The Harpenden Society ("The Society") Deadline 7 response to Examining Authority's second round of questions Luton Rising ("LR") Development Consent Order ("DCO") application

ExQ2 NO2.2

Boeing fleet mix

- 1 We note the ExA has asked the Applicant to explain why there appears to be a reduction in B737Max aircraft contrary to the trend (and contrary to P19) and a corresponding increase in B737-800/73H aircraft in the core and faster growth cases.
- 2 Ryanair is the only significant airline at Luton airport presently that flies Boeing aircraft.
- 3 It announced it was substituting three Boeing 737 Max aircraft based at Luton Airport for older Boeing 737-800/73H aircraft in April 2023 (Simpleflying website), half the based fleet. As at FY23 year end only 19% of the Ryanair Boeing fleet was new Max aircraft so it is clearly prioritising Luton airport for new aircraft. This is hardly surprising given these fuel efficient aircraft (estimated to be 15-20% more fuel efficient than a 737-800) fly the busy London to Ireland, key Mediterranean and Eastern European destinations. It would be odd indeed if Ryanair didn't replace more of its based fleet with B737 Max's before 2027. LR's data implies nothing will change from now to 2027 whereas LLAOL thought further modernisation would occur. Given both say they've spoken to airlines, the differences are extraordinary. Wizzair is following an aggressive modernisation strategy and all of its based fleet at Luton airport will be considerably more fuel efficient A321neos by 2025.
- 4 Furthermore, LR's Boeing fleet implies faster growth for airlines who fly this aircraft type at Luton airport up to 2027, compared to the overall growth rates of 19% (core growth) and 28% (faster growth) compared to 18mppa in 2019 as illustrated in the table below:

Boeing seats at Lut	on airport								
Aircraft type	Seats	2019	2019 seats	2027 core	2027 core	% growth	2027 faster	2027 faster	% growth
		aircraft	18mppa	case	case seats	over 2019	growth case	growth case	over 2019
		movements		aircraft	21.5mppa		aircraft	seats	
		18mppa		movements			movements	23mppa	
				21.5mppa			23mppa		
B737Max	197			2,820	555,540		2,320	457,040	
B737-800/73H	189	4,838	914,395	3,340	631,260		4,300	812,700	
B737 total			914,395		1,186,800	30%		1,269,740	39%
DCO growth rates over 2019						19%			28%

2019 figure is based on 29% (typical proportion of annual movements during the summer season) of 2019's annual movements (Annual Monitoring Report 2019)

5 LR stated in AS-125 that:

6.6.42 It is important to note that the rate of growth of individual airlines at the airport will vary over the forecast period, new airlines will start to serve the airport and

TR020001/APP/7.04 | Revision 1 | June 2023

Page 141

Need Case

London Luton Airport Expansion Development Consent Order

some existing airlines could cease operations. Hence, it is important to recognise that the assumptions around the fleet are not airline specific and that it is the overall split between current and new generation types that is key to the environmental assessments.

And

- 6.6.4 As will be explained further below, the Core Planning Case fleet mix is based on the expected fleet mix at the airport, taking into account the expected transition to new generation aircraft¹⁹⁶ over the next decade. However, in order to ensure that the reasonable worst case is considered for environmental assessment, a slower potential fleet transition to new generation aircraft has been adopted for the Faster Growth Case.
- 6 It would thus appear, given the flatlining in Max aircraft and the growth in older, noisier 800-73H aircraft, up to 2027, that LR has packed the Boeing fleet mix with older aircraft (which, to boot, are one of the noisiest of the low cost carrier aircraft at Luton airport) to maximise the noise making potential of the Boeing fleet and hand airlines, on a plate, scope to fly their noisiest and most polluting aircraft into Luton airport as the noise modelling shows that communities affected by the noise are not "significantly affected". Those communities are affected of course, noise is not experienced as an average but is experienced as a unique event each time and the more aircraft that fly the worse the experience. We do not believe this cynical approach conforms with national or local policy to reduce noise.

A321 fleet mix

- 7 We have also examined the position with respect to the A321 fleet mix.
- 8 Wizz is moving quickly to virtually an all A321neo fleet (per the attached fleet analysis from its November 2023 half year FY24 presentation). Wizz has also stated that its based fleet at Luton will be all A321neo by 2025.
- 9 LR's fleet mix shows a total of 8,450 flights by A321s (we've included A321ceo flights in the total). No other airline at Luton flies A321s therefore it's reasonable to assume that Wizz will fly all the A321s. The maximum capacity of a Wizz A321 is 239 passengers (this is for neos, the ceos capacity is slightly less). Thus for the summer period referred to in Appendix A that is the equivalent of 2.0 million seats in both the core and faster growth cases in 2027. We know that Wizz had approximately 2.5 million seats available in the summer 2019 (the Society's P19 submission INQ-27 Appendix 12). Applying the core and faster growth rates to 2019's available seats gives total seats of 3.0 million (core) and 3.2 million (faster growth).

Thus, approximately 1 million (core) and 1.2 million (faster growth) additional seats will need to be available on A320s (the only other aircraft Wizz flies). This is equivalent (using the A320neo seat capacity of 186) to approximately 5,400 (core) and 6,400 (faster growth) flights in the summer period 2027.

- 10 At the P19 inquiry we calculated (INQ-27 Appendix 12) that the total Wizz A320 movements in the summer period 2019 was 5,881. At that time, Wizz had 72 A320s in its fleet. In 2027 Wizz will have 27 A320s in its fleet.
- 11 Therefore, Wizz, according to LR, is expected to achieve 92% and 109% of 2019's flights on A320s in 2027 with a fleet just over a third the size it was in 2019. Worse, in 2019 Wizz based half a dozen or so A320s at Luton airport but there will be none based at Luton post 2025.
- 12 On the face of it, this isn't credible.
- 13 To emphasise this, the following table illustrates the trend at Luton airport is away from A320s, at a similar rate to the change in the Wizz fleet:

		Luton airport		Wizz as a whole			
	A320	A321	A320s as a	A320s	A321s	A320s as a	
	movements	movements	proportion of			proportion of	
			total			total fleet	
			movements				
2019	20,280	20,356	50%	72	40	64%	
2022	11,828	22,041	35%	65	88	42%	
2023 (May 1-7)	252	552	31%	50	132	27%	
2024 (January 4-6)	32	143	18%	42	162	21%	

2019 & 2022 data is from the Annual Monitoring Reports, 2023 and 2024 from flightradar24 May 2023 is arrivals and departures, 2024 departures only

- 14 This is hardly surprising and no doubt, in part, also reflects the removal of based A320s from Luton as well as the general decline in A320s. We recognise that the sample sizes for 2023 and 2024 are relatively small (and we're happy to analyse a full years data if LR make it available to us) but we are confident they are representative – the author of this paper lives under the Detling flightpath (the majority of Wizz flights use this flightpath on Westerly departures) and there has been a clear trend away from A320s (they are one of the noisiest planes so are distinctive when flying overhead).
- 15 Attached as Appendix 1 is an analysis of all the Wizz flights for 1-7 May 2023, split between A320 and A321 movements. What this shows is that A320s are utilised across the whole network at destinations that Wizz flies frequently to/from e.g. Katowice, Sofia and Tirana (a fast growing destination) and ones it flies less frequently to/from e.g. Malaga. There are nine routes where A320s exclusively are used but the weekly flights frequency ranges from 4 to 33 (the 33 is Cluj-Napoca but it did also have one A321 flight too).
- 16 Comparing this analysis to the more limited 4-6 January 2024 analysis of A320s also included in Appendix 1 there are a few subtle changes, e.g. Suceava is now a wholly A321N fleet but was exclusively A320s in May. Some exclusive A320 airports (Criaova and Debrecen, Sibiu, Varna) remain so but judging by the aircraft being utilised which are 9+ years old they will probably be replaced by A321neos in due course given the frequency of flights as was probably the case at Suceava there doesn't seem any logic replacing 180 seat aircraft with 186 seaters for flight frequencies up to 22 in a single week in May as at Craiovo).
- 17 What is clear from this analysis is that, contrary to what LLAOL claimed at the P19 inquiry, there is no evidence to support the view that A320s will remain in the Luton airport flight

mix to facilitate "frequency and breath of network". Wizz's Luton fleet mix will continue to mirror the changes in Wizz's fleet mix in the future.

- 18 Thus, it would appear that Wizz's fleet mix is considerably light of A321neos and massively overstated so far as A320s are concerned. This may partly answer the ExA's last bullet point.
- 19 Of course, the A320 is a noisier aircraft than the A321neo and quite a lot smaller too so has the dual benefit of inflating noise and requiring more planes to achieve the growth targets.
- 20 We have not attempted to assess the Easyjet fleet mix as any assessment would have to take a punt on the size of the Wizz A320 error.

Introduction of new airlines at Luton airport before 2027

- 21 Before drawing the above conclusions, we did consider, as LR suggest that it is relevant, the introduction of new airlines before 2027.
- 22 We are now at the beginning of 2024 and, apart from DanAir, who have recently started a twice weekly service to Bacau, we are not aware of any new airlines planning to operate at Luton airport. Indeed in recent years the trend has been for airlines, apart from the major airlines (Easyjet, Wizz and Ryanair), to reduce or shut down operations at Luton e.g. Blue Air, TUI. We doubt any of the smaller airlines already at Luton e.g. FlyOne or Sun Express could scale up over the next three years to soak up the forecast demand either in the face of the major airlines reactions. Thus, we're confident that the growth up to 2027 will only happen if the main airlines are able to scale their operations.

Number of aircraft in the 2027 fleet mix

Aircraft type	Seats	2027 core	2027 core	2027 faster	2027 faster
		case	case seats	growth case	growth case
		movements	21.5mppa	movemenets	seats 23mppa
		21.5mppa		23mppa	
A320ceo	180	7,400	1,332,000	10,010	1,801,800
A320neo	186	13,210	2,457,060	12,150	2,259,900
A321ceo	230	180	41,400	540	124,200
A321neo	239	8,270	1,976,530	8,680	2,074,520
B737Max	197	2,820	555,540	2,320	457,040
B737-800/73H	189	3,340	631,260	4,300	812,700
B737-900	175	180	31,500	180	31,500
B757	233	233	54,289	233	54,289
Total summer period seats			7,079,579		7,615,949
Annual seats if summer 29% of total			24,412,341		26,261,893
Load factor implied by passenger growth			88%		88%

23 If you take the proposed fleet mix for the summer 92 day period in Appendix 1 and multiply the movements by each aircraft's seat numbers you generate the following results:

24 The 88% load factor is only 1% more than that achieved in 2019 as set out by LR in AS-125 paragraph 6.6.14.

25 LR go on to claim, in the following paragraphs, the recent trends in load factor growth (presumably the rise from 81% to 87% referred to in the same paragraph) "are likely to be unsustainable". LR then refers in the next two paragraphs to average passengers per PATM (passenger air traffic movement) but this isn't particularly relevant to load factors which are the proportion of all seats sold on each aircraft (and have nothing to do with averages). By way of illustration if you put 160 passengers on a 180 seat plane the load factor is 89% but 160 passengers on a 186 seat plane will give a load factor of 86%. The average won't change.

- 26 LR then conclude in paragraph 6.6.16 that "the ongoing effects of Covid-19 means load factors are likely to remain below long-term averages for a period" but then talk about "the average rate of change in average [!] passengers per PATM being approximately 1% per annum until the mid-2020s, then slowing to 0.25% until the end of the forecast period".
- 27 Thus, it is not possible to ascertain how LR has reached a conclusion that the load factor in 2027 will be 88%.
- 28 What we do know is that the main airlines (and for the reasons explained above these will dominate air traffic movements in 2027) are all targeting load factors well into the 90%'s which contradicts the assertions of LR that load factors will "remain below long-term averages for a period" and are reporting high load factors in their most recent financial presentations.
- 29 Easyjet reported a load factor of 89% for the full year 30 September 2023, Wizzair said it expects its load factor to be "90%+" for the FY24 (ends 31 March 2024) in its November 2023 half year results presentation and Ryanair reported a 95% load factor in its half year results presentation recently. All airlines are targeting load factors in the mid 90%'s.
- 30 Clearly, airlines are more bullish about load factors than LR. Of course, a lower load factor allows more flights and, of course, more noise. We suggest that a load factor in the early mid 90%'s is a much fairer basis for assessing the number of aircraft required to meet passenger demand.

Conclusions on fleet mix

31 The above points further illustrate that no reliance can be placed on the fleet mix that LR have prepared. A proper assessment of the environmental implications of expansion cannot be undertaken as a result and it allows LR to create considerably more environmental harms than is either necessary or fair to communities. The Inspectors at P19 noted that if the fleet forecasts were as we described the noise levels would be less so there would be "no harm". The situation here is the same as it was at the P19 inquiry but we respectfully ask the ExA to note that every single aircraft movement is a disturbance and communities should not have to put up with cynical airport operators overstating the environmental harms of excess movements, even if they appear to stay below the significance threshold, to give themselves a buffer to run their operations inefficiently.

ExQ2 NO2.3

- 32 The Government's 2014 guidance on the granting of dispensation¹ exceptions under section 78(4) states that they should "relate to operational matters affecting a small number of flights". The list of operational matters that can be dispensed includes: emergencies, widespread and prolonged air traffic disruption and delays as a result of disruption leading to serious hardship and congestion at the airfield or terminal.
- 33 At Luton Airport dispensations are currently permitted by the S106 Agreement which states:

5.12 Disregarded movements

5.12.1 For the purposes of Section 78(4)(a) of the Act, the following circumstances are specified in relation to the taking off and landing of aircraft at Luton Airport, namely:

¹ Annex F: Guidelines on Dispensations (publishing.service.gov.uk)

(A) delays to aircraft which are likely to lead to serious congestion at the aerodrome or serious hardship or suffering to passengers or animals;

(B) delays to aircraft resulting from widespread and prolonged disruption of air traffic.

- 34 Until March 2023 Luton airport did not dispense flights as the preceding 12 month night movement count was generally below 9,000, well within the permitted limits.
- 35 However, this changed in 2023 and at the end of the Q1 monitoring period the airport operator reported that the preceding 12 month night movement total was 9,608 (close to the limit – although it had been in the high 8,000s in 2022 on a relatively low movement count compared to the peak passenger year 2019). This spike in night movements resulted in the airport operator applying dispensations liberally.
- 36 In the period from March to June (4 months) Luton airport dispensed 738 flights which was 28% of the all the night flights during the same period.
- 37 The vast majority of these dispensations (72%) were described as "passenger hardship" but, in reality, as the authors of this note can attest to, they reflect late night Wizz flights arriving at or departing from the airport because the requirement of low cost airlines to squeeze in as many rotations as they can which often means the last (Luton) leg suffered from accumulated delays.
- 38 In the Noise Management Plan (REP6-051) LR are proposing that conditions 2.6.1 a. and 2.6.1b. replicate the current S106 dispensations (which are similar to those set out in the guidance to 78(4) of the Civil Aviation Act 1982).
- 39 We do not believe the ExA should grant LR or any operator authority to dispense aircraft under these headings as recent experience of dispensations at Luton airport have been significantly more than a "small number of flights" and are attributable to the operational characteristics of low cost airlines rather than any genuine passenger hardship or congestion at the airport.
- 40 This is illustrated in the following table, using data from the Quarterly Monitoring Reports for 2023:

2023						
Month	Total	Number	Total night	% of	% of	
		attributable	quota period	dispensed	passenger	
		to passenger	movements	flights	hardship	
		hardship	(average for	attributable	dispensed	
		(average for	Apr-Jun)	to passenger	flights as % of	
		Apr-Jun)		hardship	non-	
					dispensed	
					night flights	
March	143	118	525	83%	22%	
April	144		718			
May	181	411	768	69%	19%	
June	270		652			

NB observation suggests there are few dispensed flights attribuable to the early morning shoulder peric

41 The existing proposals will lead, on recent experience, to a minimum 20% increase in actual night movements and probably considerably more as LR are seeking to cram more flights into the night time. This is wholly unacceptable. As we have suggested in an earlier submission, only if the ESG agrees should flights be dispensed (under any heading).

Appendix 1 - W	/izz fligh	ts to/fro	m Luton	airport		
-						~ ~
Destination	1	-7 May 202	3	4-6	5 January 20	24
	Total	A320	A321	Total	A320	A321
Amman (AMM)	6		6	2		2
Antalya (AYT)	6		6	1		1
Athens (ATH)	10		10	1		1
Bacau (BCM)	14		14	3		3
Belgrade (BEG)	10		10	3		3
Brasov (GHV)				1		1
Bratislava (BTS)	10		10	2		2
Bucharest (OTP)	52	8	44	12		12
Budapest (BUD)	42		42	9		9
Burgas (BOJ)	6	4	2	1		1
Bydgoszcz (BZG)	4	2	2	1		1
Chisinau (KIV)				2		2
Clui-Napoca (CLI)	34	33	1	- 6	3	3
Constanta (CND)	1	55	1	1	5	1
		22	4	1	1	0
	22	22	0	4	4	0
Dalaman (DLIVI)	4	10	4	2	2	0
Debrecen (DEB)	12	12	0	3	3	0
Gdansk (GDN)	28		28	6		6
Gisa (SPX)				1		1
Grenoble				1		1
Hurghada (HRG)	6		6	1		1
lasi (IAS)	38	2	36	7		7
Istanbul (IST)	14		14	4	1	3
Katowice (KTW)	28	15	13	5	2	3
Kaunas (KUN)	12		12	3		3
Kosice (KSC)	12	8	4	2		2
Krakow (KRK)	14		14	3		3
Larnaca (LCA)	14		14	3		3
Lisbon (LIS)	14	2	12	3		3
Liubliana (LIU)	6		6	1		1
Lodz (LCI)	4		4			
Lublin (1117)	1/	2	12	3		3
	10	2	12 C	J		0
Olastup (CZV)	10	4	0			0
Disztyli (SZT)	4	4	10	2		2
	14	4	10	2		0
	4	2	2	2		2
Poprad (TAT)	4	4	0			0
Poznan (POZ)	14	4	10	3		3
Prague (PRG)	20		20	5		5
Pristina (PRN)	14	2	12	3		3
Reykjavik (KEF)				3		3
Riga (RIX)	18	2	16			0
Sarajevo (SJJ)				1		1
Satu Mare (SUJ)	4		4	1		1
Sharm el-Sheikh (SSH)	4		4	2		2
Sibiu (SBZ)	14	14	0	3	3	0
Skopje (SKP)	6		6	1		1
Sofia (SOF)	34	10	24	8	2	6
Split (SPU)	4		4			0
Suceava (SCV)	20	20	0	6		6
Tallinn (TLL)	4	20	4	1		1
		1		1		1
	12	4	12	1		1
Thorselenik: (SKC)	12	2	12	1		1
Tinessaloniki (SKG)	6	2	4			0
Timisoara (TSR)	18	18	0	3	3	0
TIrana (TIA)	38	16	22	10		10
Tromso (TOS)				2		2
Varna (VAR)	22	22	0	5	5	0
Vilnius (VNO)	10	10	0	3	2	1
Warsaw (WAW)	42		42	10		10
Wroclaw (WRO)	20		20	4	4	0
	804	252	552	175	32	143
		31%	69%		18%	82%



Wizz fleet mix from November 2023 results presentation