



London 
City Airport
Get closer.

CHAPTER FOURTEEN

CITY AIRPORT DEVELOPMENT PLAN (CADP)

On Wednesday 27 July 2016 London City Airport received planning permission for a £350 million privately funded investment which includes plans for seven new aircraft stands, a parallel taxiway and the passenger terminal extension.

The approval will enable the airport to welcome 6.5 million passengers by 2025 and inject £1.5 billion each year into the economy.

The announcement came within days of Theresa May becoming Prime Minister. Philip Hammond, the Chancellor of the Exchequer, and a former Secretary of State for Transport, and Lord Ahmad of Wimbledon, at the time Aviation Minister, made a surprise visit to the airport to give the go-ahead following formal confirmation from Transport Secretary Chris Grayling and Communities Secretary Sajid Javid.

Declan Collier, CEO, London City Airport said on the occasion:

'Today, the new Government has shown it is ready to act in the best interests of the British economy. Expansion at London City Airport will create more than 2,000 new jobs in East London, add much-needed aviation capacity in the South-East, and generate an additional £750 million per year for the UK economy. As the airport serving by far the highest proportion of business travellers in the UK (52%), who do some £11 billion of trade in Europe annually, today the Government has sent a strong message that London and the UK are very much open for business. I welcome the decision and look forward to delivering new airport capacity for the South-East by 2019.'

The development will transform the airport, one of East London's largest employers, to welcome more airlines and with it more passengers. The airport has aspirations of a Silver town for London City Airport Elizabeth Line station.

Over the last 30 years London City Airport and its 1199m runway has become the benchmark for new quieter, next generation aircraft, larger and with a greater range. The major constraint has been runway capacity but with the introduction of a parallel taxiway landings and take-offs, known as movements in airline language, can be increased by up to 45 per hour without infringing the legal capacity of the airport. When the airport first opened 15 movements an hour was thought to be good going, but when the runway eastern holding point was added in 2003 this was more than doubled to 32. Thirty-eight movements an hour have been recorded.

The latest jet transport aircraft, such as the Bombardier CS100 have a greater wingspan than their predecessors which could restrict manoeuvrability. The increased area will alleviate this problem. Typically the Canadian aircraft, partly built in Belfast, will offer airlines the opportunity to consider longer-haul destinations including The Gulf and Middle East, Turkey, Russia and the east coast of the United States. With up to 130 passengers the throughput per aircraft

This aerial view clearly shows the extended aircraft taxiway.





Still at an early stage the plans call for an extension of the existing terminal to the east and a new 'drop off' area.

can increase by one third. They are quieter too than the previous generation.

The construction phase of development is expected to create 500 jobs and a further 1,600 posts once completed. Under the plans the airport can add approximately a further 30,000 flights by 2025, movements which are already permitted, helping to unlock more air capacity within London's airport system in advance of a new runway for the South-East of England.

Essentially there are two aspects to the development, the parallel runway and increased apron space, and the far more complex rebuilding and extending the easterly end of the existing terminal building to provide a new arrivals hall; East Pier and new aircraft stands.

The parallel taxiway development is relatively simple and involves pile driving into the dock bed thus extending the existing deck in certain locations by up to 920 feet to accommodate the terminal extension and East Pier. Seven more aircraft stands will be provided, with essentially a design evolution of the successfully refashioned original gates towards the west, and approximately a further 820 feet of taxiway to join up with the existing holding area at the eastern end of the airport. There is nothing very complicated to this engineering work except that care needs to be taken to ensure that no unknown World War II

bombs found are inadvertently detonated. Most of the work will be done during normal airport operational hours although some will need to be undertaken when the airport is closed for safety reasons.

Within the last 12 months the walkway to the western gates has been extensively remodelled with an open-plan layout offering more places to sit and a bright, modern environment to enjoy, with work spaces and quiet areas. A Pret A Manger has enhanced the airside food and beverage offerings, together with Brick Lane Brews, a café/bar concept, and an airport beauty lounge, AeroSpa.

In charge of the project are the award-winning, airport architects Pascall+Watson who have been involved with London City Airport since 2011, in particular the very much modernised departure lounge. Their work includes Heathrow Terminal 2, Gatwick's revised North Terminal and a number of large airport projects in China.

While the runway and taxiway will be a highly visible creation, the largest outlay in financial terms will be the construction of the extended terminal over the existing dock. Covering over 550,000 square feet in total the extended passenger facilities will include a new baggage hall, security and border control facilities, improved retail provision, and an enlarged airside lounge area. CIP and VIP facilities for scheduled flights, currently accommodated in the Private Jet Centre, are expected to be provided. The new



east gates will be served by an innovative pier design and walkway.

A new air traffic control tower is already on its way. It will be the first in the UK to operate as a single digital source of air traffic control and will put the airport at the forefront of a global aviation trend. The scheme is part of a safer generation of technology for air traffic management, offering increased capabilities to the controllers. The 164-foot high structure will use the latest Saab data technology to feed an operations control room based at the National Air Traffic Services (NATS) headquarters in Swanwick, Hampshire.

The digital solution is a multi-million pound investment utilising state-of-the-art 360-degree HD cameras on a newly constructed tower. A live feed with a panoramic view of the airfield, along with sensory and operational data, will be sent via super-fast secure fibre connections to a control room in Swanwick where air traffic controllers will perform their operational role, using the live footage displayed on 14 HD screens that form a seamless panoramic moving image, alongside the audio feed from the airfield, and radar readings from the skies above London, to instruct aircraft and oversee movements.

The state-of-the-art technology from Saab Digital Air Traffic Solutions, which is tried and tested and already in use at Örnköldsvik and Sundsvall airports in Sweden, offers several

Not at LCY. The new digital control operation will be at NATS HQ at Swanwick in Hampshire.

advantages for efficient air traffic management at London City Airport.

Controllers will be able to utilise a range of viewing tools such as high definition zoom and enhanced visuals, which provide detailed views of activity on the airfield, including close-up views of aircraft movements along the runway, with pan-tilt zoom cameras that can magnify up to 30 times for close inspection.

They will also have real-time information, including operational and sensory data, to build an augmented reality live view of the airfield. For example, the ability to overlay the images with weather information, on-screen labels, radar data, aircraft call signs, or to track moving objects.

The sophisticated tools of a digital set-up significantly improve a controller's situational awareness, enabling quick and informed decisions that thereby offer safety and operational benefits for the airport.

The new control tower is located in the airport's long-stay car park, in line with the mid-way point of the runway, adjacent to King George V Dock. It is due to be completed in 2018, followed by more than a year of rigorous testing and training, during which the existing 30-year old tower will continue to operate. The digital tower will become fully operational in 2019.