

## Session 2:

Seamless workflow for staff, suppliers & subcontractors:  
*towards the complete automation at the transportation  
hub back-end*

# Transportation Employee Access Management

Transportation Security Forum  
Paris, 1 March 2007

# Content

**Access Management: Employee v. Traveler**

**Technology Application**

**Blocking & Intrusion Detection**

**Access Control Systems**

**Video Surveillance**

**Credentials, Identification & Authentication**

**Management of Privileges**

**Summary**

# Similar Challenges Yet Different



# Multiple Security Zones for Travelers



Employee restricted areas can be accessed from low security areas

# Traveler v. Employee

- ❑ Most Employee only transactions are unmanned
- ❑ Employees are “trained” on various airport / port systems
- ❑ Faster throughput expectations
  - ❑ delays to employees costly to airport / port and leads to traveler inconvenience too
  - ❑ Most employees are typically not carrying luggage
  - ❑ Mobility issues apply
- ❑ Most airports require employees same path through security as travelers ...Registered travelers programs may offer interesting options to improve flow for employees too!



# Challenges in Transport Security

- High mix of customers to employees
- Common access points for customers and employees
- The “Shopping Mall” inside passenger terminals
- Rotating work force ...airline crew, tenants (shops & restaurants & lounges), contractors
- Employee only areas are accessed from multiple security zones
- Highest security entrance points are typically unmanned
- Most employee only areas lead to “airside”



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# Technology Application

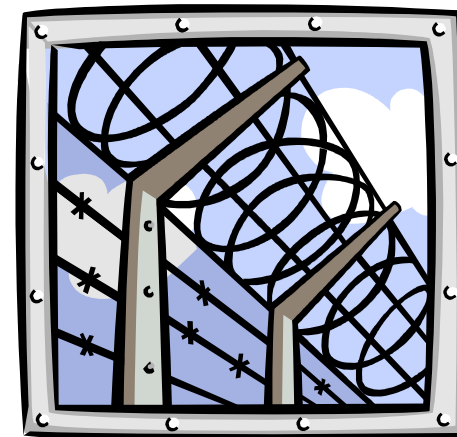
- As most employee only area lead to high security areas and are unmanned in most airports it is critical to choose & implement a number of carefully interconnected systems:
- Physical security to enable security & flow
- Access control systems closely integrated with alarm monitoring to ensure correct functionality of physical security and interface seamlessly with ID management and video systems
- Video systems to ensure correct use of access control, to detect alarming behavior, to offer on the spot surveillance of alarm areas and for archiving
- Identification systems to ensure close integration into personnel records of facility, tenants, contractors as well as the physical credentials and access controls systems
- Privilege management across multiple systems and multiple locations





# Physical Security ~ Blocking & Detection

- Perimeter security comprising barriers and detection is well understood and generally has been an area of success
- Increased understanding and application of barriers protecting against car bombs
- Continued vulnerabilities in outer security zones with congestion of unscreened passengers and baggage
- Physical security standards between security zones are generally well advanced.
- Access control systems used for detection of doors closed & locked status, many are not designed for alarm monitoring



# Access Control System

- Critical to learn from the mistakes of the past ..most access control system fell short of achieving their objectives
- Most systems available on the market today do adequate job of basic access management functions
- Alarm monitoring *is the security* part of access control system and often falls short in terms of speed, tamper proofing
- Communication of access control systems continue to be an area of vulnerability for many systems starting from card to reader communication
- Critical to integrate with video and / or optical turnstiles to overcome the “piggybacking” problem
- Simple Reader / keypad units are increasingly replaced with more secure biometric / scramble-pad stations



# Video Surveillance

- Video has been used for many years in traditional surveillance applications with moderate success
- Increasing use of video to supplement weaknesses in perimeter security including motion detection
- New use of video to track use of employee entry points, to detect doors normally closed and to counter piggybacking
- Use of predictive video systems around baggage handling areas ...may require appropriate changes to address privacy / union regulations in certain countries
- Reliance on predictive video for out of norm movement, behavior and initiating change in access control functionality could emerge
- Archiving and data mining of video history offer enhanced security as well as forensic assistance



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# Credentials, Identification & Authentication

- Security requirements mandate the move to high frequency RFID and to biometric authentication
- Use of biometric only in lieu of separately issued credentials in conjunction with Registered Traveler programs or stand alone for employee
- Interoperability of credentials across multiple locations is increasingly required. One time codes and crew wide PIN are disappearing
- Requirement for common logical & physical access control credentials is made easier with contactless crypto- controller smart cards
- The use of ePassports as credentials for visiting crews (and registered travelers) may offer interesting possibilities



# Management of Privileges

- In addition to the normal challenges of a high security environment, transport security deals with:
  - Consumers / travelers
  - Large numbers of employees and contractors many with access to most secure locations
  - Customers/ tenants
  - Finally a host of emergency personnel “first responders”

Each of these groups are issued credentials by different authorities

- Ability to transfer revocations / changes of privileges in a timely fashion is critical
- Concept of revalidation or authentication & verification stations as per US HSPD12 may play a role but will need to be made faster & less expensive to implement. Large scale tools like CoreStreet offer interesting solutions



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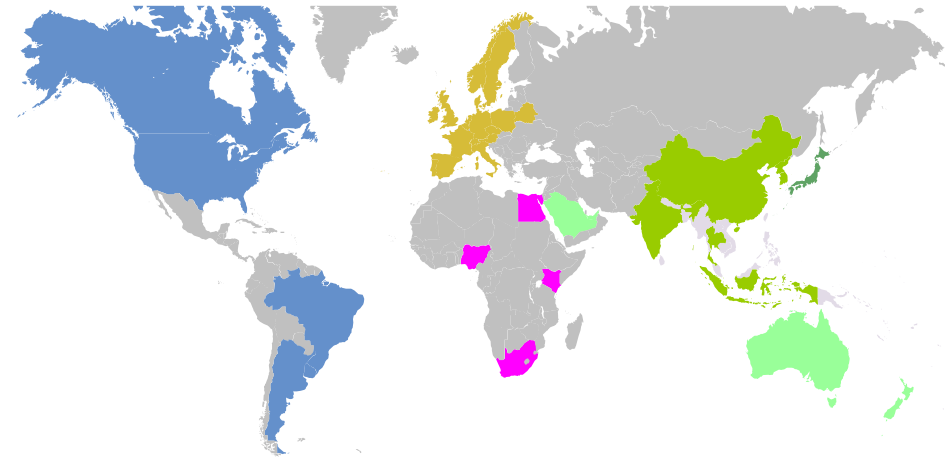
- Transport applications uniqueness require clear operational understanding for effective design and implementation an employee security concept
- High level of integration between access control, video, physical security and identification & privilege management
- Reliance on access control to provide detection not just management means that access control system must be “security grade”
- Access control & identification system require a high degree of interoperability across multiple systems and authorities



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