



Check in to the future

From robot assistants to augmented reality, Marisa Cannon rounds up the latest advances helping to smooth your journey through the airport



In the early days of commercial aviation, airports were small, modest facilities, made up of little more than an airfield and a solitary terminal. As airlines multiplied and passenger numbers soared, airports have been driven to meet new levels of customer service, streamlining the way passengers are processed and exploring new ways of entertaining them while they wait. Here is a round-up of new technological and recreational developments at airports around the world.

BIOMETRIC SCREENING

Passengers can be asked to show their documents up to five times when travelling through an airport. In the past few years,

airports have begun introducing biometric devices at checkpoints, speeding up the screening process by verifying a person's identity with a face or fingerprint scan.

In March, BA launched a facial recognition system that captures a passenger's features and allows them to board the plane without showing any documents. Currently available for some domestic flights departing Heathrow T5, the system will eventually be added to international routes. Amsterdam Schiphol and Dutch carrier KLM launched a similar trial earlier this year.

In the US, a fingerprint or iris scan will soon replace boarding passes at 22 major airports, with biometric lanes launched this year at Atlanta Hartsfield-Jackson, Los Angeles International, Minneapolis St Paul, New York JFK and La Guardia.

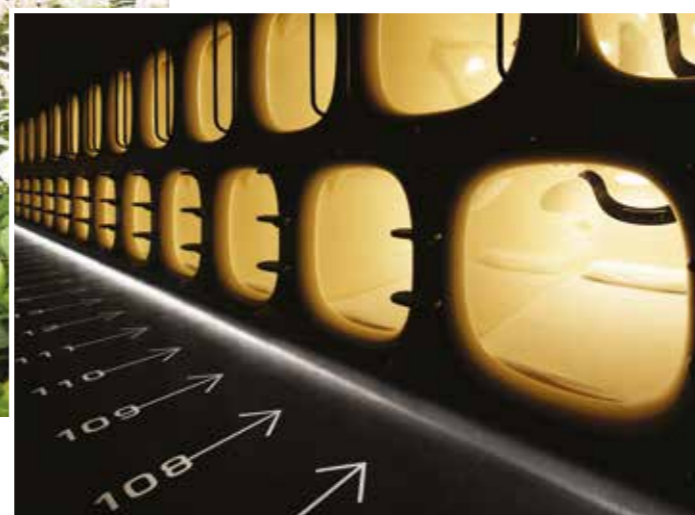
More ambitious still is Australia's "Seamless Traveller" initiative, which aims to automate 90 per cent of screening processes at the country's international airports with no human interaction by 2020.

BEACON TECHNOLOGY

This uses location detection transmitters fitted around the airport to track passenger movements, sending information such as flight times and boarding gates to their phones as they move through the terminal. Airlines have started using beacons to notify passengers of flight changes and sell add-ons such as lounge access, while airports are using it through their smartphone apps to map routes for lost passengers and to target them with advertising and retail promotions.

Doha's Hamad International has installed 700 "iBeacons" to support its app, informing passengers of their flight status, baggage claim carousel, and time and direction to gate, while alerting them to offers as they walk past shops. In

Main: KLM's robot, Spencer, at Amsterdam Schiphol
Above: BA's biometric gates at Heathrow T5
Left: Gatwick's augmented reality route planner



Clockwise from above left: Changi airport's butterfly garden; first aid for luggage at Frankfurt; Nine Hours hotel at Tokyo Narita
Below: JAL's robot at Tokyo Haneda



2015, Hong Kong International was one of the first to introduce beacon technology in Asia, providing interactive maps that guide passengers to check-in counters, public transport points and departure gates.

In Europe, BA and Virgin Atlantic were some of the first airlines to trial beacons at Heathrow as early as 2014, around the same time that Amsterdam Schiphol began installing some 2,000 beacons, which, among other things, help to monitor and inform passengers of queue waiting times at security. In May this year, Gatwick also installed around 2,000 beacons across its North and South terminals, which support an augmented reality route-planner that can be used through the camera on a smartphone.

ROBOTIC ASSISTANTS

Robotic customer service agents are no longer a thing of the future,

with many airports using them to check in passengers and provide useful information such as local exchange rates and directions.

Last year, KLM trialled its Spencer robot, which can scan boarding passes and guide lost travellers around Schiphol. At Tokyo Haneda, JAL tested its humanoid NAO robot, which could inform passengers (in three languages) about the weather at their destination as well as gate locations and opening times, while tech giant Hitachi trialled a roller-skating robot guide. Seoul Incheon is trialling the use of 15 robots – to clean floors, handle baggage and provide directions. The airport plans for additional robots to eventually perform security checks and serve food and drink in airport lounges.

FITNESS FACILITIES

Airport innovations aren't just restricted to passenger processing. Gym facilities are growing in

demand as travellers look to make better use of their time in transit. Hamad's Vitality Wellbeing and Fitness Centre offers a 25-metre pool, a hydrotherapy tub, squash courts and a gym plus anti-jet lag massages. Chicago O'Hare has a yoga room, while Toronto Pearson has a 930 sqm fitness club and kit hire. At Changi, you can swim lengths in the T1 rooftop pool.

GREENERY

Changi is well known for its green spaces, from the butterfly garden in T3, which contains more than 1,000 tropical butterflies from 40 species, to the water lily, cactus and orchid gardens in T1 and T2. Dubai International's Zen Gardens in T3 are replete with tropical vegetation, fishponds and benches to relax on. At Chicago O'Hare, passengers can visit an

aeroponic garden where seedlings sprout from 26 vertical towers, growing herbs and vegetables that supply the airport's restaurants.

CAPSULE HOTELS AND SLEEP PODS

Japan was first off the bat with the capsule hotel, offering weary office workers and thrifty travellers a place to rest their heads back in the 1980s. At Tokyo Narita's T2, capsule hotel Nine Hours has 129 pods with beds and shower facilities charged on an hourly basis. In May, Dubai unveiled 27 sleep pods and double cabins as part of its Sleep 'n' Fly lounge in Terminal 3 (see Upfront, page 12).

In 2015, Helsinki was the first European airport to introduce sleep pods, equipping them with hand luggage storage and power outlets, while Berlin Tegel and

Munich's Napcabs offer 4 sqm private cabins with a bed, desk, wifi, iPod dock and USB port, bookable for up to 12 hours.

LUGGAGE ASSISTANCE

Short of buying a new case, there's not much you can do if your luggage handle breaks or a wheel comes loose while in transit. Not any more – Frankfurt's Baggage Service (FGS) can repair all manner of mishaps, from snagged zippers to stuck wheels, at no extra charge. In the event of a write-off, you can buy a replacement suitcase should you need one.

Tokyo Narita's T2 also offers help with faulty luggage, whether it is opening a locked case, lubricating sticky wheels or making spare luggage keys. Delivery service Airport will

collect and transfer your bags to Heathrow, Gatwick or City from any London address, and check them in for you if you're travelling with British Airways.

LEISURE SPACES

Frankfurt has recently opened a "Movie World", where you can watch films and TV shows. It also has a "Gaming World" with the latest arcade and computer games available to play for free.

Amsterdam Schiphol hosts regular exhibitions in partnership with the city's Rijksmuseum, presenting works by some of the country's foremost artists. Seoul Incheon has an ice rink, a cinema and an 18-hole golf course a five-minute shuttle ride away, while Hong Kong has an indoor golf simulator and an IMAX screen accommodating 350 people. ■

Number One – for Business Travellers

Relaxed, productive work at Frankfurt Airport

- State-of-the-art Work&Connect areas
- Free Wi-Fi
- Leisure Zones & comfortable Silent Chairs
- Fully equipped offices
- Conference rooms for business meetings
- Fast Lanes for time-critical flights
- "EasyPASS" border check gates

For more information, go to www.frankfurt-airport.com/en

Gute Reise! We make it happen

Frankfurt Airport