CITY AIRPORT DEVELOPMENT PROGRAMME (CADP) S73 APPLICATION

Appeal against refusal of Section 73 application 22/03045/VAR

London City Airport Limited (PINS ref: APP/G5750/W/23/3326646)

Need / Socio-Economics -Rebuttal Proof of Evidence of Louise Congdon On behalf of London City Airport Limited





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1. Introduction

1.1.1 This Rebuttal Proof of Evidence addresses new points made in the evidence of Dr Chris Smith for the London Borough of Newham (LBN) (LPA-2.1) and Dr Alex Chapman for HACAN East (HACAN-1.1). I consider that much of their evidence has already been addressed in my original Proof of Evidence (APP-1.A) or in the Need Case (CD1.60) and I do not repeat matters here other than by cross reference. This Rebuttal Proof of Evidence adopts the defined terms used in my original Proof of Evidence.

2. Dr Chris Smith

- 2.1.1 Much of the Proof of Evidence submitted by Dr Smith (LPA-2.1) represents his personal opinions rather than being supported by actual evidence.
- 2.1.2 I now address points under the section headings used by Dr Smith.

2.2 LCY Background and Historic Traffic

Historic Traffic Development at LCY

- 2.2.1 As I noted at paragraph 7.3.6 of my Proof of Evidence (LPA-2.1), Dr Smith has changed his position on the likelihood of London City Airport (LCY) reaching 9 mppa within the timescale bounded by the Faster and Slower Growth Cases, as set out in the Need Case (CD1.60), compared to the advice that he prepared for LBN (CD4.2.5) ahead of its consideration of the Application.
- 2.2.2 His principal point relates to LCY's post-pandemic performance but, at paragraph 3.5 of his Proof of Evidence (LPA-2.1), Dr Smith seeks to cast further doubt on the robustness of the future demand forecasts for the S73 Application overall by referring to his 2016 evidence to the CADP1 Inquiry (CD2.8). He states that, in 2016, he considered the forecast growth to 2025 associated with CADP1 would be more rapid than our projections at the time. This is not strictly correct. His position then related solely to the ability of the projected number of aircraft movements at 2025 to accommodate more passengers per movement over the longer term than the forecast 6.5 mppa. In his 2016 evidence, Dr Smith did not comment on the underlying passenger growth rate of 4.6% per annum, other than that he considered it reasonable having regard to capacity constraints at the other London airports (CD2.8, para. 4.24). His sole point then was the potential for more than 6.5 mppa to be accommodated on 111,000 annual aircraft movements over the longer term.
- 2.2.3 As set out clearly at paragraph 3.2 of the Need Case (CD1.60) for the S73 Application, the underlying passenger demand forecasts for LCY proved to be highly reliable with the Airport marginally outperforming the passenger forecasts over the period 2015-2019. This demonstrates clearly that the forecasting approach is robust in terms of estimating future passenger demand at LCY.
- 2.2.4 In relation to Dr Smith's points regarding the changes in average passengers per aircraft movement at LCY compared to the expectation when the CADP1 forecasts were prepared, a full explanation for this is provided at paragraph 3.3 of the Need Case (CD1.60). In any event, at paragraphs 3.49 and 3.50 of his report to LBN (CD4.5.09b), Dr Smith accepted the reasonableness of the future aircraft movement forecasts for the S73 Application relative to passenger growth at paragraphs 3.49 and 3.50. This is confirmed at paragraph 1.14 of his Proof of Evidence (LPA-2.1).

Relevance of Short Term Performance

2.2.5 Dr Smith's change in position regarding the demand forecasts appears to be based almost entirely on his perception of LCY's short term performance.

- 2.2.6 I have already addressed Dr Smith's change in position regarding the likelihood of LCY reaching 9 mppa over the timescale indicated within the range of the demand forecasts presented in the Need Case (CD1.60) at paragraphs 7.3.6 to 7.3.12 of my Proof of Evidence (APP-1.A). There are reasons why the recovery of traffic at LCY has not mirrored that at the other London airports during 2023 and these are not solely connected with the slower recovery in business air travel relative to the strong recovery in leisure demand. A full explanation is given in Section 4.2 of my Proof of Evidence (APP-1.A). For the reasons I have explained, the slower recovery has more to do with the airline supply side their ability to operate services to meet demand than the level of demand from passengers that would choose to use LCY if services were available.
- 2.2.7 As noted above, at paragraph 4.24 of his 2016 CADP1 Proof of Evidence (CD2.8), Dr Smith accepted that, historically, there has been a relationship between growth at LCY and the extent to which capacity at the other London airports is full. This was a key reason why passenger demand growth at LCY exceeded expectations over the period 2015-2019. As I have explained at paragraphs 4.2.14 to 4.2.16 of my Proof of Evidence (APP-1.A), there is a strong correlation between growth at LCY and the number of annual aircraft movements at Heathrow approaching its permitted level of 480,000. Based on recovery of demand at Heathrow, it will soon be approaching its permitted level of aircraft movements, resulting in airlines, including British Airways, prioritising how available slots are used and displacing routes to other airports. Given the strong presence of British Airways CityFlyer (BACF) at LCY, I am confident that the same factors as existed pre-pandemic will re-emerge in the near future and growth at LCY will resume as other issues, such as shortages of relevant aircraft, are resolved.
- 2.2.8 These aircraft availability issues are being overcome, with ITA Airways having received its first new generation A220-100 aircraft recently and immediately deploying it on the Milan-LCY route, and with further frequency increases planned in the New Year¹. The new generation Embraer195-E2 aircraft has just been certificated for operations at LCY², which opens up additional operational possibilities and increased capacity for airlines such as KLM, Helvetic and Luxair. Although Dr Smith acknowledges aircraft availability and crew issues at paragraph 3.14 of his Proof (LPA-2.1), he goes onto imply that these are issues that will continue to impact on longer term recovery and result in LCY being unable to attain 9 mppa even over the longer term. I do not accept that this is a valid conclusion given that:
 - the demand forecasts underpinning the S73 Application always anticipated a lagged recovery at LCY compared to other London airports, reflecting slower recovery of business demand;
 - → aircraft availability issues are being overcome; and
 - Heathrow will be operating close to full aircraft movement capacity again in the near future, resulting in airlines seeking alternative airports, including LCY, from which to serve the London market.

¹ <u>https://www.businesstraveller.com/business-travel/2023/11/07/ita-airways-to-add-fourth-daily-london-city-milan-linate-service/</u>

² <u>https://aviationweek.com/special-topics/crossover-narrowbody-jets/lcy-steep-approach-certification-e195-e2-profit-hunter</u>

2.2.9 When coupled with the growing, and increasingly affluent, local market for leisure travel in the LCY catchment area and increased operating times at weekends enabling the airlines to better serve this market, I am confident that the core With Development passenger forecasts represent a robust assessment of demand levels attainable at LCY with the Proposed Amendments over the period to 2031. It would not be prudent to base longer term planning decisions on short term factors as Dr Smith suggests.

2.3 Future Traffic at LCY

Approach to Forecasting

- 2.3.1 At paragraph 4.4 of his Proof of Evidence (LPA-2.1), Dr Smith accepts that the approach adopted to forecasting future passenger demand at LCY is the *"most appropriate"* to the circumstances at the Airport, given its specific operating characteristics. His criticism is of the assumptions used and the forecasting judgements that necessarily have to be made. As I have pointed out at paragraph 2.2.3 above, I do not accept that the performance against the previous CADP1 passenger forecasts suggests that previous forecasts lacked *"accuracy"* as Dr Smith seeks to imply. In practice, I consider that they proved a very robust indicator of the market for LCY, albeit that the precise mix of routes and airlines may have varied.
- 2.3.2 At paragraph 4.7, Dr Smith suggests that it would not be possible to recreate a forecast for LCY. I do not accept that this is true, as it would be possible for any reasonably experienced air traffic forecaster to make their own forecast of future demand for air travel in the catchment area for LCY using assumptions relating to the drivers of demand growth following the steps set out in Appendix D of the Need Case (CD1.60) and using publicly available data sources.
- 2.3.3 Taking each of his two points in turn:
 - In relation to the Monte Carlo simulation approach and Dr Smith's comment that he would have expected a growth rate of 1.9% per annum based on GDP growth rate of 1.7% per annum and an elasticity of 1.1 ignores that fact that the forecasting equation also takes into account cost variables, including fuel and carbon costs, that moderate the growth rate. The purpose of the Monte Carlo approach is to identify a reasonable range of outcomes from the combination of demand and cost factors.
 - In relation to the specific assumptions relating to market share and frequency growth (as set out in Appendix D to the Need Case (CD1.60)) used to derive the LCY forecast, these could be replicated and verified using CAA passenger survey data.

Macro Assumptions

2.3.4 Dr Smith's analysis of assumptions focusses solely on the external inputs to deriving the underlying market growth rates rather than the second stage of deriving the LCY specific forecast from these. As I have noted at paragraph 7.3.1 of my Proof of Evidence (APP-1.A), his main criticism seems to be of the assumptions underpinning the Department for Transport's (DfT) demand forecasts which, although similar to those adopted for the S73 Application forecasts, are not identical as already explained.

Macro-economic Assumptions

2.3.5 Dr Smith notes that the forecasts were prepared ahead of the full implications of Ukraine war being known. I have already addressed, at paragraph 7.34 of my Proof of Evidence (APP-1.A), the consequences of using updated GDP assumptions. Based on the most recent economic forecasts from March 2023, the assumptions underpinning the demand forecasts for the S73 Application remain robust.

Price Assumptions

- 2.3.6 Again, these were addressed in Section 7.3 of my Proof of Evidence (APP-1.A). In relation to the point made at paragraph 4.13 of Dr Smith's Proof (LPA-2.1), I consider it reasonable to have adopted assumptions in relation to fuel efficiency that are consistent with those adopted by DfT in its Jet Zero modelling.
- 2.3.7 <u>Fuel Costs</u> A key part of Dr Smith's case that the forecasts are too high relies on his assertions in relation to the higher cost of Sustainable Aviation Fuel (SAF) relative to conventional fuels. He refers to a meeting with the DfT but has not disclosed his e-mail correspondence. The conclusion that he draws from this meeting is that:
 - firstly, current costs for carbon permits are not at a level that would incentivise a switch to SAFs in the short term, hence the need for a SAF Mandate, which is currently being legislated upon; and
 - → secondly, that the DfT accepted that it could improve its modelling of SAF costs.
- 2.3.8 <u>Carbon Costs</u> However, Dr Smith is incorrect when he says, at paragraph 4.17 of his Proof of Evidence (LPA-2.1) that the carbon costs used within the forecasting model reflect only the cost of purchase of emissions permits under the UK ETS and CORSIA. I have already addressed this point, in Section 7.3 of my Proof of Evidence (APP-1.A). It is clear from the DfT's *Jet Zero: further technical consultation Annex B* (CD3.5.15) that the carbon values adopted are not solely the current traded values but trend towards the BEIS target appraisal values. As explained in our response to CSACL's report for LBN (CD4.2.1) at paragraphs 14 to 18, the carbon values adopted for the purpose of forecasting future demand allow for costs to increase over time to a level set by BEIS as sufficient to incentivise decarbonisation. This is made clear in more recent guidance from BEIS³, which makes clear that:

"In valuing emissions for appraisal purposes, the UK Government adopts a target-consistent approach, based on estimates of the abatement costs that will need to be incurred in order to meet specific emissions reduction targets.

³ Department for Business, Energy and Industrial Strategy, Valuation of energy use and greenhouse gas (GHG) emissions, January 2023, paragraph 3.33 (CD3.9.39).

- 2.3.9 Use of these values allows for fuel cost increases, over and above those reflected in the fuel prices adopted, to reflect the increasing use of SAFs or other alternative fuel technologies and/or the higher costs to airlines of purchasing permits for residual carbon. Our assumptions in this regard are identical to those made by the DfT in their Jet Zero forecasting work, i.e. that in the short term the costs incurred by airlines will be principally related to the UK ETS permit costs but that, over time, the effective cost of carbon and/or its abatement will increase to a level that reflects requirement to decarbonise. Hence, the cost of carbon and/or its replacement technologies, including SAFs, are fully internalised within the demand forecasts.
- 2.3.10 <u>APD and Other Airline Costs</u> In relation to these other cost items, Dr Smith is largely speculating on potential future trajectories. The potential for different paths in these costs is already reflected within the Monte Carlo modelling of uncertainty and, hence, accounted for in the range of forecasts.
- 2.3.11 Ultimately, at paragraph 4.28 of his Proof of Evidence (LPA-2.1), Dr Smith concludes that these air fare/price assumptions reflect an area of uncertainty rather than necessarily a clear downside risk.

Elasticities

2.3.12 At paragraph 4.29 of his Proof of Evidence (LPA-2.1), Dr Smith seeks to challenge the robustness of the DfT's air traffic forecasting demand elasticities. I addressed this, in relation to business travel, at paragraph 8.4.5 of my Proof of Evidence (APP-1.A). The key point to note is that, whilst the elasticities were recalibrated by DfT using data pre-pandemic, the DfT used a long time series covering 1986-2017 for international markets and 1991-2018 for domestic markets⁴. During these time periods, there have been significant technological changes impacting on travel as well as the global financial crisis. Hence, I consider the elasticities derived over this timescale to be robust for the purpose of long term demand forecast as they already account for step changes in demand drivers that have arisen and will arise over time, not least when account is also taken of the use of market maturity assumptions (Need Case (CD1.60) Appendix D paragraph 14) as an overlay within the forecasting process.

Conclusions

- 2.3.13 I consider that, to the extent that there are uncertainties, as referred to by Dr Smith at paragraph 4.31 of his Proof of Evidence (LPA-2.1), these are already accounted for in the forecasting approach and range of forecasts presented for LCY. There will always be *"unknown unknowns"* at the time of presenting any forecasts and speculation about what may occur (or not) in future cannot be a basis for decision making. There are other unknowns that could equally boost demand.
- 2.3.14 For the reasons already set out paragraph 3.4.12 of my Proof of Evidence (APP-1.A), the views of the Climate Change Committee on capping airport growth have not been accepted by Government.

⁴ Department for Transport, Econometric Models to Estimate Demand Elasticities for the National Air Passenger Demand Model, March 2022, paragraph 2.17 (CD3.7.47).

Assessment of Outputs

<u>2024</u>

2.3.15 As stated at paragraph 5 of Appendix D of the Need Case (CD1.60), the demand forecasts took the assumed recovery to 2024 as a start point on the basis that most capacity would have been reinstated by the airlines by that year and the forecasts were principally concerned with understanding the impact of the Proposed Amendments to conditions thereafter. I accept Dr Smith's point, at para 4.37 of his Proof of Evidence (LPA-2.1), that attaining 4.9 mppa in 2024 may be somewhat challenging but not impossible given the factors already identified that have impacted on the slower recovery of traffic during 2023. However, to the extent that full recovery might be delayed by a year or so, this does not alter the difference with and without the Proposed Amendments and merely delays achievement of 9 mppa, as already allowed for in the Slower Growth Case.

Market Share

2.3.16 For the reasons already explained in my Proof of Evidence (APP-1.A) at paragraph 7.3.4, I do not believe that the DfT March 2023 demand projections, relied on by Dr Smith at paragraph 4.38 of his Proof of Evidence (LPA-2.1), are appropriate for considering LCY's future market share. Similarly, I do not accept that the Airport's current (12 months to September 2023) share of the market of 2% is the relevant start point for considering how its share might grow in future. Pre-pandemic, it attained a 2.8% share of the market, having grown its share from 2.1% in 2009. In the context of increasing capacity constraints at the other London airports, in particular Heathrow, and when considered against the original DfT Jet Zero projections (CD3.5.12), I do not consider an increase in market share to 4.2% by 2031 (9 mppa) to be unrealistic, particularly when the increase in operating hours, with the Proposed Amendments, is taken into account.

London Airports Capacity

2.3.17 I have already addressed Dr Smith's point in relation to the capacity available at the other London airports in Section 7.4 of my Proof of Evidence (APP-1.A). It is simply no part of policy to require capacity to be fully taken up at all airports before consent is granted for growth at another airport.

2.4 Other Matters

Policy

- 2.4.1 In this section of his Proof, Dr Smith sets out a novel interpretation of the Government's policy support for airports making best use of their existing runways⁵ in seeking to imply that this must, de facto, take into account the operating hours of an airport in considering how annual capacity relates to hourly capacity. In essence, his view appears to be that making best use is bounded by all existing conditions in place at any given airport. This is plainly nonsense. Making best use of an existing runway may involve increasing physical capacity such as the provision of additional taxiway infrastructure, as he notes at paragraph 5.3 of his Proof of Evidence (LPA-2.1), changing operating conditions such as the recent approval for London Luton Airport to grow to 19 mppa requiring an adjustment to operational noise limits⁶ or even the re-opening of an airport that was previously closed at Manston⁷.
- 2.4.2 It is not disputed that the benefits of a proposal to make better use of a runway must be balanced against environmental harms. However, it is important to note that, contrary to what Dr Smith claims at paragraph 5.6 of his Proof of Evidence (LPA-2.1), a point also made by Mr McFadden at paragraphs 6.8 and 6.9 of his Proof of Evidence (LPA-3.1), economic and consumer benefits would be realised from the first time the Airport operates within the extended operating hours as the increased passenger volume would translate into increased employment and wider economic value. Furthermore, the new slots on Saturday afternoons could only be used by new generation, quieter aircraft meaning that the noise benefits of such aircraft would be realised throughout the week from the outset. Growth on Saturday afternoons would be gradual as new generation aircraft are introduced into the fleet so the benefits and any environmental harms would be realised in tandem.

Carbon Emissions

2.4.3 I have already addressed the point that Dr Smith makes, at paragraphs 5.8 to 5.16 of his Proof of Evidence (LPA-2.1), in relation to carbon emissions at paragraphs 7.4.8 to 7.4.10 of my Proof of Evidence (APP-1.A). As is made clear in the Climate Change Topic Paper at Appendix 3B2 to Sean Bashforth's Proof of Evidence (APP-3.A), any increase in carbon emissions from the Proposed Amendments would not be significant and would not impede Government policy to achieve carbon net zero. The position taken by Dr Smith here seems to be at odds with the evidence of Mr McFadden, at paragraph 6.25 of his Proof of Evidence (LPA-2.1), that carbon emissions from aircraft are to be addressed at the national level and not for local control. In the context where the *Jet Zero Strategy* (CD3.5.07) clearly allowed for growth at LCY up to 11 mppa (Need Case (CD1.60), paragraph 2.39) and the DfT's fleet mix assumptions clearly allowed for movements aircraft types expected to use LCY (explained at paragraph 7.4.9 of my Proof of Evidence (APP-1.A), the point made by Dr Smith is simply not relevant.

⁵ Department for Transport, Beyond the horizon: making best use of existing runways, June 2018 (CD3.5.3).

⁶ London Luton Airport Appeal Decision (CD8.6).

⁷ Manston Airport DCO Decision (CD8.4).

Re-fleeting

2.4.4 I agree with Dr Smith (paragraph 5.17 of his Proof of Evidence (LPA-2.1)) that there are other factors than simply extended operating hours that will ultimately lead to airlines re-fleeting to newer generation aircraft. I have set out the relative balance of these factors in Section 5.3 of my Proof of Evidence (APP-1.A). This analysis is reinforced by the letter from BACF appended to my Proof of Evidence (APP-1.B-1). I have also explained why operating at weekends from other airports, as referred to by Dr Smith at paragraph 5.19, is itself an inefficient solution.

2.5 Conclusions

- 2.5.1 Dr Smith concludes that the Need Case for the Proposed Amendments has not been demonstrated at paragraph 6.6 of his Proof of Evidence (LPA-2.1). For the reasons that I have set out above, I do not consider the downside risks that he has identified to be material to the case for the Proposed Amendments or likely to mean that LCY will not attain 9 mppa within the timeframe set out in the range of passenger forecasts presented, i.e. 2029-2033.
- 2.5.2 Whilst the projected increase in passengers could, theoretically, be accommodated at the other London airports within the period should overall market demand be at the lower level estimated by DfT in March 2023, this would not be in the interests of consumers as it would necessitate longer surface access journeys to use alternative airports. This approach also has no basis in policy.
- 2.5.3 It would also mean that the economic benefits of growth in Newham and surrounding areas would be foregone, with the benefits displaced to areas adjacent to the other airports which, in many cases, are not located in or close to areas in need of levelling up, as is the case with Newham and adjacent areas in East London.

3. Dr Alex Chapman

- 3.1.1 I now address points made by Dr Chapman. The main thrust of his evidence in relation to the socioeconomic case replicates the position he has taken in relation to the benefits of airport development at planning inquiries in relation to Stansted Airport (2021), Bristol Airport (2021) and London Luton Airport (2022). His position has not been accepted at these previous inquiries.
- 3.1.2 In this rebuttal, I address points broadly under the sub-headings used by Dr Chapman.

3.2 Economic Appraisal Methodology

Introduction

- 3.2.1 In the introduction to Section 2 of his Proof of Evidence (HACAN-1.1), Dr Chapman introduces the Institute of Environmental Management and Assessment (IEMA) as a source of relevant guidance in relation to the assessment of economic impact of development proposals. At the outset, it is important to point out that IEMA has no formal status in this regard. It is essentially a trade body for environment and sustainability professionals and its guidance is informal and does not constitute Government policy. In addition, the source to which Dr Chapman refers at paragraphs 2.1 and 2.2 of his Proof is an article dated May 2014 by Neil Waterson (AIEMA) who was a senior planning associate at Bidwells at the time (CD3.10.2). Whilst the article appears still on the IEMA website, this does not, itself, even have the status of IEMA guidance.
- 3.2.2 Dr Chapman then lists the matters he considers should be assessed but this goes somewhat wider than actually stated in the article that he cites. The matters that, in his article, Mr Waterson considers should be included are:
 - direct economic impacts;
 - indirect/wider economic/expenditure impacts;
 - demographic impacts;
 - impacts on housing;
 - impacts on other local services;
 - socio-cultural impacts; and
 - distributional effects

It is in this context that Mr Waterson suggests that the presentation of socio-economic impacts within an environmental assessment can be strengthened so that the benefits can be properly assessed in relation to the environmental harms identified within an environmental impact assessment (EIA). These broader issues were considered in Chapter 7 of the Environmental Statement (CD1.14).

3.2.3 In paragraph 2.1 of his Proof of Evidence (HACAN-1.1), Dr Chapman appears to set out his personal view based on what may be included in a Green Book economic appraisal of a Government intervention. This appears to go beyond what is actually recommended by Mr Waterson in the context of an EIA relevant to planning decisions.

3.2.4 Furthermore, I would disagree with the premise that the economic impact assessment in relation to the S73 Application is as narrow as a simple assessment of jobs and GVA impacts. The socio-economic assessment sits within the overall EIA process. The entire premise of an EIA is to consider a wide range of impacts, including impacts on environmental aspects, and for this assessment to be used to assess the planning balance. Dr Chapman appears to be simply ignoring the fact that the assessment process here is far broader than simply the socio-economic impact element. The Environmental Statement specifically considers the impact on greenhouse gas emissions, it considers noise impacts and their effects on communities near the Airport, and it considers the social and regeneration effects associated with the growth of the Airport. In other words, the overall environmental impact process does what Dr Chapman is suggesting at paragraph 2.6 of his Proof of Evidence (HACAN-1.1). It considers environmental harms, distributional effects and place-based impacts exactly as he suggests is required.

DfT Transport Analysis Guidance

3.2.5 At paragraph 2.7 of his Proof of Evidence (HACAN-1.1), Dr Chapman introduces his arguments around the relevance of the DfT's Transport Appraisal Guidance, known as WebTAG. As I made clear in Section 8.5 of my Proof of Evidence (APP-1.A), these arguments are in the main the same arguments that he has made (and that have been rejected) at other planning inquiries. However, Dr Chapman does spend some time highlighting some changes that were made to the *TAG Unit A5.2 Aviation Appraisal* guidance in November 2022 (CD3.10.04). At the outset, I would highlight that, in practice, very little of substance was actually changed in this latest iteration of the WebTAG guidance. However, in my view, it does clarify the status of WebTAG in relation to planning applications but not in the way that Dr Chapman suggests. At paragraph 1.1.4 of the WebTAG guidance (CD3.10.04), it states that:

"Decisions on planning applications for airport development will be considered in the normal way, including to take account of relevant material considerations which may include evidence relating to the strategic, commercial, financial and management case of a development proposal."

- 3.2.6 Paragraph 1.1.5 of the guidance also goes on to make clear that *"the appraisal process may be very different for alternative types of intervention"*. In other words, the approach adopted for a planning application need not follow the same process as for a Government financial intervention. The normal way of considering planning applications is through the environmental impact assessment process and through consideration of the influence of different effects on the planning balance. That is precisely what has been done in this case.
- 3.2.7 At paragraph 2.13 of his Proof of Evidence, Dr Chapman seeks to challenge the decision made in the recent Bristol Airport Inquiry. That Inquiry found that an airport development by a private sector investor was not a Government intervention in the market (CD8.1, paragraph 465). There was a similar finding at the recent London Luton Airport Inquiry at which Dr Chapman also made the same arguments (CD8.6, Inspectors' Report paragraphs 15.188 15.190). In many ways, this would seem self-evident. It is unclear how a private sector investment could be a Government intervention. However, Dr Chapman seeks to argue otherwise in paragraphs 2.14 to 2.17 of his Proof of Evidence (HACAN-1.1). In my view, he is simply incorrect to construe a planning decision to vary planning conditions on the operation of an airport as a Government intervention requiring a full WebTAG appraisal.

- 3.2.8 At paragraph 2.18 of his Proof of Evidence (HACAN-1.1), Dr Chapman states that he recognises that a WebTAG Aviation Appraisal is not the only way to present evidence. In this, he is correct. In relation to a planning application, the framework through which the costs and benefits of an application are assessed is the EIA, a process designed to aid decision makers in assessing the planning balance across a broad range of topics. Ultimately, WebTAG is primarily a tool for Government, in the form of the Department for Transport, to assess the relative merits of different Government policy options. It is not well suited to a binary decision about a planning application, where a wide range of costs and benefits and factors are involved, many of which are not quantifiable and cannot be reduced to a monetary value (for instance, how is it possible to ascribe a monetary value compliance with Government policy such as MBU).
- 3.2.9 I note Dr Chapman's comment at paragraph 2.14 of his Proof of Evidence (HACAN-1.1), with regard to Gatwick Airport's inclusion of a WebTAG style appraisal within its application. Whilst it is not possible to know Gatwick's motivation for including this type of assessment, I note that it has also included a more GVA and employment focussed assessment akin to what is generally seen in relation airport planning applications⁸. However, it is worth considering the context and nature of Gatwick's proposals. In essence, the proposal at Gatwick is about adding new runway capacity to the London system. This could be seen as challenging the Airports National Policy Statement (ANPS) (CD3.5.02) by suggesting the utilisation of an additional runway in the South East and is, in essence, being presented as an alternative to the provision of a third runway at Heathrow. In this context, Gatwick is not only seeking to prove that the local planning balance is positive through an EIA but is also, to some extent, seeking to challenge Government policy as set out in the ANPS. This is a very different context to the S73 Application, which is seeking to make best use of an existing fully operational runway to deliver benefit locally and regionally.

3.3 General Issues with the Social Cost Benefit Analysis Methodology

- 3.3.1 At paragraph 2.22 of his Proof of Evidence (HACAN-1.1), Dr Chapman does accept that the scope of economic impact assessment undertaken was considered acceptable by LBN, albeit he considers that it meets only the minimum standards. This is confirmed at Section 8.0 of the Statement of Common Ground (CD11.2).
- 3.3.2 In essence, this section of his Proof of Evidence principally restates his argument that the socioeconomic cost benefit analysis is inadequate because it does not comprise of a full WebTAG quantification of all environmental costs. For the reasons, outlined above, this is simply not required in the context where the full environmental consequences of the Proposed Amendments have been fully set out in the Environmental Impact Assessment.
- 3.3.3 I now address the specific gaps that Dr Chapman has identified in his Proof of Evidence.

⁸ Gatwick Airport Ltd, Needs Case Appendix 1 – National Economic Impact Assessment, August 2023 (CD3.7.48).

Sensitivity Testing and the underlying forecasts

- 3.3.4 At paragraphs 3.7 to 3.19 of his Proof of Evidence (HACAN-1.1), Dr Chapman embarks on a criticism of the Monte Carlo approach to considering potential future growth rates and for dealing with uncertainty. It is important to be clear about the purpose of the Monte Carlo analysis in the context of the S73 Application. The demand forecasts that support the S73 Application seek to identify a reasonable time period in which LCY will reach 9 mppa in the context of a very wide range of possible and uncertain influences on air transport demand. The forecasts are not attempting to identify the full possible range of outcomes and they are not seeking to understand the influence of any one particular variable or risk. That is simply not a helpful exercise in the context of a range of upside and downside risks potentially occurring. That is what the application forecasts deliver.
- 3.3.5 In relation to Dr Chapman's specific comments regarding the weightings applied to UK GDP growth within the Monte Carlo analysis at Paragraph 3.17 of his Proof of Evidence (HACAN-1.1), the 60%/20%/20% split was included to maintain consistency with the weightings given to other risk factors within the analysis where the same level of detail is not available, notably overseas GDP, and intended to reflect a traditional 80%/20% sensitivity mix. It was not, as suggested, a deliberate attempt to narrow the range as suggested. I would reject Dr Chapman's suggestion that the assumptions are not transparent. They are clearly set out in the Need Case (CD1.60) in Appendix D.
- 3.3.6 At paragraph 3.19, Dr Chapman raises the issue of co-variance within the Monte Carlo modelling. Whilst I would accept that there may well be a link between variables such as GDP, oil price and ETS prices, I would not accept that sufficient detail is known about such a link to enable effective modelling of such effects within the context of the analysis here given the medium to long term time frame of the forecasts. For instance, we do not know how, realistically, GDP will react to oil price changes in 10 years' time. I remain of the view that testing these effects individually remains the most effective way of establishing a reasonable range of forecasts for LCY for the purposes of considering this S73 Application.
- 3.3.7 Again, Dr Chapman repeatedly comes back to arguments about the requirements of WebTAG and, again, I would repeat that WebTAG is not the relevant tool for consideration of a planning application. A broad range of sensitivity testing and examination of individual risks in more detail makes sense in the context of the type of option appraisal that WebTAG is designed for, where there are potentially a wide range of options being considered on a value for money basis. It does not make sense in the context of a binary decision, such as a planning application.
- 3.3.8 Ultimately, it is my view that Dr Chapman is simply missing the point of what the forecasts are trying to achieve in the context of assessing a planning application.

3.4 Business Passengers

Forecasting business passenger growth

- 3.4.1 I have already addressed business travel recovery at paragraphs 4.2.5 to 4.2.11 and in Section 8.4 of my Proof of Evidence (APP-1.A). As indicated in Table 4.1, domestic business travel is recovering well at LCY but recovery in European markets is lagging, in part related to the airline service issues and slow reinstatement of routes as discussed in Section 2 above. Notwithstanding the expected growth in leisure travel at the Airport if the Proposed Amendments are approved, the proportion of passengers travelling for business purposes is expected to be around 35% of all passengers at 9 mppa. Dr Chapman is incorrect that the proportions of business passengers with and without development has not been provided. This information was set out at Appendix 2 to the Appellant's response to the GLA Stage 1 Report (CD4.2.3).
- 3.4.2 Relative to the market as a whole, LCY is expected to remain attractive for business passengers given its proximity to Canary Wharf and the City of London. With development, the increase in business passenger use of the Airport represents an increase of only 0.8 mppa (or 400,000 return business air trips) above 2019 levels. In the context of constraints at the Heathrow and the likelihood of some short haul business type services being squeezed out in favour of long haul services, which tend to have lower proportions of business travellers using them, this modest increase in business passenger numbers at LCY does not seem unreasonable over the period to 2031, notwithstanding the lag in recovery of that segment of the market.

Economic impact of business and leisure travellers and the impact on the predicted wider economic benefits

- 3.4.3 At a number of points in his Proof of Evidence (HACAN-1.1), Dr Chapman seeks to criticise the use of the Oxford Economics methodology for considering the productivity impacts in the wider economy (see paragraphs 4.6.2, 4.6.4 and 4.8). In particular, he suggests that the time period used for the analysis, 1980 to 2010, is invalid. This seems a very odd position. A 30-year time-series, which includes periods of growth and recession, substantial evolution and change in the UK economy, fundamental changes in information and communication technologies, and substantial changes in the air transport market would seem an excellent basis for considering the link between productivity and business air travel.
- 3.4.4 I would also note that the Oxford Economics research used in my analysis is far from the only research that has identified a similar link between productivity in the economy and air travel. For example:
 - InterVISTAS in its work on the economic impact of airports in Europe for ACI EUROPE in 2015 also identified an elasticity of 0.05;⁹
 - Research by Oxford Economics for Eurocontrol in 2005 identified an elasticity of around 0.06¹⁰;

 ⁹ InterVISTAS for ACI EUROPE, Economic Impact of European Airports, 2015, page 55 (CD3.7.49).
¹⁰ Oxford Economics for Eurocontrol, The Economic Catalytic Effects of Air Transport in Europe, 2005, page 42 (CD3.7.50).

- Research by PwC for the Airports Commission identified an elasticity of around 0.1¹¹. In relation to this research in particular, I note Dr Chapman's comment as regards causality in the relationship between GDP and air connectivity at paragraph 4.6.4 of his Proof (HACAN-1.1). The PwC analysis explores causality in some detail in Section 3.3 on page 20. It concludes that *"Our findings shows that there is evidence of a bi-directional causality between GDP and seat capacity"* on page 26. In other words, it concludes that there is evidence of a virtuous circle of growth between UK GDP and air connectivity;
- As recently as September 2020, Oxford Economics for ATAG in its Aviation: Benefits Beyond Borders report¹² has cited an elasticity of 0.05 for the link between productivity in the wider economy and air travel.
- 3.4.5 Overall, I simply do not accept Dr Chapman's position in relation to the Oxford Economics relationship and its appropriateness as a basis for assessing the business productivity impacts of the Proposed Amendments.
- 3.4.6 Nor do I accept his position in relation to the negative implications of leisure travel for the reasons already set out in Section 8.2 of my Proof of Evidence (APP-1.A).

3.5 Employment

Displacement and study areas

- 3.5.1 At paragraph 5.1 of his Proof of Evidence (HACAN-1.1), Dr Chapman criticises a failure to distinguish between local impacts and national impacts. This was deliberate as the main benefits of the Proposed Amendments are realised locally, in Newham, the defined Study Area¹³ and across London.
- 3.5.2 As identified in my Proof of Evidence (APP-1.A) at paragraphs 6.2.3 to 6.2.6, Newham is identified as a priority area for levelling up where there is greater value on the creation of new employment opportunities. This fits entirely within the concept of 'place-based impacts' referenced at paragraph 2.1.3 of Dr Chapman's Proof of Evidence (HACAN-1.1). In this context, and given the priority placed on the creation of additional employment opportunities as set out at paragraph 5.9 of Mr McFadden's Proof of Evidence (LBN-3.1), the new jobs created directly and indirectly as a result of growth at the Airport should be treated as additional locally.

¹¹ PwC for the Airports Commission, Econometric Analysis to Develop Evidence on the links between Aviation and the Economy, 2013, page 8 (CD3.7.51).

¹² Oxford Economics for ATAG, Aviation Benefits Beyond Borders, 2020, page 25 (CD3.7.52).

¹³ See Proof of Evidence (APP-1.A), Figure 6.1.

- 3.5.3 Contrary to what Dr Chapman states at paragraph 5.6 of his Proof of Evidence (HACAN-1.1), there is no contradiction in terms of the treatment of displacement within the Appellant's case. Given that the Economic Impact Assessment and Socio-economic Cost Benefit Analysis are addressing the impacts principally at the local level and across London, the impacts are presented in gross terms as stated at paragraph 9 of Appendix F to the Need Case (CD1.60). However, when considering the benefits to local passengers who would prefer to use LCY if capacity is available, is it correct to consider the disbenefits to them if they were forced to use alternative airports. In those circumstances, the direct benefits of growth (e.g. local employment) would be realised in the vicinity of those airports, potentially in areas with less need for regeneration than Newham and surrounding areas of East London, but there would be disbenefits to consumers who would otherwise have preferred to use LCY with negative economic consequences at the local level.
- 3.5.4 I do not accept that the estimates presented for direct, indirect and induced impacts represent an overestimate, as claimed by Dr Chapman at paragraph 5.7 of his Proof of Evidence (HACAN-1.1) when considered at the appropriate scale of the Study Area and London.

Direct, indirect and induced jobs

- 3.5.5 At paragraph 5.10 of his Proof of Evidence (HACAN-1.1), Dr Chapman quotes FTE employment numbers from the 2017 and 2019 LCY Annual Performance Reports. He appears unaware that the figures for 2019 were under-reported and corrected in the 2021 Annual Performance Report (APR) (CD9.1, page 23, footnote 10). The figures were verified by my team for the purpose of preparing the economic impact assessment for the S73 Application and it was found that a significant number of employees had been omitted from the 2019 estimate in error due to incomplete reporting. The baseline figures for 2019 set out in the Need Case (CD1.60, Table 6.2) align with those corrected in the APR.
- 3.5.6 It was recognised in the original CADP1 Application that the growth in employment anticipated in 2008 had not fully materialised and this was attributed to an unforeseen step change in productivity due to restructuring of functions (e.g. increased automation) following the global financial crisis¹⁴. These productivity improvements and future anticipated productivity improvements are taken into account in the employment estimates set out in Section 6 of the Need Case (CD1.60).
- 3.5.7 At paragraph 5.14 of his Proof of Evidence (HACAN-1.1), Dr Chapman comments that, in his opinion, it is strange that the employment density (jobs per mppa) related to growth from 2019 to 2031 is expected to be the same as that related to passenger growth of 2.5 mppa from 2015 to 2018 as he would expect to see some economies of scale as an airport grows. Whilst this is true in general terms, what Dr Chapman has failed to take into account is the additional retail and catering employment expected when the CADP1 terminal works are built out. This is explained further in Appendix G to the Need Case (CD1.60) when comparing the assessed economic impacts of the Proposed Amendments to the original estimates made at the time of CADP1.
- 3.5.8 I have already addressed Dr Chapman's point about the employment benefits of aviation growth more generally in Section 8.3 of my Proof of Evidence (APP-1.A).
- 3.5.9 Contrary to what Dr Chapman says at paragraph 5.16 of his Proof (HACAN-1.1), the methodology by which the indirect and induced multipliers have been derived is set out in Appendix F to the Need Case (CD1.60).

¹⁴ See CADP Update to the Need Statement, September 2015, paragraph 5.5 (CD2.6.10).

Job quality and inequality

3.5.10 I have addressed these points in Section 8.3 of my Proof of Evidence (APP-1.A).

Impact on predicted employment benefits

3.5.11 I do not accept that the benefits of the Proposed Amendments have been overstated nor that it would be appropriate to assess the impacts at a national rather than a local level given the specific economic and regeneration requirements of the area within which the Airport is located.

3.6 Costs of Environmental Impacts

Noise

- 3.6.1 At paragraphs 6.1 to 6.8 of his Proof of Evidence (HACAN-1.1), Dr Chapman argues that the noise impacts of the Proposed Amendments should have been monetised and, indeed, notes at paragraph 6.8 that, to the extent that the Proposed Amendments result in a reduction in noise due to fleet modernisation, that these values should have been included as monetised benefits of the scheme overall.
- 3.6.2 Whilst the monetisation of noise related costs may be appropriate if the decision maker is weighing the value of one scheme versus another, it is of less relevance in considering the planning balance. This is particularly so given that, as stated at paragraph 3.2.8 above, there are many factors to be considered in the planning balance and not all can be monetised.

Climate Change

3.6.3 At the outset, I would note that Dr Chapman quotes, at paragraph 6.11 of his Proof of Evidence (HACAN-1.1), from the London Luton Development Consent Order (DCO) Need Case (paragraph 8.6.1e) (CD3.7.53) in relation to accounting for carbon related costs in the Socio-economic cost benefit analysis. However, he neglects to include the important caveat contained in the footnote:

"It should be noted that whether or not these carbon costs should be included within an appraisal of this type is a matter of some debate and this is discussed further in Appendix D. The costs of carbon or its abatement are already accounted for within the demand forecasts and, hence, such costs should not be included in the assessment as this would constitute double counting."

3.6.4 The same is true in this case and the socio-economic cost benefit analysis presented in Table 6.8 of the Need Case (CD1.60) is presented in identical terms to that included with the London Luton DCO application and, indeed, as was presented in connection with Bristol Airport. It should be noted that the matter was addressed at paragraph 463 of Bristol Airport decision (CD8.1).

"Having considered these submissions the Panel considers that the inclusion of carbon values in the CBA would result in an element of double counting. Moreover, as concluded elsewhere in this decision, the issue of carbon emissions is a matter to be dealt with at the national level."

3.6.5 At paragraph 6.16.1 of his Proof of Evidence, Dr Chapman highlights the forthcoming change to WebTAG guidance (CD3.10.7) published on 19 October 2023 in relation to the treatment of arriving and departing flights. I note that this change is to be made at some date in the future. However, as repeatedly stated, WebTAG is not the appropriate tool for the purpose of assessing the S73 Application. On the principle of what is set out, I would also note a number of other points in relation to the prospective forthcoming amendments:

 "It will also acknowledge that traded sector emissions will risk double counting emissions from within the traded sector due to existing carbon pricing mechanisms, and will recommend that analysts make an adjustment to avoid such double counting using appropriate data and assumptions about current and future traded carbon prices."¹⁵

This clearly reflects the position that the cost of traded emissions are already internalised within the cost of flying for relevant markets and that, as a consequence, the costs of these emissions should be excluded from any appraisal;

 "In some circumstances, there may be evidence that a UK-specific scheme or policy has displaced emissions from elsewhere within the sector. When proportionate and possible to do so, these changes in emissions and associated levels of displacement should be considered in an appraisal."¹⁶

This establishes the point that it is not the emissions purely at LCY that should be considered but those across the UK or potentially overseas (following the logic of departing and arriving flights being included). In other words, if passengers were to continue to fly via less convenient airport if LCY does not grow or the aircraft used shift to an alternate airport to be used, then it is only the net carbon emissions after this displacement that should be considered. This would substantially reduce any impact from the Proposed Development.

- 3.6.6 Overall, I believe that the forthcoming changes would in fact reinforce the position that the incremental costs of carbon should largely be discounted in relation to assessment of the Proposed Development.
- 3.6.7 In relation to non-CO₂ impacts (paragraph 6.16.2 of Dr Chapman's Proof (HACAN-1.1), it is clear from *Jet Zero Strategy: One Year On* (CD3.5.10, page 33), that substantial uncertainty remains as to how such effects might be quantified:

"Undertake further work on how non-CO₂ impacts could be monitored and included in the UK ETS, in line with our aim to price aviation's non-CO₂ climate impact once scientific understanding and consensus permit."

- 3.6.8 Furthermore, at paragraph 6.16.3 of his Proof (HACAN-1.1), Dr Chapman quotes selectively from *TAG Unit A5.2 Aviation Appraisal* (CD3.10.04) suggesting that a quantitative assessment is required when it is clear that, given the uncertainties, the appraisal may be qualitative or quantitative. In this case, a qualitative assessment is set out in the relevant chapter of the Environmental Statement (CD1.18).
- 3.6.9 In relation to Dr Chapman's point, at paragraph 6.17 of his Proof (HACAN-1.1) about the appropriateness of the *Jet Zero Strategy* time series of carbon costs being used to illustrate the effects, if such costs are to be included in the cost benefit analysis (albeit I do consider this to be double counting given the inclusion of carbon costs within the derivation of the demand forecasts), I do not agree with his view. It is important to understand both the purpose of the DESNZ (formerly BEIS) carbon appraisal values and the purpose of the socio-economic cost benefit analysis:
 - As I have made clear at paragraph 2.3.8 above, the target appraisal values are intended to reflect both the cost of abatement and the cost of residual carbon and have been set at a

 ¹⁵ Department for Transport, Forthcoming Change to TAG, October 2023, page 7 (CD3.10.7).
¹⁶ Ibid.

level consistent with securing sufficient abatement to ensure that long term climate change targets are met. These costs are not the same in the short term as those that are incurred by airlines under the emissions trading scheme or CORSIA. It is for this reason that DfT adopts a set of carbon values for the purpose of considering the costs to users as an input to demand forecasting that trend from the current traded (or non-traded) prices borne by the airlines to the target appraisal values over the longer term to reflect a gradual shift in emphasis from simply paying for carbon permits to incurring the full costs of abatement to meet sector targets.

- → The socio-economic cost benefit analysis is, as set out at paragraph 10 of the Need Case (CD1.60) examining the efficient allocation of resources taking into account the costs and benefits to passengers, producers (airlines and airports) and the Government. For the reasons already stated it is not a full WebTAG appraisal as one is simply not required. In the context that the socio-economic cost benefit analysis is presented, it is entirely logical and reasonable to adopt the costs that users are likely to incur.
- 3.6.10 For the reasons set out above, I do not accept Dr Chapman's recalculation of carbon costs as appropriate or reasonable. I would note, furthermore, that his adoption of the Greenhouse Gas Conversion Factors for Company Reporting (CD3.10.12) as the basis for estimating non-CO₂ effects was not accepted by the High Court as appropriate for determining non-CO2 emissions from aviation in the context of a planning decision at the Appeal into the Bristol Airport decision (CD8.08), paragraph 202:

"However much the claimant may seek to invoke the BEIS 1.9 multiplier, there is very far from being any scientific consensus that it is a relevant tool in determining non-CO2 emissions from aviation, other than in the context of company reporting."

3.6.11 Finally, at paragraph 6.26 of his Proof (HACAN-1.1), Dr Chapman confuses two different points, namely the extent to which constraints at other London airports, particularly Heathrow, lead to increased demand from passengers seeking to use LCY (Need Case (CD1.60), paragraph 5.11) and whether there would be displacement of aircraft to other airports to serve different markets altogether if the Proposed Amendments are not approved. In the latter case, this would result in the same level of carbon emissions with or without the Proposed Amendments. It is for this reason that carbon from aircraft is a matter to be addressed at a national and international level, rather than a local level, as confirmed in the High Court Judgment in respect of Bristol Airport (CD8.08, paragraphs 117 and 118). Nonetheless, consistent with good practice the Climate Change Chapter of the ES (CD1.18) presents the carbon impacts in gross terms before any considerations of displacement of aircraft.

3.7 Summary and Conclusions

3.7.1 Overall Dr Chapman seeks to repeat arguments made and rejected in connection with other airport development proposals, namely that the economic benefits of aviation growth are overstated at a national level and that any local benefits are outweighed by the environmental harms. I do not agree with his view.

4. Conclusions

- 4.1.1 Overall, I have considered the evidence of Dr Smith and Dr Chapman and do not consider that either Proof demonstrates that the analysis set out in the Need Case (CD1.60) in support of the S73 Application does not provide a robust statement of the benefits of the Proposed Amendments.
- 4.1.2 I do not accept Dr Smith's recent hypothesis that LCY is unlikely to attain 9 mppa at all, leave aside within the timescale set out in range of forecasts presented with the S73 Application. It is not correct to assert that any negative environmental impacts from the Proposed Development would arise ahead of the benefits.
- 4.1.3 In relation to Dr Chapman's evidence, it relies on the thesis that a full quantified economic appraisal of all of the costs and benefits is required to inform a planning decision. This is simply not correct as evidenced by other recent decisions regarding airport growth and development. His criticisms of the basis of the economic assessment are unfounded.