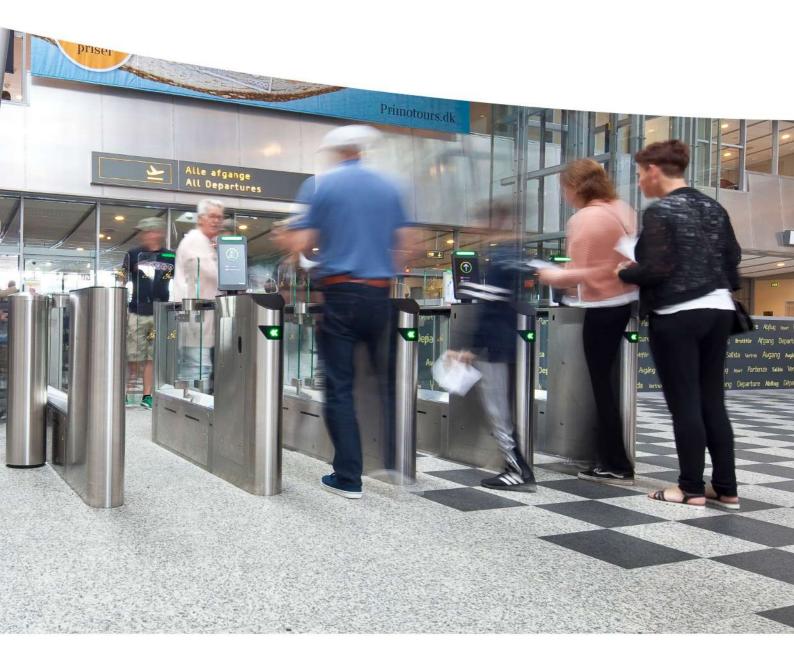
AIRPORT SECURITY SOLUTIONS









The future of the airport:

Automation, self-service and ease of travel

Recent growth in the demand for air travel and developments in technology has brought a step-change in the way airports manage their passenger flow.

Global passenger traffic is set to increase at 4.5% per year

From personalised pre-travel communications to a simplified, delay-free arrival through border control, airline travel and the airport terminal experience will soon become unrecognisable from what they once were.

Developments in self-service check-in and automated identity checks technology allow passengers to manage their own travel arrangements whilst enabling airports to increase their capacity in order to meet the increasing needs and volumes of travellers.



Gunnebo's airport security solutions equip the airport environment for this step-change in air travel by providing a secure, efficient and reliable means to manage the passenger flow process.

Through automating the system of identity checks that take place at different stages through the traveller's journey the process is transformed into a seamless, walking-pace transition through security, lounge access, boarding and arrivals.



Gunnebo's solutions at these key touchpoints are adapted to the specific needs and security measures of each location within the airport and with an ability to integrate any reader or scanner, are ready for the biometric single token which promises to redefine the airport journey.

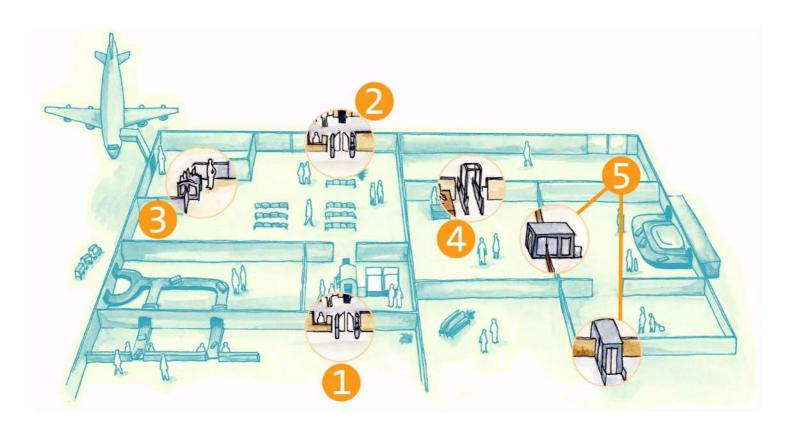
Rise in growth presents a challenge and an opportunity

With market forecasts predicting huge growth in the air travel sector – resulting in increased passenger footfall and demand – a challenge presents itself in how to meet these needs whilst maintaining operational efficiency and positive passenger experience.

While airport expansion is limited by many factors (space, budget, stringent regulations) operators must find ways to stay ahead of this wave of growth, optimising their capacity and enhancing their efficiency. With many airports having reached saturation point, automation and digital technology offer a way to manage passenger flow into the future.

The airport terminal landscape is soon to be transformed by new technologies which allow passenger tracking, passenger detection and queue management.

Automation means data generation, and in order to benefit from this data operators must ensure that their passenger flow management solutions integrate fully with their operations.



Intelligent passenger flow management

for all stages in the airport journey

Following IATA guidelines, Gunnebo provides the latest in automated gate technology for all key touchpoints in the passenger's journey through the airport terminal.

- Pre-Security Boarding
 Pass check
- Immigration and Border Control

Lounge Access

- Anti-Return
- **B** Automated Self-Boarding



Pre-Security Boarding Pass Check

Increase capacity with self-service security

Whether the passenger holds a boarding pass printed at home or at the airport, uses a smart phone or is already geared up for NFC technology, the scanners in Gunnebo's gates can read any form of boarding pass quickly and reliably.

When combined with an integrated biometric identification system — for example, facial recognition — it is possible to execute a secure and hands-free ID check at the gate. This feature allows passengers to pass through the boarding pass check with their face as the only token, adding a new dimension of ease and security to the passenger experience.

In addition to fulfilling the obligation of checking boarding passes prior to the security check, Gunnebo's PresSec AFL provides many more benefits.

Gunnebo PreSec





PreSec gates at Billund Airport.

Through serial or TCP/IP based communication between the gates and the AODB (or any other database) valuable data can be collected and useful reports or statistics about passenger behaviour, peak-time traffic and the status of the gates can be generated.

With optional extension modules, it is even possible to use the PreSec gates for implementing a highly accurate queue management system.

Benefits - PreSec

- Greatly reduced labour costs at pre-security
- Compatible with majority of Biometric identification technologies
- Increased throughput
- Provision of valuable passenger data and statistics
- Platform for implementation of accurate queue management

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Lounge Access

Ensure your most valued customers receive a faultless service

The boarding pass, together with additional qualification credentials like frequent flyer cards, must be presented and scanned by passengers before entering a lounge operated by an airline or by the airport. This procedure is normally executed by an agent, but of course can be executed conveniently and quickly by passengers themselves using a Lounge Access gate.

The Lounge Access gate, connected to the database of the respective airline or lounge operator, provides the self-service that – especially frequent – travellers are used to and expect from a modern airport.

The installation of gates removes the time taken by agents working at the counter of a lounge to interact with passengers who have attempted to enter without the necessary permissions, as well as reducing the waiting times of passengers awaiting entry by offering a fast and direct route.

Combined with a biometric identification system such as a facial recognition camera, the Lounge Access provides an even more convenient and simple access-check of passengers.

Gunnebo LoungeSec



Facial data can be captured while the passenger is approaching the gate and compared with the data stored in the airline or operator database. When enrolled it can also be compared with the data stored on the membership card.



LoungeSec gates at SAS Lounge, Oslo.

Benefits - LoungeSec

- Increased speed of service and convenience for important frequent flyer passengers
- · Increased throughput
- Provides easy and fast access by avoiding inconvenient waiting
- Ready for one-token hands freepassage with an optional facial recognition camera

Automated Self-Boarding

Enhance passenger experience and reduce boarding times

Checking the boarding pass of each individual passenger boarding an aircraft is a must for every airline. However, it is a requirement which demands the full attention of those responsible and can be costly in valuable staff time.

Using Gunnebo's BoardSec self-boarding gate, the vast majority of passengers are able to check their boarding passes themselves. As with the manual BGR, the confirmation from the related airline host arrives almost instantly. Once received, the gate grants access allowing the passenger to move forward towards the aircraft.

The BoardSec gate regulates the flow of passengers onto an aircraft in a safe and secure way, freeing up the valuable time of airport staff and enabling them to concentrate on those passengers that need extra attention and xxxsupport.



BoardSec gates at Hamburg Airport.

Due to the certified full compliance with AEA 2007 - 2012 standards, the gate can be easily integrated into any CUTE-environment. Even an integration into dedicated environments can easily be realised.

Through the integration of an optional biometric identification system it is possible to use Gunnebo's gate not only for domestic but also for international flights.

A comparison of the facial image against the enrolled biometric data provides a secure, fast and convenient ID-check inside the gate.

Benefits - BoardSec

- Avoidance of costly delays caused by boarding issues
- Flights can be closed earlier, shorter parking time
- Shorter waiting time for passengers
- Relief of manual work from agent who has more time for
- exception handling
- Fast, convenient and secure ID Check with biometric identification (e.g. facial)

Gunnebo BoardSec





Immigration and Border Control

Maximise your resources with efficient verification of passengers

Border control is one of the most security sensitive areas in an airport. It requires accurate identification of incoming passengers.

Gunnebo's ImmSec immigration gate is an automated solution which accelerates the whole process, validating passengers' identities whilst ensuring that only one person is allowed entry per authorised passage.

Depending on government legislation, the ImmSec can be equipped with readers for smart ID cards, MRTDs and RFID passports, as well as biometric capture technology.

Gunnebo ImmSec



ImmSec gates at Lyon Airport.

Due to its modular design, along with its combination of glass and steel, the ImmSec offers an elegant solution which is transparent, customisable and which integrates perfectly into the ambience of the airport.

Large glass panels encourage the passenger to feel at ease by reducing the 'physical barrier' effect of the gate. It provides a transparency and for the supervisor, a greater visibility of passengers inside the gate.

The ImmSec's slim and ergonomic modules allow the gate to be installed in single or multiple lane configurations, with a minimal footprint when installed. There is also an ability to use a bidirectional function for staff as well as be used by PRM (Persons with Reduced Mobility), including standard and wide passage.



Benefits - ImmSec

- Accelerates the immigration process
- Automates the entry process and collection of data
- Increases security with integrated biometrics technology and single passage detection
- Minimises queues and queuing time
- · Disabled compliant
- Ready for single token hands-free passage with an optional facial recognition camera



Airside to Landside Anti-Return

Secure passenger flow from airside to landside

The PasSec has been designed to provide free passage for passengers moving from airside to landside areas and prevents any passenger from returning or passing from landside back to airside.

This PasSec is equipped with an array of sophisticated sensors used to detect presence and direction of passage. With additional sensors, left items and thrown-back objects can also be detected, both of which could present a security threat.



PasSec gates at Salalah Airport.

Since speed and simplicity of movement are critical to achieving good passenger flow, the gates are designed to be fully automatic – demanding no user interaction – and are built to deal with high passenger throughput.

The PasSec is available as a single or double door module or at its most secure, as a double door module with interlocking elements.

Benefits - PasSec

- Controls passenger movement from secure to non-secure areas and prevents passage in the wrong direction
- Improves security with advanced detection system
- Allows high throughput with no passenger interaction
- · Disabled compliant
- Sophisticated sensor detect presence and direction of movement, as well as left items.

Gunnebo PasSec





PreSec Pre-Security Boarding Pass Check

Increase capacity with self-service security

The Gunnebo PreSec is a pre-security gate developed for interfacing to the airport's passenger flight information system and checking the validity of the passenger entitlement to enter the security area.



LoungeSec Lounge Access

Ensures your most valued customers receive a faultless service

The Gunnebo LoungeSec provides increased speed of service and convenience for important frequent flyer passengers and other lounge vistors, while freeing up time for lounge staff to focus on more value adding activities that improve the passenger experience.



BoardSec Automated Self-Boarding

Enhance passenger experience and reduce boarding times

The BoardSec regulates the flow of passengers onto an aircraft in a safe and secure way, freeing up the valuable time of airport staff and enabling them to concentrate on those passengers that need extra attention and support.



ImmSec Immigration and Border Control

Efficient verification of passengers

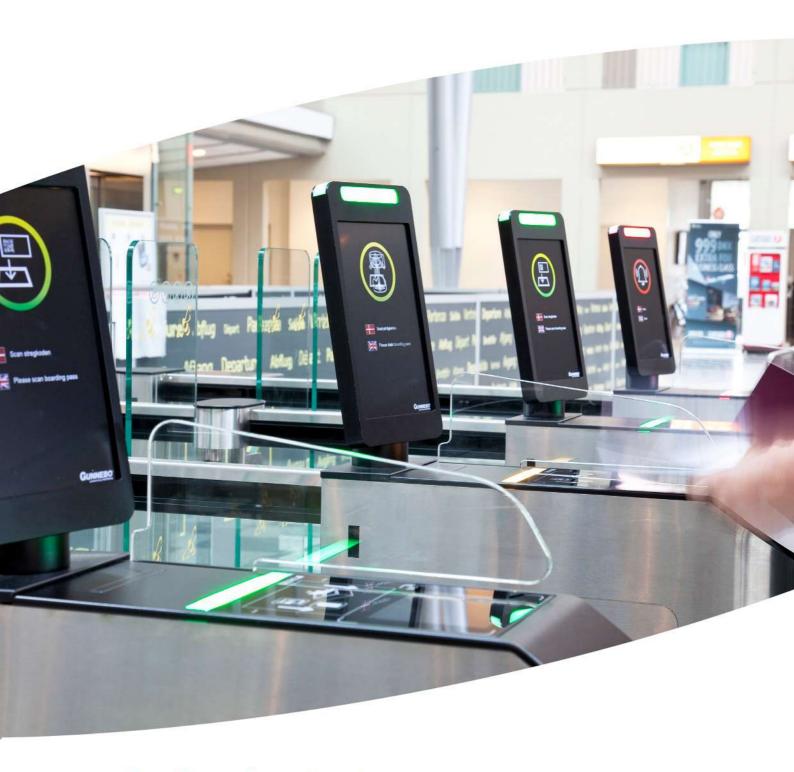
The Gunnebo ImmSec is a specifically designed double gate interlock solution used for the automated identification and validation of travellers at one of the most security sensitive areas in an airport: immigration.



PasSec Airside to Landside Anti-Return

Secure passenger flow from airside to landside

The Gunnebo PasSec is an anti-return gate preventing passengers and airport visitors from moving from landside to airside via arrivals.



The Gunnebo advantage

With 30 plus years of experience in the field of throughput management, more than 70,000 speed gates installed in subways, stadiums and airports around the world and more than 90 million passengers every day, Gunnebo is a world leader in passenger processing.