

Section 73 Application LPA REF. 22/03035/VAR: CSACL Response to York Comments

Introduction

1. This short note responds to the comments of York Aviation of 27 April 2023 to CSACL's review of LCY's Need Statement.

Airport Policy Context

2. In order to minimise expenditure, the CSACL review on the policy context of LCY's application was focused on information and arguments presented by York in the Need Statement: the CSACL work did not examine primary policy documents.

3. York indicates that it sees a distinction between 'making best use' and 'making better use' of runway capacity, with in its view 'best' placing a stronger imperative on maximising potential demand, than does 'better': best/better needs clearly to sit within a context which recognises and weighs the disturbance to residents caused by aircraft operations. CSACL did not seek to make any distinction between 'best' and 'better'.

4. York notes at Paragraph 4 of its response that as set out in the 2018 DfT Document 'Making Best Use' carbon emissions are a matter for national policy. The cited paragraphs from the MBU (1.11 and 1.12) do indeed state carbon emissions should be considered at a national level, although they do not appear to indicate that local authorities may make take no interest in carbon emissions. However, this is more properly a legal matter on which London Borough of Newham (LBN) might seek legal opinion. Furthermore, other environmental issues do exist and these may be considered by LBN.

5. York comments (Paragraph 6) on CSACL's discussion of the 6th Carbon Budget and the Climate Change Committee. CSACL considers it had a duty of care to LBN to note these matters. CSACL noted that the Government in July 2022 reached a different conclusion from its expert advisors in formulating the Jet Zero Strategy.

LCY Recent Performance

6. CSACL holds by its views on the traffic forecasts presented at the time of the CADP application, but sees no value in continuing the discussion.

7. The slower recovery of LCY from the Pandemic was noted in the CSACL report, and is a factor which could slow growth to the proposed level of 9 mppa: by the end of March 2023, LCY had recovered to 66% of its peak but lost further ground to the other London airports which had reached 84% of their combined peak. This slower recovery may be a symptom of a change in LCY's market reflecting slower growth in traffic to the EU as a consequence of Brexit, and a lower level of business travel facilitated by increased video-conferencing, found to be feasible during the Pandemic and fortuitously both cheaper and greener than flying.

Operators' Efficiency Improvement

8. CSACL has accepted the arguments made in the Need Statement in relation to operator efficiency improvements if operating hours were to be extended as requested. The debate about the nature of positioning flights made by York (Paragraph 14) is not supported by any statistical evidence, but in any event does not change the overall CSACL conclusion/agreement that operator efficiency would be improved by longer operating hours.

9. In relation to an expectation of future applications to further extend operating hours, this is based partly on a pattern common at UK airports, but more importantly on LCY's Masterplan aspirations. Preliminary analyses undertaken by CSACL in 2019 concluded that longer operating hours would be a necessity to allow the traffic levels to be reached. Again, provision of these views to LBN was regarded by CSACL as a duty of care.

Demand Forecasts

10. CSACL has accepted that the York approach to demand forecasting is the most appropriate method available. However, that does not make it 'robust'. The differences between York and CSACL are essentially the rate of growth.

11. The DfT has confirmed to CSACL that its forecasts do not take into account the higher costs of SAF: this is a clear statement of fact and not a mere suggestion of a possibility as York has indicated at Paragraph 23 of its response. The illustration of the consequences of this as set out in Table 3.6 of the CSACL report does endeavour to factor in the changes in both fuel price and cost of carbon from the DfT's 2017 assumed inputs for these parameters, to reflect most recent values as in LCY's Need Statement (Table D.5). This is the difference between the second and fourth (numerical) rows of Table 3.6 for 2030. Subsequent rows assume SAF has a 10% share of total fuel and a price multiple of 2 of the cost of Kerosene. In the sixth (numeric) row, it may be seen that there is a reduction in the cost of carbon. However, this reduction only partially off-sets the higher cost of SAF. Put simply with the current input assumptions, it is cheaper for airlines to pay the cost of carbon than it is to buy SAF.

12. In Paragraph 22 of its response, York distances itself from CSACL's criticism of the DfT's forecasts, despite:

- Using the DfT's income and price elasticities which were derived based on pre-Brexit and pre-Pandemic travel relationships, which relationships will have also embraced a lower level of awareness of Climate Change; and
- Largely adopting the DfT's pricing assumptions save for modified fuel price assumptions (recognised by CSACL as reasonable) and carbon costs.

13. CSACL considers that these factors mean that elements of York's forecasts carry the same weaknesses as those of the DfT, including lack of consideration of the higher cost of SAF.

14. It is acknowledged that York assumes that LCY will not reach its pre-Pandemic peak level of traffic until 2025. York is also correct that the main conclusion of CSACL's analysis is that growth in passenger traffic at LCY will be slower than forecast by York in its Development Case.

Demand:Capacity Balance in the London Area

15. York's comments in Paragraph 26 concerning CSACL's examination of this aspect in Paragraphs 3.51 to 3.53 are unclear to CSACL: Paragraph 3.51 was a simple presentation of CSACL's assumptions on airport capacity in the London Area, Paragraph 3.52 was a commentary on the analysis of Table 3.8, while Paragraph 3.53 was the conclusion which CSACL drew from the analysis.

16. In relation to the distribution of passengers around the different airports of the London area, the dynamics are complex and the markets are competitive. Most domestic and European destinations are served from several London area airports, and for those that are served from only one airport many are experience-specific points (e.g. a sandy beach) rather than a destination-specific point (e.g. home of the Eifel Tower or the Acropolis). Consumers make their choices of departure airports and destinations based on many factors, and if it is not possible to travel via Airport A they will change either their departure point or their destination. Individual airlines will operate services based on aircraft, crew and airport capacity availability and their assessments of market demand. In reality, demand will like water fill the seat capacity available. The flexibility to use different airports and airlines is greater for leisure traffic, the market segment which is increasing at LCY. On this basis, CSACL considers that there is a considerable degree of substitution possible between airports.

17. York's claim that CSACL regards LCY is a residual airport is not supported by any evidence and is refuted by CSACL: for this claim to be true CSACL's analysis would have to have allocated London traffic to individual airports, whereas the analysis has merely identified airport capacity availability.

18. In March 2023, the DfT published revised passenger forecasts in conjunction with a consultation on SAF. These were lower than those published in March 2022 as a consequence of using more recent macroeconomic forecasts and of updating the expected traffic base in 2025. To reach this traffic base of 304.4 mppa in 2025 would require a compound growth of 11% per annum from the 2022 total of 221.8 mppa.

19. Table 1 below summarises the sources of the economic forecasts. It may be appreciated that the long term forecasts still pre-date the Russian invasion of Ukraine.

Table 1: Macroeconomic Forecasts Sources

Assumption	Primary Source	DfT March 2022	York	DfT March 2023
Economic Drivers				
UK GDP to 2026	OBR	Oct 2021	March 2022	To 2027, Nov 2022
UK GDP from 2026	OBR	March 2020	July 2020	From 2028, May 2021
Foreign GDP to 2026	IMF	April 2021	-	To 2027, Oct 2022
Foreign GDP from 2026	OECD	July 2018	-	From 2028, Oct 2021
South Europe GDP	OECD	-	Oct 2021	-
Rest of Europe GDP	OECD	-	Oct 2021	-

Source: DfT sustainable-aviation-fuel-mandate-dataset March-April 2023

20. Applying these most recent DfT forecasts shows that airport capacity in the London Area exceeds demand until 2031. This is despite these most recent DfT forecasts still being based on

elasticities pre-dating Brexit and the Pandemic, long term economic forecasts still pre-dating the Russian invasion of Ukraine and the price forecasts not taking into account the higher costs of SAF or other potential price increases noted at Paragraph 3.41 of the CSACL report.

Table 2: Passenger Demand:Capacity Balance in the London Area, 2024 to 2031 (mppa)

	2025	2026	2027	2028	2029	2030	2031
Demand							
UK Total	304.3	312.9	319.1	324.3	329.1	340.2	341.0
London Area	182.6	187.8	191.4	194.6	197.5	204.1	204.6
Capacity							
Heathrow	82.2	83.0	83.8	84.7	85.5	86.4	87.2
Gatwick	48.6	49.4	50.1	50.6	51.1	51.6	52.2
Stansted	43	43	43	43	43	43	43
Luton	18	18	18	18	18	18	18
LCY	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Southend	2	2	2	2	2	2	2
Total	200.3	201.9	203.4	204.8	206.1	207.5	208.9
Balance	17.7	14.1	12.0	10.2	8.7	3.4	4.3

Source: CSACL analysis of DfT sustainable-aviation-fuel-mandate-dataset March-April 2023

21. York comments on CSACL's analysis of the relative carbon emissions of different aircraft types from Paragraph 27 of its report. The illustration of Table 3.9 of the CSACL report was not intended to consider operations at a specific time of the week but to look at an average picture over a year. The choice of aircraft types was constrained by the two datasets used to assemble the information: not all the most modern aircraft types were contained in both datasets. Hence, the comparisons were made between types of a similar technological vintage, namely the A320, the A321, the B737-800 and the EMB190. More modern Airbus A320 family neos already feature significantly on the UK aircraft register (more than 80 at the end of December 2022), the B737 Max 8 is also there although in smaller numbers, but the EMB 190 Gen 2 seems not yet to be used by UK operators. Hence, at Heathrow, Gatwick and Stansted newer generation aircraft are already in operation, so reducing the need for the airport operators to introduce incentives for airlines to move to these more efficient types.

22. Figure 1 of York's report shows the carbon emissions on a Palma operation for six airport/airline/aircraft combinations, although no source for this information is given. The figures for the flights from Gatwick, Stansted and Heathrow are the same as in the CSACL report (Table 3.9), although the emissions for an E190 are significantly lower. No statement is made about the source of these data nor that for the GEN 2 versions of the E190 and E195.

23. DfT documents give estimations of the degree of improvement expected from the types used in the CSACL comparison. It may be seen from Table 3 that these are 15% for all types considered here.

Table 3: Estimated Efficiency Improvements for More Modern Aircraft Types

Current Aircraft Type	Future Type	Fuel Burn relative to Current
B737-800	B737 Max 8	-15%
E190	E190-E2	-15%
A320	A320neo	-15%
A321	A321neo	-15%

Source: DfT Air Passenger Forecasts 2017, Page 52, and DfT Jet Zero Modelling Framework, Page 38

24. Hence, as and when data on the more modern types are published the expectation is that the current advantage enjoyed by the larger aircraft types would be maintained. The difference between the emissions levels of aircraft at LCY and those used from other airports is material, and CSACL is content that its thesis (that lower emissions would result if demand were satisfied at other airports) remains valid.

25. York is incorrect when it states in Paragraph 31 that the CSACL analysis is only partial since the analysis includes an estimate of carbon emissions for rail travel from central London to alternative airports at Paragraph 3.55 of the CSACL report. These carbon emissions of some 5 kilograms per Round Trip passenger are small in comparison with the difference in flight emissions between the LCY emissions and those that would be generated at other London airports.

LCY Capacity

26. Given the demonstration of historic over-estimation of busy hours produced by York's analysis of the BDTT during the CADP process, CSACL investigated another approach, namely application of a trend analysis. CSACL conceded that the estimates produced by one set of data were implausibly low; that the second estimate produced estimates that were still lower than York's forecasts; and that there was no perfect way to estimate busy hours. CSACL accepted that the projections put forward by York were a reasonable basis for impact assessment. These conclusions were given at Paragraph 3.63. It is unclear why York has raised the matter in its response.

Conclusions

27. The arguments presented in York's response do nothing to cause CSACL to question its conclusion that the Development Case passenger forecasts prepared by York are optimistic. Indeed, the most recent forecasts produced by the DfT in March 2023 are lower than those of a year earlier, meaning that to the end of the period forecast by York (viz. 2031) there is likely to be adequate airport capacity available in the London area to handle likely demand without an expansion in capacity at LCY.

28. York's suggestions that emissions from future aircraft types operating from LCY would be on a par with those produced by older types operating from other airports does not provide any source for its claims and in any event invalidly compares aircraft and engine technologies of different vintages.