RECOMMENDED PRACTICE 1701h

Security Checkpoint Access and Egress

All the content of this document is intended to be used as guidance material, to be considered by airports when applicable, subject to local requirements:

1 Introduction

- The recommendations that appear on this document are intended to be a useful reference for airport terminal design and management of the passenger flow around security checkpoint.
- Terminal design, layout and configuration may vary from one airport to another. There is no one size fits all solution. The recommendations made in this document are intended to be considered by airports when applicable and where it makes sense.
- The information provided comes from airports where the mentioned best-practices have been implemented successfully.
- This document is not intended to be part of any regulation or mandate
- This document is a joint effort of ACI and IATA.

2 Scope

The main focus of this best-practice guidance will be for security checkpoint access and egress.

2.1 Security checkpoint access:

- Pre-screening preparation zone and queuing space
- Divest tables and zones
- Tray feeding systems

2.2 Security checkpoint egress:

- Composure tables and zones
- Egress seating area
- Tray recovering systems
3 Geometrical Configuration

3.1 Assumption

Default security checkpoint configuration:

- Configuration “2 X-RAYS to 1 WTMD” (Walk-Through Metal Detector)
- Centralized screening area

- The standard “2 X-RAYS to 1 WTMD” security checkpoint configuration is one of the most common deployments as it is widely used in average centralized airport screening areas all around the world, providing great efficiency and flexibility. However there are many passenger screening combinations that an airport or a regulator may require. It should be noted that a number of regulators are currently considering alternative passenger screening technologies such as passenger security scanners.

- Airports that have implemented other Security checkpoint configurations (i.e. gate screening) may use the following information as an overall reference benchmark, depending on their local arrangements.

- It is important to mention that, for airports developing the one stop security concept for connecting passengers, the centralized security checkpoint area is the most efficient way to implement that concept.
3.2 Diagram

The following exhibits provide a typical layout of a screening lane pair, with what can be considered the minimum recommended dimensions for each area and function.

![Diagram of screening lane pair]

3.3 Dimensions

Following the previous schema, the ‘best practice’ participant airports have the following dimensions – in centimeters (cm):

<table>
<thead>
<tr>
<th>Security checkpoint dimensions</th>
<th>Recommended Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Pre-screening and queuing</td>
<td>700</td>
</tr>
<tr>
<td>B In feed lengths (Divest)</td>
<td>400</td>
</tr>
<tr>
<td>C Out feed lengths (Composure)</td>
<td>600</td>
</tr>
<tr>
<td>D Egress Seating</td>
<td>400</td>
</tr>
<tr>
<td>E Space between lanes for passenger movement</td>
<td>450</td>
</tr>
<tr>
<td>F Lane width</td>
<td>200</td>
</tr>
</tbody>
</table>

*Note the above recommended minimum measurements do not include X-ray machine measurements. These measurements should be obtained from the manufacturer and incorporated into calculations.*
3.4 Alternative Passenger Screening Configurations

Below are simply a few examples to illustrate that the recommended minimum space between lanes of 4.5m will not be sufficient if more than one walk-through metal detector or security scanners are to be installed.

It is recommended that all commissioning airports, airlines and government authorities select experienced professionals to assist them.
4 Access

4.1 Pre-screening and queuing

Sufficient space should be allocated for passenger preparation so that airport security managers have the space required to install signage, bins and other infrastructure to support passengers preparation for the screening process.

It is recommended to have a centralized queueing system, where one queue feeds a number of lanes and passengers are screened on a first come first screened basis. Airports with more than 6 screening lanes may seek to implement two single queues serving multiple screening lanes provided that physical space permits two queues.

4.1.1 2D Bar code scanning to provide access

2D bar code scanning is recommended to be conducted before entering the queue to determine passenger eligibility to access restricted area and/or segregated line.

4.1.2 Information on screening procedures

Information point, containing:

- Poster on regulation,
- Video explaining the process
- Information flyers available for passengers
- 1 officer supervising the information procedures

4.1.3 Segmentation of lines

Passenger segmentation describes a process which assigns search lanes to different passenger groups based on different processing needs, processing throughput, or queuing standards. Typical segmentation policies include at least two groups:

- Premium passengers / Frequent travelers
- Occasional travelers / Families with children

4.1.4 Queuing arrangements

- Provide tensa-barrier flexible queuing system
- 1 supervisor / queuing manager on duty during peak times

4.1.5 Staff allocated to help passenger in pre-screening

- Customer Service ambassador to help and advise passengers
4.2 Divest tables and zones

4.2.1 Rectangular roller beds aligned with X-RAY feeding
  ➤ Roller beds could accommodate at least 3 passengers

4.2.2 Roller beds overlapped with tensa-barrier queuing
  ➤ Enable passenger divesting while moving along the queue

4.2.3 Staff allocated to control divesting and X-RAY feeding
  ➤ 1 loader per X-RAY in-feed.

4.3 Tray feeding

Provide a mechanical system, integrated in the checkpoint infrastructure, for trays to be rolled back efficiently.

5 Egress

5.1 Composure tables and zones

5.1.1 Rectangular roller beds aligned with X-RAY out belt
  ➤ Provide roller beds and tables aligned – to accommodate at least 5 Passengers
  ➤ Secondary search table at 90° not to interfere with the flow

5.1.2 Staff allocated to assist passengers
  ➤ 2 Searchers – opposite sex – right behind the WTMD
  ➤ Private booths available for secondary search

5.2 Egress seating area

  ➤ Tables for passengers to repack their hand luggage
  ➤ Seating possibilities to accommodate at least 2 passengers per X-RAY

5.3 Tray recovery

Provide a mechanical system, integrated in the checkpoint infrastructure, for trays to be rolled back efficiently.
6 Other considerations

6.1 Ambience

It is very important to provide a good ambience, focusing at least on the following aspects:

- Cleanliness
- Light
- Temperature

6.2 Recommendations when shoe inspection is required

- Plastic slippers
- Soft floor covering

6.3 Courtesy and friendliness of staff

- Customer Service Training
- Language training
- Basic greetings: "Good morning.. have a good flight"

6.4 Information on processing time

- It is very useful to inform the passenger about a standard waiting time, to gain predictability and reduce stress/hassle

7 Measurement of passenger perception

It is highly recommended to measure the passenger perception of the security screening process, covering at least these two aspects:

- Courtesy of security staff and perceived time at security

8 Measurement of queuing time performance

It is highly recommended to have a performance indicator measurement process, to measure at least security checkpoint waiting times and throughput, for security management to be able to allocate staff efficiently, according to the flow distribution.