

## 3. Description of the Proposed Scheme

### 3.1 Introduction

3.1.1 In writing the scheme description, consideration has been given to the requirements of Schedule 4 of the 2017 EIA Regulations in which paragraph 1 states that the description should include:

- a) *"a description of the location of the development;*
- b) *a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;*
- c) *a description of the main characteristics of the development (in particular any production process), for instance, energy demand and energy used, nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used; and*
- d) *an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases."*<sup>12</sup>

### 3.2 Scheme description

#### Site location and the surrounding area

- 3.2.1 LLA is located approximately 45 km north of London and the redline boundary is wholly within the local authority administrative area of LBC. Outside of the redline boundary, LLA owns land in Central Bedfordshire and North Hertfordshire. As shown in **Figure 1.1** in **Volume 3: Figures and Appendices**, it is situated to the south-east of Luton, directly adjacent to the A1081 to the west and Percival Way to the north. To the south and east, the airport is bound by agricultural land. The southern boundary of LLA closely follows the boundary between Luton and the district of Central Bedfordshire, while the easterly boundary follows the county boundaries between the counties of Hertfordshire and Bedfordshire.
- 3.2.2 LLA itself is approximately 245 ha and is predominantly level on a raised chalk plateau at the northern end of the Chiltern Hills, an Area of Outstanding Natural Beauty (AONB), and its highest point is approximately halfway along the runway. At the runway edges, the local topography steeply drops with a gradient of 1:12.5 beyond the western extent, and approximately 1:17 at the eastern extent of the Site. The general topography of the area to the south and east of Luton consists of a series of generally parallel ridges and valleys that run from north-west to south-east.
- 3.2.3 Further afield, the landscape is characterised by arable farmland and moderately sized villages or smaller clusters of residential properties. The arable farmland also contains pockets of priority habitat, namely deciduous woodland, ancient, replanted woodland, and semi-natural woodland located to the south and east of LLA. There are several listed buildings and two registered parks and gardens within 2 km of the airport. There is one scheduled monument, Someries Castle, located 0.75 km to the south-west of LLA. The nearest ecological designated site is Gallery Warden

<sup>12</sup> The Town and Country Planning (Environmental Impact Assessment) Regulations 2017, Schedule 4, Paragraph 1 [online]. Available at: <http://www.legislation.gov.uk/ukxi/2017/571/contents/made> [Checked March 2019].

Hills Site of Special Scientific Interest (SSSI), located 5 km north of LLA (as presented in **Figure 3.1** in **Volume 3: Figures and Appendices**).

### Site history

- 3.2.4 The airport opened as Luton Municipal Airport in 1938 by the Borough of Luton, following a period of use by the Royal Air Force (RAF) during World War II. During World War II, the airport was home to 264 Fighter Squadron, as well as being a manufacturing base for both military and civil aircraft.
- 3.2.5 By 1952, civil use of the airport resumed, and in 1969 nearly a fifth of all flights from the UK departed from Luton. Despite financial difficulties during the 1970s, resulting from the liquidation of major tour operators, in 1985 a new international terminal building was opened. This was followed by the airport becoming a limited company in 1987, with LBC as sole shareholder. The airport was then re-named LLA in 1990 to mark its position as part of the London airport network.
- 3.2.6 Business continued to increase as new airlines were introduced and by 1998 passenger numbers had risen to 4.4 million per annum. Luton was the UK's fastest growing airport. In August 1998 the operation, management and development of the airport was formerly transferred from LBC to the Applicant, following the signing of a public-private partnership deal. Originally this was for a period of 30 years, however a subsequent extension has extended the operating agreement to 2031.

### Consented scheme

- 3.2.7 The scheme consented by the 2014 Planning Permission has made best use of the existing infrastructure, and this comprises eight key components, which are outlined in **Table 3.1**.

**Table 3.1** Components of Luton Airport Expansion

Component	Status
Duelling of the road from the Holiday Inn roundabout to the Central Terminal Area	Complete
Improvements to the public transport hub, adjacent to the terminal	Complete
Construction of a multi-storey car park and pedestrian link on the western side of the existing Short-term Car Park	Complete
Extension to the Mid-term Car Park and Long-term Car Park	Complete
Improvements to the terminal building involving internal re-organisation and minor extensions and building works	Complete
Construction of a new pier (Pier B)	Complete
Construction of a new taxiway parallel to Taxiway Delta	On-going
Taxiway extensions and rationalisation of aircraft parking areas with new stands replacing and improving existing stands	On-going

Source: London Luton Airport Operations Limited, 2020

## Changes to the 2014 Planning Permission

- 3.2.8 The 2014 Planning Permission provided consent to allow the capacity of LLA to increase to 18 mppa. According to London Luton Airport Vision for Sustainable Growth 2020-2050<sup>13</sup>, the latest forecasts for LLA anticipated that the 18 mppa capacity was expected to be fully utilised by 2020. The 18 mppa cap on passenger numbers imposed by the 2014 Planning Permission reflected the forecasts at that time, which anticipated that LLA would see a steady rise to around 18 mppa by around 2028. It is important to note, that within the decision notice, LBC acknowledged that the on-site infrastructure of the approved scheme at LLA has the potential to support operational capacity up to 20 mppa.
- 3.2.9 The Applicant is seeking to vary Condition 8 and raise the passenger cap from 18 mppa to 19 mppa. This would ensure that the number of passengers going through LLA could continue to grow over the short-term, and not be restricted by the existing cap. The increase to 19 mppa is likely to be realised by LLA in 2024 rather than the previous projection of 2020 due to the impact COVID-19 has had on the aviation sector.
- 3.2.10 The proposed variation to Condition 10 is driven by the occasional breaches during the summer 2017, summer 2018, and 2019 summer night-time contour. The daytime contour was exceeded in 2019 by 1.4 sq.km at 20.8 sq.km.
- 3.2.11 The Amendments associated with the proposed variation of Condition 10 relate to a request to modify the previous planning permission (15/00950/VARCON).
- 3.2.12 There are no physical or infrastructure changes associated with the proposed variation to Conditions 8 and 10 that would seek to change the external appearance, height, scale, mass, or layout of elements associated with the 2014 Planning Permission.

### Proposed Variation to Condition 8

- 3.2.13 In light of the above, it is proposed that variation to Condition 8 is as follows (variations to the existing condition are noted in **red bold text**, with the text to be replaced shown as ~~strikethrough~~):

*"At no time shall the commercial passenger throughput of the airport exceed ~~18~~ **19** million passengers in any twelve-month period. From the date of this permission the applicant shall every quarter report in writing to the Local Planning Authority the moving annual total numbers of passengers through the airport (arrivals plus departures). The report shall be made no later than 28 days after the end of each quarter to which the data relates."*

**Reason:** *To ensure growth of the airport can continue, and not be restricted by the existing cap."*

### Proposed Variation to Condition 10

- 3.2.14 In light of the above, it is proposed that variation to Condition 10 is as follows (variations to the existing condition are noted in **red bold text**, with the text to be replaced shown as ~~strikethrough~~):

*"~~The development shall be operated in accordance with the Noise report approved on 2 March 2015 (ref: 14/01519/DOC), including providing details of forecast aircraft movements and consequential noise contours as set out in that report.~~*

*The area enclosed by the 57dB(A) Leq16hr (0700-2300) contour shall not exceed ~~19.4 sq km~~ **21.6 sq km** for daytime noise, and the area enclosed by the 48dB(A) Leq8hr (2300-0700) contour shall not exceed ~~37.2 sq km~~ **42.9 sq km** for night-time noise, when calculated by the Federal Aviation*

<sup>13</sup> London Luton Airport Ltd (n.d.). London Luton Airport Vision for Sustainable Growth 2020 – 2050, [online] Available at: <https://www.llal.org.uk/Documents/vision2020-2050.pdf> [Accessed 11 May 2020].

Authority Integrated Noise Model version 7.0-d (or as may be updated and amended) **for the period up to the end of 2027. Post 2027 the area enclosed by the 57dB(A) Leq16hr (0700-2300) contour shall not exceed 15.5 sq km for daytime noise, and the area enclosed by the 48dB(A) Leq8hr (2300-0700) contour shall not exceed 35.5 sq km for night time noise.**

Within ~~five years~~ **12 months** of the commencement of development **the date of this permission** a strategy shall be submitted to the Local Planning Authority for their approval which defines the methods to be used by LLAOL or any successor or airport operator to reduce the area of the noise contours by 2028 for daytime noise to ~~15.2 sq km~~ **15.5 sq km** for the area exposed to 57dB(A) Leq16hr (0700-2300) and above and for night-time noise to ~~31.6 sq km~~ **35.5 sq km** for the area exposed to 48dB(A) Leq8hr (2300-0700) and above.

**Forecast aircraft movements and consequential noise contours (Day, Night and Quota Periods) for the forthcoming calendar year shall be reported on the 1st December each year to the LPA, which shall utilise the standard 92 day summer contour."**

**Reason:** To safeguard residential amenity. To accord with the objectives of the Luton Local Plan and the National Planning Policy Framework."

#### Proposed variation to Condition 22 (Car park management)

3.2.15 The 2014 Planning Permission granted consent to physically extend the car parking facilities as part of the Phase 1 development (out of the total 3 phases of development). The Proposed Scheme does not seek any physical changes to the airport's existing car parking facilities which have already been built out pursuant to the 2014 Planning Permission and are operational. However, an updated Car Parking Management Plan (CPMP) is being provided to support the Proposed Scheme and therefore there is a need to vary Condition 22.

3.2.16 It is proposed that variation to Condition 22 is as follows (variations to the existing condition are noted in **red bold text**, with the text to be replaced shown as ~~striketrough~~):

~~"The car parking areas within Phase 1 shall be constructed and managed in accordance with details approved on 21 January 2016 (ref: 15/00659.)"~~

~~The scheme as approved shall be implemented in full prior to that phase coming into operation. The areas within the application site which are shown to be in use for car parking in the application details shall not be used for any other purpose other than the parking of vehicles by passengers, staff and contractors servicing the airport.~~

**The car parking areas within the application site shall be managed in accordance with details provided in the Car Parking Management Plan (document reference 41431MP18V2) to accommodate up to 19 million passengers per annum."**

#### Proposed variation to Condition 24 (Travel plan)

3.2.17 The Proposed Scheme is being accompanied by a new Travel Plan to accommodate the additional 1 mppa, therefore Condition 24 will need to be varied.

3.2.18 It is proposed that variation to Condition 24 is as follows (variations to the existing condition are noted in **red bold text**, with the text to be replaced shown as ~~striketrough~~):

~~"The Passenger and Staff Travel Plan shall be implemented in accordance with the details approved on 23 September 2015 (re: 15/00761/DOC)"~~

***The Travel Plan (document reference 41431MP18V2) shall be complied with to accommodate up to 19 million passengers per annum.***

#### Proposed variation to Condition 28 (Approved plans and documents)

3.2.19 The Proposed Scheme is being accompanied by updated submissions across a suite of technical evidence-based assessments which would necessitate the variation of Condition 28 as it sets out the approved documentation in support of planning permission.

3.2.20 It is proposed that variation to Condition 28 is as follows (variations to the existing conditions are noted in **red bold text**, with the text to be replaced shown as ~~strikethrough~~):

*"The development hereby permitted shall not be carried out other than in complete accordance with the approved plans and specifications as set out in the schedule of documents and the Environmental Statement contained in the Terence O'Rourke letters dated 30<sup>th</sup> November and 14<sup>th</sup> December 2012 submitted with application 12/01400/FUL and with the following documents:*

- *Noise Impact Assessment, Bickerdike Allen Partners dated 15 May 2015.*
- *Contour Methodology Update, Bickerdike Allen Partners dated 14 August 2015.*
- *Environmental Statement Addendum, Terence O'Rourke dated July 2015".*

3.2.21 The proposal for 19 mppa is being accompanied by updated submissions across a suite of technical evidence-based assessments which would necessitate the variation of Condition 28 as it sets out the approved documentation in support of planning permission.

3.2.22 The proposed variation would read:

***"To accommodate up to 19 million passengers per annum, the development hereby permitted shall not be carried out other than in complete accordance with the approved plans and specifications as set out in the schedule of documents and the Environmental Statement contained in the Terence O'Rourke letters dated 30<sup>th</sup> November and 14<sup>th</sup> December 2012 submitted with application 12/01400/FUL and with the following documents:***

- *Noise Impact Assessment, Bickerdike Allen Partners dated 15 May 2015.*
- *Contour Methodology Update, Bickerdike Allen Partners dated 14 August 2015.*
- *Environmental Statement Addendum, Terence O'Rourke dated July 2015.*
- ***Environmental Impact Assessment Volume 1: Non-Technical Statement of Environmental Statement Addendum, Wood (document reference 4143119V3).***
- ***Environmental Impact Assessment Volume 2: Environmental Statement Addendum, Wood (document reference 4143120V3).***
- ***Environmental Impact Assessment Volume 3: Environmental Statement Addendum, Wood Appendices (document reference 4143121V3).***
- ***Planning Statement, Wood (document reference 41431EP12V3).***
- ***London Luton Airport Master Plan 19 MPPA, IDOM (document reference: Version 2.6. January 2021).***
- ***Consultation Summary Report, Wood (document reference 41431SF23V3).***
- ***Drainage and Water Supply Infrastructure Appraisal, Wood (document reference: 41431JG22V2).***

- **Site Waste Management Plan, Wood (document reference: 41431BN6V3).**
- **Site Location Plan, Wood (document reference: As-Built Master Plan).**
- **Terminal Floorplans, Wood (drawing references: TBC).**
- **Transport Assessment, Wood (document reference: 41431MP17V2).**
- **Travel Plan, Wood (document reference: 41431MP18V2).**

3.2.23 The Proposed Scheme includes variations to Condition 22 (car park management), Condition 24 (travel plan), and Condition 28 (approved plans and documents, this includes the updated car parking management plan and updated travel plan). These will not alter the parameters of LLA nor have impacts on the environment as such, and so these variations are not assessed within the ES.

### 3.3 Planning context and conditions

#### Planning history

- 3.3.1 In December 2012, an application was submitted to LBC to initiate the expansion of LLA, which would improve passenger facilities and extend the capacity of the airport to 18 mppa by 2028 (reference 12/01400/FUL).
- 3.3.2 A full description of the 2014 Planning Permission comprises the following:
- "Full planning application for dualling of airport way / airport approach road and associated junction improvements, extensions and alterations to the terminal buildings, erection of new departures / arrivals pier and walkway, erection of a pedestrian link building from the short-stay car park to the terminal, extensions and alterations to the mid-term and long-term car parks, construction of a new parallel taxiway, extensions to the existing taxiway parallel to the runway, extensions to existing aircraft parking aprons, improvements to ancillary infrastructure including access and drainage, and demolition of existing structures and enabling works. Outline planning application for the construction of a multi-storey car park and pedestrian link building (all matters reserved)."*
- 3.3.3 The planning application was validated by LBC on 3 December 2012 and consented, subject to 30 conditions and a S106 legal agreement, on 23 June 2014.
- 3.3.4 Subsequently, an application (reference - 12/01400/AMEND) was submitted to LBC for a non-material amendment. This application included modifications to the alignment of Airport Way, update to the arrangement of the Central Terminal Area, reduction in floor space created in terminal building, and modification to from extension due to requirements to move the lifts. Permission was granted in May 2015.
- 3.3.5 Following this, the Applicant submitted an application (reference – 15/00950/VARCON) in June 2015 to vary Condition 11 of the 2014 Planning Permission. This was consented by LBC in October 2017. It is important to note that within the decision notice for permission reference 15/00950/VARCON, conditions were carried forward from the 2014 Planning Permission (12/01400/FUL) or, as amended, where they have been discharged / partially discharged previously, resulting in a different numbering system being applied.
- 3.3.6 For more information on the Planning Context, please refer to the accompanying Planning Statement (document reference number: **41431EP12V103**).

## Planning condition

### Condition 8

- 3.3.7 The growth to 19 mppa could be accommodated without any new on-airport infrastructure, including that which is already permitted and not yet built, and that which could be built under permitted development rights. The growth to 19 mppa would, therefore, not require any new built development. However, a small increase in the number of ATMs is required to accommodate the additional passengers.
- 3.3.8 **Table 3.2** shows that to accommodate 19 mppa in 2024, the total peak day ATMs would be consistent with the movements to accommodate both the 2019 18 mppa scenario and the 2024 18 mppa scenario (483). For the 2024 19 mppa scenario, no change in movements would occur because additional passengers would be accommodated through higher levels of patronage on each individual aircraft. However, they would then reduce by 6 movements (-1.24%) from the 2019 18 mppa scenario / 2024 18 mppa scenario by 2028 for the 19 mppa scenario as larger planes are introduced.

Table 3.2 Peak Day Air Transport Movements 2019 to 2028\*

Peak day	18 mppa						19 mppa	
	2019 ATMs	2020 ATMs	2021 ATMs	2022 ATMs	2023 ATMs	2024 ATMs	2024 ATMs	2028 ATMs
Daytime	417	417	417	417	417	417	419	413
Night-time	66	66	66	66	66	66	64	64
Daily total	483	483	483	483	483	483	483	477

\*'Peak day' ATMs: the busiest day in terms of the number of ATMs.

- 3.3.9 **Table 3.3** shows that during the 92-day peak period, accommodating 19 mppa in 2024 would result in an increase of 598 (1.71%) daytime ATMs over the 92-day period, with an increase in the night-time ATMs of 218 (4.08%) and an increase in the daily total of 816 (2.02%), when comparing against 18 mppa in 2024 scenario. There would, however, be a corresponding reduction in ATMs outside of the 92-day peak period.

Table 3.3 92-Day Peak Period Air Transport Movements 2019 to 2028\*

92-day peak period	18 mppa						19 mppa	
	2019 ATMs	2020 ATMs	2021 ATMs	2022 ATMs	2023 ATMs	2024 ATMs	2024 ATMs	2028 ATMs
Daytime	34,124	34,124	34,391	34,706	35,003	34,391	34,989	34,848
Night-time	5,398	5,398	5,131	4,994	4,997	5,131	5,349	5,003
Daily total	39,522	39,522	39,522	39,700	40,000	39,522	40,338	39,851

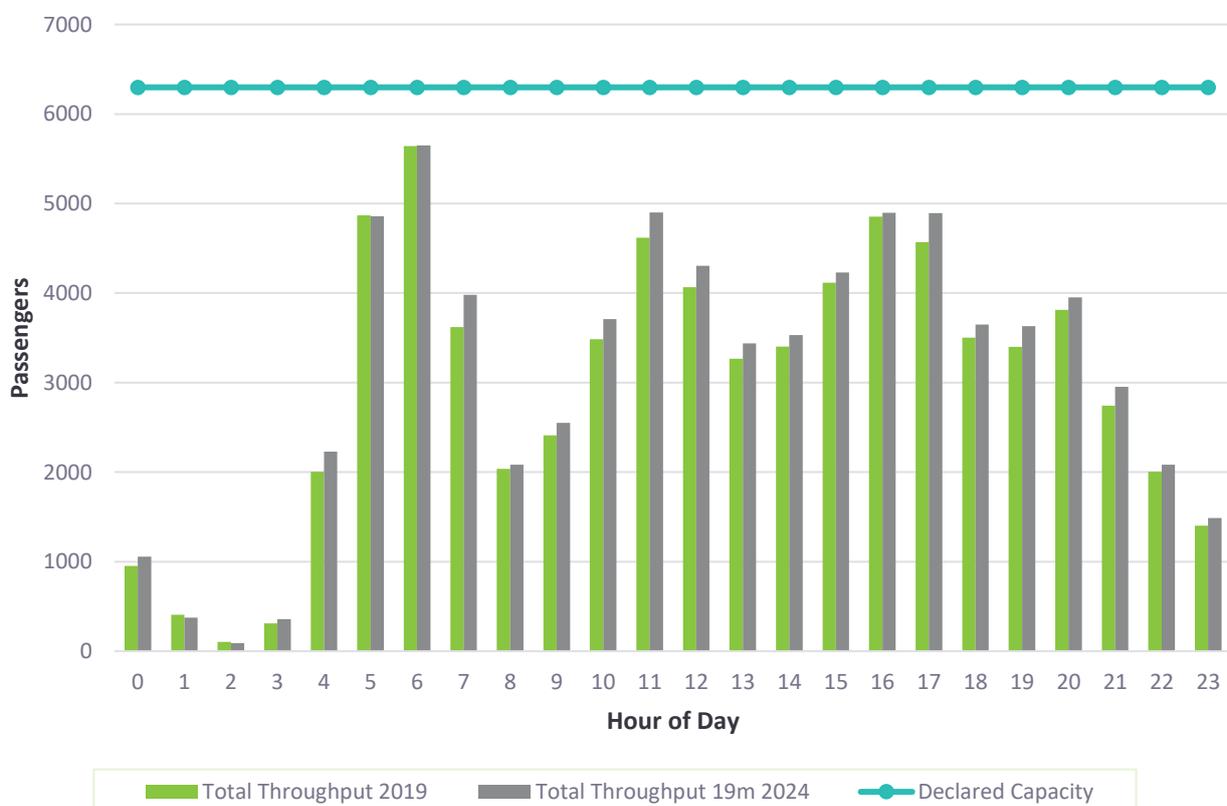
\*'92-day peak period' ATMs: the 92-day period within which the highest number of ATMs occurs.

- 3.3.10 As shown in **Table 3.2** and **Table 3.3**, ATMs would increase to accommodate the additional passengers, but this would not be at the same rate of increase as the passenger numbers (5.26%). This can be achieved by increasing seat occupancy, and seat numbers by using larger aircraft.
- 3.3.11 In addition to the above, there will be no major change in the direction of flights. This is due to the short haul point-to-point nature of LLA and as such, the majority of flights will remain in the “East-North-East” to “South-South-West” sectors. The nature and direction of flights is not expected to change as a result of the Proposed Scheme.

### Passenger throughput

- 3.3.12 The Proposed Scheme will not result in an increase in the peak passenger throughput or staff numbers. LLAOL manage planning constraints relating to night quotas, noise contours, and annual passenger numbers through a capacity declaration on slot usage, which dictates maximum hourly runway movements, maximum hourly and multi-hourly terminal passenger throughput. Notwithstanding the increase in capacity to 19 mppa, LLAOL will maintain the hourly and two hourly declared terminal passenger flow capacity that was submitted to Airport Coordination Limited (ACL) for 18 mppa in Summer 2019. It is understood that LLAOL will only review and, therefore, potentially increase the declared terminal passenger flow capacity if there is a change in the physical infrastructure of the airport, and this will not occur due to the Proposed Scheme. An estimation of hourly passenger throughput for the busiest slot usage day during 2019 (approximately 18 mppa) and 2024 (estimated 19 mppa scenario) has been provided by LLAOL within **Graphic 3.1**.

Graphic 3.1 2019 (c.18 mppa) and estimated 2024 (19 mppa scenario) hourly arrival and departure passenger hourly throughput based on aircraft slot usage



- 3.3.13 As shown in **Graphic 3.1**, the hourly passenger throughput (arrivals and departures) for 6 am is the maximum recorded on the busiest day in 2019. **Graphic 3.1** also shows that this will remain the

same when capacity is increased from 18 mppa to 19 mppa and, therefore, maximum passenger numbers will not be exceeded within either permission.

### Condition 10

- 3.3.14 Consent is also sought for a variation to the wording of Condition 10 of the 2014 Planning Permission in order to provide a less restrictive daytime and night-time noise contour.
- 3.3.15 It is understood that Condition 10 was set on the basis of noise modelling carried out for the 2014 Planning Permission. However:
- since the time of this modelling, LLA has experienced unprecedented levels of growth in passenger numbers, which are considerably above those predicted, reflecting the success of LLA as a destination, and
  - in addition to the above, the original noise modelling took into account the fleet modernisation information that was available at that time. It was anticipated that the aircraft fleet using LLA would be modernised and therefore become quieter over time.
- 3.3.16 The original noise modelling only took into account the effects of modernisation with respect to the assessment in 2028, by which time it was assumed that the resident airlines would have acquired all of the ordered NEO and MAX aircraft. As such, little or no headroom was included for unforeseen circumstances outside of the control of the operator of LLA. There are a number of reasons why forecasting fleet modernisation is difficult to predict, including:
- the speed of manufacture;
  - whether an Operator chooses to base or use aircraft at LLA, instead of at another airport in its network;
  - whether an aircraft is permitted to fly;
  - the financial situation of an operator and whether they order as many as forecasted; and
  - the likelihood of manufacturers producing re-engined aircraft.
- 3.3.17 It is acknowledged that the expected reductions in noise levels have not been forthcoming to the extent envisaged, and it is taking longer than anticipated to achieve the mandated noise levels, resulting in breaches of Condition 10. This has been due to the delay in the manufacture of Airbus Neo aircraft, because of the unavailability of Pratt and Whitney engines, and from the grounding of Boeing 737Max aircraft due to safety concerns. This has meant that there are lower numbers of new generation aircraft at LLA, compared to the initial assumptions made as part of the 2028 forecast in the noise modelling for the 2014 Planning Permission.
- 3.3.18 The forecast of the fleet modernisation for each of the scenarios assessed (this includes a 'without development' scenario) within this ES Addendum is presented in **Appendix 3A in Volume 3: Figures and Appendices**. This is based on current replacement schemes of the airlines using LLA and has considered the financial incentive offered by the Proposed Scheme for airlines to utilise the increased passenger / flight quotas available and so invest further in their fleet.
- 3.3.19 LLA is therefore seeking a variation to Condition 10. The proposed variation to Condition 10 seeks to increase the area enclosed by the contours for daytime and night-time noise. The proposed variation is driven by the occasional breaches during the summer 2017 night-time contour, 2018 summer night-time contour, and 2019 night-time contour. The daytime contour was exceeded in 2019 by 1.4 km<sup>2</sup> at 20.8 km<sup>2</sup>.

- 3.3.20 The proposed Amendments will enable the area enclosed by the 57 dB(A)  $L_{Aeq16hr}$  daytime (0700-2300) noise contour to increase from 19.4 km<sup>2</sup> to 21.6 km<sup>2</sup>; and the area enclosed by the 48 dB(A)  $L_{Aeq8hr}$  (2300-0700) night-time noise contour to increase from 37.2 km<sup>2</sup> to 42.9 km<sup>2</sup> for the period up to the end of 2027. The change to the noise contours is shown in **Figure 8.15** and **Figure 8.16** in **Volume 3: Figures and Appendices**.
- 3.3.21 At the end of 2027, Condition 10 will require LLAOL or any successor or airport operator to reduce the area of the noise contours for daytime noise to 15.5 sq km for the area exposed to 57 dB(A)  $L_{eq16hr}$  (0700-2300) and above and for night-time noise to 35.5 sq km for the area exposed to 48 dB(A)  $L_{eq8hr}$  (2300-0700) and above. The change to the noise contours is shown in **Figure 8.9** and **Figure 8.10** in **Volume 3: Figures and Appendices**.
- 3.3.22 **Table 3.4** presents the total forecast passengers at the time of the 2014 Planning Permission against the updated passenger forecasts. The table shows that the 2012 ES, passenger growth was forecast to be slower than that which has occurred and in 2018 Luton Airport handled an additional 4 mppa passengers than expected.

Table 3.4 Annual passenger forecasts from 2014 Planning Permission Vs. latest updated forecasts

Year	Forecast in 2012 (mppa)	Actual mppa (A) / Updated Forecast (t) (mppa)
2016	11.7	14.6 A
2017	12.1	15.8 A
2018	12.6	16.6 A
2019	12.9	18.0 A
2020	13.4	5.5 A
2021	14.3	13.6 †
2022	14.8	18.0 †
2023	15.4	18.0 †
2024	15.8	19.0 †
2025	16.6	19.0 †
2026	17.3	19.0 †
2027	17.7	19.0 †
2028	17.8	19.0 †

Source: London Luton Airport Operations Limited, 2020

Notes: A - Actual passenger numbers

† - Forecast passenger numbers

- 3.3.23 As shown in **Table 3.4**, there has been significant growth in passenger numbers, which has exceeded those predicted in the 2014 Planning Permission (with respect to years reached), and LLA will reach the 18 mppa passenger cap nine years earlier than anticipated. Although passenger numbers have decreased during 2020 as a result of COVID-19, LLA have forecasted that passenger levels could realistically return to 18 mppa in 2023 (see **Section 2.2**). A combination of factors, including the more rapid growth in aircraft movements outpacing the deployment of next generation aircraft, aircraft noise reductions being less effective than anticipated for those aircraft that have been introduced, and air traffic delays across Europe which have resulted in a breach of the summer night-time noise contour area limit for 2017, 2018, and summer daytime and night time in 2019.
- 3.3.24 Irrespective of these factors, the forecasts for 2018 and 2019 were exceeded for the night-time contour limit, and the daytime 57 dB contour was marginally exceeded in 2019 by 1.4 sq.km at 20.8 sq.km. **Table 3.5** presents the noise contour area for 2017 alongside the contour area limit for 2018 and 2019. This shows that the Applicant breached the night-time contour limit by 1.5 sq.km in 2017.

Table 3.5 Noise contour limits

	Daytime (km <sup>2</sup> )	Actual & Forecast summer daytime movements	Night time (km <sup>2</sup> )	Actual & Forecast summer night-time movements
<b>CURRENT LIMIT (2014-2028, and 2028+)</b>	19.4	-	37.2	-
<b>FUTURE EXISTING LIMIT (2021-2027)</b>	21.6	-	42.9	-
<b>ACTUAL NOISE CONTOUR AREA (2017)</b>	19.0	-	38.7	-
<b>ACTUAL NOISE CONTOUR AREA (2018)</b>	19.4	-	40.2	-
<b>ACTUAL NOISE CONTOUR AREA (2019)</b>	20.8	34,124	44.0	5,398
<b>FORECAST NOISE CONTOUR AREA (2020)</b>	12.2	17,365	28.8	2,658
<b>FORECAST NOISE CONTOUR AREA (2021)</b>	21.6	34,391	42.9	5,131
<b>FORECAST NOISE CONTOUR AREA (2022)</b>	21.1	34,706	42.1	4,994
<b>FORECAST NOISE CONTOUR AREA (2023)</b>	20.4	35,003	41.9	4,997
<b>FORECAST NOISE CONTOUR AREA (2024, 18 mppa)</b>	16.7	34,391	37.2	5,131

	Daytime (km <sup>2</sup> )	Actual & Forecast summer daytime movements	Night time (km <sup>2</sup> )	Actual & Forecast summer night-time movements
<b>FORECAST NOISE CONTOUR AREA (2024, 19 mppa)</b>	19.4	35,331	39.8	5,007
<b>FORECAST NOISE CONTOUR AREA (2028, 19 mppa)</b>	15.5	34,849	35.5	5,002

Source: London Luton Airport Operational Limited, 2020

### 3.4 Waste management

- 3.4.1 A Site Waste Management Plan (SWMP) has been produced to determine the potential impacts of waste arisings associated with an increase from 18 mppa to 19 mppa (document reference **41431BNV2**).
- 3.4.2 The Proposed Scheme is estimated to result in operational waste arisings of 2,630 tonnes/annum and there are no expected changes to the type of activities generating waste. Operational waste arisings for 19 mppa are therefore assumed to be of a similar character and derived from the same sources as the existing waste arisings. The SWMP suggests that compared to 18 mppa, an additional 1 mppa would result an increase in operational waste arisings of between 56 to 138 tonnes/annum, or 2% to 6% (depending on the baseline used for passenger waste rates: i.e. the 2011 rate for the 2014 Planning Permission, or the most recent 2019 rate). This indicates that there would be a slight to moderate impact on total waste arisings under the 19 mppa proposals, and minimal impact on the day-to-day management of operational waste, which is expected to be within the capacity of existing infrastructure at the airport. In addition, objectives for improved management and minimisation of waste at the airport are outlined in LLA's latest Sustainability Strategy<sup>14</sup>, with targets to reduce passenger waste rates that should further reduce the impact of the 19 mppa proposals on waste arisings.
- 3.4.3 To ensure effective management of operational waste associated with the increased passenger capacity, all possible care would be taken to follow the waste hierarchy, minimising waste arisings from the airport by optimising opportunities to reduce, reuse, recycle and recover waste materials. Actions for waste management good practice in-line with the waste hierarchy are outlined in the SWMP. These include responsibilities under duty of care; appropriate segregation, storage, and treatment of specific wastes; measuring and monitoring; and incorporation of waste targets from the Sustainability Strategy. The actions proposed within the SWMP reinforce existing waste management procedures at LLA, ensuring the airport will continue to achieve targets for recycling and diverting waste from landfill, and providing the basis for the effective management of operational waste for 19 mppa.
- 3.4.4 The Applicant has determined that for an increase to 19 mppa there is sufficient capacity within the airport's existing infrastructure for routine operational waste arisings. The planning application does not include any physical changes to the airport terminal building and surrounding infrastructure; therefore, no waste is expected to be generated by construction, demolition, or excavation activities.
- 3.4.5 The SWMP demonstrates that existing procedures for management of waste generated by the airport's operations have delivered a reduction in passenger waste rates and are consistent with the

<sup>14</sup> London Luton Airport Limited. Sustainability strategy, 2019, [online]. Available at: <https://www.llal.org.uk/Documents/Luton-Airport-sustainability-strategy.pdf> [Accessed November 2020].

principles of the waste hierarchy; these will continue to be applied to operations for 19 mppa. The actions proposed within the SWMP reinforce existing waste management procedures at LLA, ensuring the airport will continue to achieve targets for recycling and diverting waste from landfill, and providing the basis for the effective management of operational waste for 19 mppa.

## 3.5 Operational control measures

3.5.1

As discussed in the previous section, there are no proposed design changes associated with the Proposed Scheme. As such, there is limited opportunity to embed mitigation measures through the Proposed Scheme. However, following the first breach of Condition 10 in 2017, the Applicant took immediate action to reduce the number of flights to LLA and in March 2018 produced an Action Plan. The Action Plan details operational control measures the Applicant has set to ensure that no further exceedances of the existing Condition 10 would occur. These control measures will continue to be in applied for the Proposed Scheme. Additional control measures have been developed and will apply to the Proposed Scheme. The current restrictions include:

### *Removal of ad-hoc slot applications between 22:00-05:59 GMT 1 June and 30 September*

- The movements occurring in the night-time period can increase due to off-schedule activity such as late arriving aircraft caused by industrial disputes in mainland Europe, staff shortages, capacity issues and severe weather events. These additional movements can contribute to the exceedance of the night-time contour. LLAOL have therefore removed the ad-hoc slot applications during this period. This provides a proportionate buffer for any late arrivals in the summer period to guard against contour breaches. Late arrivals due to weather disruption are beyond the airport's control.

### *No further night slots to be allocated to series flights between 22:00-05:59 GMT 1 June and 30 September*

- No further growth to scheduled night-time traffic, commercial or cargo will be permitted. Whilst capacity is available in this period, LLAOL have placed this restriction to prevent any further growth ahead of aircraft fleet modernisation. LLAOL have taken this step, as noise modelling suggests that any increase in movements in the night-time period without aircraft modernisation may contribute to further breaches of the condition.

### *No rescheduling of existing allocated slots from the day-time (06:00-21:59 GMT) into the night-time (22:00-05:59 GMT) between 1 June and 30 September*

- This particularly refers to the early morning shoulder period which is currently full. This restriction means that operators will not be able to move existing slots from post 06:00 GMT to before 06:00 GMT thereby ensuring no further increase in night-time movements.

### *No non-emergency diverted flights accepted during daytime (06:00-21:59 GMT) and night-time (22:00-05:59 GMT) between 1 June and 30 September*

- This ensures that LLAOL minimise any additional unplanned movements that could affect the noise contour and that airlines do not use LLA as a diversion airport in the event that they cannot land at the original port of destination. However, LLA will remain available to emergency diverts and life critical movements.

*Zero flow rate between 05:00-05:59 GMT 1 June and 30 September*

- This will ensure that aircraft scheduled for arrival in the day-time period close to the early morning shoulder threshold do not actually arrive in the night-time period.

*QC2 aircraft ban*

- QC2 aircraft will no longer be permitted to operate at night-time to or from the airport.

*No aircraft with a value greater than QC1 permitted to operate in the night-time period (22:00-05:59 GMT) / No further day-time (06:00-21:59 GMT) slot to be allocated to aircraft greater than QC1 between 1 June and 30 September*

- Condition 9(i) of the 2014 Planning Permission requires the voluntary phase out of these aircraft by 2028. However, LLAOL has decided to meet the standards set out in this condition in relation to the night-time period from summer 2019 and for all subsequent seasons, removing the noisiest aircraft from the night-time period.

*No equipment changes on existing allocated slots that would involve replacing an aircraft with a QC value of 1 or less with an aircraft with a QC value greater than 1 between 06:00-21:59 GMT 1 June and 30 September*

- This will stop airlines from changing aircraft after slots have been approved. The intention is that this will provide greater assurance between the noise modelling forecast and actual noise through fewer changes that generate additional noise.

*Incentivise aircraft fleet modernisation with differential charging*

- Differential charging was implemented from 2019 to incentivise the rapid modernisation of fleet. The intention is to structure the charging mechanism in such a way that incentivises fleet modernisation and use of next generation aircraft as part of the LLA operation.

*Increased frequency and detailed cooperation between the Flight Operations Department and the Business Development Department in LLAOL*

- This ensures that the Flight Operations Department works closely with the Business Development Department to ensure that passenger growth is managed more effectively in line with noise limitations.

3.5.2

Additional restrictions will be put in place for the Proposed Scheme to ensure that noise levels decrease year on year, the following commitments will be made as part of the Proposed Scheme:

- For Summer 2021 and all subsequent seasons, no night-time slots (22:00 to 05:59 GMT) will be allocated to aircraft with a quota count (QC) value greater than 1;
- No further daytime slots will be allocated to aircraft with a QC value greater than 1 (06:00 to 21:59 GMT) between 1 June and 30 September;
- No further night slots to be allocated to series flights (22:00-05:59 GMT) between 1st June and 30th September;
- No new slot applications with an aircraft QC value greater than 0.5 will be permitted between 22:00 and 05:59 GMT;

- Only scheduled arriving aircraft will be accepted between 04:45 and 06:00 GMT. All other arriving aircraft must land after 06:00 GMT, arrivals earlier than the scheduled arrival time will not be accepted; and
- No re-scheduling of existing allocated slots from the day time (06:00 to 21:59 GMT) into the night-time (22:00 to 05:59 GMT) 1 June – 30 September.

## Monitoring

- 3.5.3 The conditions attached to the 2014 Planning Permission referred to preparing a Noise Control Monitoring Scheme. If the proposed variation to Conditions 8 and 10 are granted, the Applicant will maintain its commitment to noise monitoring. A Noise Action Plan<sup>15</sup> has also been prepared to manage, mitigate, and minimise aircraft noise and includes the following items:
- operational procedures;
  - quieter aircraft;
  - land-use planning and mitigation;
  - operational restrictions; and
  - working with the local community and industry.
- 3.5.4 The latest Noise Action Plan for 2019 – 2023 was approved by Central Government. The Noise Action Plan is explained further within the relevant technical chapters of the ES.

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<sup>15</sup> London Luton Airport. Noise Action Plan 2019 – 2023 [online]. Available at: <https://www.london-luton.co.uk/corporate/community/noise/noise-action-plan> [Accessed November 2020].