ISH8 – LADACAN post-hearing submission

IP ref 20040757

We summarise the key points made by LADACAN at ISH8. Documents containing Action responses have been submitted separately.

Modelling of 2019-consented baselines

We noted that in modelling a contour-compliant 2019 fleet by replacement with less noisy aircraft rather than removing the excess flights, the Applicant has not achieved a realistic model.

Two key planning conditions applicable in 2019 must both be complied with to create any model of a consented operation: the annual passenger limit (18 million) and the noise contour limits.

The 2019 operation of Luton Airport reached the passenger limit and exceeded the noise contour limits, as the Airport Operator's 2019 Annual Monitoring Report¹ KMIs and data tables confirm:

PDF page 4:

Key Monitoring Indicators

Parameter		2019	2018
Total Aircraft Movements	1	141,481	136,270
Day Movements (07:00 - 23:00)	1	124,306	119,937
Night Movements (23.00 – 07.00)	1	17,175	16,333
Early Morning Movements (06.00 – 07.00)	1	5,968	5,794
Total Scheduled Passengers	1	17,751,946	16,223,039
Total Charter Passengers	$\mathbf{\Psi}$	248,023	358,811
Total Passengers	1	17,999,969	16,581,850

PDF p35:

Annual noise contours summer 2019

The table below shows the annual daytime noise contours for summer 2019 covering the standard summer period from 16th June to 15th September inclusive, using the latest version of INM software (the Integrated Noise Model) version 7.0d which is the method used by many other airports in the UK.

L _{Aeq, 16 hour} Daytime	Contour Area (km²)						
	1984	1999	2018 actual	2019 actual	2019 average	Difference 2018-2019 (actual)	2020 (forecast)
>72	1.63	1.5	1.0	1.1	1.1	+0.1	1.2
>69	2.80	2.5	1.7	1.9	1.9	+0.2	1.9
>66	4.86	4.4	3.1	3.6	3.6	+0.5	3.7
>63	9.10	7.3	6.1	6.7	6.7	+0.6	6.9
>60	17.18	11.8	10.6	11.5	11.5	+0.9	11.8
>57	31.52	19.6	19.4	20.8	20.8	+1.4	21.3

Considering the 57 dB LAeq,16h daytime noise contour there is an increase in area of approximately 8% when comparing the 2019 actual contour with the 2018 actual contour. This increase caused an exceedance of Condition 12 which relates to the area of the daytime summer noise contour; condition 12 limits the area to 19.4km². This is largely due to the increase in daytime movements. The 2019 contours based on the long term average runway split have the same areas as those based on the actual runway usage in 2019. The 2020 daytime contours are slightly larger than those for 2019, largely due to the forecast increase in daytime movements.

¹ Available from https://www.london-luton.co.uk/corporate/community/noise/annual-monitoring-reports

The table below shows the annual night time noise contours for summer 2019 covering the standard summer period from 16th June to 15th September inclusive, using the latest version of INM software (the Integrated Noise Model) version 7.0d which is the method used by many other airports in the UK.

L _{Aeq, 8 hour} Night-time	1984	1999	2018 actual	2019 actual	2019 average	Difference 2018-2019 (actual)	2020 (forecast)
>69	1.39	1.8	0.7	0.8	0.8	+0.1	0.8
>66	2.42	3.0	1.1	1.3	1.3	+0.2	1.2
>63	4.01	5.2	1.9	2.2	2.2	+0.3	2.1
>60	7.06	8.3	3.7	4.4	4.4	+0.7	4.2
>57	13.05	13.2	6.8	8.0	8.0	+1.2	7.6
>54	24.48	21.6	12.6	14.6	14.6	+2.0	14.0
>51	44.92	36.0	23.0	26.0	26.1	+3.0	25.0
>48	85.04	60.6	40.2	44.2	44.0	+4.0	42.6

Considering the 48 dB LAeq,8h night time noise contour there is an increase in area of approximately 10% when comparing the 2019 actual contour with the 2018 actual contour. The 2019 night time contour area also exceeded the limit as detailed in Condition 12 (the limit is 37.2km²). The 2019 contours based on the long term average runway split have very similar areas to those based on the actual runway usage in 2019. The 2020 night time contours are smaller than those for 2019, largely due to the forecast decrease in night time movements.

Furthermore, as evidenced in REP1-095 paragraph 145, the Airport Operator confirmed to the 2022 Inquiry that "...the Airport would have to remove 30 daytime movements from the daily summer schedule (9%) and 13 night-time movements from the daily summer schedule (22%) compared with 2019 in order to comply with Condition 10." (Condition 10 being the contour limits)

It therefore follows that the Applicant's approach of substituting older with modernised aircraft, when these tend to have more seats, is not an adequate way to model a 2019-consented fleet, without also ensuring that the passenger limit is not breached.

We stated that given the fleet available in 2019, using all the information cited above (and under normal operating conditions), it would not have been possible to fly 18 million passengers and at the same time comply with the noise contour limits, therefore the passenger count would have been reduced by the number of passengers who flew in those 30 daytime and 13 night-time excess summer movements. This would have reduced the number of passenger journeys, and emissions, hence reducing the 2019-consented baselines for comparison of other environmental assessment factors.

Steeper descent operations

We have separately submitted the LLA document evidencing that airlines have declined to progress using steeper descents at Luton Airport in order to reduce noise, due to the comparatively shorter runway and the stronger winds.

A321neo noise

We have separately submitted an Action point document covering the A321neo noise issue. Noise modelling using the -2dBA benefit compared to the A321ceo applies in Phase 1 until 2031 and it is important to ensure impacts are being correctly assessed.

We noted that the Wizz A321neo fleet is among those being recalled for maintenance on the Pratt and Whitney geared turbofan blades. See: https://travelweekly.co.uk/news/air/wizz-air-facesenforced-winter-capacity-cut-due-to-engine-checks As a result, Wizz is reported to be extending leases on non-modernised aircraft to cover the shortfall:

"As part of its action plan, Wizz has extended the leases for nine A320-200s and four A321-200s and is currently in the process of doing so for additional lease periods of two to four years"

(November 2023 ch-aviation report, available from:

https://www.ch-aviation.com/portal/news/134017-wizz-air-extends-a320ceo-leases-due-to-pw-issues)

The type-noise information from LLA's Quarterly Monitoring Reports reproduced in our response to Action 7 from ISH6 shows that overall the noise from A320ceo aircraft is comparable to that of the A321neo, whereas the noise from A321ceo aircraft is greater – and the Applicant has put a figure of +2dBA on that differential.

Therefore the short-term noise impact modelling needs to be assessed to determine the effects of the recall of A321neo aircraft.