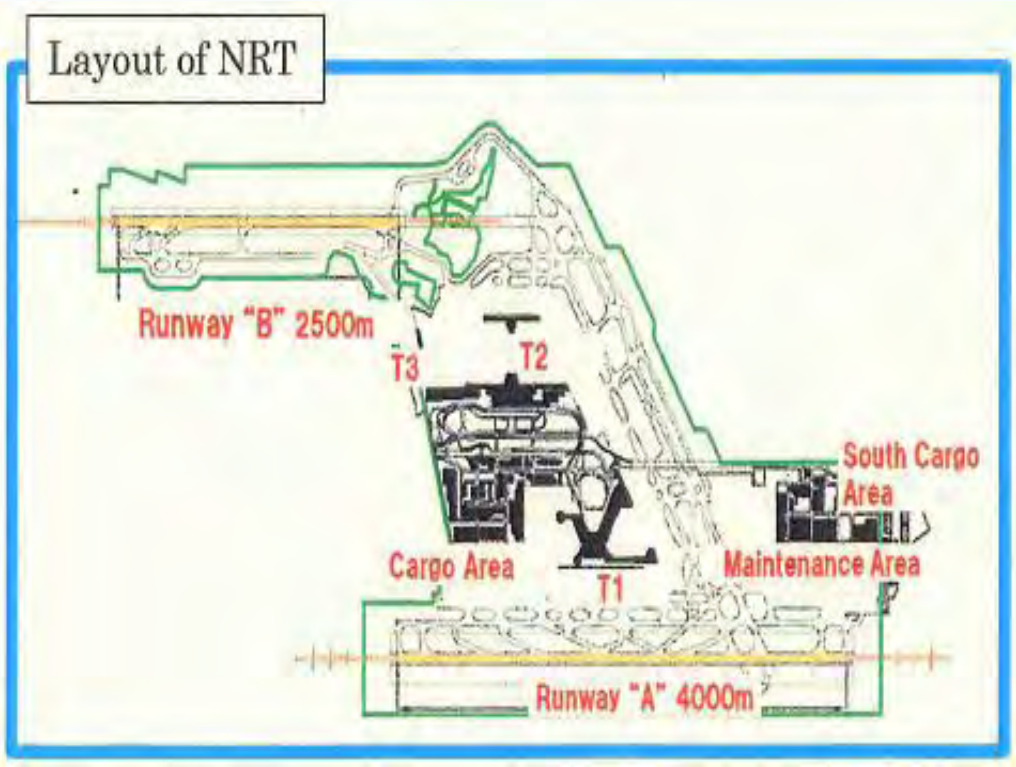
(7)遠端駕駛飛行系統(無人機)－中低度風險但未來可能增加

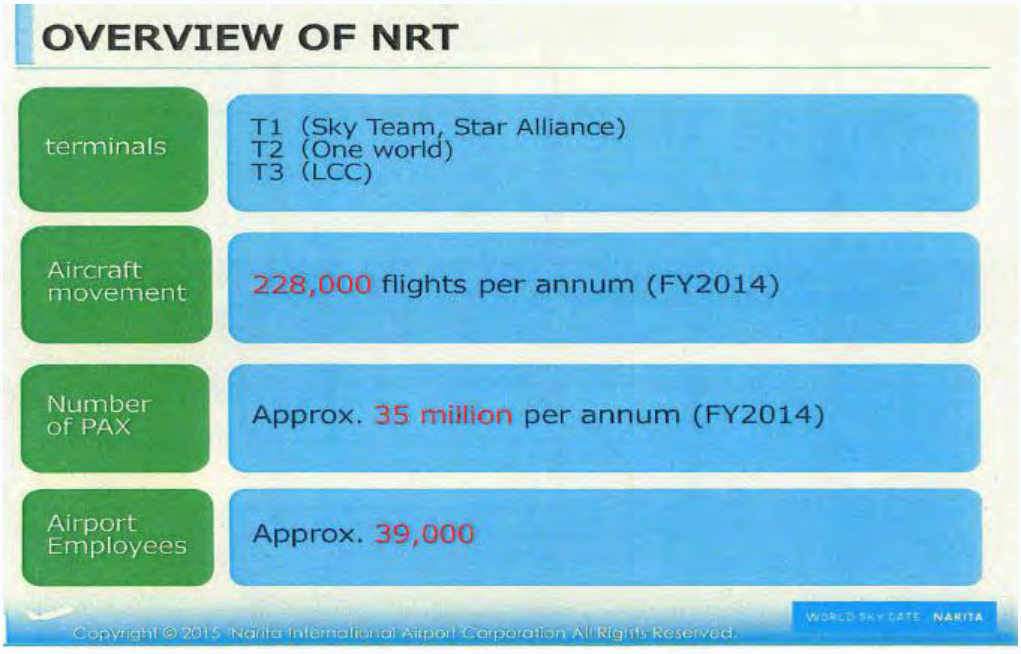
(8)3D 列印物件－低度風險

叁、日本成田國際機場

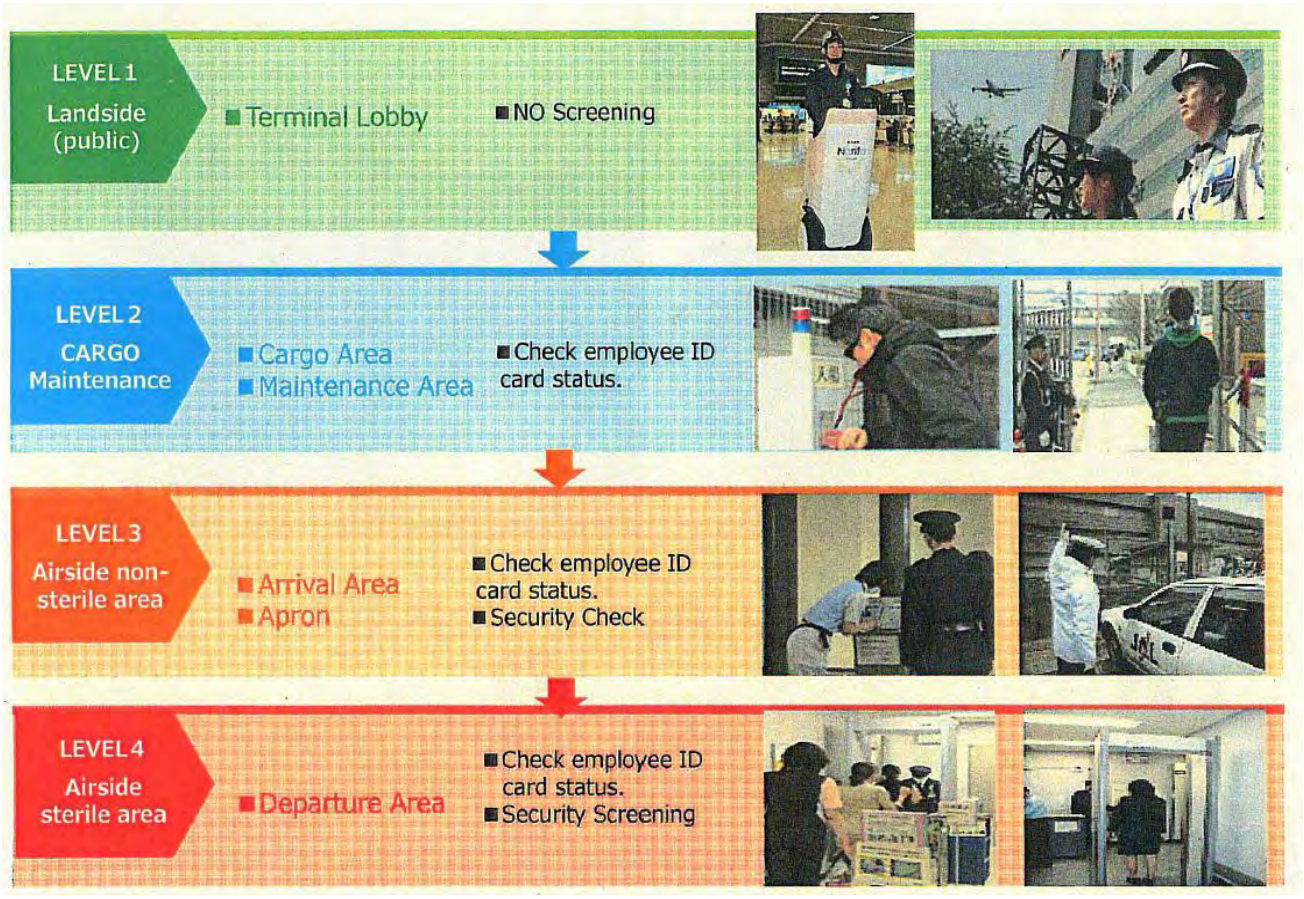
日本成田機場在 1970 年代興建期，當時就是以用地徵收來興建，導致產生三里塚鬥爭造成機場與民眾嚴重的社會對立。因此保安議題對機場而言是相當嚴肅的話題，本次會議著重保安議題討論為主，所以參觀成田機場時間非常短暫，而較特殊的地方是參觀成田機場的安檢線及安全中心，剩餘的時間則介紹機場內動線設計及航廈的保安概念。

成田機場：



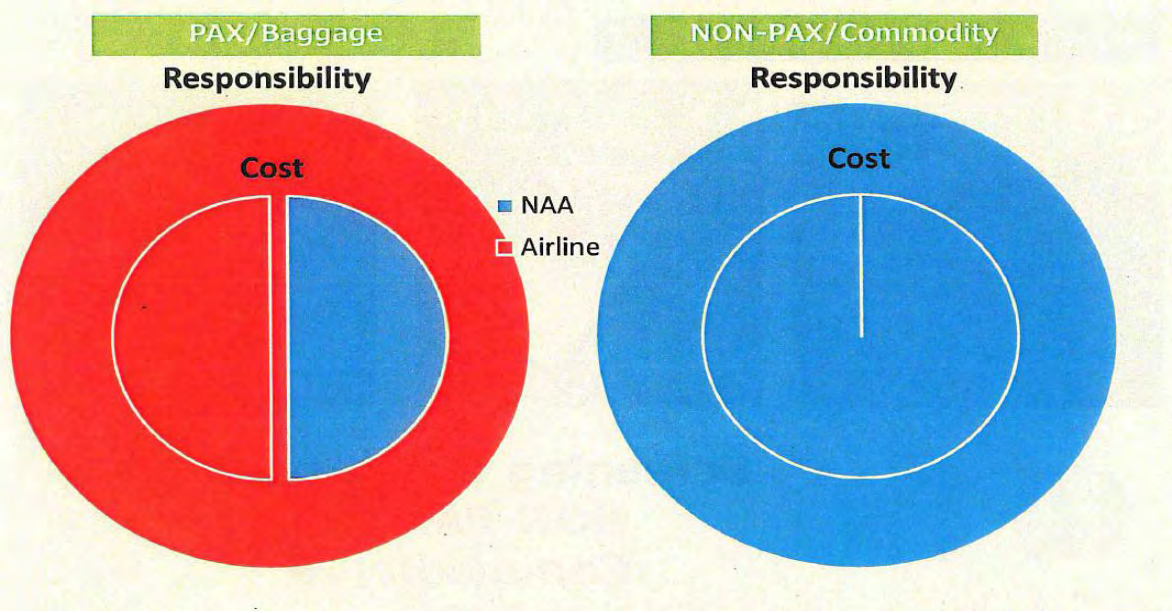


成田機場將機場保安劃分為四個層次等級：

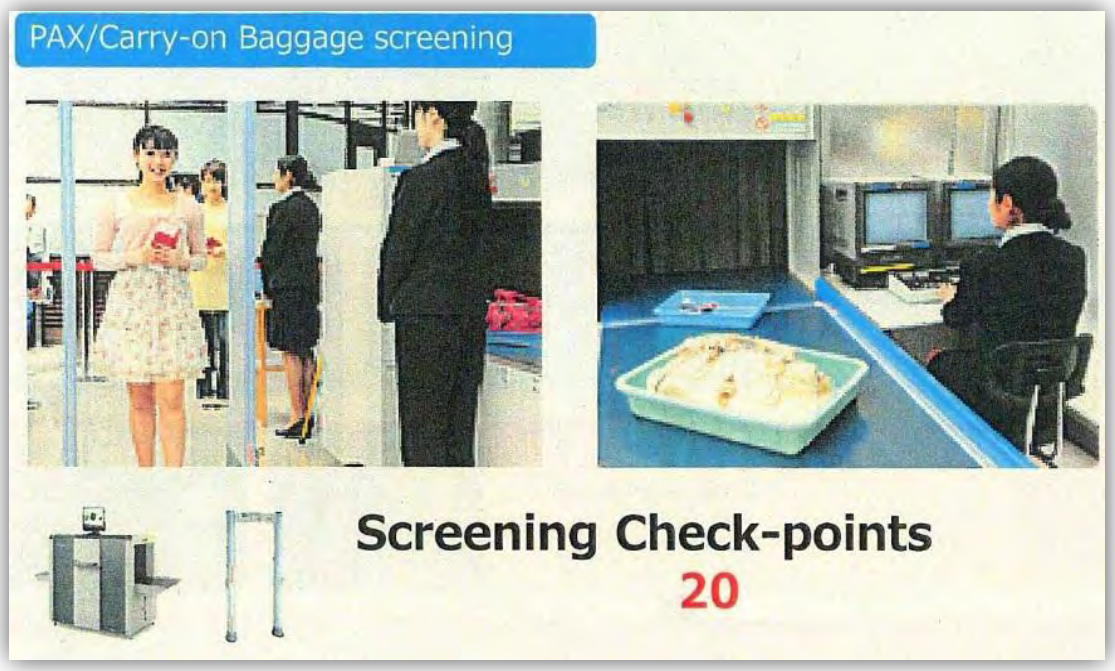


根據不同等級所受安全檢查之程度也不同。

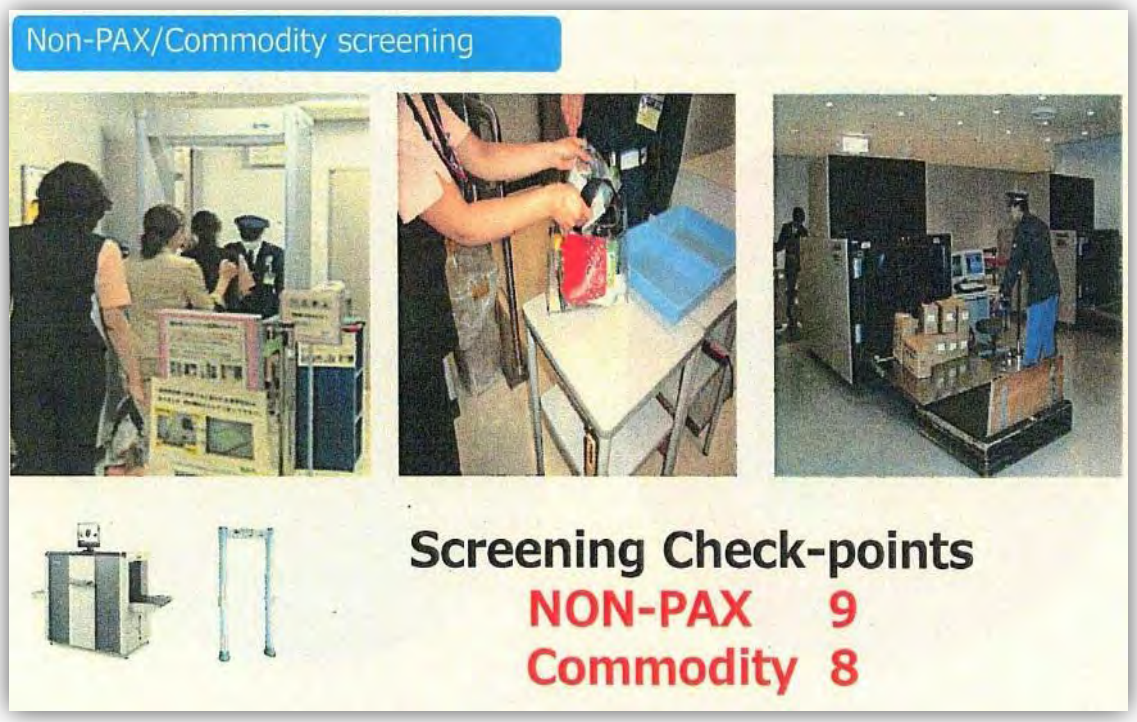
責任成本概念圖



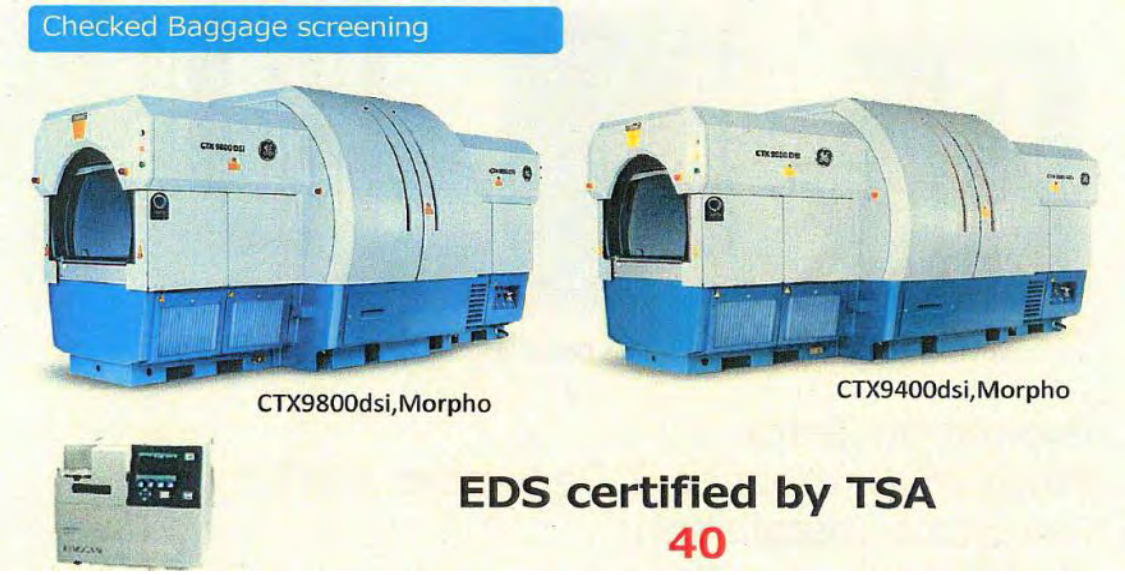
成田機場對於航空保安的責任與成本分配如上圖所示。有關乘客及其行李的保安支出由成田機場公司(NAA)與航空公司各負一半；非乘客的部分則全數由 NAA 負責。



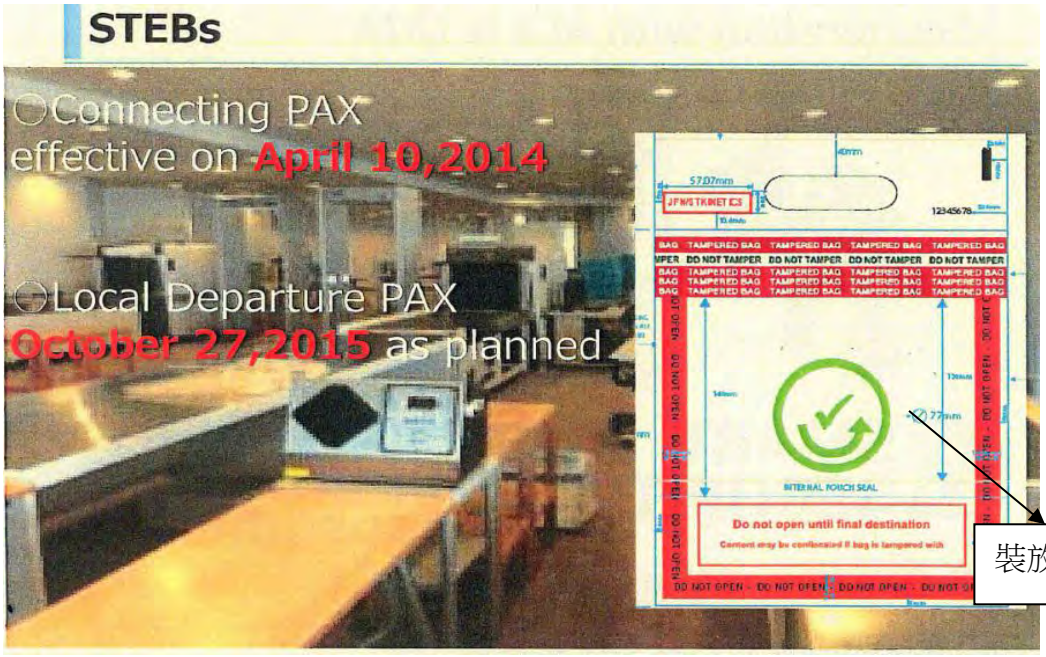
一般旅客及攜帶隨身行李之檢查共有 20 個安檢點



工作人員非旅客之使用有 9 個檢查站
商務人事檢查共有 8 個檢查站

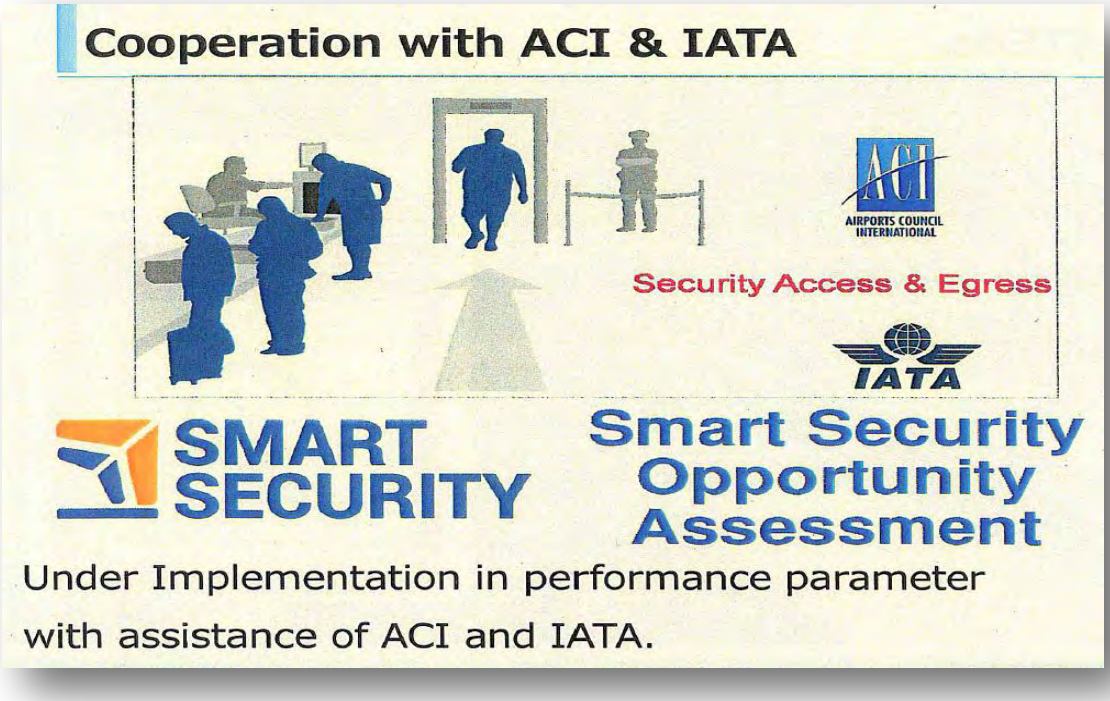


行李爆裂物偵測儀有 40 座(分部於報到櫃檯等區域)



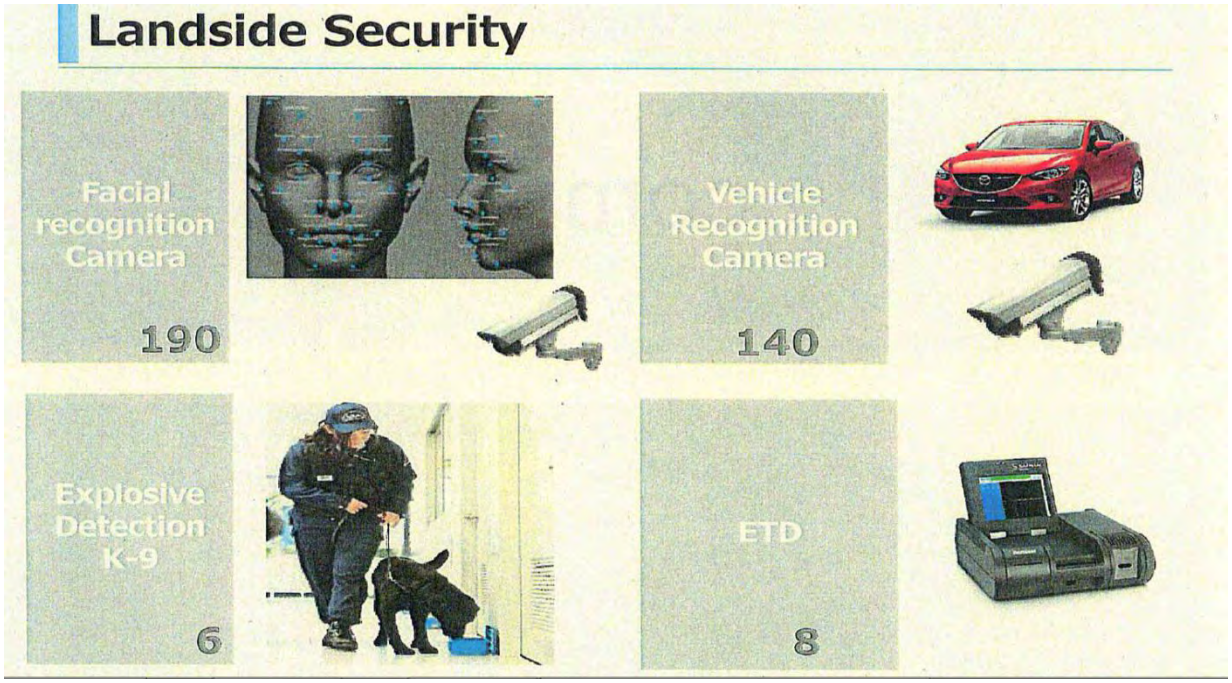
成田機場與 ACI 合作推行智慧安全機場，機場採集中式安檢，安檢線隨機抽驗可疑的旅客，並作全身掃描儀(有 3 種設備 如附圖)提供詳細檢查，透過多次測試及評估會選定適合的掃描儀，預計 2016 將安置並啟用。

3D 全身掃描儀



成田機場推行智慧安全

安檢線設計以直線式行進檢驗若有問題的行李會由紅線再次檢驗
此種設計較為便利對旅客動線行進上也顯得較順暢。



成田機場路側安全佈署：
190 支臉部辨識攝影機
140 支車輛辨識攝影機
6 組隨機檢驗人員加配爆裂物探測犬隨機檢查
8 台便攜式爆裂物偵測儀

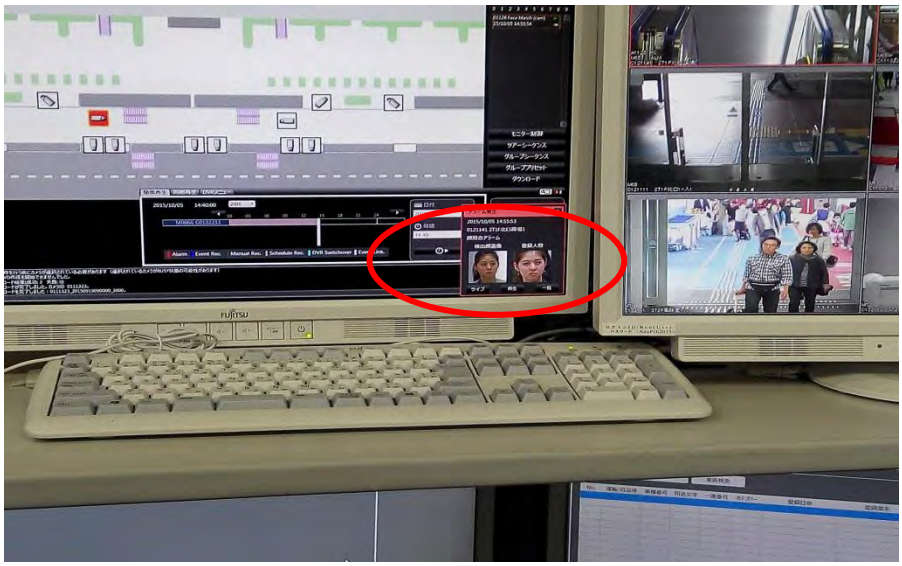
有關安檢線實地現勘照片

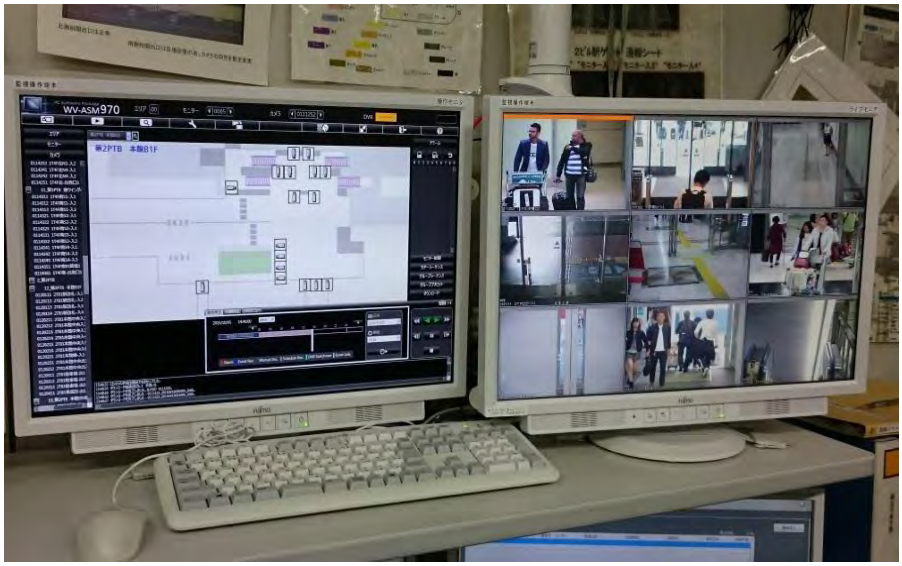
為因應2020年東京奧運，2015年10月日本國土交通省於成田、羽田和關西機場試用以一種名為“毫米波”的全身掃描儀，利用穿透性能較高的“毫米波” 捕捉測定人體或物體放射出的毫米波後，根據波的強弱將對象物體的外形成像。只需在裝置前靜止約2秒，即可測知隱藏在衣服下的可疑物品，可探知乘客藏匿的塑料炸彈及液體等任何危險物。

而成田機場設置掃描儀於第一航廈南翼的保安檢查，目前設定需對乘客進行掃描約需10到20秒左右的時間，電磁波強度約是手機的0.01%至0.1%，檢查數據也會自動刪除。但機場安檢仍是以使用金屬探測器和隨機對乘客進行觸摸身體的檢查為主，全身掃描儀僅為安檢人員對可疑旅客或隨機抽驗。

參訪成田機場安全中心

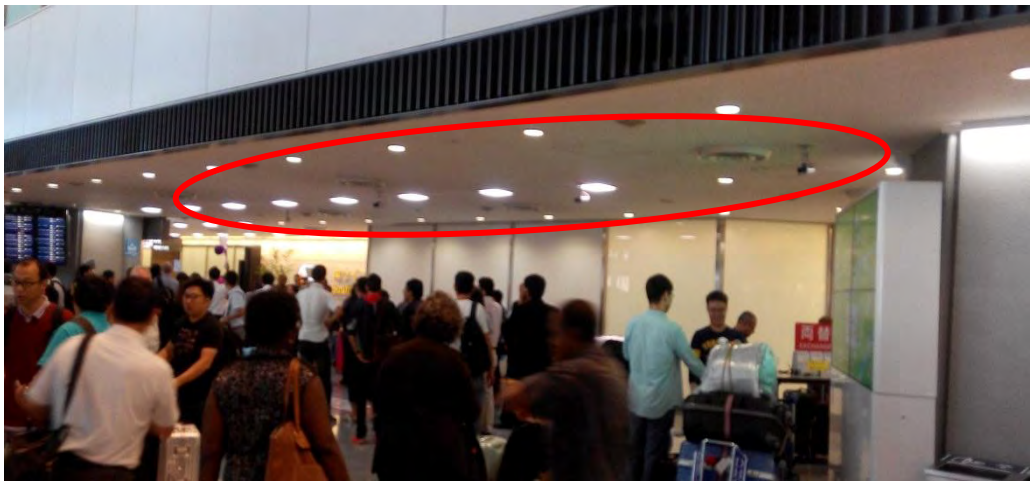
成田機場開放給參訪的安全中心看似規模較小，但人員及設備非常充足，內部約有 20 位執勤人員，每個工作站都有一位操作人員，每位員工對責任分工相當仔細，所以萬一發生事故時，工作定位也較容易分清楚，降低失誤的機率。

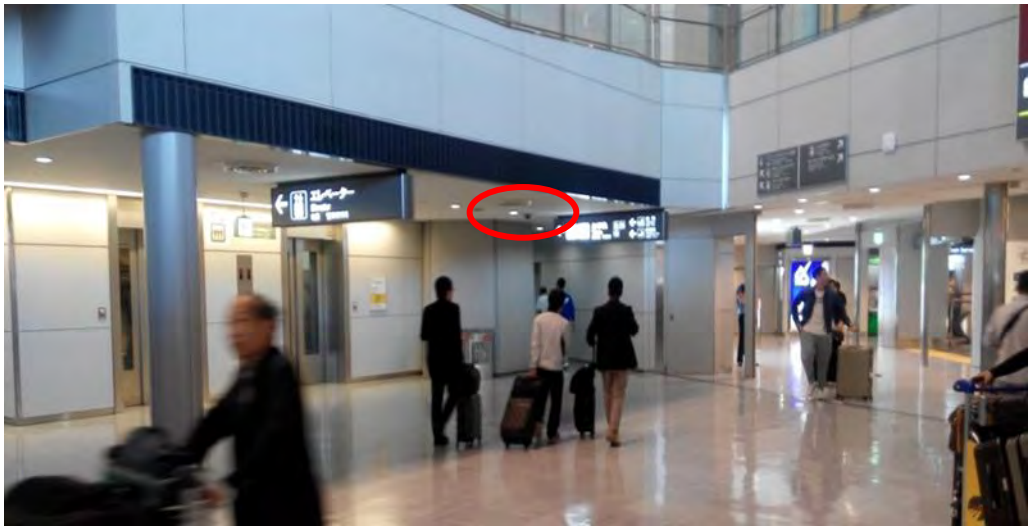




臉部辨識系統 ：建立犯罪人士影像資料庫，並定期更新資料，只要有列管人物出現將立刻告警。

照片中是成田機場入境大廳設影機分佈狀況，由攝影機照攝位置我們得知，幾乎每一重要入口或通道都有架設攝影機，有利機場安全單位掌握進出機場相關人士。





伍、心得建議

一、　於RASC會議中可見,所有會員熱絡的為機場發展方向交換意見，如今桃園機場正面臨許多重大建設工程，除硬體建設外，航廈空間利用與機場內的商業發展，都將受到極大挑戰，藉由參訪其他先進的機場或出席航空業之國際會議，吸收他機場之優缺點作借鏡。機場公司將賡續參與此會議，未來也希望能邀請民航局、航空警察局等主管機關共同派員參加，除在保安工作實務能有所交流外，爾後在國內政策或法令執行較能有統一之意見。

二、　因應桃園國際機場旅運量屢創新高，桃園國際機場的心臟地帶-營運控制中心的作業負荷量亦急遽升高。本次參訪成田國際機場時，發現該安全中心人力相較之下顯得相當充足，同時結合完整的資訊及設備，更是如虎添翼；此外，成田國際機場係將航廈安全監控人員以及該機場的消防隊值班人員集中於安全中心，不論是從陸、空側整體安全，或是就災害防救、緊急應變的角度來看，都是一種相對有效率的配置，值得我國機場參考。

三、　Smart Security是ACI主要的航空保安倡議之一，概念是將旅客自進入機場路緣到空側出境，可能面臨一連串安檢措施遭受到的不便予以最小化，並依據機場所受威脅風險程度，將保安資源及所有設施最適化。就桃園國際機場現況來說，報到大廳的擁擠，尤其是第二航廈，是必須解決的當務之急。目前桃園機場公司已經規劃第二航廈的擴建案，在通關及安檢設施的部份，除了首要的擴大空間之外，建議可以採納Smart Security的一些概念，例如採平行式設計的安檢準備區，提供旅客舒適的待檢準備環境，並可加速安檢效率；此外也可考慮增設自動化的安檢線設備，自動分流正常行李及待複檢行李，減少安檢動線上的迴堵狀況，同時自動回收安檢用盒，減少人力搬運勞費。

四、　隨著桃園機場運量逐年成長，安全服務的需求也隨之大幅增加，然而航警局目前之人力運用及調整受限於行政機關員額總數之限制，

實無法因應旅客運量持續成長之安全需求。與成田機場公司人員對談過程中，發現該機場安檢係由保全公司來執行，而且三座航廈分別由三家保全公司來執行，警察人員已退居第二線監督保全人員，也符合國際間對政府組織人力精簡的潮流。如前所述，我國安檢受限於法令限制須由航警來執行，而航警人力又受限於行政機關員額總數之限制，儼然成為一個無法解的死結，有關當局實宜參考外國體例，積極研議放寬法令，充足安檢人力，始能落實航空保安，維護飛航安全。

陸、附錄各國機場資料


Adelaide Airport
Australian Update on Aviation Security

OUTLINE

1. Security threat level change
2. Australian Security Outlook – OTS 2025
3. Security trials
4. Evolving threats
5. Airside security review
6. Outcomes from QUAD

SECURITY THREAT LEVEL CHANGE

- 12 Sep 2014 - Australia's national general terrorist alert level increased from MEDIUM to HIGH
- The increased threat level was not based on specific credible knowledge of an attack plan but more so a **'body of evidence'** that points to the increased likelihood of a terrorist attack in Australia
- The Aviation sector threat level remains unchanged at MEDIUM
- Aviation remains an attractive target for terrorists
- Specific and credible intelligence would be needed to raise the aviation sectoral threat level within Australia.

EVOLVING THREATS

- February 2015 ASAF - Government discussed most likely evolving threat/s
  - NMIEDs focused on aircraft
  - Lone Actor / Front of House Small Arms attack
- Discussions underway regarding short term actions and medium/long term contingency plans

AUSTRALIAN SECURITY OUTLOOK

- Outlook to 2025 by OTS
- OTS undertaking workshops at Security Forums
- The Australian Government has changed its focus on aviation security threats and risk assessment
- The **evolution of technology** in security screening and airport front of house security measures has lessened the attractiveness of airports as a primary attack point
- The **'all hazards risk'** approach is too costly and unsustainable
- Risk-based screening approach may be more sustainable - investigate.
- Mitigation of the **most plausible or higher security risk events** is more sustainable
- Government and industry working together to identify the risk events and mitigation measures is more effective

SECURITY TRIALS

- Risk based screening
  - Melbourne & Sydney (International) / Sydney and Brisbane (Domestic)
  - Occurred from April 2015 – July 2015 (divest based)
  - 23,000 participants – 70% staff and crew / 30% regular travellers
  - Overall success & satisfaction
- Biometric Trial with Virgin Australia and Qantas

STRENGTHENING AIRSIDE SECURITY (1)

- Government review commenced
- Focus on a first principles approach through a re-examination of
  - The most plausible risks in the airside environment
  - The effectiveness of measures already in place (i.e. regulated and unregulated); and
  - The opportunities that may exist for regulatory cooperation with other agencies

STRENGTHENING AIRSIDE SECURITY (2)

1. Screening options

    1A – Random selection of people, vehicles and goods
    1B – Operation of screening points at randomly designated times
    1C – Screening inside the airside area

2. Enhanced security awareness for airside workers

    2A – Extending the coverage of security awareness

3. Improved access control for airside areas

    3A – Electronic access verification
    3B – Biometric identity and access

Submissions and feedback
Proposal to Minister
Trials and implementation

OUTCOMES FROM QUAD

- 9 – 10 April 2015 in Toronto

- Threat & Risk
  - Foreign fighters

- Risk Based Passenger Screening
  - Australian trials underway
  - TSA pre-check 51% of passengers
  - Canada analysis underway

- Technology

- One Stop Security
  - Three principles in AUS paper – transparent, outcomes & adaptable based
  - Influence ICAO guidance material

- LAGS
  - EC trials October 2015

Next meeting 9 – 10 September 2015 in Canada

Adelaide Airport

Enhancement of Airport Security & Airport Staff's Convenience by introducing Advanced Access Control System

2015. 10

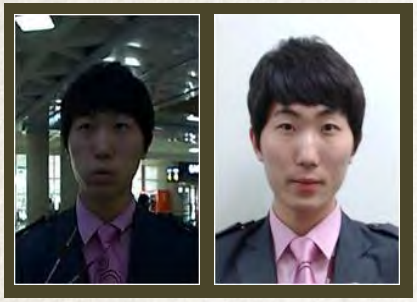
Contents

Backgrounds / existing access control system

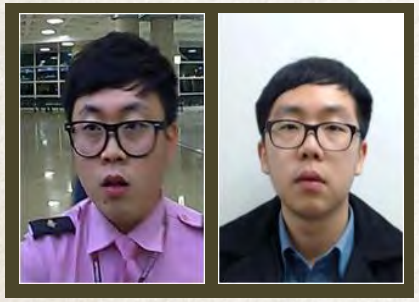
Mechanism	 Visual identification  Check authorized access area, picture, and the term of validity  Fingerprint recognition system Identifying validation of person requiring access Access to restricted area Face identification and check the picture on the permit
Method	**Person** requiring access is identified by **Fingerprint recognition system** **Permit validity** is checked by **visual inspection** of security staff
Weakness	✓ The limitation of visual inspections ✓ Disadvantage of fingerprint recognition system such as relatively slow work process etc.

Backgrounds / Disadvantages of existing access control system

Q. Are these two people the same person?



A B



A B

A B

Q. Can guards do check a permit exactly in crowded access points without any mistakes?

The permit should contain following information

[Size(85mm×55mm)]

* **Expiry date** of the permit
* **Number of valid SRAs**
* **Name** of holder
* Name of **company/organization**
* **Serial number**

◆ Face Recognition System

❖ 'Biometric Recognition System' which utilizes the locations of an individual's eyes, nose and lips electronically

•Comparison with other access systems

Parts	Finger print	Face	Iris	Vein
False Accept Rate (FAR)	0.0001% (1/1000000)	0.00005% (1/2000000)	0.00001% (1/10000000)	0.001% (1/100000)
Awareness time	About 0.1sec	About 0.001sec	About 0.2sec	About 0.01sec

* S1 Corporation, 2012'

◆ RFID system

❖ Identification Technology which utilizes IC chips and Radio Frequency to identify various objects.

Introduction of FRRS / Process of New Access Control System 'FRRACS'

◆ Process > **RFID system + Face recognition**

→ **RFID system**

Approval to valid permit
- authorized access point
- the term of validity
- registered picture

→ **Face recognition**

Approval to valid person (registrant=person requiring access)

MAIN

FRRACS

Access to restricted area

Improvement through **TEST OPERATION** and result analysis

- FRRS installed at 6 access points in Jeju international airport on Dec 27th, 2012

	Before	Now
Face Recognition Time	5 – 10 seconds	Within 1 second
FAR(False Accept Rate)	1.15%	0%
User's Satisfaction	59.6%	96.7%

◆ How to Improve

- ❖ **Increasing the number of registered pictures for access control (1→ 4 pieces)**
- ❖ **Setting the optimum recognition sensitivity rates.**

Expected effects

- **Double check by integrating both identification of RFID permits and Face recognition system**
  - Preventing security accident that occurred by internal threat (e.g. illegal permit usage)
  - By controlling access of unauthorized person to access restricted area, promoting an effective threat/occurrence response

- **Substitute Cutting-Edge System Device for Visual Check of Security Guards**
  - Preventing Security Accidents by Human Errors & Enhancement Reliability of Flawless Control

Future Plan

2012~2014	2015	2016
1 airport(Jeju)	4 Airports	8 Airports

THANK YOU

香港 國際機場 | HONG KONG INTERNATIONAL AIRPORT

Field Trial on Liquid Explosive Detection Systems at Hong Kong International Airport

Dominic Yu

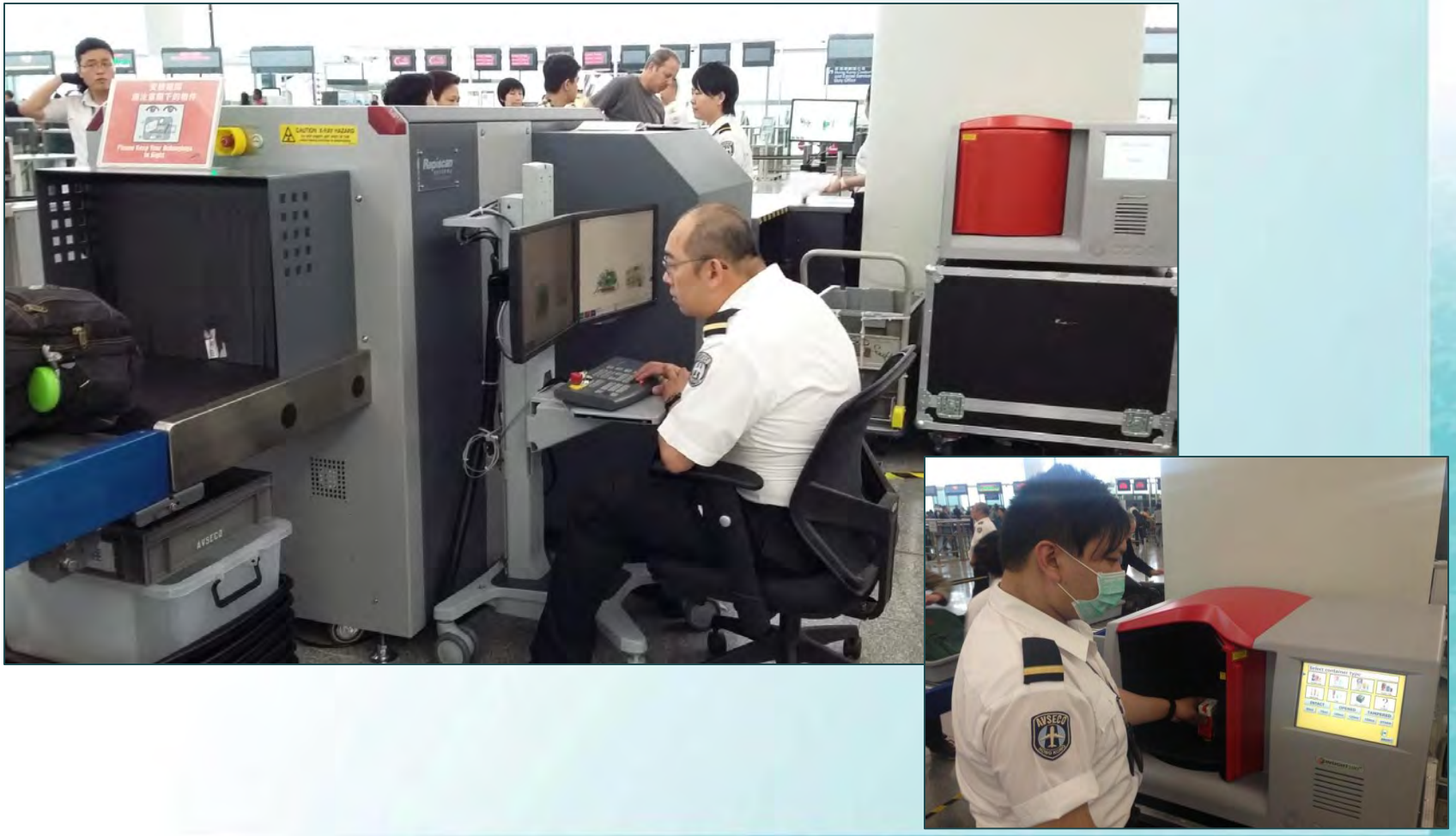
Field Trial on Liquid Explosive Detection Systems

- Objectives:
  - To prepare for procurement of the new screening equipment
  - To obtain alarm rates of the equipment on trial
  - To provide hands-on experience for screeners with new types of screening equipment / technology

- Trial at L7 North & South Departure Immigration Halls (DIH), from 21 to 30 April 2015

- Equipment involved
  - 2 units of Dual View X-ray Machine
  - 4 units of Bottle Liquid Scanner

Field Trial of
Liquid Explosive Detection Systems



Level 7 South DIH

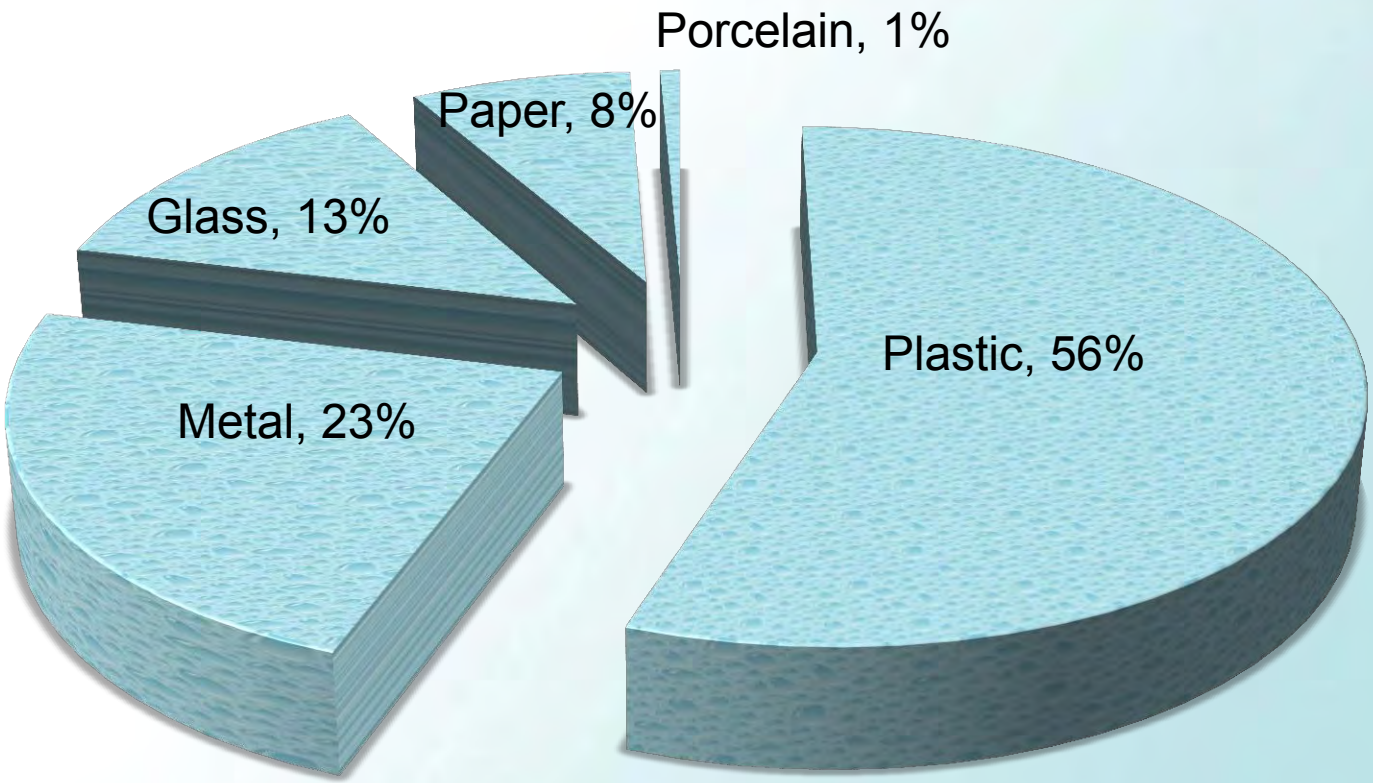
Field Trial of
Liquid Explosive Detection Systems

Level 7 North DIH

Field Trial of
Liquid Explosive Detection Systems

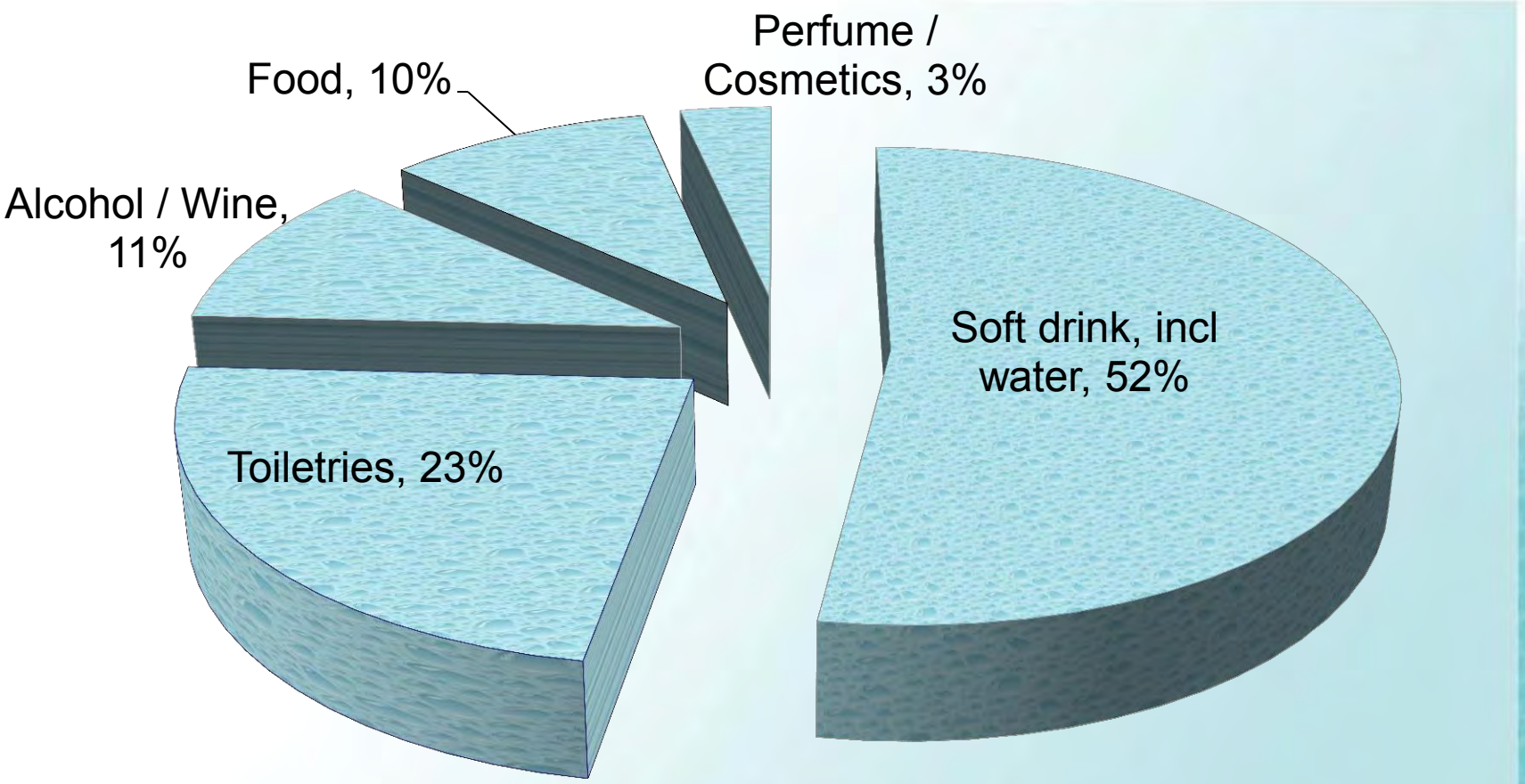
Off-line Trial

Types of Container Material



Sample Size: 1000

Types of LAG



Sample Size: 1000

Thank You

KIX Airport Update

October 5, 2015

New Kansai International Airport Company, Ltd.

Contents

1.NKIAC / KIX Overview
2.KIX Update

1. NKIAC / KIX Overview

Location of Osaka

Location of Kansai and Itami Airport

Kansai - Our Home Land

Population of 20 million.
Gateway to World Heritage sites and other popular destinations ➡ Prospect for Growth

Himeji-jo
(World Heritage)

Kobe Beef

Historic Monuments of Ancient Kyoto and Traditional Culture
(World Heritage)

Osaka food culture

Historic Monuments of Ancient Nara
(World Heritage)

Universal Studios Japan

The Wizarding World of Harry Potter – July 2014

Sacred Sites and Pilgrimage Routes in the Kii Mountain Range
(World Heritage)

Overview of KIX and ITM (FY 2014)

KIX KANSAI INTERNATIONAL

OSAKA ITAMI ITM

KIX		ITM
20,040,000 (111%)	**Annual Passengers**	14,620,000 (104%)
145,000	**Annual Aircraft Movements**	139,000
740,000t	**Annual Cargo Volume**	133,000t
3,500m and 4,000m	**Runway Lengths**	1,828m and 3,000m
91	**Aircraft Parking Stands**	50
T1: 303,444m^2 T2: 29,660m^2	**Passenger Terminals**	South: 18,990m^2 North: 21,598m^2
24 hours	**Operating Hours**	14 hours (7:00-21:00)

★ *KIX and ITM are Japan's largest international and domestic airports outside Tokyo.*

* Based on Japan's Fiscal Year 2014 (2014/4/1-2015/3/31)

Overview of Existing Facilities

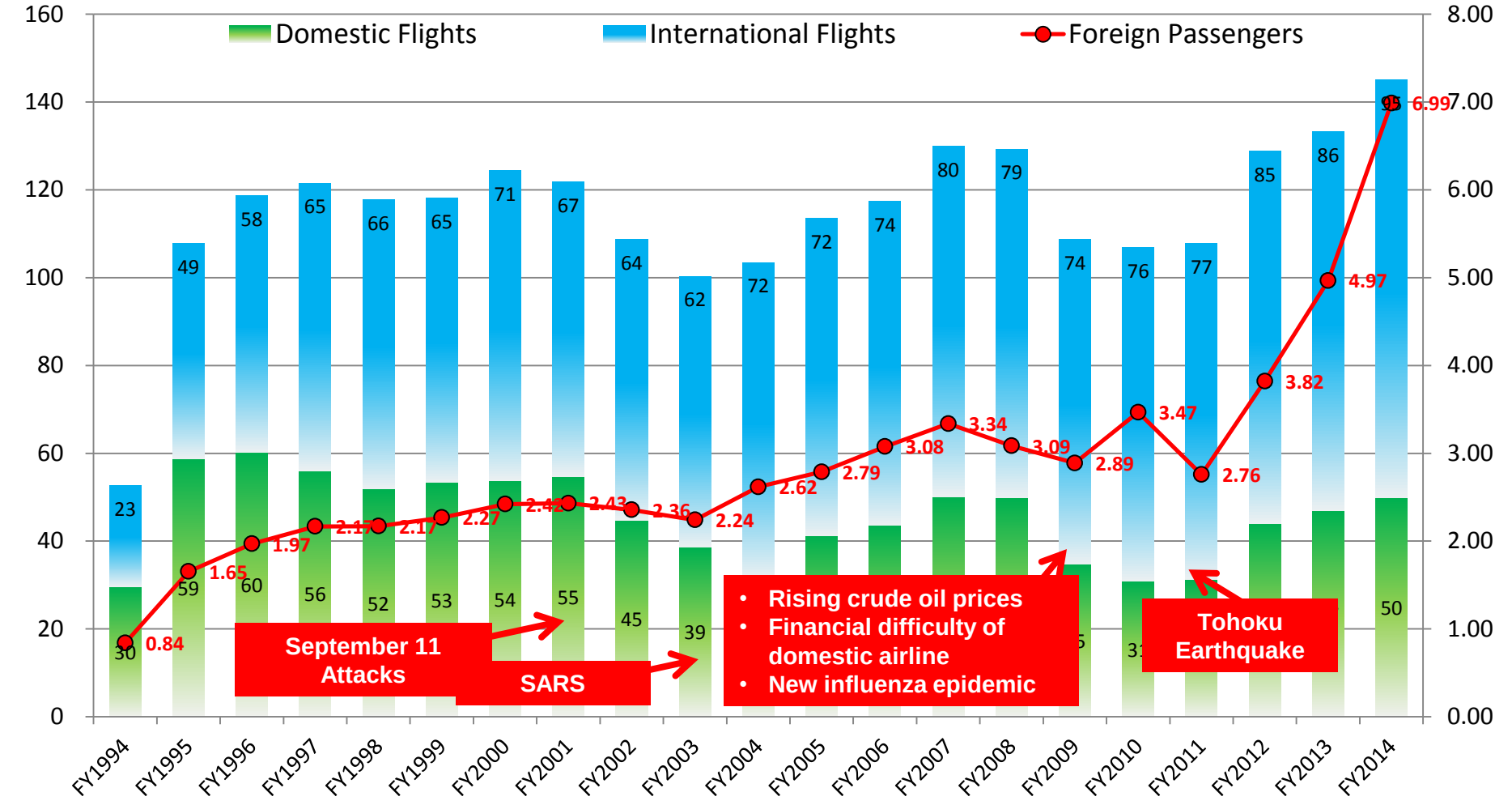
2. KIX Update

Extension of security checkpoints at terminal 1

Transition of Aircraft Movements and Number of Foreign Passengers at KIX

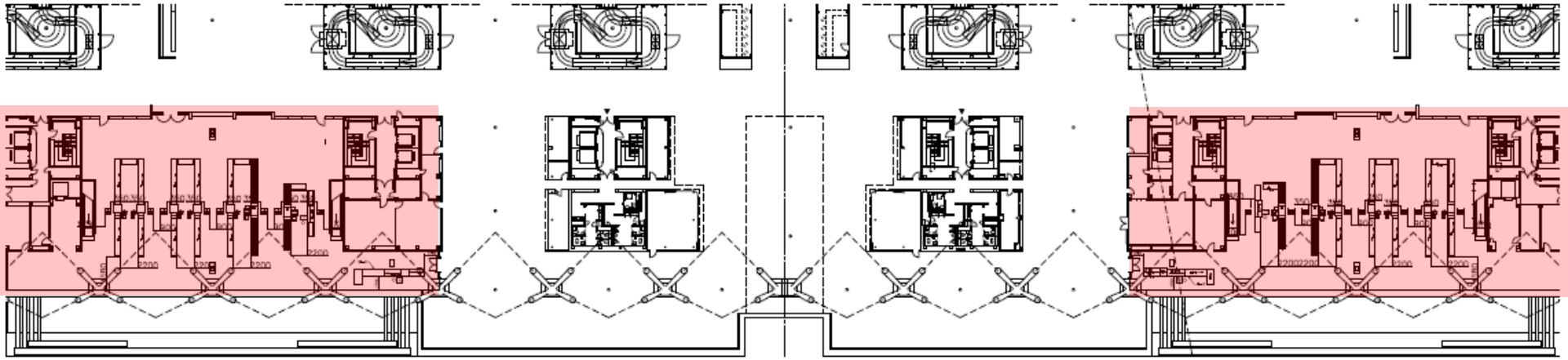
(unit: thousand movements)

(unit: million passengers)

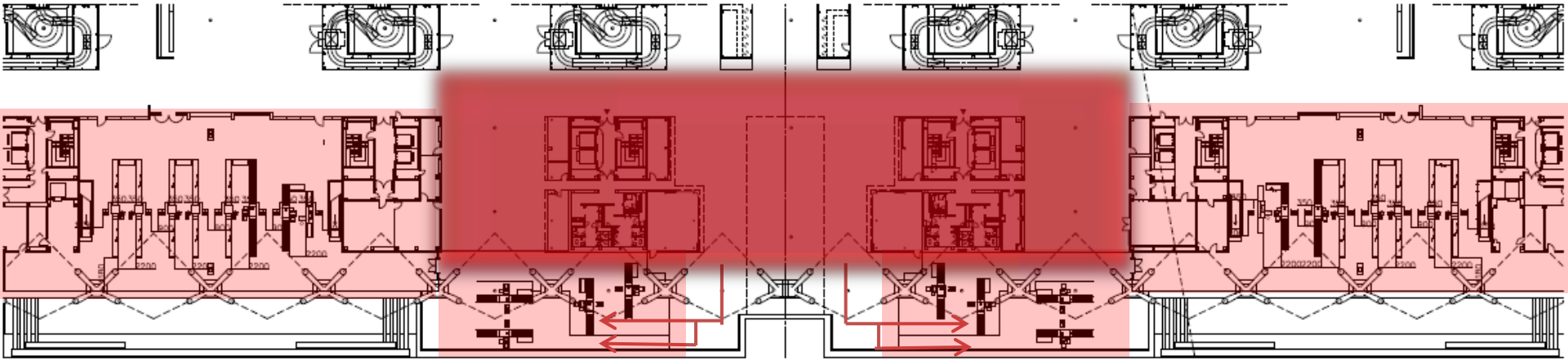


Extension of security checkpoints

■ Current checkpoints



■ After extension(January 2016 ~)



Body Scanner installation at terminal 2

Body Scanner installation at KIX terminal 2

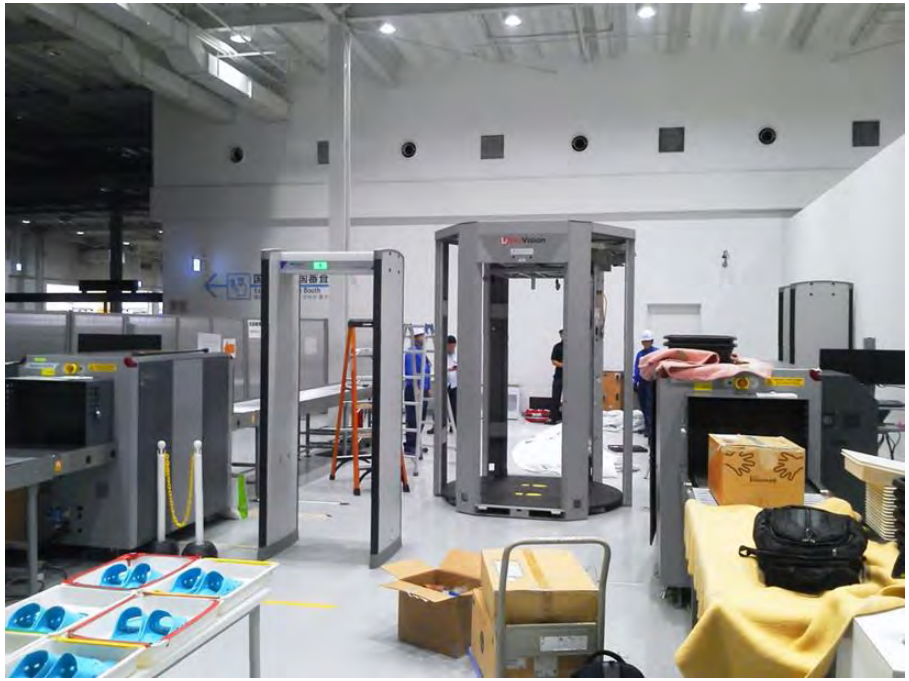
○Installation plan

- October 2015　Start assessment trial by JCAB at KIX
- FY 2016　Full installation at both terminal 1 and 2

○ overview of “assessment trial”

To make a operating guideline of Body Scanner, JCAB conducts assessment trials at KIX, Narita and Haneda airport. JCAB collects several data and conducts a trial of some pattern of screener assignment.

【collecting these data】
(1) passenger throughput
(2) alarmed position
(3) effective assignment of screeners



Construction of terminal 3

Overview of Terminals at KIX

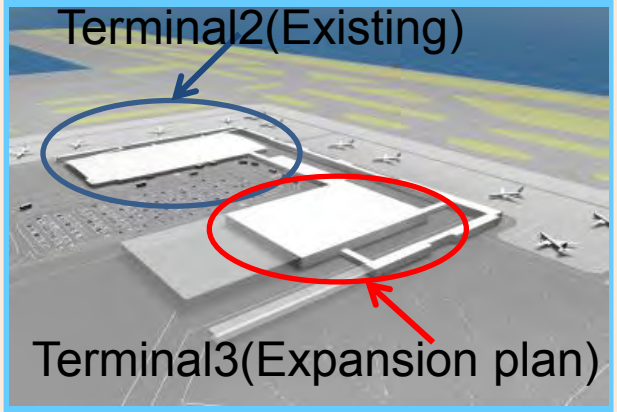
【Terminal 1】 (for FSC)

- Approx.303,000㎡
- 4 stories
- 41 spots with PBB
- Opened in 1994

【Terminal 2】(for LCC)

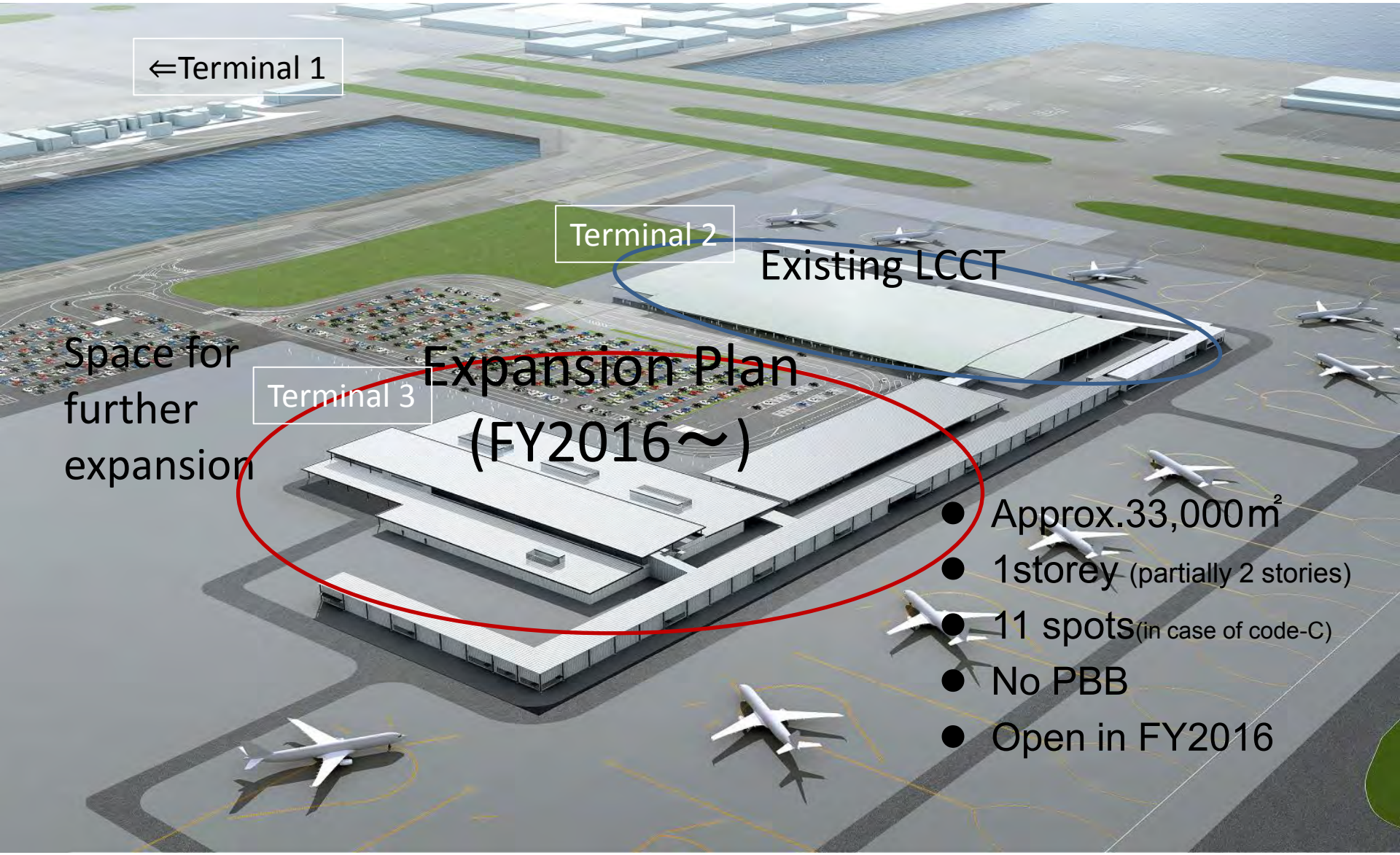
- Approx.30,000㎡
- 1storey (partially 2 stories)
- 9 spots(in case of code-c)
- No PBB
- Self spot in and spot out is possible.
- Opened in 2012

【Terminal 3】(for LCC)



- Approx.33,000㎡
- 1storey (partially 2 stories)
- 11 spots(in case of code-C)
- No PBB
- It will open in 2016

Overview of Terminal 3



Thank you very much for your attention.

الهيئة العامة للطيران المدني
General Authority of Civil Aviation

UPDATE
SAUDI ARABIA AIRPORTS

MOHAMMED ALFOZAN

Total # of Airports
27

International
4

Regional
7

Local
16

Prince Mohammad bin Abdulaziz International Airport

Madinah

Total Annual Passengers **8** Millions

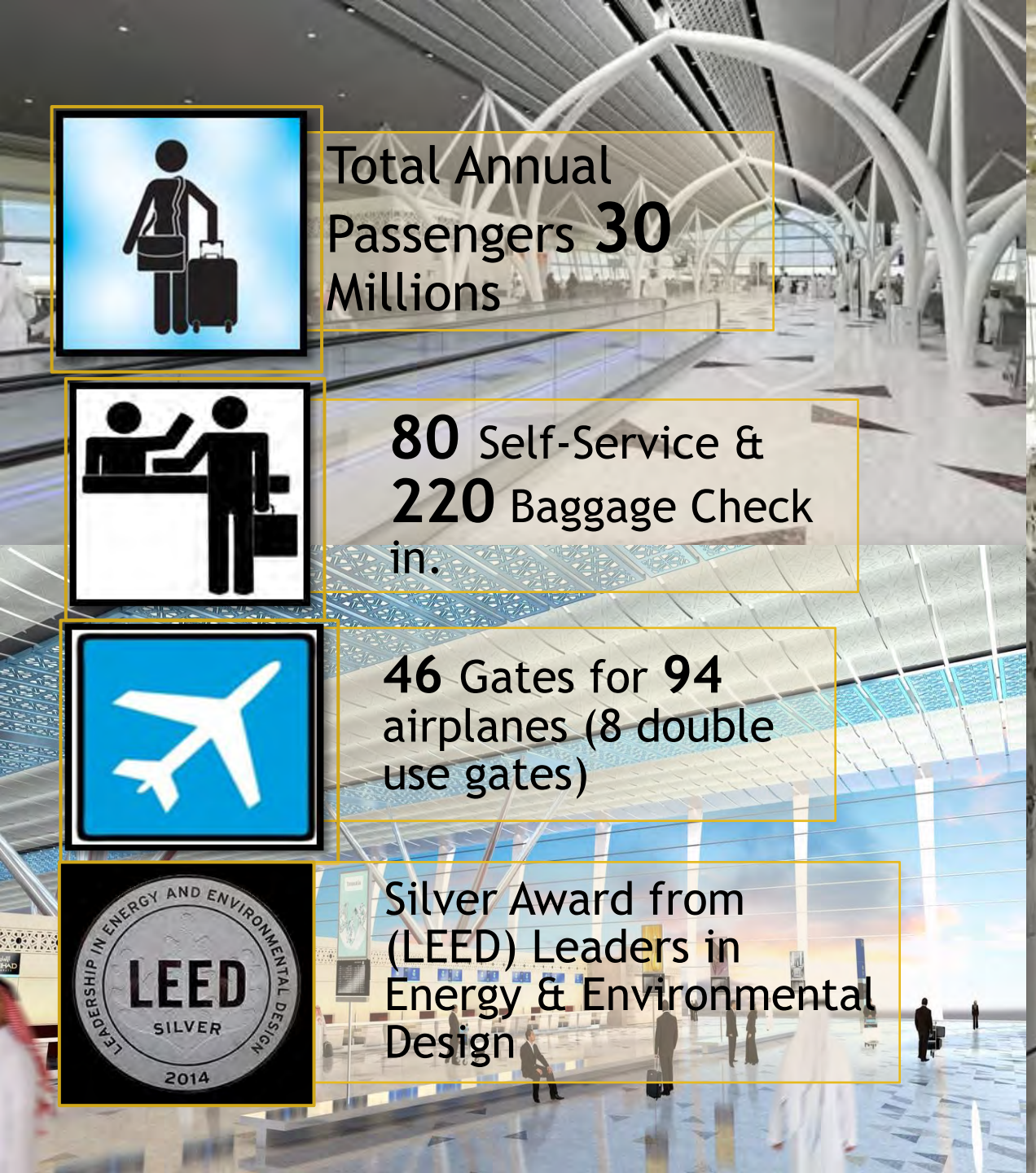
24 Self-Service & **72** Baggage Check in.

16 Gates for **32** airplanes

Estimated **4** million sq. meters

King Abdulaziz International Airport

Jeddah



Total Annual Passengers **30** Millions

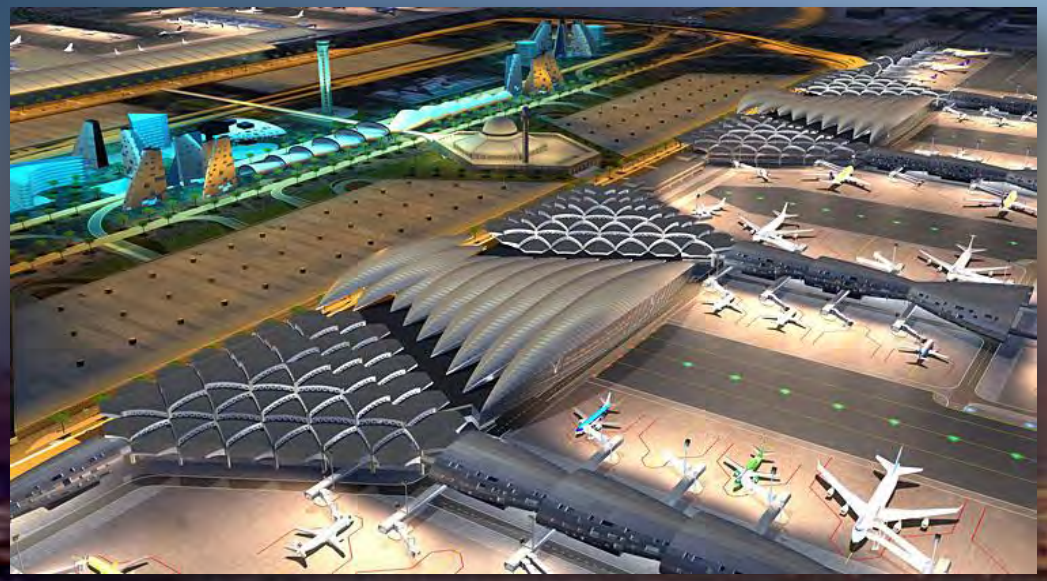
80 Self-Service & **220** Baggage Check in.

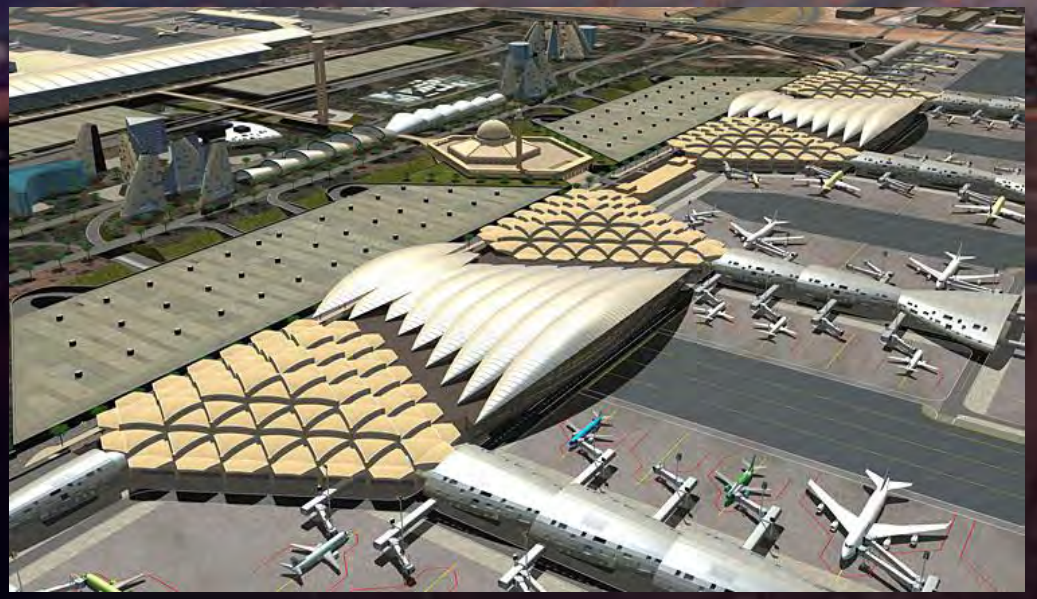
46 Gates for **94** airplanes (8 double use gates)

Silver Award from (LEED) Leaders in Energy & Environmental Design

King Khalid International Airport
Terminal 5

Riyadh






Total Annual Passengers 12 Millions
20 Self-Service &
60 Baggage Check in.
16 Gates for 16 airplanes
4550 m Services & Restaurants

All Airports

الهيئة العامة للطيران المدني

General Authority of Civil Aviation

- Projects to upgrade Security & Safety is underway including all International, Regional and Local Saudi Airports.

AOT's Security Quality Control

AOT's Security Quality Control

1. Aviation Security Quality Control Programme

AOT's Security Quality Control

2. AOT's Security Quality Control Function

2.1 Organization level

2.2 Airport Level

AOT's Security Quality Control

บริษัท ท่าอากาศยานไทย จำกัด (มหาชน)
Airports of Thailand Public Company Limited

3. Security Quality Control Activities

3.1 Audit

3.2 Inspection

3.3 Survey

3.4 Test

AOT's Security Quality Control

บริษัท ท่าอากาศยานไทย จำกัด (มหาชน)
Airports of Thailand Public Company Limited

4. Security Test

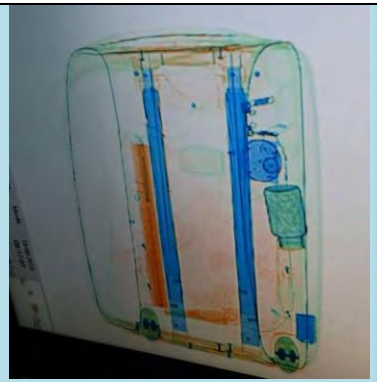
4.1 Screening

4.2 Access Control

AOT's Security Quality Control

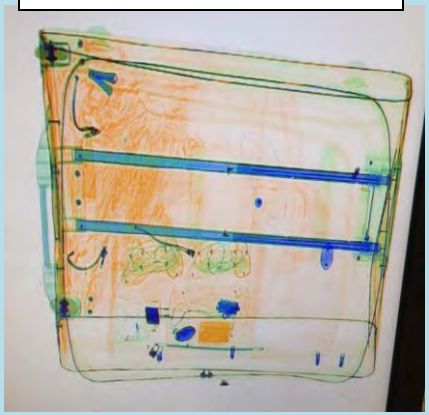
บริษัท ท่าอากาศยานไทย จำกัด (มหาชน)
Airports of Thailand Public Company Limited

Improvised Explosive Device (IED)

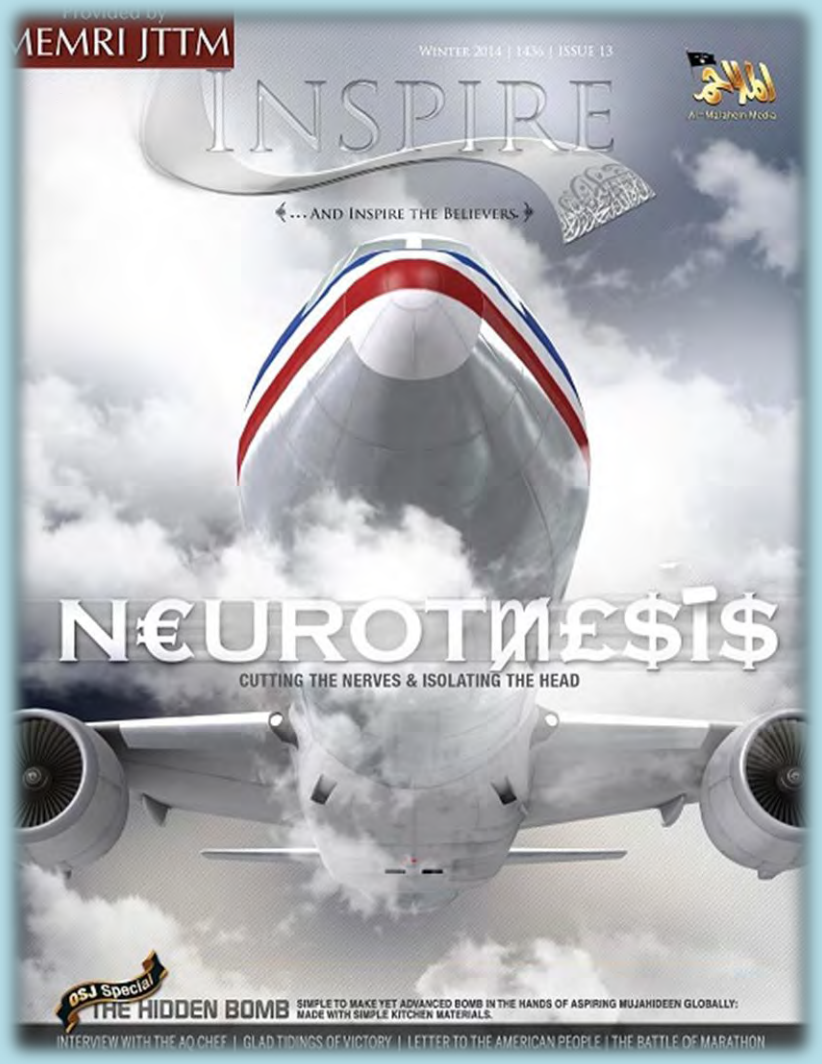


IED

IED



AOT's Security Quality Control



Thank you