

CITY AIRPORT DEVELOPMENT PROGRAMME
(CADP1) S73 APPLICATION

ENVIRONMENTAL STATEMENT

VOLUME 1: MAIN ES
DECEMBER 2022



Pell Frischmann

City Airport Development
Programme (CADP1) S73
Application

Volume 1: Environmental Statement
Chapter 2: Site Description

December 2022

2 SITE DESCRIPTION, PROPOSED DEVELOPMENT AND ALTERNATIVES

2.1 Introduction

2.1.1 This Chapter of the ES provides a description of the existing airport site, the proposed amendments to the CADP1 planning permission being sought as part of the S73 application, and then provides a summary of the alternatives considered during the pre-application process, as required by the EIA Regulations 2017.

2.1.2 A description of the construction works and the likely phasing of the remaining elements of CADP1 which have not yet been built out, are provided in Chapter 6: Construction Programme and Environmental Management.

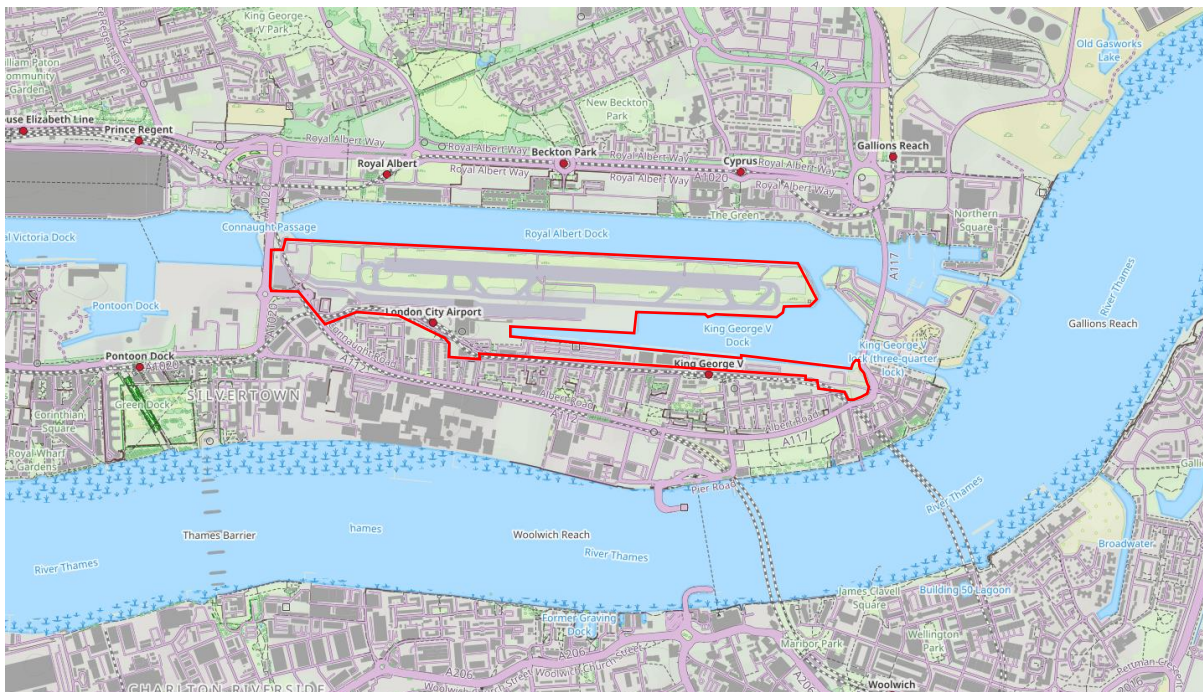
2.2 Site Description

Site Location

2.2.1 LCY is the most centrally located London airport and it lies within the administrative area of the London Borough of Newham (LBN). The airport extends to an area of 60 hectares and is located between the Royal Albert Dock and King George V (KGV) Dock, adjacent to the Woolwich Reach and Gallions Reach of the River Thames. Figure 2.1 below shows the location of the airport in the context of the Royal Docks and East London area.

2.2.2 The airport is approximately 9.5 km east of the City of London, approximately 3 km east of Canary Wharf and 0.8 km away from the ExCeL Exhibition and Conference Centre. The surrounding area comprises of a mix of residential, industrial and commercial uses. There is also a significant amount of planned development and regeneration in the vicinity of the airport.

Figure 2.1- Site Location Map of London City Airport



2.2.3 The land around the airport is in urban use with a mix of clearly defined zones including residential and industrial/commercial areas located on the northern and southern banks of the River Thames at Silvertown and North Greenwich. Significant non-residential uses in the area include the large Tate and Lyle factory to the south of the airport; the University of East London (UEL) on the north-east side of the Royal Albert Dock; the Royals Business Park to the north; the London Regatta Centre on the north-west side of the Royal Albert Dock; the Excel Exhibition Centre and three adjacent high rise hotels to the west on the northern side of Royal

Victoria Dock; and several areas of vacant land including land at Albert Basin to the east and a large expanse of land on the north side of Royal Albert Dock ('the ABP site') between UEL and Royals Business Park. Some of these sites are currently being developed.

2.2.4 The land immediately south of the airport is dominated by residential land uses between Hartmann Road and the DLR ramp to the north, and Albert Road to the south. In addition, several new major residential developments have been completed in the vicinity of the airport since 2016, when CADP1 was granted planning permission. These include at Gallions Reach and Royal Albert Wharf at the eastern end of the runway between the KGV Dock and the River Thames, and the Royal Wharf and Barrier Park East developments adjacent to Thames Barrier Park to the southwest of the airport.

2.2.5 There are numerous other proposed developments in the local area (with planning permission) that have not yet commenced, including Silvertown Quays to the southwest of the airport. These are discussed further in Chapter 3 and 14 of the ES.

Airport Layout

2.2.6 The airport is constructed on the site of a disused shipping dock, with the runway situated on the strip of land between KGV Dock and the Royal Albert Dock. It first opened in 1987 as a Short Take-off and Landing (STOL) airport and was predominantly used by propeller-powered aircraft conveying business passengers to domestic and European destinations. However, it has grown progressively since this time and now handles a mix of aircraft types including regional jet aircraft with a seating capacity of around 110. The airport continues to serve a primarily business travel market but with an increasing proportion of leisure/ holiday passengers.

2.2.7 A concrete deck over KGV Dock (the "Eastern Apron") was constructed between 2003 and 2008 to provide four aircraft stands (numbers 21-24) undertaken as part of the airport's Operational Improvement Programme (OIP). This deck was then extended eastwards between 2018 and 2020 to create eight additional stands, a parallel taxiway and a runway hold, in accordance with the CADP1 planning permission. The concrete deck is suspended on piles extending to the base of KGV Dock, which is approximately 10m deep.

2.2.8 The existing airport layout is illustrated in Figure 2.2 and an aerial view of the site is provided in Figure 2.3. The runway, which is categorised 'Code 2C,' is used by aircraft taking off and landing in an easterly (Runway 09) direction and westerly (Runway 27) direction. The largest aircraft currently certified to operate from the airport are the E190-E2 and A220-100.

2.2.9 Since the completion of the parallel taxiway and runway hold (known as Runway Hold 27) in 2020, all permitted aircraft types and sizes have been able to use the full length of the parallel taxiway, including along the Western Apron, removing the need for backtracking and thereby enabling the capacity of the runway to be optimised. In its present configuration, the runway is restricted to 45 aircraft movements per hour under the CADP1 planning permission. This restriction will not change as part of the S73 application.

2.2.10 The airport has 25 approved stands for scheduled commercial aircraft, but only 19 are currently operational. Eleven of the stands were original to the initial opening of the airport, with three more provided when the Western Apron was reconfigured in 2002 and another four upon the completion of the OIP in 2008. Stands 21 – 24 and the eight new CADP1 stands are the only ones currently capable of accommodating the largest aircraft operating at the airport and future variants such as the E195-E2.

2.2.11 The existing aircraft stands located between the runway and terminal and are serviced by the West and East Piers which adjoin the Main Terminal Building (MTB). The existing East Pier is 9m high and extends along the south side of aircraft stands 21-24, ending in a short length of an 8m high noise barrier which screens aircraft at the eastern end of the aircraft stands. The airfield is surrounded by a mix of natural and artificial grass, on which are located the navigational and landing aids. The airside land also accommodates a fire station, various fuel storage compounds, ground and freight handling, flight catering and facilities maintenance that, collectively, are essential for the operation of the airport.

2.2.12 In addition, there are stands at the corporate aviation facility (known as the Jet Centre) for smaller company/ privately owned or leased aircraft. The Jet Centre is situated at the western end of the airfield and includes a public access ('landside') and restricted access to the airport ('airside') off the Connaught Road roundabout. It consists of VIP lounges, parking for business aviation aircraft, immigration and crew facilities. This area of the site also contains a series of fences which form part of the western perimeter boundary of the airfield.

2.2.13 The existing airport terminal is a flat roofed building of approximately 13 m in height with a conning air traffic control (ATC) tower at a maximum height of 15 m, located at the western end of KGV Dock. The air traffic control functions are now provided remotely via the new Digital Air Traffic Control Tower (DATCT) constructed on the southern dockside in 2019. The DATCT became operational in 2021, thus making the old ATC tower redundant. The MTB contains check-in facilities, ticket desks, security processing, a departure lounge, a departure and arrival pier, departure gate areas, domestic and international baggage reclaim, immigration and customs, shops, a business centre and catering outlets.

2.2.14 The first-floor departure lounge was re-configured and expanded in 1997 and, in 2001, the terminal building was extended westwards to increase baggage reclaim capacity, enhance immigration facilities and provide accommodation for control authorities and handling agents. An upgrade of the airport's departure lounge was also completed in 2009. The airport also contains various temporary facilities, including a Temporary Immigration Facility (TIF) and a Temporary Outbound Baggage (OBB) structure and there have been ongoing improvements to the departure lounge and security facilities since 2016.

2.2.15 To the south of the terminal, the existing forecourt provides passenger drop-off and pick-up facilities as well as direct access to the airport's dedicated Dockland Light Railway (DLR) station. To the east of the MTB are several car rental facilities, as well as the airport's staff office building City Aviation House (CAH) which is 4 storey building. Further along the dockside is KGV House which is used for offices and as a staff training facility, the LCY Engineering Building, a temporary decked car park (constructed in 2019), and the Fuelling Facility. Further east, towards Woolwich Manor Way, the remaining land within the ownership of the airport is either vacant or used for goods storage and heavy vehicle parking.

2.2.16 A number of changes have occurred at the airport in recent years as the first elements of the approved CADP1 have been constructed. The approved CADP1 site plan is provided in Figure 2.4 for context. In summary, the following have also been constructed:

- Extension to the deck over the KGV Dock to provide 8 additional 'Code C' aircraft stands and a new taxiway which runs parallel to the eastern part of the runway and connects with a holding point for up to 3 aircraft (known as Runway Hold 27) located at the eastern end of the runway;
- Erection of a temporary noise barrier to the east of the existing East Pier;
- Construction of the foundations and deck for the East Terminal Extension (ETE) and New East Pier (NEP);
- Construction of temporary facilities at the airport, including the Temporary Immigration Facility (TIF), Temporary Outbound Baggage (OBB) structure, Temporary Good-In Facility (TGIF), temporary single deck car park and temporary car rental building; and
- Installation of artificial fish refugia (an ecological enhancement feature) within the KGV Dock;

2.2.17 In addition to the airport improvements delivered as part of CADP1, a number of other specific structures and airfield enhancements have been built out or implemented under the airport's permitted development rights, in accordance with Part 8, Class F of the Town and Country Planning (General Permitted Development) (England) Order 2015 (as amended). These changes are identified on Figure 2.2 and include:

- The Digital Air Traffic Control Tower (DATCT) to the south of KGV Dock;
- Runway and taxiway rehabilitation works; and
- Introduction of an Engineered Material Arrestor System (EMAS) at either end of the runway (presently under construction).

2.2.18 Photographs of the existing site and airport buildings and infrastructure are provided in Figure 2.5.

Pell Frischmann



Figure 2.3: Aerial View of the Existing Site



Figure 2.4: Approved CADP1 Site Plan

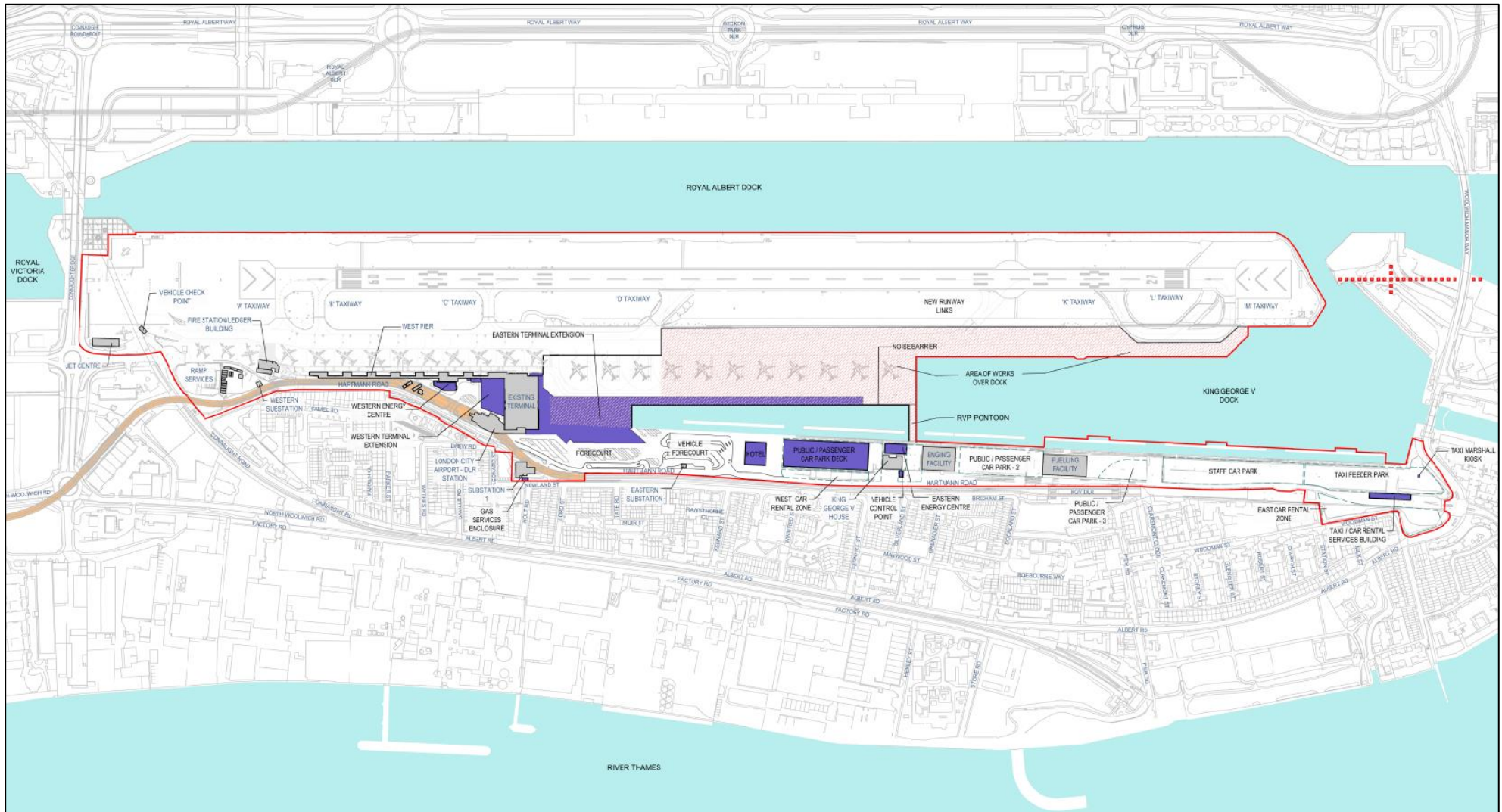


Figure 2.5: Existing Site Photographs

Plate 2– View of airport looking north-west, with Eastern Apron (left) and new Deck (right) in the foreground.



Plate 1– View of DATCT looking south-west from the new Deck



Plate 3 – View of existing stands and new Deck, looking east



Plate 4 – View of existing terminal forecourt and DLR ramp, looking south-west.



Site Access

2.2.19 Vehicle access to the airport is provided from Hartmann Road, which is a private road with an east-west orientation that connects with the A112 Connaught Road at a signalised junction at its western end. This currently functions as the single point of access to the airport from the wider highway network. At its eastern end, Hartmann Road forms a signalised junction with the A117 Woolwich Manor Way, although this junction is presently closed for public access to the airport. As part of the CADP1 scheme, the eastern end of Hartmann Road will be opened to traffic to provide enhanced access to the airport. This will occur around 2030, with or without the proposed amendments.

2.2.20 The A112 Connaught Road has an east-west orientation to the south of the airport, parallel with Hartmann Road. It connects directly to the South Circular at the A117 Albert Road to the east, and to the A13 Newham Way via the A112 Victoria Dock Road/Prince Regent Lane to the north.

2.2.21 Highways access to the airport will be enhanced when the Silvertown Tunnel opens in 2025. This will be broadly parallel to the Blackwall Tunnel and will connect with North Woolwich Road at the western end of Dock Road.

2.2.22 The Ultra-Low Emission Zone (ULEZ) was expanded in October 2021 to cover all areas bordered by both the North and South Circular roads, which includes the A117 Albert Road. As a result, all approach routes to the airport are covered by the ULEZ. Vehicles not meeting the requisite Euro standard (i.e. older, more polluting vehicles) are currently required to pay £12.50 per day to enter the ULEZ.

2.2.23 The main strategic road connections to the airport are the east-west A13 and the A406 North Circular that connects with the M11 and M25 motorways. The airport is approximately 1.5 km from the A13 (Prince Regent's Lane junction), 5 km from the A406 and 25 km from the M25. In addition, the A102(M) crosses the Thames north-south via the Blackwall Tunnel, approximately 5 km from the airport. This is the nearest road-river crossing point to the airport.

2.2.24 There are two main car parking areas within the airport, shared between passengers and staff. The short stay car park is located closest to the terminal building, and the long stay car park is adjacent to the east of this. These car parks are accessed via a barrier-controlled exit on to Hartmann Road. The airport currently has 974 car parking spaces and consent to increase provision up to 1,251 car parking spaces under the existing CADP1 planning permission. Parking is also provided for motorcycles and cycles.

2.2.25 The public roads within the vicinity of the airport are covered by a Controlled Parking Zone (CPZ) in operation 08:00 – 18:30 Monday to Sunday. This includes parking bays on the residential streets of Silvertown and double-yellow lines on Connaught Road/Albert Road and Hartmann Road.

2.2.26 The airport has a good Public Transport Accessibility Level (PTAL) of 3 (where 1 is the lowest level and 6b the highest level achievable)¹. The airport is well connected to London's public transport rail system via its onsite DLR station, which links directly into the airport terminal building with direct connections to/from the City of London, Stratford and Woolwich. It provides direct connections to the Jubilee, Hammersmith and City, and District Line London Underground services and to the C2C, TfL Rail, London Overground and Greater Anglia national rail services. Frequent services (every four minutes at peak times) operate between 05:30 and midnight, Mondays to Saturdays and between 07:00 and 23:00 on Sundays.

2.2.27 The airport is also served by bus routes 473 (Stratford – North Woolwich) and 474 (Canning Town – Manor Park), both of which stop in the airport forecourt. Route 474 operates on a 24/7 basis and since May 2022, has been diverted to provide a direct link between the airport and Custom House station to coincide with the opening of the Elizabeth Line.

¹ <https://tfl.gov.uk/info-for/urban-planning-and-construction/planning-with-webcat/webcat>

2.2.28 As a result, it has the highest public transport mode share of any UK airport, with 73% of passengers using public transport (DLR, Bus and Black Taxi) in the Baseline Year of 2019, including 64% of passengers using the DLR, according to an ASQ passenger survey in this year².

2.2.29 Following the opening of the Silvertown Tunnel in 2025, there is the potential for further bus services between destinations south of the River Thames and the airport. The nature of these enhancements will be established in dialogue with TfL and the LBN and are unrelated to the proposed S73 planning application.

2.2.30 The airport is accessible on foot from the surrounding residential and commercial areas. Hartmann Road has a footway on its southern side which connects directly with footways on Connaught Road to the west. There are controlled pedestrian facilities at the traffic signal-controlled junction of Connaught Road and Hartmann Road. Pedestrians can also access the airport from a dedicated pedestrian link between Hartmann Road and Newman Street.

2.2.31 Cyclists access the airport from Hartmann Road. There are 30 covered cycle parking spaces located beneath the DLR adjacent to the motorcycle parking area. This is opposite the main entrance to the airport terminal. There are a further 12 cycle parking spaces located within a secure bike store in the short stay car park. Cycle stands are predominantly used by staff.

2.2.32 The current arrangement for black taxis is that on arrival at the airport with passengers, the taxi will drop passengers at the front of the terminal building within the forecourt. Once the passenger has paid the taxi fare, the vehicle departs from the forecourt and either turns right, away from the airport, or turns left and joins the back of the taxi queue that extends eastwards on Hartmann Road towards the airport car parks. The taxi queue length can accommodate approximately 200 taxis.

2.3 Proposed Development

2.3.1 As introduced in Chapter 1, the airport is seeking approval to revise planning conditions attached to the CADP1 planning permission pursuant to Section 73 (S73) of the Town and Country Planning Act 1990 (as amended). The S73 application comprises the following:

“Section 73 Application to vary conditions 2 (approved drawings and documents), 8 (aircraft maintenance), 10 (restrictions on development – Plan P4), 12 (aircraft stand location – Plan P4), 17 (aircraft take-off and land times), 23, 25, 26 (daily limits), 35 (temporary facilities), 42 (terminal opening hours), 43 (passengers) and 50 (ground running) attached to planning permission 13/01228/FUL, dated 26 July 2016 (as varied) to allow up to 9 million passengers per annum (currently limited to 6.5 million), arrivals and departures on Saturdays until 18.30 with up to 12 arrivals for a further hour during British Summer Time (currently allowed until 12.30), modifications to daily, weekend and other limits on flights and minor design changes, including to the forecourt and airfield layout”.

2.3.2 The proposed amendments to the existing CADP1 planning conditions would allow for:

- An increase in the number of passengers able to use the airport each year, from 6.5 million currently permitted to 9 million per year (expected to be achieved in 2031) (Condition 43).
- An extension of operational hours on Saturday to allow aircraft landings and departures to take place throughout the afternoon up to 18.30, with an additional allowance of 12 aircraft permitted to land at the airport before 19.30 during British Summer Time (Condition 17 and 23).
- An increase in the number of flights permitted between 06:30 and 06:59 (from 6 to 9) (Condition 17).
- Extension of permitted maintenance and ground running of aircraft on Saturday afternoons up to 18.30 (Conditions 8 and 50).

Note: The CAA data reports lower public transport usage and therefore, for robustness, this CAA data is used for future projections, as reported in the TA

- Greater flexibility in the location of the already permitted aircraft to allow for the wider wingspan of new generation aircraft (Condition 12).
- Changes to the Energy Strategy to update it in line with policy requirements (Condition 61).

2.3.3 Air Transport Movements (ATMs) will remain limited to 111,000 per annum and 45 ATMs per hour, as approved under the CADP1 planning permission, and there would be no change to the 8-hour night-time closure period or the Sunday morning curfew currently in operation at the airport.

2.3.4 There will be no changes to the number of aircraft stands, the runway and other infrastructure, or to the design and layout of the buildings, as approved under the CADP1 permission and subsequently varied by several non-material amendment applications. There will be some minor changes to the terminal forecourt to reflect changes to modal split assumptions since the plans were originally approved, and to the approved 'facilitating works' during the construction of the project. Further details on these minor changes are provided in both the Planning Statement and the Design Development Report submitted with the S73 application.

2.3.5 In addition, the area to the west of the airfield could be used more efficiently to park new generation aircraft, which have a wider wingspan. This would, in turn, allow for greater operational resilience at peak times. Minor changes to the existing apron are therefore proposed, including the layout and marking of aircraft stands, but no new physical infrastructure will be necessary. The Jet Centre is expected to be retained under this arrangement, albeit the number of flights it caters for will be progressively reduced as these are squeezed out by scheduled aircraft in the Development Case (DC).

2.3.6 Changes to the construction programme are discussed further in Chapter 6 of the ES. Construction of CADP1 was put on hold during the Covid-19 pandemic and the remaining elements will be built out commensurate with the recovery of passenger demand following the reduction in air travel as a result of the pandemic. Accordingly, the build out of CADP1 will be at a slower pace than originally envisaged when the approved construction phasing plan was prepared.

2.3.7 Where they remain appropriate, all relevant existing environmental and operational controls, strategies and systems approved through extant conditions attached to the CADP1 planning permission and the associated Section 106 (S106) planning agreement will continue to apply (and/or be re-imposed under a new planning permission and S106 Agreement with LBN).

2.3.8 Some minor inconsequential changes to the wording of other planning conditions will be necessary; however, these would not have a material bearing on the original findings of the 2015 Updated Environmental Statement (UES) or have any potential to give rise to significant environmental effects and, accordingly, are not listed in this ES. Full details are provided in the Planning Statement that accompanies the S73 planning application.

2.4 Alternatives

Introduction

2.4.1 This section is provided in accordance with the requirements of Schedule 4 of the Town and Country planning (Environmental Impact Assessment) Regulations 2017 which specifies that an ES should contain:

"A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."

2.4.2 When considering the 'reasonable alternatives' for a change to permitted operations and amending the existing annual passenger cap, LCY has not identified any credible alternatives which would achieve the overarching objective of making better and more efficient use of the airport's existing and consented infrastructure, in accordance with Government policy, whilst minimising environmental effects as far as reasonably possible.

2.4.3 The requirement of the EIA Regulations for an applicant to consider ‘design alternatives’ does not infer that the airport must undertake a hypothetical and/or retrospective design process, especially as no plausible alternatives exist within the confines and specific characteristics of the CADP1 project and the existing planning permission. Most importantly, there are no proposed changes to the consented buildings or physical infrastructure at the airport as part of the S73 application. Therefore, it is not considered relevant to consider alternative sites, design or layouts of the proposed buildings and airfield, all of which were considered in detail in the 2015 UES and fixed by virtue of the CADP1 planning permission.

2.4.4 The proposed re-configuration of the aircraft stands at the western end of the runway is purely functional and of limited scale, and these changes to the airfield will not be highly visible beyond the airport operational boundary (see ES Chapter 13 for more detail). In addition, no materially different configuration for the stands was identified within the existing operational constraints imposed.

2.4.5 Given the nature of the application and proposed amendments to the CADP1 planning permission being sought, the primary alternative to the Development Case (DC) is the Do Minimum (DM) Scenario, as discussed below and within each chapter of this ES.

2.4.6 Where applicable, faster and slower growth projections are also considered in this ES using two alternative aviation and passenger forecasts prepared by York Aviation. Several alternative construction programmes have also been also considered due to the inherent uncertainty over the exact timing of the commencement of the remaining CADP1 works, which is heavily dependent on the airport’s available capital expenditure in future years.

2.4.7 The above scenarios are described in detail in Chapter 3, 4 and 6 of this ES, and assessed appropriately in each technical chapter. However, for completeness, these ‘alternatives’ are summarised below.

Do Minimum Scenario

2.4.8 The aviation forecasts under the Do Minimum (DM) Scenario are described in detail in Chapter 4 of this ES and the Need Case (ES Volume 3). The DM Scenario is based on aviation and passenger forecasts that assume the proposed amendments are not implemented and that the passenger cap and operational hours at the airport remain in place, as currently consented under the 2016 CADP1 planning permission with its associated planning conditions. This would act to suppress the growth of the airport and delay the transition towards cleaner, quieter new generation aircraft³.

2.4.9 In both the DM and DC scenarios, the airport would continue to operate within the constraint of its 111,000 permitted ATMs, maximum 57dB noise contour, ANCS noise quota count and other environmental controls and conditions which remain in force under the CADP1 permission. As set out in Chapter 1, these extant (unamended) planning conditions and the approved, but as yet unbuilt, physical components of the CADP1 scheme in combination with the proposed amendments, constitute the “proposed development”.

2.4.10 Should the amendments not be approved, the airport would be constrained in its ability to make best use of its existing runway and the opportunities associated with the proposed amendments being sought, including: allowing the airport to operate a wider range of routes and services; the socio-economic benefits from increased employment and Gross Value Added (GVA); and incentivising airlines to more rapidly re-fleet with fuel efficient and quieter new generation aircraft.

2.4.11 As described in Chapter 3: EIA Methodology, the comparative environmental and socio-economic effects of the DM and DC scenarios form the basis of all the technical assessments presented in this ES. In other words, the consequential environmental effects of the proposed S73 amendments are assessed by comparing the projected future growth of the airport under both planning outcomes. Therefore, whilst it would be a highly undesirable outcome for LCY, the DM scenario is the main alternative to the proposed development.

³ See Chapter 8: Noise, for the more precise definition of ‘new generation’ aircraft used in this case.

Faster and Slower Growth Scenarios

2.4.12 Two alternative Development Case (DC) scenarios have been identified and are considered in the ES and the Need Case (ES Volume 3), namely:

- **DC Faster Growth Case;** and
- **DC Slower Growth Case.**

2.4.13 These alternative forecasts reflect the inevitable uncertainties inherent in projecting future demand, particularly in the circumstance of recovery from the Covid-19 pandemic and the current global economic and political instability. However, whilst they are plausible outcomes, they are considered to be less likely than the core DC forecasts.

2.4.14 The Faster Growth Case indicates the airport reaching 9 mppa in 2029, with a Compound Annual Growth Rate (CAGR) of 5.8%, which is slower than growth rates seen at the airport pre-pandemic. The Slower Growth Case is projected to reach 9 mppa in 2033, with a CAGR of 4.1% per annum.

2.4.15 The Faster Growth Case assumes slightly faster growth in the average number of passengers per aircraft movement than in the core DC and a converse position for the Slower Growth Case. This reflects both changes in the expected route structure and slight differences in the fleet transition to new generation aircraft, as well as load factor differences to reflect the underlying demand assumptions.

2.4.16 These faster and slower sensitivity tests are presented and quantitatively assessed in the ES where appropriate to identify any realistic alternative (including the 'worst case') environmental outcomes resulting from these different growth scenarios. They would also have some influence on the phasing and delivery of the remaining CADP1 structures, as discussed in Chapter 6.

Operational Hours

2.4.17 The proposed amendments to the CADP1 planning permission together comprise a package of operational changes that, as a whole, are designed to incentivise airlines operating at LCY (particularly BACF) to invest in new generation aircraft which are quieter and more fuel efficient. The increased allowance for 3 additional aircraft movements in the first half hour of operation (6.30 to 6.59) and the extended Saturday hours are both critical to these investment decisions. This is discussed further in Chapter 4 of this ES and presented in detail in the Need Case that accompanies the planning application (ES Volume 3).

2.4.18 With regard to Saturday operational hours, LCY first carried out pre-application consultation in summer 2022 on potential changes to Saturday operations beyond 12.30 but no later than 22.00 hours to align with the other days of the week (except Sundays) in order to provide the airlines with increased operational flexibility and enable them to schedule flights throughout this extended period on Saturdays. However, following the extensive public consultation process, it was decided by LCY that it should only seek permission for flights to continue only up to 18:30 hours; with a further 12 additional landings permitted up to 19.30 during British Summer Time, in order to accommodate incoming flights from more distant locations and to allow such aircraft to be based at the airport overnight. These additional slots would only be available for the quietest types of new generation aircraft.

No Change to Operational Hours

2.4.19 A further alternative considered in the Need Statement (although not explicitly assessed in this ES) is a scenario in which permission is granted for the extended passenger cap (to 9 mppa) but not for the proposed changes in operational hours, including Saturday afternoons. In this case, growth would be expected to follow the slower Do Minimum (DM) growth path, reflecting slower fleet transition, until 6.5 mppa is reached. Thereafter, growth would be incremental until a ceiling of 8.8 mppa would be reached with 111,000 movements in the late 2030s reflecting smaller aircraft on average using the airport. The 9 mppa cap would be unlikely to be reached until the mid to late 2040s.

2.4.20 In this hypothetical scenario, the lower average aircraft size would result from airlines (particularly BACF) being less willing to invest in higher capacity aircraft types without a commercial case (through greater utilisation) for their higher acquisition cost when compared to the smaller variants of the same aircraft. Overall, this would be less efficient and result in more aircraft movements relative to the volume of passenger carried. It might also mean that some potential new routes and services would not operate. Ultimately, it would constrain the rate of growth meaning that LCY would not be able to meet local demand for air travel and it would also delay the achievement of the beneficial impacts of growth, including additional local employment and improved connectivity for business and leisure travel.

2.4.21 Development over this timeframe would also be likely to lead to more focus on business orientated routes and business users, potentially offering less benefit to local residents. Conversely, extending the Saturday operational hours would offer more leisure routes and hub connections at an earlier point in time as well as potentially lower fares through better aircraft utilisation and larger aircraft with lower direct operating costs.

Alternative Construction Programmes

2.4.22 CADP1 construction works commenced in late 2017 and were put on hold once the new deck was completed in December 2020, due to the Covid-19 Pandemic and the severe consequence this had on the airport's business and finances. No significant construction works have taken place since this time. As such, the last approved version of the Construction Phasing Plan, CPP (approved in 2019 under Condition 4 of the CADP1 planning permission, ref 19/02619/AOD), is now out of date and does not represent a realistic alternative baseline against which construction impacts can be assessed. Indeed, this previously approved CPP had assumed the works would be ongoing from 2019 until their completion in 2025, whereas it is now expected that the remaining CADP works will only just have re-commenced by this time (at the earliest) and only then subject to S73 amendments being approved and funds being available.

2.4.23 The Covid-19 pandemic, and the hiatus this has caused to the airport's business and the aviation sector as a whole, has led to changes in the underlying market dynamics for the airport compared to the outlook that first informed the CADP1 planning application in 2013 and the forecasts used in the 2015 UES. For the reasons set out in the Need Case (ES Volume 3), notwithstanding the now projected growth in annual passenger throughput to 9 mppa by 2031, the future 'busy hour' demands on terminal capacity are expected to be virtually the same as originally anticipated for CADP1 at 6.5 mppa. This means that the CADP1 infrastructure can accommodate the forecast throughput in the DC Scenario without needing further expansion. In part, this is because some of the activity is expected to take place on Saturday afternoons and so does not add to peak period demands on the infrastructure.

2.4.24 One further consequence of the above is that the remaining CADP1 structures (including the East and West Terminal Extensions and the New East Pier) can be built out later, and in a slightly different order, to that set out in the 2019 CPP. These works would be timed so as to match the predicted passenger growth, taking into account the airport's revenue streams and available CAPEX budgets in each year going forward as the airport recovers from the effects of the pandemic. The ability to delay the build-out of the remaining CADP1 works is facilitated by the retention of the existing temporary facilities (e.g. the TIF and TOBB) for slightly longer, and the introduction of technological advancements such as self-service bag drop off and next-generation security screening. The latter equipment also contributes to increasing effective capacity of the terminal facility, which will in-turn also release space to re-configure the departure lounge to provide increased seating in the near term; albeit this may require some reduction in the amount of space provided for retail and catering in the departure lounge.

2.4.25 The likely construction programme in the DC Scenario, spanning an approximate 6-year period between 2025 to 2031, is presented and described in Chapter 6 of the ES. It is important to note that this construction programme is not being put forward for formal approval by LBN at this juncture (in accordance with Condition 4 of the CADP1 planning permission) as this can only occur once the S73 amendments have been approved. Moreover, there is a reasonable prospect that the works will commence somewhat later, depending on operational and financial constraints prevalent at the time (which are currently unknown).

2.4.26 In the DM Scenario, the business case and programme for building out the remainder of the CADP1 infrastructure are much less certain, especially given the slower rate of growth to 6.5 mppa (i.e., being reached in 2030 rather than 2027) and the cap being retained thereafter. This would have an adverse effect on the airport's available revenue, required to fund the works, and it would take the airport longer to return to a positive balance sheet after the losses it endured during the Covid-19 pandemic. Also, with the interventions to the terminal described above, together with the option of other temporary arrangements (e.g., bussing passengers from stands), the airport could, in theory, continue to process up to 6.5mppa well into the mid to late 2030's without needing to build the remaining CADP1 infrastructure.

2.4.27 However, an alternative and more likely outcome is that the airport would choose to at least partially build out CADP1, including the first section of the New East Pier (NEP) in around 2033; as revenue grows and in order to enhance passenger experience, provide additional retail and catering facilities and relieve pressure on the existing gate rooms, bus gates and departure lounge. Thereafter, the airport would be expected to build out the remainder of CADP1 incrementally up to 2037/38 (i.e., 6-8 years later than in the DC scenario) in order to ensure that the levels of service to passengers are fully maintained.

2.4.28 Accounting for the above, one alternative DC and two alternative DM construction timelines are considered in Chapter 6 and within the technical chapters of this ES, where relevant:

- **A Slower DC Construction Case** under which construction commences 2 years later than the core DC case - i.e., commencing in 2027 and being completed by 2033
- **A Core DM Construction Case** whereby construction of the 'stub' of the NEP and other essential facilities are constructed between 2031 and 2033, with the remainder of the NEP, ETE, WTE, forecourt and other facilities built out incrementally up to 2038.
- **A DM Construction Sensitivity Test** whereby no further construction takes place (within the foreseeable future) and the airport continues to operate with its existing terminal and temporary facilities (the latter being subject to a separate application for their retention), with selective internal modifications/ operational interventions to enable it to process peak hour passenger numbers, and 6.5 mppa overall.

2.4.29 In all cases the construction works would need to comply with an approved Construction Environmental Management Plan (CEMP) and therefore the effects would be capable of being reduced to non-significant levels. This is discussed in more detail in Chapter 6.