

TOWN AND COUNTRY PLANNING ACT 1990

BRISTOL AIRPORT

DEVELOPMENT OF BRISTOL AIRPORT TO ACCOMMODATE 12 MILLION PASSENGERS PER ANNUM

CLOSING SUBMISSIONS ON BEHALF OF BRISTOL AIRPORT LIMITED

INTRODUCTION

A few opening thoughts

1. After some eight weeks of evidence and six closing submissions from other parties, now is perhaps the time to remind ourselves about what this proposed development is all about.
 - a. Bristol Airport Limited ('BAL') is seeking to expand Bristol Airport to accommodate the demand to fly from, quite literally, millions of people who wish to travel, whether to go on holiday, visit family or friends, on educational or cultural exchange or for business.
 - b. That demand is driven by local people, not just in North Somerset and the surrounding districts, but in the wider sub-regional and regional area. It is also driven by people who want to visit the local or wider area, again for a variety of reasons.
 - c. People don't fly because there are airports; rather, there are airports because people want to fly. People want to fly from Bristol Airport because it offers a good quality of service, and a range and frequency of destinations that people find attractive. Bristol Airport is successful because it is good at meeting customer demand.
 - d. The level of that demand has had to be re-forecast in the context of the effects on the COVID-19 pandemic, but there is broad agreement between BAL and North Somerset Council ('NSC') on the level and timing forecast growth.

- e. In catering for such demand the airport is able to provide jobs and income for those that are actually employed at the airport, but also generate jobs and economic opportunities for many, many others. Many in the local business community have spoken up in support of expansion.
 - f. Arguments that local jobs and opportunities should be deliberately foregone in the hope that they will, in part at least, be displaced to other even more needy areas of the country is the mantra of despair. The policy objective is to 'level up'; not 'level down' to some lowest common denominator.
 - g. As for adverse effects, BAL has always acknowledged that there are adverse effects, but what must also be acknowledged is that Bristol Airport's rural location makes many of those adverse effects relatively modest. It is genuinely difficult to think of any large development that has no impacts and that is certainly true of infrastructure development. That is why, however, the planning system allows a 'planning balance' to be undertaken between what are often very local impacts against what are often much wider benefits.
 - h. In that context, however, BAL has undertaken a detailed environmental impact assessment in its Environmental Statement ('ES') and then updated this, where appropriate, in its Environmental Statement Addendum ('ESA') to understand the likely significant effects of the proposed development. Indeed, it is interesting to note that there has been very little (if any) challenge to the actual environmental effects reported in the ES and ESA; the challenge has largely been to the 'interpretation' of those results.
 - i. Properly understood, BAL has demonstrated that the adverse effects are 'not significant' in the context of environmental impact assessment. Indeed, in terms of health, there are assessed to be public health benefits of the proposed development.
 - j. BAL has also sought to engage constructively with the local planning authority on mitigation. Indeed, before refusal it had agreed all mitigation with officers in a series of conditions and section 106 heads of terms. In negotiations during the inquiry itself BAL has genuinely tried to find a middle way and has enhanced its mitigation offer where it has felt that that is appropriate.
2. Of course, there have been many other important issues in this inquiry, including climate change, green belt and highways and these are all considered below.

3. It is important to note, however, that (at its heart) this application is seeking to meet an acknowledged demand from millions of people to fly each year, and it is doing so by 'making best use' of the existing runway infrastructure at Bristol Airport, in a way that maximises its benefits and appropriately mitigates its adverse environmental effects.
4. What these closing submissions will try to do is to identify and consider the various substantive arguments debated during the inquiry in a fair and balanced way. They are firmly grounded in the written and oral evidence and fully referenced in detailed footnotes throughout and we hope that they will help the inspectors to find a way through that evidence.
5. The broad structure of BAL's closing submissions is as follows:
 - a. Chapter 1: This introductory section
 - b. Chapter 2: Forecasting
 - c. Chapter 3: Socio-economics
 - d. Chapter 4: Noise
 - e. Chapter 5: Air quality
 - f. Chapter 6: Health
 - g. Chapter 7: Surface access and parking
 - h. Chapter 8: Climate change
 - i. Chapter 9: Green Belt
 - j. Chapter 10: Other matters
 - k. Chapter 11: Planning balance
6. There is also an Appendix 1 that picks up various legal points raised by others and sets out BAL's position. This appendix is sometimes referred to in the text relating to the issue to which it relates; but not always so. Appendix 2 to this closing provides BAL's commentary on its section 106 agreement with NSC and its unilateral undertaking. This appendix is intended to assist the inspectors in understanding how these documents work and the relationship between them.

An unusual inquiry in many ways

7. This has been an unusual inquiry in many ways. It has been the first major ‘blended’ planning inquiry following the changes to procedure required during the pandemic, it has been an unusually long inquiry by recent standards, and it has involved a lot of parties: the appellant, the local planning authority and no less than five rule (6) parties.
8. But it has been unusual in other respects too. There have been some pretty direct attempts to attack the merits of Government policy through the ‘back door’ by challenging weight. Parties have sought to debate the UK’s strategy for achieving its carbon budgets and ‘net zero’ target in 2050. There have been efforts to discredit a Government consultation on its strategy for achieving ‘net zero’ aviation. Matters agreed between the applicant and officers, have become unagreed, and the subject of fierce debate. Rather than defining the local planning authority’s case, its reasons for refusal have become little more than a loose framework to be departed from at will. New issues have been raised and new legal objections identified – indeed it is now said that to grant planning permission for this (and presumably any other form of development that is not itself ‘net zero’) would be contrary to the duties on the Secretary of State in sections 1 and 4 of the Climate Change Act 2008 (‘CCA 2008’) and so unlawful. It is asserted that a single elasticity variable in a consultant’s model is so important that failure by the consultant to disclose it renders large areas of evidence of little or no weight.
9. Yes, this has been an unusual inquiry, but the objective in BAL’s closing submissions is to try to assist the inspectors to find their way through all these matters in order to get to the substance of the evidence and to genuinely grapple with the underlining merits in the context of the legal and policy framework that applies to decision-making under the Town and Country Planning Act 1990.

A glimpse behind the curtain

10. In the Speaking Note to NSC’s Closing Submissions¹ it sought to characterise Bristol Airport Limited (‘BAL’) as having “*pursued its own interests*” ahead of sustainable development, of being “*convinced of its own self importance*”, of being so “*self involved*” that it cannot even contemplate another view, of exhibiting “*closed mindedness*” and being so “*lacking in appreciation*” and “*focussed on profit*” that it pursues growth ahead of mitigation, and putting “*the pursuit of profit before the well-being of the people its operations affect*”. Nothing, of

¹ NSC Speaking Note paras 3 and 4.

course, could be further from the truth. Bristol Airport is a regional airport that is very much grounded in its local and wider communities where most of its employees live. It is absolutely focussed on sharing the benefits of growth and appropriately mitigating its effects, and it hopes that its evidence and conduct throughout this inquiry has made that clear. These unfair allegations are, therefore, firmly rejected. What they reveal about the Council, however, is rather more interesting.

11. NSC's closing submissions are made on behalf of the Council (as has been stressed more than once, its Members) and such serious allegations against an applicant can only have been made on instruction. What those allegations reveal, therefore, are Council members that are not only hostile to the application, but hostile to the applicant itself. Maybe this 'glimpse behind the curtain' will assist the inspectors in understanding how members came to reject the clear professional advice of their officers on the benefits and limited likely significant effects of the proposed development, and their conclusions that the application was compliant with policy and should be granted planning permission.

Some preliminary points

Description of Proposed Development

12. It is notable that many of the physical aspects of the proposed development have attracted almost no challenge at all. These elements are as follows:
 - a. An extension of the passenger terminal on its west and southern sides with canopies over the forecourt of the main terminal building;
 - b. A new walkway and pier with vertical circulation cores and pre-board zones;
 - c. A new service yard;
 - d. An acoustic fence; and
 - e. Minor enhancements to airside infrastructure through the construction of a new eastern taxiway link and taxiway widening and fillets.
13. The present application seeks planning permission to amend the following planning conditions:
 - a. Condition 65, which imposes the current passenger cap of 10 million passengers per annum ('mppa'), in order to allow a throughput of 12 mppa;

- b. Condition 38, which currently limits night time flights (namely, those between 23:30 and 06:00 hours) to 4000 a year with a maximum of 3000 flights during British Summer Time and 1000 movements in British Winter Time. The proposed amendment will remove the seasonal restrictions on the number of night flights but the overall cap of 4000 night flights a year will remain unchanged;
 - c. Condition 33, which allows only 'tow on push back' on aircraft stands 38 and 39 in order to allow the use of auxiliary power units on these stands; and
 - d. Condition 9, in order to remove the seasonal restriction on the use of the car park known as 'Cogloop'.
14. In order to meet the increased need for car parking associated with 12 mppa, BAL proposes the following development:
- a. A multi-storey car park;
 - b. An extension to the Silver Zone surface level car park; and
 - c. Associated enhancements to the internal road system and layout.
15. With regards to off-site development, the proposed development includes carriageway and junction improvements to the A38 in order to mitigate the impacts of the growth in passenger numbers on the local highway network.
16. The proposed development would permit an increase in passenger capacity of around 20% from 10mppa to 12mppa. In the context of airport expansions, the proposed development really is therefore relatively modest.

Pre-Application Process

13. BAL submitted its application for planning permission in December 2018 (Application Ref. 18/P/5118/OUT) following pre-application discussions with NSC Officers. The application was accompanied by, *inter alia*, an Environmental Statement of 19 chapters. The scope of the Environmental Statement was in accordance with the Scoping Opinion², issued by NSC in response to BAL's Scoping Report, on 17 August 2018.

² Ref: 18/P/3502/EA2 (CD4.9).

14. Regulation 4(5) of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ('the 2017 EIA Regs')³ states clearly that "[t]he relevant planning authority or the Secretary of State must ensure that they have, or have access as necessary to, sufficient expertise to examine the environmental statement." This is particularly important where, as here, many of the issues are highly technical. Accordingly, NSC appointed specialist external consultants in the fields of forecasting, highways, carbon and climate change, noise and vibration, economic impacts in order to assist it in determining the application.
15. It is important to acknowledge the process that was undertaken between the submission of BAL's application for planning permission in December 2018 and the Committee's determination of the appeal in February 2020. For a period of some fourteen months, BAL worked extensively with NSC Officers and their respective expert advisers in order to deal with all matters raised by Officers and other consultees. This process resulted in two requests for further information under regulation 25 of the 2017 EIA Regs by NSC. BAL provided detailed responses to these requests on 18 April 2019 and 30 October 2019 respectively⁴.
16. Through this process, NSC and BAL reached full agreement on a wide range of matters including:
 - a. The conditions to be imposed on the planning permission;
 - b. The obligations to be included in a section 106 agreement; and
 - c. The design of the A38 highway works which were to mitigate the impacts of the proposed development on the local highway network.

Officers' Report

17. The culmination of this process was a substantial Officers' Report⁵ which thoroughly examined all the technical information provided by BAL. The key conclusions reached in the Report were as follows:
 - a. Officers broadly endorsed the air traffic forecasts prepared on behalf of BAL.⁶ These forecasts demonstrated that Bristol Airport would meet 12 mppa at approximately (the then central forecast date of) 2026.

³ (CD5.5).

⁴ BAL's responses are at (CD3.4.1 – 3.5) and (CD3.6.1 – 3.12).

⁵ (CD4.11).

⁶ (CD4.11), pdf page 16.

- b. The methodology adopted in order to calculate the socio-economic benefits of the proposed development was appropriate.⁷ Whilst there were certain differences between the views of Officers and the assessment set out in the ES, Officers agreed that the proposed development would achieve substantial benefits.⁸
- c. With regards to the air noise impacts of the proposed development, Officers concluded that the methodology adopted in the ES was consistent with policy and the results were reasonable.⁹ Officers concluded that there was a “*minimal*” difference between the noise impacts of the consented 10 mppa, and the proposed 12 mppa.¹⁰ Both the ground noise and road traffic noise impacts were acceptable.¹¹
- d. The methodology used, including the number and distribution of assessment locations, to assess the air quality impacts of the proposed development provided a “*realistic projection of the impacts*”. The results of this assessment showed the air quality impacts to be acceptable.¹²
- e. The scope and methodology set out in the Transport Assessment were considered acceptable and Officers agreed with the traffic projections produced.¹³ It was found that the proposed development would not have an unacceptable effect.¹⁴ The proposed mitigation works were considered proportionate. Officers had no objection based on the surface access proposals.¹⁵
- f. Officers were satisfied that the level of parking was the minimum required¹⁶, that the provision of additional car parking was “*essential*”. These factors, coupled with the absence of sites outside the Green Belt amounted to very special circumstances capable of outweighing the harm to the Green Belt resulting from inappropriate development.¹⁷

⁷ (CD4.11), pdf page 26.

⁸ (CD4.11), pdf page 34.

⁹ (CD4.11), pdf page 65.

¹⁰ (CD4.11), pdf page 66.

¹¹ (CD4.11), pdf page 70 – 72 (ground noise) and 75 (road noise).

¹² (CD4.11), pdf page 83.

¹³ (CD4.11), pdf page 293 and 95.

¹⁴ (CD4.11), pdf page 99.

¹⁵ (CD4.11), pdf page 92.

¹⁶ (CD4.11), pdf page 104.

¹⁷ (CD4.11), pdf page 111.

- g. The Health Impact Assessment was considered to be realistic. Neither the Council's public health team, Public Health England¹⁸ or NSC Officers¹⁹ had an objection to the proposal based on the public health impacts of the proposed development.
 - h. With regards to the impact of the proposed development on climate change, Officers concluded that the greenhouse gas emissions are *"unlikely to have a material impact on the ability of the Government to meet its climate change obligations"*²⁰.
18. The Report recommended that the application for planning permission was granted subject to referral to the Secretary of State and the conclusion of a section 106 agreement.²¹

Committee's Determination of Application

19. As explained at paragraphs 24 to 33 of BAL's Opening Submissions, NSC's Planning and Regulatory Committee considered BAL's application at a meeting on 10 February 2020²². Without seeking any further advice or information from Officers, the Committee rejected the recommendation of Officers and resolved to refuse planning permission for (then) seven proposed reasons for refusal. Five reasons for refusal were ultimately adopted by the Committee on 18 March 2020²³.
20. As it transpired, shortly before the Committee meeting on 10 February 2020, Councillors had received a legal opinion dated Tuesday 4 February 2020²⁴, commissioned by Parish Councils Airport Association ('PCAA'), Bristol Airport Action Network Coordinating Committee ('BAANCC') and a third unidentified organisation. This opinion was not sent directly to BAL, as the applicant, and BAL has seen no evidence that it was sent directly to Officers. BAL understands that Officers obtained the opinion later that week, ahead of the Committee meeting on 10 February.
21. BAL has the following main criticisms in respect of NSC's handling of this application for planning permission:
- a. The Committee's decision to refuse planning permission, and the five reasons for refusal subsequently adopted, was not based on any reasoning in the Officer's Report or, indeed,

¹⁸ (CD4.11), pdf page 130.

¹⁹ (CD4.11), pdf page 134.

²⁰ (CD4.11), pdf page 40.

²¹ (CD4.11), pdf page 146.

²² The minutes of the meeting are available at (CD9.86).

²³ As recorded in the Decision Notice (CD4.16).

²⁴ (CD19.11).

any other evidence to stand against that reasoning. The decision to refuse represents a sweeping rejection of the careful analysis in the Officers' Report, which was itself informed by independent expert advice and a series of meetings with BAL and its advisers.

- b. Indeed, the reasons for refusal ultimately adopted by the Committee are on matters of technical environmental assessment. There was clear consensus between all technical advisers instructed in respect of the application (both on behalf of NSC and BAL) that the proposal was acceptable in environmental terms. None of those technical advisers considered there to be grounds for a technical reason for refusal. Despite this, the Committee refused the application on such grounds without the benefit of any technical expertise or advice that would be capable of supporting the decision. This is not a case in which the Committee simply came to a different conclusion with regards to the balancing of adverse impacts and benefits.
- c. The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 impose a legal duty on local planning authorities to 'examine' the environmental information provided, reach a 'reasoned conclusion' on the significant effects of proposed EIA development and 'integrate' that conclusion into the decision as to whether to grant planning permission.²⁵ NSC patently failed to do so when determining BAL's application for permission for the proposed development.
- d. On receipt of the legal opinion by NSC, the only reasonable and fair course of action in the circumstances would have been to postpone the Committee meeting in order for BAL, as the applicant, to have an opportunity to review and respond to the opinion. The legal opinion went directly to the determination of BAL's application, explaining that the Committee could depart from the Officers' recommendation, proposing reasons for refusal and warning of the risk of judicial review if they granted the application. Ms Burn, on behalf of the PCAA was not shy to admit, the opinion was sent to Councillors directly in order to influence them. NSC's failure to adjourn the Committee meeting was unreasonable in the circumstances. BAL was not afforded an opportunity to respond on the substance of the points such that the Committee was not in receipt of BAL's response to the matters raised in the opinion when it determined its application. Whilst BAL

²⁵ Regulation 26(1)(a) and (b) (**CD5.5**). The full text of regulation 26(1) is also set out at paragraph 24 of BAL's Opening Submissions (**INQ/001**).

subsequently commented on NSC's draft reasons for refusal²⁶, the 'in principle' decision to refuse had already been taken.

22. These points go directly to the reasonableness of NSC's decision to refuse BAL's application, which necessitated the holding of a public inquiry over three months before a panel of three planning Inspectors and which heard witness evidence from some 53 witnesses on behalf of seven different parties and many more local residents.
23. What has happened since the decision to refuse is that NSC has developed a largely new case and, in a number of instances, has departed completely from its own reasons for refusal. Whilst, of course, the inspectors must now consider the appeal in the context of the world as it has moved on, that does not make the original decision reasonable and it would not have been necessary to consider the world as it has moved on if planning permission had been granted, as it should have been.
24. BAL has indicated its intention to submit an application for costs against NSC and these issues will not, therefore, be covered further now.

Inspectors' Case Management Conference 1 Issues

25. At the first Case Management Conference ('CMC1'), which was held on 8 March 2021, the Inspectors identified the following seven main issues:²⁷
 - a. The acceptability of the proposed development with regard to adopted and emerging local and national policy;
 - b. The extent to which the proposed development would harm the openness of the Green Belt and/or conflict with its purposes and the extent to which the harm to the Green Belt by reason of inappropriateness, and any other Green Belt harm, is clearly outweighed by other considerations, including very special circumstances;
 - c. The effects of the proposed development upon sustainable transport objectives, the highway network, highway safety and parking provision;
 - d. The effect of air pollution associated with the proposed development on health and quality of life;

²⁶ INQ/036 dated 16 March 2020.

²⁷ Inspectors' CMC and PIM Note, para 5.

- e. The effect of noise associated with the proposed development on health and quality of life;
 - f. The impact of the proposed development on greenhouse gas emissions and the ability of the UK to meet its climate change obligations; and
 - g. The extent to which the proposed development will deliver economic, social and/or other benefits.
26. These Closing Submissions are structured around the themes on which evidence was heard during the Inquiry. In so doing, they address the Inspectors' issues, albeit the order in which these issues are taken differs to the order in which these issues are set out in the Inspectors' CMC1 Note.

Legal and policy context for determination of the appeal

27. A number of legal issues have been raised during the course of the inquiry. For the most part these closing submissions have commented on those issues, to the extent appropriate, in the body of the text and in the relevant sections to which they relate.
28. These closing submissions also include, however, a legal appendix (Appendix 1) that deals with a number of these legal points on a thematic approach. The legal appendix is not always cross-referenced in the body of the closing, but should be a helpful further resource for the inspectors. The legal appendix covers the following broad topics:
- a. Ecology and the application of the Habitats Regs;
 - b. Matters relating to the impact of the proposed development on climate change;
 - c. The approach to assessing harm to the Green Belt;
 - d. The detailed design of the proposed A38 highway improvements; and
 - e. Matters of fairness.
29. The policy context for the consideration of each topic issue is set out in detail under the relevant topics in the remainder of these closing submissions.

AIR TRAFFIC FORECASTING

Introduction

30. The role of forecasting in the context of this appeal is to identify three things; that Bristol Airport will reach 12 mppa (the proposed new passenger cap), the broad timescale over which this threshold is expected to be reached, and the likely characteristics of the airport at 12 mppa.¹ The outputs from the detailed forecasts, which are identified below, are then used to inform the environmental assessment of the proposed development.

Scope of dispute at close of evidence

31. Before turning to the policy context, it is worth noting the extent to which matters relating to forecasting are now agreed between BAL and NSC. The methodology, the use of alternative growth scenarios and the use of the Monte Carlo analysis to take account of uncertainty are all broadly agreed. There is no dispute that it is the long-term detailed forecasts, and not the short-term forecasts that inform the environmental assessment. With regards to the inputs for that assessment, the scope of the remaining dispute stems from one principal point, namely the impact of Jet2 operating from Bristol Airport. The only other outstanding matter of disagreement is the rate of recovery of business travel, the implications of which primarily relate to the socio-economic benefits of the proposal, rather than the forecasting evidence, given that there is no dispute that overall demand will reach 12 mppa. These issues are discussed in detail below.

Policy context

32. Current Government policy on aviation is contained in the following documents: Aviation Policy Framework ('APF') (March 2013)², Beyond the Horizon - The Future of UK Aviation: Making Best Use of Existing Runways (June 2018) ('MBU')³ and the Airports National Policy Statement: New Runway Capacity and Infrastructure at Airports in the South East of England (June 2018) ('ANPS')^{4, 5}

¹ Proof of Evidence of Mr Brass (Forecasting), para 2.9.3 (**BAL/1/2**).

² (**CD6.1**).

³ (**CD6.4**).

⁴ (**CD6.9**).

⁵ Statement of Common Ground, para 19 (**CD12.1**).

33. The APF⁶, which was published in March 2013, recognises the role of aviation in economic growth. It states as follows:

*“The Government’s primary objective is to achieve long-term economic growth. The aviation sector is a major contributor to the economy and we support its growth within a framework which maintains a balance between the benefits of aviation and its costs, particularly its contribution to climate change and noise.”*⁷

34. It highlights the role of air travel in maintaining international connectivity, stating that:

*“One of our main objectives is to ensure that the UK’s air links continue to make it one of the best connected countries in the world.”*⁸

35. The APF identifies that a “key priority” is “to work with the aviation industry and other stakeholders to make better use of existing runway capacity at all UK airports”⁹. The importance of this policy must be understood in light of the identified medium to long term capacity challenge at all of the biggest airports in the South East and the consensus around the importance of maintaining excellent connectivity¹⁰.

36. It recognises the important economic role of regional airports in accommodating wider forecast growth in demand and taking pressure off London’s main airports. The APF, like the Air Transport White Paper (2003) before it, acknowledges that regional airports “play a very important role in UK connectivity.”¹¹ In particular, it notes the “vital role” of Bristol Airport in the economic success of the South West region¹². In recognition of this, the APF summarises the Government’s policy position as follows:

“The Government wants to see the best use of existing airport capacity. We support the growth of airports in Northern Ireland, Scotland, Wales and airports outside the South East of England. However, we recognise that the development of airports can have negative as well as positive local impacts, including on noise levels. We therefore consider that proposals for expansion at

⁶ (CD6.1).

⁷ Pdf page 9, para 5.

⁸ Pdf page 9, para 9.

⁹ Pdf page 10, para 10.

¹⁰ Pdf page 10, para 11.

¹¹ Pdf page 27, para 1.44.

¹² Pdf page 21, box.

these airports should be judged on their individual merits, taking careful account of all relevant considerations, particularly economic and environmental impacts.”¹³

37. Against the background of an identified capacity constraint in the South East, the Airports Commission was set up in order to examine solutions and make recommendations which allow the UK to maintain its position as an aviation hub.¹⁴ In July 2015, the Airports Commission published its Final Report¹⁵. In respect of airports outside the South East, the Report concluded that whatever the Government’s response to the Commission’s recommendations, it was *“imperative”* that the UK continues to grow its domestic and international connectivity in this period and that this will require more intensive utilisation of existing airports outside Gatwick and Heathrow.¹⁶ In so finding, the Report recognised the *“crucial importance”* of regional airports¹⁷.
38. At the time that the Airports Commission made this recommendation, it was acknowledged that a new runway would not open for at least 10 years. As at 2021, the delivery of an additional runway in the South East remains many years away, strengthening the importance of meeting demand at other airports.
13. The result of the Airports Commission report was the publication of the ANPS¹⁸ and its *“sister”* document,¹⁹ MBU. The ANPS, whilst of primary relevance to Heathrow, confirms that the Government is *“supportive of airports beyond Heathrow making best use of their existing runways.”*²⁰
39. Between 2017 and 2019, the Government carried out consultation on its draft future aviation policy. This included the publication of a Green Paper titled ‘Aviation Strategy 2050: The Future of UK Aviation’ (‘Aviation 2050’)²¹. At the present time, the Government’s final aviation strategy is yet to be published. For the purposes of this appeal, therefore, extant national aviation policy is that contained in the documents identified above. However, Aviation 2050 signals the

¹³ Pdf page 22, para 1.24.

¹⁴ Pdf page 5 (CD6.11).

¹⁵ (CD6.11).

¹⁶ Pdf page 332, para 16.40.

¹⁷ Pdf page 333, para 16.45.

¹⁸ (CD6.9).

¹⁹ Dr Hinnells, cross-examination, Day 21 am session.

²⁰ Pdf page 11, para 1.39 (CD6.9).

²¹ (CD6.5).

Government's continuing support for regional airports 'making best use' of their existing infrastructure, as follows:

*"The government believes that forecasted aviation demand up to 2030 can be met through a Northwest runway at Heathrow and by airports beyond Heathrow making best use of their existing runways subject to environmental issues being addressed."*²²

40. The most recent expression of Government policy on expansion of UK airports other than Heathrow is contained in MBU, which was published in June 2018 and builds on UK Aviation Forecasts 2017. MBU is clear in confirming the Government's in principle support for airports beyond Heathrow making best use of their existing runways, taking into account relevant economic and environmental considerations.²³ MBU is consistent with the recommendations of the Airports Commission's Final Report²⁴ and statements in the ANPS²⁵, as set out above. Of particular relevance to the air traffic forecasting evidence is that the strategy in MBU anticipates significant growth in demand for passenger air travel over the long-term.²⁶
41. There has been much debate over the course of the Inquiry about the status of MBU and the "weight" to be given to it. This is somewhat surprising. The merits of Government policy are plainly not for debate at this local planning inquiry. That principle is clear from the well-known judgement of Lord Diplock in *Bushell*²⁷. Nor is it legitimate for parties to challenge the merits of Government policy through the backdoor of "soundness" or "weight".
42. Indeed, MBU has been restated on a number of occasions. This includes the written statement of Grant Shapps MP to Parliament in February 2020 following the Court of Appeal's judgment in the ANPS judicial review,²⁸ in which the Minister for Transport referred to the Government's "wider making best use" policy.²⁹ That MBU was Government policy was recognised by the Inspectors' decision in the Stansted Airport Appeal in May 2021³⁰, in which the MBU was described as "a recent expression of policy by the Government",³¹ which "has remained Government policy" notwithstanding changes to the UK's statutory climate change obligations

²² (CD6.5).

²³ Pdf page 10, para 1.29 (CD6.4).

²⁴ (CD6.11).

²⁵ (CD6.9).

²⁶ Proof of Evidence of Mr Brass (Forecasting), Figure 5 (BAL/1/2).

²⁷ *Bushell & Anor v SSE* [1981] AC 75, per Lord Diplock.

²⁸ *R. (on the application of Plan B Earth) v Secretary of State for Transport* [2020] EWCA Civ 214.

²⁹ Pdf page 2 (CD9.131).

³⁰ (CD6.13)

³¹ Pdf page 45, para 18.

and targets.³² Parties seeking to challenge MBU are forced into the position that the Inspectors at Stansted were simply wrong³³.

43. As recently as July 2021, the Government has made clear that the ANPS and MBU remain *“the most up-to-date policy on planning for airport development”* and *“continue to have full effect, for example, as a material consideration in decision-taking on applications for planning permission.”*³⁴ This statement was included within a footnote in the Jet Zero Consultation which ran between July and September 2021. In this respect Government could not have been plainer in its intention that decision makers to give *“full effect”* to MBU. This was reiterated in even clearer terms in the DfT’s response to NSC’s letter on the Jet Zero Consultation.³⁵ In that letter, the DfT stated that *“the Government has set out its support for airports making best use of their existing runways in its policy statement Beyond the horizon: The future of UK aviation - Making best use of existing runways (MBU). MBU remains the Government’s current policy and continues to have full effect in planning decisions. As stated in footnote 39 of the Jet Zero consultation, MBU continues to have full effect in relation to planning decision-taking.”*³⁶
44. Furthermore, in the recent refusal of permission to challenge the Stansted decision³⁷, Ms Justice Lang stated in terms that:

*“... On a fair reading of the Decision Letter (DL), the Panel correctly identified and understood the relevant national and local policies. It was correct to find that carbon emissions policies are addressed at a national level, in the MBU, and are not a matter for local planning decision-makers. It was entitled to conclude that the national policy “Making best use of existing runways” (“MBU”), published in June 2018, was made in full knowledge of the UK’s then commitments to combat climate change, and that it thoroughly tested the potential implications of the policy in climate change terms ... It was also entitled to conclude that the Government has not altered the policies in the MBU, notwithstanding changes to the targets for reduction of greenhouse gas emissions ...”*³⁸

³² Pdf page 5, para 24.

³³ Dr Hinnells, Evidence in Chief, Day 21 am session; Mr Hunter-Jones, cross-examination, Day 23 am session.

³⁴ Jet Zero Consultation (CD9.135), pdf page 51, footnote 39.

³⁵ (INQ/042).

³⁶ (INQ/042), page 23.

³⁷ (INQ/094).

³⁸ Pdf page 2.

45. There is nothing here to support NSC's argument that less weight should be attached to the policies in MBU because of the changes in the UK's carbon targets since the policy was published.
46. For the purposes of forecasting, it is clear that the in principle support in MBU for airports other than Heathrow making best use of their existing runways, subject to environmental considerations, clearly remains Government policy to be accorded full weight.
47. What is also of importance when considering the appeal proposal, however, are the matters that are not part of national policy:
 - a. There is no policy requiring airport 'capacity' to be restricted in order to manage demand for air travel;
 - b. There is no policy that airports should not be allowed to compete to provide air traffic services, or that demand should be distributed to certain airports and not others;
 - c. There is no policy imposing a general capacity limit on UK airports in order to achieve climate change objectives; and
 - d. There is no policy that demand to travel to and from the UK should be rationed or otherwise prevented.
48. As such, there is no in principle policy that demand should not be met, and that it should not be met where it arises. Of course there are limits set on greenhouse gas emissions under the UK's five-yearly 'carbon budgets' and 2050 net zero 'carbon target', but that is not a limit on airport growth or indeed its location; it is a limit on carbon.
13. In this regard, national aviation policy is entirely supportive of and consistent with Government economic policy. The Government's current view of the economic contribution of UK aviation is clear. The Government's recent Jet Zero Consultation document contains the following statement within the opening paragraphs:

"Aviation and the UK go hand in hand. We were pioneers of early flight, and the sector has long been at the heart of our economic success. It is vital for trade and the distribution of goods, creates jobs, connects friends and family, and – crucially for an island nation – links us to the

rest of the world. Flight is essential for our Global Britain ambitions of openness as a society and an economy.”³⁹

49. The importance of aviation is reflected in the Government’s overarching ambition that decarbonising aviation is achieved without directly restricting growth in the industry. As the Government has made clear:

“It is not about stopping people doing things: it’s about doing the same things differently. We will still fly on holiday, but in more efficient aircraft, using sustainable fuel. We will still drive on improved roads, but increasingly in zero emission cars. We will still have new development, but it won’t force us into high-carbon lifestyles.”⁴⁰

50. This reflects the main themes of the Government’s strategy for rebuilding the UK economy from the COVID-10 pandemic. In March 2021, the Government published its ‘Build Back Better: Our Plan for Growth’⁴¹ (‘BBB’). This strategy sees Britain as firmly embedded in the global economy through trade, foreign investment and competition. Air travel will be needed to meet this internationally focussed vision.

51. BBB also recognises the important roles played by cities:

“Cities are a fundamental driver of productivity growth. They play a critical role in the success of the wider region – successful regions benefit from strong cities to anchor growth. Our long-term vision is therefore for every region and nation of the UK to have at least one globally competitive city at its heart, helping to drive prosperity and increasing opportunity for all those who live nearby.”⁴²

52. In the South West region, Bristol is key to achieving the BBB’s ‘levelling-up’ agenda by virtue of its importance to the South West economy.

Wider Context

Drivers of Air Traffic Demand

53. Air traffic forecasting is concerned with the assessment of future demand for air travel. People travel for different reasons, whether that be business, study, leisure or to visit family and friends. There is, however, no dispute as to the fundamental drivers of demand, namely,

³⁹ (CD9.135), pdf page 8, para 1.1.

⁴⁰ (CD9.135), pdf page 4.

⁴¹ HM Treasury, March 2021 (CD11.10).

⁴² (CD11.10), pdf page 74.

population growth, economic growth, disposable income and the cost of travel, in addition to various other factors.⁴³ Furthermore, the long term relationship between these factors is well established and not disputed.⁴⁴

Increase in Air Traffic

54. The wider context for the forecasts prepared in connection with the proposed development is an expectation of growth in air traffic. Air travel in the UK has grown significantly since 1990, reaching 296 million passengers in 2019. The expectation of continued growth is reflected in DfT's 2017 air traffic forecasts, which indicate an expectation of significant growth in demand in the future over the long-term.⁴⁵ This expectation is borne out in the Government's Decarbonising Transport Strategy⁴⁶ and Jet Zero Consultation documents⁴⁷ which were published on 14 July 2021. Both of these documents rely on the DfT's 2017 air traffic forecasts.
55. The Decarbonising Transport strategy makes clear that it is based on a projected increase in passenger numbers⁴⁸. The Jet Zero Consultation identifies four illustrative pathways to UK net zero aviation in 2050,⁴⁹ each of which are based on an expectation of growth in demand of between 58% and 60% compared to the 2018 baseline⁵⁰. This is consistent with and reflective of the important links between aviation and economic growth identified in Government policy, which is reiterated in the Jet Zero Consultation document⁵¹.

Characteristics of Bristol Airport

56. Bristol Airport has long been a strong, growing and resilient UK airport.⁵² Since 1998 until the outbreak of the global pandemic in 2020, the airport has seen consistent growth. In only one year during this 20 year period had Bristol seen a decline in demand, which was in 2009,

⁴³ Proof of Evidence of Mr Brass (Forecasting), page 6, para 2.2.1 (**BAL/1/2**). Mr Folley, cross-examination, Day 5, am session.

⁴⁴ Proof of Evidence of Mr Brass (Forecasting), page 7, Figure 1 (**BAL/1/2**). Folley, cross-examination, Day 5 am session.

⁴⁵ Proof of Evidence of Mr Brass (**BAL/W1/2**), page 14, para 2.5.8 and Figure 5.

⁴⁶ **CD9.134**.

⁴⁷ The consultation (**CD9.135**) and the supporting evidence and analysis (**CD6.136**).

⁴⁸ Pdf page 118.

⁴⁹ **CD9.135**, pdf pages 13 to 15.

⁵⁰ Addendum Proof of Evidence of Mr Osund-Ireland (**BAL/W6/4**), Appendix by Mr Brass, page 3, paras 2.1.6 and 2.1.7.

⁵¹ Addendum Proof of Evidence of Mr Osund-Ireland (**BAL/W6/4**), Appendix by Mr Brass, page 2, para 2.1.3 and 2.1.4.

⁵² Proof of Evidence of Mr Brass (**BAL/W1/2**), page 21, para 2.8.2 and page 22, Figure 6.

following the global financial crisis⁵³. The airport saw a steady recovery from the recession between 2009 and 2014.

57. Whilst there are clearly areas of real deprivation in Weston-super-Mare and South Bristol, the Airport's strong performance reflects a growing, relatively affluent wider catchment area, in which the airport is the only significant local player.⁵⁴ CAA data collected from other airports also indicates a consistent increase in passenger demand from the South West currently using airports such as Birmingham, East Midlands, Gatwick, Heathrow, Luton, Stansted and Manchester.⁵⁵ This level of underlying demand growth reflects the above average population growth in the West of England and South West⁵⁶ and GVA growth in the West of England⁵⁷. This supports the potential for continued growth at the airports around Bristol, even with expansion.
58. Whilst there are a number of other airports serving the South West and South Wales, those airports are simply too small⁵⁸ and have too limited a network to provide any real competition to Bristol. Whilst all of these airports currently have capacity, the reality is that they are under-used by passengers. Bristol Airport's strong airlines and wide network of routes means that it is the main provider of airport services in the South West.⁵⁹ The Airport continues to substantially outperform both the airports around it and the UK as a whole.⁶⁰

The Effect of the Sixth Carbon Budget

59. On 23 June 2021, the Government passed the Carbon Budget Order 2021, by which the Sixth Carbon Budget was adopted. Under the Sixth Carbon Budget, unlike the First to Fifth, the emissions from international aviation and shipping are formally included within its scope. The implications of this for the assessment of the carbon and climate change implications of the proposed development are considered later on in these submissions. For the purposes of forecasting, it is important to understand the following three points:
- a. Aviation emissions within the UK Emissions Trading Scheme ('UK ETS') are 'capped'; such that an allowance will need to be submitted for each tonne of carbon emitted and the

⁵³ Proof of Evidence of Mr Brass (**BAL/W1/2**), page 20, para 2.8.2 and page 21, Figure 6.

⁵⁴ Proof of Evidence of Mr Brass (**BAL/W1/2**), page 22, para 2.8.5.

⁵⁵ Proof of Evidence of Mr Brass (**BAL/W1/2**), page 22, Figure 8.

⁵⁶ Proof of Evidence of Mr Brass (**BAL/W1/2**), page 25, Figure 11.

⁵⁷ Proof of Evidence of Mr Brass (**BAL/W1/2**), page 23, Figure 9.

⁵⁸ Proof of Evidence of Mr Brass (**BAL/W5/3**), page 64, section 8.3.

⁵⁹ Proof of Evidence of Mr Brass (**BAL/W1/2**), page 13, para 2.5.6.

⁶⁰ Proof of Evidence of Mr Brass (**BAL/W1/2**), page 21, Figure 7. This, of course, reflects levels of growth before the global COVID-19 pandemic.

total number of such allowances can be set by Government to meet its climate change budgets and target. Carbon allowances may be traded between those operating within the UK ETS, but that does not increase the overall cap. The level of carbon prices, i.e. the observed price of carbon in the traded market, is a matter that has a bearing on the rate of growth in demand for air travel. The cap on aviation emissions may lead to higher carbon prices, which in turn may result in higher air fares.⁶¹

- b. As explained by Mr Brass, the air traffic forecasts produced by York Aviation take into account carbon pricing in the assessment of future growth rates, both for the central case carbon costs and high case carbon costs.⁶² The carbon prices used in the air traffic forecasts are very similar to those used in the Jet Zero Consultation. The carbon prices assumed through to 2040 area shown in the Air Traffic Forecasting Report.⁶³ Different future paths for carbon prices are address through the Monte Carlo analysis, which takes into account a range of scenarios relating to carbon pricing, in order to account for the impact that different prices may have on demand.⁶⁴ High carbon prices is therefore a matter that has been taken into account in the forecasts produced by York Aviation, the effect of which will be to move the air traffic forecasts more towards the Slower Growth Case.⁶⁵
- c. Carbon prices are not, however, the same as carbon values. The recently published document by the Department for Business, Energy and Industrial Affairs⁶⁶ ('BEIS') sets out revised carbon values. These are quite clearly stated to be for use across government for *"valuing impacts on GHG emissions resulting from policy interventions."* In other words, *"[t]hey represent a monetary value that society places on one tonne of carbon dioxide equivalent."* They are not the observed price of carbon in the UK ETS market; the guidance is absolutely explicit. As explained by Mr Brass, these carbon values have no bearing on the air traffic forecasts produced in relation to the appeal proposal, for which carbon prices are an input.⁶⁷ Whereas previous BEIS guidance documents provided an assessment of the value of carbon for the traded sectors, which include aviation and was

⁶¹ Mr Brass, examination in chief, Day 7 am session.

⁶² Mr Brass, Annex to the Addendum Proof of Evidence of Dr Osund-Ireland, page 5, para 3.1.2 (**BAL/6/4**).

⁶³ (**CD2.21**), page 23. See Mr Brass, Annex to the Addendum Proof of Evidence of Dr Osund-Ireland, page 6, para 4.1.3 (**BAL/6/4**).

⁶⁴ See Mr Brass, Annex to the Addendum Proof of Evidence of Dr Osund-Ireland, page 6, para 4.1.4 (**BAL/6/4**).

⁶⁵ See Mr Brass, Annex to the Addendum Proof of Evidence of Dr Osund-Ireland, page 6, para 4.1.4 (**BAL/6/4**).

⁶⁶ (**INQ/054**).

⁶⁷ (**INQ/074**), page 1, para 1.1.2.

based on the traded price of carbon, the new BEIS guidance does not do so.⁶⁸ For this reason, the BEIS guidance has no effect on the air traffic forecasts for the proposed development, as it does not provide guidance or evidence on the price of carbon allowances.⁶⁹

Impact of Particular Factors on Demand

Impact of Brexit

60. The evidence of NSC is that Brexit has the potential to impact future demand for air travel from the EU and that this has not been appropriately reflected in BAL's short term forecasts.⁷⁰ In particular, it is NSC's position that BAL has not accounted for a levelling off or reduction in demand for air travel to EU worker markets.⁷¹
61. As acknowledged by Mr Folley⁷², however, this issue is a short-term matter. It has no bearing on the relationship between economic growth and air traffic demand. Whatever the impact on the short-term forecasts, therefore, it does not impact the long-term, detailed forecasts from which the inputs to the environmental assessment are derived. The short-term forecasts to which Mr Folley's criticism is targeted is simply a step on the way to reaching 12 mppa.⁷³
62. Moreover, Mr Folley's points regarding the impact of Brexit on the speed of air traffic growth are largely inconsequential in light of the agreement between the parties that Bristol Airport will reach 12 mppa, and that it will do so within a broadly agreed timeframe.

Impact of COVID-19

63. The immediate impact of the COVID-19 pandemic on the aviation industry has been severe. The imposition of widespread travel restrictions has meant that it has not been (and still is not) possible to observe the level of demand in the UK market⁷⁴. The existing passenger throughput is a result of legal restrictions on the ability to travel and not passengers' desire to do so.

⁶⁸ INQ/074, pages 2 to 3, para 2.1.4 to 2.1.5.

⁶⁹ INQ/074, pages 3 to 4, para 2.1.7.

⁷⁰ Proof of Evidence of Mr Folley (NSC/W1/1), page 8, para 4.10.

⁷¹ Proof of Evidence of Mr Folley (NSC/W1/1), page 8, para 4.10.

⁷² Proof of Evidence of Mr Folley (NSC/W1/1), page 8, para 4.10.

⁷³ Proof of Evidence of Mr Brass (BAL/1/2), page 16, para 2.6.2.

⁷⁴ Proof of Evidence of Mr Brass (BAL/W1/2), page 16, para 2.6.2.

64. Whilst there is inevitably uncertainty regarding the precise rate of recovery from COVID-19, the clear industry consensus is that aviation will recover by the mid-2020s⁷⁵. In order to take account of the pandemic's impact on passenger demand and address the uncertainty about the rate at which it will recover, York Aviation produced updated passenger forecasts⁷⁶. These forecasts have provided the basis for the updated environmental assessment of the proposed development that is presented in the ESA. As explained below, these forecasts have examined a range of growth scenarios, both faster and slower.

BAL's Air Traffic Forecasting

Forecasting Methodology

65. There is no dispute that the forecasting methodology adopted by York Aviation is appropriate and absolutely standard⁷⁷. York Aviation uses a 'bottom up' approach to demand forecasting to inform the first four years of the forecast. This approach is designed to reflect both airline behaviour and underlying market demand at a route level.
66. To inform the longer term forecast, York Aviation has used an econometric passenger allocation model to determine how the underlying passenger demand base in the broad catchment area for the airport will split between Bristol and a number of competing airports.⁷⁸ Air traffic movements ('ATMs') have been calculated for future years by dividing the overall passenger demand forecast by a projected average number of passengers per movement, which in turn is identified from historic trends as well as airlines' likely fleet plans for Bristol Airport.⁷⁹
67. The econometric model uses a 'Monte Carlo' analysis in order to take account of uncertainty. This form of analysis allows a range of outcomes to be modelled in a probabilistic way.

Managing Uncertainty

68. As with any forecasts, there remains a degree of uncertainty surrounding the model output. This is inherent in the exercise of forecasting. The unprecedented impact of the global pandemic

⁷⁵ IATA (2020) (CD13.7); Airport Operators Association, Steer (2020) (CD13.13); ACI (2021) (CD13.1). Proof of Evidence of Mr Brass (BAL/W1/2), page 17, para 2.6.5.

⁷⁶ (CD2.21)

⁷⁷ Mr Folley agreed in cross-examination on Day 5, am session.

⁷⁸ Proof of Evidence of Mr Brass (Forecasting), section 3 (BAL/1/2) and York Aviation Forecasting Report (CD2.21).

⁷⁹ Proof of Evidence of Mr Brass (Forecasting), para 3.1.8 (BAL/1/2).

and associated travel restrictions, however, means that such uncertainty is inevitably greater. This is particularly so in the short term.

69. It is important, however, to put any such uncertainty in context: there is no uncertainty as to throughput.⁸⁰ BAL's application is for an increased passenger cap to 12 mppa. There can therefore be no doubt about the maximum level of growth that the airport would see were planning permission to be granted. This is not a case, therefore, where a forecast year is fixed, but there is uncertainty about the throughput that will be achieved in that year; here the throughput is fixed at no more than 12mppa and the only uncertainty is when that throughput will be reached. This is an altogether different form of uncertainty and it is significant in this context that Mr Folley agrees that a throughput of 12mppa is most likely to be reached in 2030⁸¹. In this respect, the examples produced in Appendix A to Mr Folley's Proof of Evidence⁸², which are designed to show how inaccurate air traffic forecasts may turn out to be, are of an altogether different nature.
70. Nor is there any uncertainty about the *general* characteristics of Bristol Airport at 12 mppa. This is now broadly agreed.⁸³ Whether growth is slightly faster or slightly slower than anticipated by the Core Case, the general characteristics of the airport at 12 mppa will be generally the same. A different speed of growth would simply bring forward or delay the benefits and impacts associated with that level of throughput. Indeed, the slower the growth, the less the environmental impacts are likely to be due to the higher proportion of 'new generation' aircraft that are likely to be within the fleet and improving background levels of air quality. That this is the case was recognised by the Inspectors in the Stansted Appeal⁸⁴.

Forecast Scenarios

71. The forecast model presented in the York Aviation's Forecast Report⁸⁵ and the ESA considers a range of different growth scenarios as follows:
- a. The Core Case, which sees passenger demand at Bristol Airport reaching 10 mppa in around 2024 and 12 mppa in 2030;

⁸⁰ Agreed by Mr Folley in cross-examination on Day 5, am session.

⁸¹ Proof of evidence of Mr Folley, para 4.11 (**NSC/W1/1**).

⁸² (**NSC/W1/1**).

⁸³ Mr Folley, cross-examination, Day 5 am session.

⁸⁴ (**CD6.13**), page 6, para 30.

⁸⁵ (**CD2.21**).

- b. The Slower Growth Case, which sees passenger demand reaching 10 mppa in around 2027 and 12 mppa in 2034;
 - c. The Faster Growth Case, which sees passenger demand reaching 10 mppa in around 2022 and 12 mppa in 2027.
72. This approach is agreed by Mr Folley to be a sensible one⁸⁶ and there is no dispute about the faster and slower scenarios examined⁸⁷.
73. Notably, all of these forecasts see Bristol Airport reach 12 mppa within a reasonable timeframe between 2027 and 2034. It is not, therefore, a question of precisely when the airport reaches the 12 mppa threshold but of the broad timescale for it doing so.
74. As set out above, at the present time, both BAL and NSC agree that of the three scenarios, the faster growth scenario is less likely to be realised.⁸⁸

Core Case

75. The Core Case provides the basis for the quantification of environmental effects of the proposed development. It is common ground with NSC that the Core Case is the scenario most likely to be realised, and that it provides an appropriate basis for assessing environmental impacts.⁸⁹
76. The Core Case represents a balanced view of the future market and current risks, reflecting a central view of issues such as economic growth and carbon costs. As Mr Brass explains in his evidence, this scenario is felt to be a reasonable best estimate of when Bristol Airport will reach 10 mppa and 12 mppa.
77. Under the Core Case, the forecast air transport movements in 2030 at 10 mppa and 12 mppa respectively is 74,380 (including 63,740 commercial movements) and 85,980 (including 75,340 commercial movements). These numbers reflect on-going growth in aircraft size in line with airline fleet development plans and discussions with key airlines as regards likely deployment at Bristol Airport.

Slower and Faster Growth Scenarios

78. The faster and slower growth cases represent a reasonable worst case scenario in terms of future growth being faster and slower than expected. The slower growth case reflects factors

⁸⁶ Mr Folley, cross-examination, Day 5 am session.

⁸⁷ Mr Folley, cross-examination, Day 5 am session.

⁸⁸ Proof of Evidence of Mr Folley, para 4.11 (**NSC/W1/1**).

⁸⁹ Proof of Evidence of Mr Folley, para 4.11 (**NSC/W1/1**).

such as a potentially slower recovery from COVID-19, lower economic growth or adverse market conditions, such as higher carbon costs. The faster growth case reflects a more rapid bounce back from COVID-19 or faster economic growth.

79. These scenarios have been used to sensitivity test the outputs from the Core Case, which NSC agrees is an appropriate approach and in line with best practice⁹⁰. In other words, they are used to determine whether a different rate of growth would have a material difference on the outputs from the forecast model, which in turn are used for the assessment of significant environmental impacts.
80. It is important to understand the nature of this sensitivity testing. The alternative growth scenarios have been used to qualitatively assess the extent to which passenger forecast outputs would be affected by slower or faster passenger growth at the airport. If those qualitative assessments had indicated a material change in effect that might lead to a different conclusion on significance, then a quantified assessment would have been undertaken; it didn't and so no such quantitative assessment was necessary.
81. Crucially, what the sensitivity testing demonstrates is that whichever growth scenario is realised, the outputs from the detailed air traffic forecasts that are used as inputs to the EIA process are unlikely to be significantly affected. This reflects the fact that, whether 12 mppa is reached in 2027 in accordance with the faster growth scenario or 2034 following the slower growth scenario, this means that the capacity will be used up slightly earlier or later than anticipated by the Core Case. In each case, the benefits and impacts may be brought forward slightly in time, or deferred slightly in time. In all other respects, however, they are not materially different such as to change significance of effect. Indeed, if growth is at a slower rate, the evidence demonstrates that any adverse environmental impacts are likely to be less significant than in the Core Case scenario. In light of this, therefore, arguments about the precise timescale within which the airport will reach 12 mppa are largely academic.

Forecasting inputs to the Environmental Statement

82. The quantitative inputs for the environmental assessment are derived from the long-term detailed forecasts based on the Core Case, which have been produced by York Aviation. As

⁹⁰ Proof of Evidence of Mr Folley, para 3.5 (NSC/W1/1).

explained above, these forecasts have been shown to be insensitive to the year at which 12 mppa is reached.⁹¹

83. There are seven outputs from the forecast modelling that inform the environmental assessment, as follows:

- a. Busy hour rates: A series of busy day timetables that describe the diurnal profile of ATMs and passengers arrival / departures at the airport were developed, which form inputs to assessments such as highway junction capacity;
- b. Fleet mix: The forecasting provides an assessment of the annual fleet mix in order to inform assessments such as for noise and air quality;
- c. 92 day summer period average daily movements: This covers the period from 16 June to 15 September each year. Together with the fleet mix, this data is used for noise modelling;
- d. Night movements and quota count: This data was used as an input to the noise assessment;
- e. Average range forecasts: These forecasts, which are concerned with the average flight distance of aircraft at Bristol Airport, informed the carbon assessment;
- f. Surface origins and destinations of passengers: This information provided an input into the transport assessment and quantification of socio-economic benefits of the proposed development;
- g. Passenger demand displacement: The level of passenger displacement to other airports provided an input into the socio-economic assessment.

Position of NSC Officers

84. When considering the forecasts produced in connection with BAL's original application for planning permission, NSC was professionally advised by a large and well known firm of consultants (Jacobs). These consultants did not seek to challenge BAL's forecasting

⁹¹⁹¹ Proof of Evidence of Mr Brass (BAL/W1/1), page 36, para 3.4.8.

methodology and broadly endorsed the (then) air traffic forecasts⁹². These forecasts⁹³ were accepted as being an appropriate basis for the environmental impact assessment.

Areas of agreement

85. As noted above, there are a significant number of areas of agreement between NSC and BAL. These are as follows:

- a. There is no dispute that the forecasting methodology adopted by York Aviation is appropriate and absolutely standard⁹⁴.
- b. There is no challenge by NSC to the use of a 'Monte Carlo' analysis within the econometric model⁹⁵.
- c. The modelling of alternative growth scenarios is agreed to be a sensible one⁹⁶ and there is no dispute about the faster and slower scenarios examined⁹⁷.
- d. There remains agreement that the Core Case, which would see the Airport reach 12 mppa in 2030, is the most likely to materialise.
- e. It is agreed that as at this point in time, the Faster Growth Case is less likely to materialise than either the Core or Slower Growth Cases⁹⁸.
- f. It is agreed that there is a strong correlation between levels of air noise, impacts on air quality and carbon emissions from aircraft types. 'New generation' aircraft are increasingly both cleaner and quieter than 'current generation'.⁹⁹
- g. Mr Folley recognises that shorter-term forecasts are not used to derive inputs for the environmental assessment of the proposed development.

86. These areas of agreement far outweigh the remaining points of dispute.

Outstanding Issues in Dispute

⁹² Officer's Report (**CD4.11**), page 16.

⁹³ NB/ The original application forecasts were produced by BAL internally and then audited by Mott MacDonald. York Aviation produced the revised forecasts following refusal and the impact of the Covid-19 pandemic.

⁹⁴ Mr Folley agreed in cross-examination on Day 5, am session.

⁹⁵ Mr Folley, cross-examination on Day 5 am session.

⁹⁶ Mr Folley, cross-examination, Day 5 am session.

⁹⁷ Mr Folley, cross-examination, Day 5 am session.

⁹⁸ Mr Folley, cross-examination, Day 5 am session.

⁹⁹ Mr Folley, cross-examination, Day 5 am session.

Introduction

87. The thrust of NSC's case is that there is a significant degree of uncertainty regarding the forecasts. There are two particular factors that give rise to this:
- a. The implications of Jet2's announcement that it would commence operations from Bristol Airport, introducing uncertainty around the assumptions regarding the busy day timetable and fleet mix; and
 - b. The assumptions around the rate of recovery of business travel, which has particular implications for the socio-economic analysis.
88. These issues are discussed in turn. Save for these two main points of difference, it is agreed that all other parts of the forecasting assessment are "*appropriate*"¹⁰⁰.
89. There is an issue between the parties relating to the 'logit model' that is used to calculate potential 'displacement' of economic effects from other airports with the growth Bristol Airport, but this is dealt with in the relevant section of the chapter of this closing on socio-economic effects and is not referred to further here.

Effects of Jet2

90. NSC's case relies heavily on the introduction of Jet2 at Bristol Airport. It is worth noting that the announcement of Jet2's operations commencing at Bristol Airport only took place in November 2020. It was not a matter that was known about at the time of the decision to refuse planning permission for the proposed development.
91. Whilst much inquiry time has been spent exploring the implications of Jet2's operations at Bristol, there is nothing radically different about Jet2 compared to the airlines that already operate from Bristol. In essence, Jet2 is a low-cost airline, that primarily serves the leisure travel market, just like those currently operating.
92. The outstanding points of dispute that arise from the introduction of Jet2 at Bristol Airport are those of fleet mix and the busy day timetable. These are dealt with in turn below.

Fleet Mix

¹⁰⁰ Mr Folley, cross-examination, Day 5, am session.

93. The annual fleet mix produced by York Aviation for the Core Case is summarised in Table 3 of Mr Brass's Proof of Evidence¹⁰¹. This table divides movements into five broad types of aircraft, including current generation and new generation aircraft¹⁰². At 12 mppa, 11% are from current generation and 62% of movements are from new generation aircraft. This fleet mix provides an input into the air quality, noise and carbon assessments. Mr Brass made clear in his evidence that the fleet mix assumptions "*are not airline specific and are not intended to be so given the distance into the future being considered*".¹⁰³
94. In his Proof of Evidence, Mr Folley presented an "*alternative 2030 fleet mix*" that "*takes into account Jet2.com's operation*."¹⁰⁴ The comparison of the fleet mix produced by York Aviation against that produced by Mr Folley was set out in Table 3 of his Proof¹⁰⁵. Mr Brass responded to Mr Folley's fleet mix in section 4.2 of his Rebuttal Proof, in which he demonstrated that Mr Folley's fleet mix was illogical and significantly flawed.¹⁰⁶ In Appendix B of Mr Brass's Rebuttal, he presented a 'corrected' version of Mr Folley's fleet mix.
95. That original fleet mix presented in Mr Folley's Proof of Evidence has now been wholly abandoned. Every single number in that table has been changed. Mr Folley has since presented two further updates to the fleet mix presented in his Proof of Evidence, on 23 July 2021¹⁰⁷ and 29 July 2021¹⁰⁸ respectively. Mr Folley confirmed in cross examination that four of the five corrections set out in Mr Brass's Rebuttal have now been accepted¹⁰⁹ and the remaining changes are consequential on those amendments. The remaining point of dispute between the parties with regards to fleet mix concerns the proportion of movements from Boeing 737-800 (current generation) aircraft.
96. Mr Folley's updated fleet mix of 29 July 2021 contains 14,582 Boeing 737-800 movements. As Mr Brass explains in his response to Mr Folley's note, there is simply no explanation or ready justification of this high proportion of Boeing 737-800s within the fleet mix. Whilst Mr Folley relies on other airlines operating from Bristol to explain the number of current generation aircraft in his assumed fleet mix, this would mean that these airlines were operating a

¹⁰¹ Proof of Evidence of Mr Brass (BAL/W1/1) page 39, Table 3.

¹⁰² Proof of Evidence of Mr Brass (BAL/W1/1) page 38, para 3.4.15.

¹⁰³ Proof of Evidence of Mr Brass (BAL/W1/1) page 39, para 3.4.16.

¹⁰⁴ Proof of Evidence of Mr Folley (NSC/W1/1) page 19, para 7.8.

¹⁰⁵ Proof of Evidence of Mr Folley (NSC/W1/1) page 20, Table 3.

¹⁰⁶ Rebuttal Proof of Mr Brass (BAL/W1/3) page 15, para 4.2.1.

¹⁰⁷ (INQ/010).

¹⁰⁸ (INQ/018).

¹⁰⁹ Mr Folley, cross-examination, Day 5 am session.

disproportionately high number of current generation aircraft from Bristol¹¹⁰. As Mr Brass explains, the flaws that remain in Mr Folley's fleet mix demonstrates the problematic nature of trying to produce an airline specific fleet mix¹¹¹. By way of contrast, the fleet mix produced by York Aviation focusses on identifying an appropriate balance of current and new generation aircraft, rather than seeking to anticipate the fleet mix for precise aircraft, nearly a decade into the future. For this reason, Mr Brass's fleet mix provides an appropriate and, on balance, reasonable input to the environmental assessment.

97. Even if Mr Folley's fleet mix were to be preferred, it would only see roughly an additional 11 movements a day from current generation aircraft. The principal impact of this would be that the environmental impacts of the fleet at 2030 may differ slightly. With regards to the air noise impact of the proposed development, a larger proportion of current generation aircraft may increase the noise impacts of the proposed development. However, the significance of this point must be understood in context: BAL is proposing a noise contour cap by way of condition. The size of this cap is consistent with the assessment of air noise in the ESA. As such, any fleet mix that was noisier than the assessed levels in the ESA simply could not fly. In this regard, a change in fleet mix is relatively inconsequential for the impact of the proposed development overall.
98. In any event, in response to a request by the Inspectors¹¹², all of BAL's witnesses that have given evidence on the environmental impacts of the proposed development have considered the extent to which the environmental impacts would be different, were Mr Folley's latest fleet mix to be preferred. This is contained within technical notes by Mr Williams¹¹³ and Mr Peirce¹¹⁴. These notes conclude that Mr Folley's fleet mix would not materially alter the assessments in the ESA or the conclusion on significance reached therein. In light of this, the dispute surrounding fleet mix has very limited implications for the assessment of environmental effects and, therefore, for the determination of the appeal.

Busy Day Timetable

¹¹⁰ Mr Brass, examination in chief, Day 7 am session.

¹¹¹ Response to Mr Folley's 'Note in Response to Mr Brass's Evidence in Chief' **INQ/028**, para 3.

¹¹² Day 7, am session.

¹¹³ (**INQ/030**).

¹¹⁴ (**INQ/031**).

99. York Aviation has produced a series of busy day timetables that describe the diurnal profile at the airport, based on the passenger and ATM forecasts for the Core Case at 12 mppa and 10 mppa at 2030. They provide a profile of ATMs and passenger numbers across the day.¹¹⁵
100. In his Proof of Evidence, Mr Folley disputed the busy day timetable derived from the detailed forecasts.¹¹⁶ Mr Folley argued that whilst these inputs were appropriate at the time they were produced, they were no longer appropriate for use in the environmental assessment in light of the Jet2 announcement.
101. However, in cross-examination Mr Folley accepted that the business model of Jet2 would not be dissimilar to the business models of other low-cost airlines that operate from Bristol Airport¹¹⁷. He stated that while there may be “*some differences*”, the inclusion of Jet2 would not change the overall diurnal profile of air traffic movements produced by York Aviation.¹¹⁸ In light of this, the criticism of the busy day timetable largely falls away.
102. Indeed, given that the busy day timetable provides one of the inputs into the surface access forecasts, it is significant that NSC have not challenged the accuracy of those forecasts.

Business Travel

103. The second outstanding point of dispute concerns the forecasted growth in business travel at Bristol Airport. There are four main points that pertain to this issue, as follows:
- a. The use of elasticities specified in the DfT’s UK Aviation Forecasts 2017;
 - b. The impact of technological change following the pandemic;
 - c. The business and leisure growth rates at Bristol Airport; and
 - d. Route development at Bristol Airport.
104. These are considered in turn, although the nature of the issues mean that there is inevitably some overlap in their scope.
105. York Aviation used air traffic elasticities specified in the DfT’s UK Aviation Forecasts 2017 in the production of its forecasts. These elasticities encapsulate in broad terms the relationship between economic growth and price, and the propensity of to fly. They reflect a wide range of

¹¹⁵ Proof of Evidence of Mr Brass (BAL/W1/1) page 38, para 3.4.14.

¹¹⁶ Proof of Evidence of Mr Folley (NSC/W1/1) page 16, para 5.9.

¹¹⁷ Mr Folley, cross examination, Day 5 am session.

¹¹⁸ Mr Folley, cross examination, Day 5 am session.

factors that may impact demand, such as the maturity of markets, attitudinal change, changes in personal and business habits and the rise of new technologies. Whilst there is no dispute that they are widely used,¹¹⁹ Mr Folley seeks to cast doubt on the appropriateness of the use of the business passenger elasticities. His position is that much has happened since the production of these elasticities which may have rendered them out of date.

106. There are three main points to make in respect of the use of the DfT elasticities:

- a. They are based on an analysis of data from 1984 to 2008,¹²⁰ they have been peer-reviewed, and they remain the most comprehensive piece of analysis available;¹²¹
- b. There is no evidence that the DfT itself is moving away from using them in its forecasting.¹²² Indeed, they underpin the modelling in the Decarbonising Transport strategy published in July 2021¹²³; and
- c. They are the only elasticities before the Inquiry. When asked what the alternative to using them would be, Mr Folley said that he was unable to comment.¹²⁴

107. York Aviation's use of the elasticities in these circumstances is entirely appropriate and reasonable.

108. In his Proof of Evidence Mr Folley argued that the impact of the global pandemic is that general "*skilling up*" had occurred, which would mean that business travel would grow at a slower rate than anticipated by York Aviation.¹²⁵ Mr Folley has presented no evidence to support this contention. As explained by Mr Brass, whilst the pandemic has of course led to an increase in use of communications technology, this is simply part of a long term trend¹²⁶ and has not led to a change in the fundamental relationship between price and propensity to fly. Such trends are reflected in air traffic elasticities, which are based on data from a period within which there has been profound technological advances and through the use of market maturity assumptions, which reflect attitudinal change over time.¹²⁷

¹¹⁹ Mr Folley, cross examination, Day 5 am session.

¹²⁰ UK Aviation Forecasts 2017 (**CD6.2**), page 20, para 3.13.

¹²¹ Mr Brass, examination in chief, Day 10, am session.

¹²² As agreed by Mr Folley, cross examination, Day 5 am session.

¹²³ As agreed by Mr Folley, cross examination, Day 5 am session and confirmed in re-examination, Day 5 pm session.

¹²⁴ Mr Folley, cross examination, Day 5 am session.

¹²⁵ Mr Folley, Proof of Evidence (NSC/W1/1) page 10, para 4.17 and page 24, para 9.5(d).

¹²⁶ Mr Brass (BAL/W1/3) Rebuttal, page 8, para 3.3.3.

¹²⁷ Mr Brass, Rebuttal (BAL/W1/3), page 8, para 3.3.3.

109. In any event, were technological advances to slow the rate of growth of air travel, it would merely push the growth towards the Slower Growth Scenario. As explained above, the outputs from the detailed forecasts have been shown to be insensitive to the precise year in which 12 mppa is reached.
110. The growth rates assumed in relation to leisure and business passengers were provided to Jacobs on request. These are derived from the Monte Carlo analysis within the econometric model.¹²⁸ The growth rates range between 2% and 3% for all categories.¹²⁹
111. In his Proof of Evidence, Mr Folley presents CAA passenger survey data from 2000 to 2019 in order to show that leisure travel has grown at almost double the rate of business travel between 2000 and 2019.¹³⁰ Mr Folley argues that the growth rates relied on by York Aviation are inconsistent with past trends.
112. As explained by Mr Brass, this criticism is misplaced. The comparison between the rate at which business travel has grown compared to leisure travel depends entirely on the years chosen:
- a. The existence of the 'low cost bubble' between 2000 and 2008 inflated the rate at which leisure travel grew within this period. Following that period, growth in the leisure market has levelled off;¹³¹ and
 - b. During the period of 2008 to 2019 and 2012 to 2019, which exclude the low cost bubble and are therefore more relevant periods to look at, the rate of growth in business travel at Bristol Airport is entirely consistent with the growth rates used by York Aviation.¹³²
113. Mr Folley agreed that if the Inspectors were to conclude that the periods assessed were long enough, the growth rate figures used by Mr Brass would be reasonable¹³³
114. In his Proof of Evidence Mr Folley argues that York Aviation fail to demonstrate how the forecast business passenger growth will be supported by new route development.¹³⁴ While the short term forecasts consider route development, the approach adopted by York Aviation for the long term forecasts (and those that are relevant to 2030) is not to focus on individual routes but the

¹²⁸ Mr Brass, examination in chief, Day 7 am session.

¹²⁹ The categories are domestic business, domestic leisure, international business and international leisure.

¹³⁰ Mr Folley, Proof of Evidence (**NSC/W1/1**) page 10, para 4.16.

¹³¹ Mr Brass, Rebuttal Proof (**BAL/W2/3**), page 8, Table 1.

¹³² Mr Brass, Rebuttal Proof (**BAL/W1/3**), page 8, Table 1. Figures for 2008 to 2019 show 2.6% growth in business and 2.5% in leisure. Figures for 2012 to 2019 show 4.9% growth in business and 4.7% in leisure.

¹³³ Mr Folley, cross examination, Day 5 am session.

¹³⁴ Mr Folley (**NSC/W1/1**) Proof of Evidence, para 4.28.

nature of demand¹³⁵. This approach is entirely consistent with standard industry practice. As explained by Mr Brass, his expectation is that in the longer term, airlines will bring forward a range of routes, some of which, most notably additional city destinations, will be useful to business travellers. This is wholly consistent with the way in which Bristol Airport has always developed.¹³⁶ Indeed, Mr Brass's evidence identifies a number of important business destinations that were served by airlines operating from Bristol Airport in 2019.¹³⁷ This will be supplemented by the new Lufthansa Frankfurt service from the airport.¹³⁸

115. The use of the DfT elasticities is appropriate; they have been informed by data collected over a substantial period and on this basis are robust. BAL's forecast of business passenger growth is both reasonable and robust.

Rule 6 Parties' Positions on Forecasting

116. No other party produced expert evidence on air traffic forecasts. However XR Elders called three witnesses, all of which provided evidence in respect of their own areas of expertise and the extent to which various factors would impact on the likelihood that demand would return following the lifting of travel restrictions and continue to grow. The factors relied on to this effect are as follows:

- a. Changes in social attitudes to flying, influenced by concerns over climate change and the risk of spreading new variants of the COVID-19 pandemic;¹³⁹
- b. The impact of the COVID-19 pandemic on 'skilling up' and the use of technology;
- c. The preference for rail travel as a result of the expanding network of high speed rail;¹⁴⁰ and
- d. The extent of any long-term travel restrictions imposed in order to contain the spread of COVID19.

117. Insofar as these points reflect those raised by NSC, BAL's response is summarised above. It must be remembered that the growth to 12 mppa is not forecast until 2030 in the Core Case, some nine years away. By that time, it is reasonable to expect that a number of short term factors

¹³⁵ Mr Brass Proof of Evidence (BAL/W1/1), page 55, paras 4.9.11 to 4.9.12.

¹³⁶ Mr Brass, Proof of Evidence (BAL/W1/1), page 56, Table 8.

¹³⁷ Mr Brass, Rebuttal Proof (BAL/W1/3), page 11, para 3.4.3.

¹³⁸ Mr Brass, Rebuttal Proof (BAL/W1/2), page 13, para 2.2.5.

¹³⁹ See Mr Capstick, Proof of Evidence (PCAA/W5/1). Mr Devas, Proof of Evidence (XRE/W3/1).

¹⁴⁰ Mr Devas, Proof of Evidence (XRE/W3/1).

have ceased to have an impact on demand. Moreover, a range of factors that may impact the rate of growth have been taken into account through the Monte Carlo model, as explained by Mr Brass.

118. Witnesses on behalf of the PCAA too sought to demonstrate that the tide was changing in respect of air travel, and that many people no longer wished to rely on aviation for international travel.
119. Standing back, however, there is an inherent tension in the case presented by the rule 6 parties; at the same time as seeking to demonstrate that the Airport won't reach 12 mppa, they seek to demonstrate how great the adverse environmental effects associated with that level of growth will be. As Mr Jeacocke accepted, either the Airport will reach 12 mppa and the effects of doing so will be realised, or it will not.¹⁴¹ If it does not, the environmental effects of the additional flights will simply not arise.

Key Conclusions

120. The forecasts produced by York Aviation have taken account of uncertainties caused by the COVID-19 pandemic, Brexit and carbon prices. The scope of the agreement between BAL and NSC is great: Bristol Airport will reach 12 mppa and it will do so within a broadly agreed timeframe. There is no dispute that the characteristics of Bristol Airport at 12 mppa will be broadly the same, whenever this level of growth is reached. Indeed, it remains the case that both parties consider the Core Case to be the most likely to materialise, with the likelihood of slower growth greater than the likelihood of faster growth. In any event, however, the outputs from the long term forecasts have been sensitivity tested against different speeds of growth and have been found to be robust and generally insensitive. It is further agreed that the Core Case is a reasonable basis on which to assess the benefits and adverse impacts of the proposed development. The outputs of the Core Case, which are very largely now agreed, provide robust inputs into the environmental assessment.
121. The remaining points of dispute must be seen against this backdrop of general consensus. As outlined above, the two remaining outstanding points of dispute concern the operation of Jet2 from Bristol Airport and the forecast of business passenger growth. For the reasons explained above, any 'uncertainty' arising from the operation of Jet2 is limited; the impact on fleet mix is relatively minor, and has been shown not to result in significantly different environmental

¹⁴¹ Mr Jeacocke, cross-examination, Day 3 am session.

effects in any event. The principal potential difference in effect, noise, is controlled by a contour cap, ensuring that the effects cannot exceed those assessed.

122. For the reasons explained above, BAL's forecast of business passenger growth is robust and entirely appropriate. Once the methodology adopted by York Aviation is properly understood, many of the apparent points of 'dispute' between BAL and NSC fall away.

SOCIO-ECONOMIC BENEFITS

Introduction

106. Bristol Airport is the principal airport and main international gateway for the South West of England and South Wales. In 2018, the Airport was responsible for 8,200 full time equivalent ('FTE') jobs across the South West and South Wales region through direct, indirect and induced employment. The connectivity provided by the airport enables the flow of trade, investment, people and knowledge that underpins a globally successful region. As at 2018, it was estimated that the airport generates circa £1.7 billion in Gross Value Added ('GVA') in the South West and South Wales economy.
107. The proposed development will allow Bristol Airport to grow to serve 12 mppa, delivering important economic, social and environmental benefits that are aligned with the principles of sustainable development, national aviation policy and the UK's wider economic objectives.
108. The socio-economic benefits of the proposed development were identified by the Inspectors as CMC1 issue (g). The assessment of the benefits of the proposed development underpins reason for refusal 1, which asserts that the economic benefits would not outweigh the environmental impacts of the proposed development.

Scope of Dispute at Close of Evidence

109. Whilst there remain a number of areas of disagreement between NSC and BAL, two of the most fundamental aspects of BAL's case are now broadly agreed:
 - a. The level of employment that the proposed development will deliver, in terms of direct, indirect and induced employment figures, in addition to that resulting from inbound tourism; and
 - b. The contribution of the proposed development in GVA in terms of direct, indirect and induced, in addition to that resulting from inbound tourism.
110. The principal areas that are not agreed concern the assumption of growth in business travel (which is directly linked to one of the remaining forecasting issues above), the question of displacement, the impact of outbound tourism and the matters to do with the scope of any cost benefit analysis.

Policy Context

National Policy

111. The Government's position on the importance of aviation to the UK economy is clear.
112. The UK only has one land link to the rest of the world and, as an island nation, is heavily reliant therefore on aviation as a means of international connectivity. It of the utmost importance that this connectivity is preserved and strengthened. One of the main objectives of Government, which was set out in the APF in 2013, is *"to ensure that the UK's air links continue to make it one of the best connected countries in the world."*¹ This aim was reiterated in the Green Paper, 'Aviation 2050 – The Future of UK Aviation'² in December 2018, in which the Government identified the UK as *"one of the best connected countries in the world"* and recognised that:
- "Aviation has an important role to play in the future of our country. It is key to helping to build a global Britain that reaches out to the world. It underpins the competitiveness and global reach of our national and our regional economies."*³
113. The Green Paper highlights the specific economic contribution of aviation in respect of connectivity, productivity, employment and tourism.⁴
114. The recognition of the vital role played by airports in global connectivity has been re-emphasised by the Secretary of State for Transport, Grant Shapps, in a ministerial statement to Parliament in February 2020. He stated as follows:
- "Our airports are national assets and their expansion is a core part of boosting our global connectivity. This in turn will drive economic growth for all parts of this country, connecting our nations and regions to international markets, levelling up our economy and supporting a truly global Britain."*⁵
115. Most recently, in the foreword to the Government's recent 'Decarbonising Transport' Plan, Grant Shapps again recognised that *"international connectivity is a vital part of Global Britain, and everyone should continue to have access to affordable flights, allowing them to go on holiday, visit family, and do business."*⁶

¹ Para 9 (CD6.1).

² (CD9.29).

³ HM Government, December 2018, page 18 (CD9.29).

⁴ Page 21 (CD9.29).

⁵ (CD6.8).

⁶ Page 8.

116. This will be all the more important in a post-Brexit UK, both in terms of trade and the labour market.

117. The APF too recognises the economic importance of aviation:

*"The Government's primary objective is to achieve long-term economic growth. The aviation sector is a major contributor to the economy and we support its growth within a framework which maintains a balance between the benefits of aviation and its costs, particularly its contribution to climate change and noise."*⁷

118. But airports do not just provide international connectivity. The role of airports both as centres of employment and catalysts of economic growth is well-established and recognised in national policy. The APF provides strong support for sustainable air transport growth in recognition of the significant economic and social benefits that it brings:

*"Airports are in some ways cities in themselves, creating local jobs and fuelling opportunities for economic rebalancing in their wider region or area".*⁸

119. This is echoed in Aviation 2050, which explains that:

*"The government has been clear about the importance of aviation to the whole of the UK. Aviation creates jobs across the UK, encourages our economy to grow and connects us with the rest of the world as a dynamic trading nation. It also helps maintain international, social and family ties. This is why the government supports the growth of aviation, provided that this is done in a sustainable way and balances growth with the need to address environmental impacts."*⁹

120. In March 2021, the Government's Build Back Better ('BBB') plan for recovery from the pandemic highlighted the importance of world class infrastructure in supporting economic growth. BBB articulates the Government's desire to 'level up' the UK economy by supporting economic growth opportunities outside of London and the South East:

"We will tackle geographical disparities in key services and outcomes across the UK: improving health, education, skills, increasing jobs and growth, building stronger and safer communities

⁷ (CD6.1).

⁸ (CD6.1), pdf page 20, para 1.20.

⁹ HM Government, December 2018, page 18 (CD9.29).

and improving infrastructure and connectivity. We will focus on boosting regional productivity where it is lagging to improve job opportunities and wages.”¹⁰

121. Central to this vision is boosting the global competitiveness of UK cities away from London and the South East, such as Bristol. Indeed, the APF recognises that Bristol Airport *“plays a vital role in the economic success of the South West region”¹¹*.

122. This importance of airports for the UK economy has explicit links with the MBU policy, as explained by the Secretary of State for Transport in February 2020:

“We fully recognise the importance of the aviation sector for the whole of the UK economy. The UK’s airports support connections to over 370 overseas destinations in more than 100 countries facilitating trade, investment and tourism. It facilitates £95.2 billion of UK’s non-EU trade exports; contributes at least £14 billion directly to GDP; supports over half a million jobs and underpins the competitiveness and global reach of our national and our regional economies. Under our wider “making best use” policy, airports across the UK are already coming forward with ambitious proposals to invest in their infrastructure.”¹²

123. The NPPF too provides that significant weight should be given to the need to support economic growth and productivity.¹³

124. What is notable, however, is that there is no policy to stop UK residents travelling abroad in order to retain spending domestically. Indeed, the APF considers the economic impacts of outbound tourism, noting that the evidence available did not show that a decrease in the number of UK residents flying abroad for their holidays would have an overall benefit for the UK economy.¹⁴ It is well recognised that there are not only economic, but social and well-being benefits of international travel¹⁵. This is particularly so in a UK that is, and prides itself on being, multi-cultural, outward facing, and internationally connected.

125. The recent Jet Zero consultation document has made clear that the Government’s objective is to decarbonise aviation and deliver the benefits of doing so, *“whilst allowing the sector to thrive, and hardworking families to continue to enjoy their annual holiday abroad.”¹⁶* The Government

¹⁰ HM Treasury, March 2021, page 71 (CD11.10).

¹¹ Page 21 (CD11.10).

¹² Grant Shapps, 2020 (CD6.8), pdf page 1.

¹³ (CD 5.08.1), Para 80.

¹⁴ Para 1.16 (CD6.1)

¹⁵ APF (CD6.1), paras 1.3 and 1.17.

¹⁶ (CD9.135), page 5.

“want Britons to continue to have access to affordable flights, allowing them to enjoy holidays, visit friends and family overseas and to travel for business.”¹⁷

Regional Policy

126. The economic importance of Bristol Airport is recognised at a regional level:

- a. The West of England Local Enterprise Partnership Strategic Economic Plan (2015 – 2030)¹⁸ identifies the connectivity provided by the airport as a strength of the region and highlights an opportunity for meeting investment and jobs targets through major development at Bristol Airport;¹⁹ and
- b. The West of England Local Industrial Strategy,²⁰ published in July 2019, highlights the global nature of the West of England economy and the importance of these international links to future prosperity. The foreword to the Strategy recognises the airport as a strategic economic asset for the region and its role in making the West of England a *“critical gateway to the nation and the world”*.²¹ Figure 1 in the Strategy shows both the location of both airport and the port in the centre of a cluster of ‘enterprise zone’ activities within the West of England.²²

Local Policy

127. At a local policy level, both North Somerset’s Economic Plan 2020 to 2025²³ and the North Somerset Core Strategy²⁴ identify Bristol Airport as a strategic employment site. The Core Strategy identifies one of its priorities as *“[s]upport[ing] and promot[ing] major employers in North Somerset, such as Bristol Airport and Royal Portbury Dock, to ensure continued employment security and economic prosperity”*.²⁵ It identifies economic development as a *“high priority”* for North Somerset, recognising that this is largely influenced by its *“geographic position in addition to local workforce, infrastructure capacity including transport and commercial attractiveness.”*²⁶

¹⁷ (CD9.135), page 5.

¹⁸ (CD11.2).

¹⁹ Page 22/23.

²⁰ (CD7.11).

²¹ (CD7.11), page 4.

²² (CD11.7), page 10, Figure 1.

²³ (CD11.15), page 22.

²⁴ Page 20.

²⁵ Page 20.

²⁶ (CD5.6), page 83, para 3.247 to 3.248.

Conclusions from Policy

128. There are six major themes running through the policy context in which the socio-economic benefits of the proposed development fall to be considered:
- a. Airports are a 'national asset' and their expansion is a core part of boosting global connectivity, which is essential to the vision of 'Global Britain';
 - b. There is clear Government support for airport expansion, subject to the local environmental effects being acceptable;
 - c. Such airport expansion drives the whole economy and supports the 'levelling up' agenda;
 - d. MBU continues to be Government policy and is to be given full effect in decision-making;
 - e. Airport expansion outside the South East in particular contributes to 'levelling up' the regions; and
 - f. One of the three pillars of building back economic recovery and 'levelling up' is investment in the high quality infrastructure. This is crucial for economic growth, boosting productivity and competitiveness.

Wider context

128. Bristol Airport is located in proximity to, and directly between, two of the South West's most deprived areas. Parts of both Weston-super-Mare and South Bristol have high levels of economic deprivation as shown by the index of deprivation in Mr Siraut's Figure 3-3.²⁷ These areas form an important labour catchment area for Bristol Airport, which is recognised by NSC as a major employer.²⁸
129. The Airport provides a wide range of different activities and, associated with that, a significant range of job opportunities at a range of different skill levels and pay scales. The average income of employees at Bristol Airport is higher than the average salaries in the South West and West of England²⁹. This is particularly so at the lower income percentile levels³⁰.

²⁷ Mr Siraut, Proof of Evidence (**NSC/W5/1**), page 12, Figure 3-3.

²⁸ North Somerset Core Strategy (**CD5.6**), page 20.

²⁹ Economic Impact Assessment Addendum (**CD2.22**), page 26, Figure 3.8.

³⁰ Economic Impact Assessment Addendum (**CD2.22**), page 26, Figure 3.8, in particular below the 20th percentile.

130. The role of the Airport as a major employer and generator of economic prosperity is key to the ‘levelling up’ of the South West. The growth of the Airport provides an opportunity for job creation and skills development, as recognised by NSC Officers³¹. This is of particular importance in light of the economic effects of the pandemic on local areas of deprivation.
131. Furthermore, the international connectivity provided by the Airport underpins the success of NSC’s own economic initiatives, such as the Junction 21 Enterprise Area. This development, which aims to provide a 72 hectare “*attractive mixed use destination at the gateway of the region*”,³² advertises its proximity to the Airport as a key attribute. This is for good reason; the linkage between air transport and the attraction and retention of inward foreign investment is well established³³.
132. The growth of the Airport will allow the South West and South Wales to maintain their competitive positions, helping to achieve the economic ambitions of both NSC and the West of England Combined Authority.
133. The importance of Bristol Airport has been echoed by those who own and work for local businesses, organisations such as Visit West and Business West, and the Somerset and Bristol Chambers of Commerce. The messages from these people and organisations are clear and consistent:
- a. Business depends on strong transport links;³⁴
 - b. There are clear links between visiting a place and considering it as a place for trade and inward investment;³⁵
 - c. A successful airport is an important ingredient in the long term prosperity of the area and a critical part of the regional transport infrastructure and global connectivity;³⁶

³¹ (CD4.11), page 34.

³² Mr Brass, Proof of Evidence (BAL/W5/2), page 49, Figure 7 – Junction 21 Enterprise Area website.

³³ Mr Brass, Proof of Evidence (BAL/W5/2)

³⁴ Mr Tudor, on behalf of the Somerset Chamber of Commerce, Day 3 am session. Mr Brass, Proof of Evidence (BAL/W5/2), Appendix 2, page 60, view of Gravity (Enterprise Zone).

³⁵ Mr Croft, CEO of UK Inbound, Day 27 am session.

³⁶ Mr Durie, the Chief Executive of Bristol Chamber of Commerce, Day 3 pm session; Mr Tudor on behalf of the Somerset Chamber of Commerce, Day 3 am session; Mr Brass, Proof of Evidence (BAL/W5/2), Appendix 2, page 60, views of Mace and Swindon and Wiltshire Local Enterprise Partnership and page 61, Visit Britain / Visit England and Visit Wiltshire Ltd.

- d. The Airport is a key enabler of economic growth³⁷ and will have an important role in a post-Brexit³⁸ and post-COVID-19 world³⁹;
- e. The expansion of the Airport will play a key role in encouraging inward investment⁴⁰ and encourage people to visit the South West⁴¹; and
- f. Constraining the airport risks cutting businesses off from the world and puts the region at a competitive disadvantage.⁴²

BAL's assessment of socio-economic benefits

Approach to assessment

134. The approach adopted to the socio-economic assessment is set out in detail in the Economic Impact Report produced by York Aviation.⁴³ The assessment involved a detailed review of the Airport's market position, an analysis of the economic and policy context in which the Airport is operating, engagement with a range of stakeholders and the development of economic models.⁴⁴ The assessment has considered the economic impact of the growth of the Airport in relation to North Somerset, the West of England and the South West Region and South Wales. This approach is comprehensive, robust and in accordance with best practice.

Direct, indirect and induced employment

135. The proposed development would deliver a substantial number of jobs within the local economy of North Somerset and the wider region. The creation of new jobs is of real significance to local people, in particular those living in the areas of deprivation near Bristol Airport, from which the Airport draws a significant number of employees.⁴⁵ As Mr Sweeney explained on behalf of Unite, the socio-economic benefits of the proposed development are

³⁷ Mr Bonner, on behalf of Arcadis (also the President of the Bristol Chamber of Commerce), Day 3 pm session. Mr Brass, Proof of Evidence (**BAL/W5/2**), Appendix 2, page 59.

³⁸ Mr Durie, the Chief Executive of Bristol Chamber of Commerce, Day 3 pm session.

³⁹ Mr Bonner, on behalf of Arcadis, Day 3 pm session. Mr Brass, Proof of Evidence (**BAL/W5/2**), Appendix 2, page 59, views of CBI SW and Constructing Excellence SW.

⁴⁰ Mr Tudor, on behalf of the Somerset Chamber of Commerce, Day 3 pm session. Mr Brass, Proof of Evidence (**BAL/W5/2**), Appendix 2, page 60, view of UK Inbound and Swindon and Wiltshire Local Enterprise Partnership.

⁴¹ Mr Croft, CEO of UK Inbound, Day 3 pm session.

⁴² Mr Durie, the Chief Executive of Bristol Chamber of Commerce, Day 3 pm session; Mr Tudor on behalf of the Somerset Chamber of Commerce; Mr Bonner, Arcadis. Mr Brass, Proof of Evidence (**BAL/W5/2**), Appendix 2, page 61, view Visit Britain/Visit England.

⁴³ (**CD2.8**).

⁴⁴ Mr Brass, Proof of Evidence (**BAL/W5/2**), page 19 to 20, para 4.2.2.

⁴⁵ (**CD2.8**), page 60, para 7.3. 13% from Weston-super-Mare and 11% from South Bristol.

about real jobs for real people, taking home wages and putting food on the table for their family.⁴⁶

136. The delivery of employment is to be supported by a range of initiatives for both the construction and operational phase, which will assist local residents to access skills training and secure employment. These measures include, *inter alia*, an 'Achieve Programme' to deliver employment and skills interventions and a programme of activities in association with education providers, an education programme to offer young people access to employment at the airport and a monitoring programme through which the success of the proposed measures can be assessed. These initiatives seek to ensure that the economic opportunities and benefits provided by the growth of the airport are experienced by the local community.
137. The Economic Impact Assessment Addendum demonstrates that the proposed development would generate the following number of direct, indirect and induced jobs⁴⁷:
 - a. 530 jobs (430 full time equivalent ('FTEs')) in North Somerset;
 - b. 1,220 jobs (1,040 FTEs) in the West of England; and
 - c. 2,120 jobs (1,750 FTEs) in the South West and South Wales.
138. The wider employment impacts of the proposed development, which arise from tourism and productivity benefits, are as follows:
 - a. 180 jobs (140 FTEs) in North Somerset;
 - b. 1,240 jobs (1,000 FTEs) in the West of England; and
 - c. 3,440 jobs (2,720 FTEs) in the South West and South Wales.
139. Accordingly, the total number of jobs generated are as follows:
 - a. 710 jobs (570 FTEs) in North Somerset;
 - b. 2,460 jobs (2,040 FTEs) in the West of England; and
 - c. 5,560 jobs (4,470 FTEs) in the South West and South Wales.

GVA

⁴⁶ Mr Sweeney, Unite, Day 3 pm session.

⁴⁷ Mr Brass, Proof of Evidence (**BAL/W5/2**), page 24, Table 1.

140. The economic footprint of the proposed development in terms of GVA is as follows⁴⁸:
- a. £50 million in GVA in North Somerset;
 - b. £100 million in GVA in the West of England; and
 - c. £150 million in GVA in the South West and South Wales.
141. The wider economic impacts are as follows:
- a. £20 million in GVA North Somerset;
 - b. £120 million in GVA in the West of England;
 - c. £280 million in GVA in the South West and South Wales.
142. This means a total GVA impact of:
- a. £70 million in GVA in North Somerset;
 - b. £220 million in GVA in the West of England;
 - c. £430 million in GVA in the South West and South Wales.
143. The impact of the proposed development in terms of employment and GVA is assessed as 'major' and 'beneficial' in EIA terms. This has been shown to be insensitive to faster and slower growth scenarios.⁴⁹

Wider productivity benefits

144. The growth of the Airport represents a strategic opportunity for the regional economy. The Airport, in its role as a connector for the region, is a key part of ensuring that the West of England can achieve its wider economic goals. This includes being a world class, global location for business and one of the UK's leading tourism regions.⁵⁰
145. As set out above, the Economic Impact Assessment Addendum has calculated that there would be wider productivity benefits arising from the increase in 'connectivity' of the region. This is reflected in the growth in number of business travellers. The appropriateness or otherwise of

⁴⁸ Mr Brass, Proof of Evidence (BAL/W5/2), page 24, Table 1.

⁴⁹ Mr Brass, Proof of Evidence (BAL/W5/2), page 23, para 4.4.1.

⁵⁰ Mr Brass, Proof of Evidence (BAL/W5/2), page 25, para 4.4.9.

the assessment of these wider productivity benefits depends upon the forecasting of business travel, on which the parties disagree.

Outbound tourism

146. Various parties to the Inquiry⁵¹ have presented evidence on the impact of the so-called “*outbound tourism deficit*”, namely the phenomenon of more people travelling abroad than overseas residents travelling to the UK.
147. The national policy position on outbound tourism is clear: there is no policy against travel abroad in order to retain spending domestically. The Government’s position is that “*continuing to make UK tourism more attractive is a better approach both for residents and attracting new visitors.*”⁵² This reflects the recognition that, in addition to the domestic spending associated with overseas travel, the chance to fly abroad “*offers quality of life benefits including educational and skills development.*”⁵³ It affords the ability to travel, study, experience different cultures and visit friends and family. Government policy continues to stress that this should be available for everyone.⁵⁴
148. It is, therefore, overly simplistic to look exclusively at the value of UK tourist spending abroad as against overseas tourist spending in the UK; any proper assessment would have to also take into account the very considerable social and cultural benefits of overseas travel for UK residents. UK residents are not giving their money away to overseas travel operators, they are buying a service that they value at least as highly as what they pay for it.

The position of NSC’s officers

149. The original assessment of the socio-economic benefits by NSC Officers was informed by the advice of independent expert consultants. The approach adopted by York Aviation was examined in detail by NSC’s consultants and considered to be “*appropriate*”⁵⁵. Whilst there were some minor differences regarding the precise scale of the benefits, there was no dispute that the proposed development would have “*a substantial net economic impact for North Somerset and the wider sub-region*”.⁵⁶ Officers further noted that the expansion “*builds on the*

⁵¹ Mr Siraut, Proof of Evidence (NSC/W5/1), page 50, section 8.3. Mr Chapman, Proof of Evidence (PCAA/W5/1), page 28, section 8.3.

⁵² APF (CD6.1), page 19, para 1.16.

⁵³ APF (CD6.1), page 19, para 1.16.

⁵⁴ Decarbonising Transport (2021) (CD9.134), page 8.

⁵⁵ Officer’s Report (CD4.11), page 26.

⁵⁶ Officer’s Report (CD4.11), page 34.

airport's role as a major employer in North Somerset and provides opportunities for job creation and skills development" supported by various commitments in the section 106 agreement.

150. The only changes to the original methodology for the Economic Impact Assessment Addendum are those made in response to points raised by NSC.⁵⁷

Areas of agreement

Introduction

151. BAL's case on the socio-economic benefits of the proposed development rests on two main calculations, namely, the quantum of employment and the additional GVA associated with the proposed development.
152. Significantly, there is a large degree of agreement on both of these calculations:
- a. There is no dispute as to the number of direct, indirect and induced jobs generated by the proposed development;⁵⁸ and
 - b. There is no dispute (in broad terms)⁵⁹ as to the additional direct, indirect and induced GVA as set out above.
153. Whilst there remains a dispute about the scale of the wider economic benefits of the proposed development, as explained below, this dispute relates only to the business productivity benefits of expansion. NSC has not challenged the calculation of the benefits of inbound tourism.⁶⁰

Outstanding issues in dispute

154. There remain, however, four main areas of disagreement between BAL and NSC. These are as follows:
- a. The productivity benefits resulting from the growth in business travel;
 - b. The extent of displacement of economic benefits associated with the proposed development;

⁵⁷ Mr Brass, Proof of Evidence (**BAL/W5/2**), page 20, para 4.2.5.

⁵⁸ Mr Siraut, cross examination, Day 7 pm session.

⁵⁹ Mr Siraut explained in examination in chief that the remaining difference between the parties is circa £1 million in terms of GVA.

⁶⁰ Mr Siraut in his examination in chief (Day 7 pm session) cast doubts on the inbound tourism benefits, but no specific challenge has been made. As explained by Mr Brass, examination in chief, Day 9 am session.

- c. The impact of outbound tourism; and
 - d. The scope of the cost benefit analysis.
155. The first three of these points relate to the wider economic benefits of the proposed development, as set out above, the scale of which is not agreed.

Business travel and productivity benefits

156. In essence, business productivity benefits are those derived from the ‘connectedness’ of a region⁶¹. There is a well-established and long standing relationship between business related connectivity and economic activity. These wider productivity benefits are not, as assumed by NSC, about the individual business travellers. The growth in the number of business travellers is, however, a reflection of how well connected a region is.
157. The Economic Impact Assessment Addendum estimated that the net productivity benefits of the proposed development would be £20 million GVA within North Somerset, £90 million GVA at the West of England level and £200 million GVA in the South West and South Wales.⁶² In calculating this impact, York Aviation adopted an assumption that a 10% increase in business related connectivity increases economy-wide productivity by 0.5%.⁶³ This is a well-established and widely used elasticity, that is accepted by Mr Siraut.⁶⁴
158. Mr Siraut’s challenge to the productivity benefits of the proposed development depends entirely on NSC’s challenge to York Aviation’s forecast of the growth in business travel (as a function of business related connectivity).⁶⁵ If the Inspectors were to accept York Aviation’s forecast of the growth in business passengers, it is agreed that NSC’s challenge to the productivity benefits falls away.⁶⁶
159. Mr Siraut’s evidence repeats many of the themes addressed in the forecasting evidence. This includes the decreasing propensity to fly⁶⁷ resulting from factors such as the rise of video conferencing and changing attitudes to flying, the appropriateness of the DfT elasticities of demand,⁶⁸ and the lack of information about future routes to support the growth in business

⁶¹ Mr Brass, examination in chief, Day 9 am session.

⁶² (CD2.22), page 13, Table 3.4.

⁶³ Oxford Economics Report (2013) (CD11.48), page 3, Table 1.

⁶⁴ Mr Siraut, cross examination, Day 8 am session.

⁶⁵ Mr Siraut, cross examination, Day 8 am session.

⁶⁶ Mr Siraut, cross examination, Day 8 am session.

⁶⁷ Mr Siraut, Proof of Evidence (NSC/W5/1), page 22, para 4.3.2.

⁶⁸ Mr Siraut, Proof of Evidence (NSC/W5/1), page 23, para 4.3.9.

passengers⁶⁹. These factors, Mr Siraut argues, means that there will not be the growth in business traffic forecast and the associated productivity benefits will not be realised.⁷⁰

160. Drawing these points together, Mr Siraut presents a ‘balanced’ and an ‘optimistic’ approach⁷¹ to business passenger productivity benefits. Under the ‘balanced’ approach, Mr Siraut assesses the productivity benefits at zero, and under the optimistic approach, the levels are half those assumed by BAL. Mr Siraut arrives at these figures by assuming no overall growth in business travellers for the ‘balanced’ approach, and a growth rate of half that forecast by York Aviation for the ‘optimistic’ approach.⁷²
161. To the extent that Mr Siraut’s evidence seeks to revisit matters of forecasting, they are not matters within his expertise. BAL’s response to these points is set out above⁷³. By way of clarification, however, the productivity benefits reflected in BAL’s forecast increase in business traffic do not assume an overall growth in the percentage of business passengers. The York Aviation assumption adopted is simply that the current proportion of business traffic will be maintained. York Aviation’s forecasts of business passengers are supported by a large number of business destinations that are already served by the Airport.⁷⁴ Whilst Mr Siraut’s ‘balanced’ approach assumes no growth at all in the number of business passengers, this is not a view supported by NSC’s own forecasting witness.⁷⁵
162. Overall, NSC’s challenge to the wider business productivity figures stands or falls with its challenge to the forecast growth in business passengers; BAL’s case is that this challenge falls.

Displacement

163. ‘Displacement’ is the concept of economic activity in one location taking or moving economic activity away from somewhere else, or some other economic activity. In other words, it is the idea that if economic activity does not happen in one location or in another sector, it will merely happen elsewhere. As explained by Mr Brass, there is a significant degree of difficulty and

⁶⁹ Mr Siraut, Proof of Evidence (NSC/W5/1), page 23, para 4.3.9.

⁷⁰ Mr Folley, Proof of Evidence (NSC/W5/1), page 21, para 4.3.1.

⁷¹ Mr Siraut, Proof of Evidence (NSC/W5/1), page 24, para 4.3.10.

⁷² Mr Siraut, Proof of Evidence (NSC/W5/1), page 24, paras 4.3.11 to 4.3.12.

⁷³ This includes the response to the appropriateness of DfT elasticities, the impact of factors such as the COVID-19 pandemic and the approach to route development. See the explanation of this above.

⁷⁴ Proof of Evidence of Mr Siraut (NSC/W5/1), page 24, Figure 4.1.

⁷⁵ Mr Folley’s position was that business traffic would grow at a slower rate than that assumed, not that there would be no growth in business traffic against the 10 mppa baseline. See Mr Folley, Proof of Evidence, (NSC/W1/1), pages 9 to 10, paras 4.12 to 4.20.

uncertainty associated with assessing displacement⁷⁶. As Mr Siraut acknowledged, there is no standard method for the calculation of displacement.⁷⁷ It is inevitable that the scale of displacement will depend on the area over which you examine the effects.⁷⁸ Indeed, the primary relevance of displacement is to public sector interventions which seek to improve the way a market functions.⁷⁹ In these instances, it is necessary to understand the full impact of any particular intervention. By contrast, the proposed development is a private sector investment that is responding to market signals.⁸⁰

164. Nevertheless, the assessment in the Economic Impact Assessment considered in qualitative terms the extent to which displacement of passenger demand to other airports in the South West and South Wales region would occur should Bristol Airport be limited to 10 mppa. The consequence of any displacement would be that the associated employment and GVA of other airports would increase in order to serve the increased demand. The conclusion reached was that the effect would be limited. This reflects the view of NSC at the time of the Officers' Report, where they agreed with BAL's explanation that *"the four other airports in the South West / Wales offer a substantially different range of services in terms of destination and flight frequency"*.⁸¹ In order to respond to discussions with NSC and its consultants, however, York Aviation subsequently considered the issue in quantitative terms in the Economic Impact Assessment Addendum.

165. The updated forecasts produced by York Aviation consider the issue of potential displacement by use of an econometric passenger allocation model.⁸² The Economic Impact Assessment Addendum stated that⁸³:

"To ensure that the assessment represents a worst case assessment, passenger displacement has been considered in the latest traffic forecasts in more detail. These forecasts include the development of an econometric passenger allocation model to consider how passengers will choose between airports serving Bristol Airport's catchment area in the future. The allocation model developed is described in detail in the traffic forecasts report. This analysis has identified that only around 28% of the 2 million passengers that would be displaced from Bristol Airport in

⁷⁶ Mr Brass, examination in chief, Day 9 am session.

⁷⁷ Mr Siraut, cross-examination, Day 8 am session.

⁷⁸ This is agreed. Mr Siraut, cross-examination, Day 8 am session.

⁷⁹ Mr Brass, examination in chief, Day 9 am session.

⁸⁰ Mr Brass, examination in chief, Day 9 am session.

⁸¹ (CD4.11), page 27.

⁸² (CD2.22), pages 13 to 16.

⁸³ (CD2.22) para 3.27.

2030 (should passenger throughput be capped at 10mppa) would divert to other airports in the South West and South Wales, namely Cardiff, Exeter, Newquay and Bournemouth airports. This compares to an estimated diversion percentage for the region calculated by NSC's advisors, Jacobs, of 36%."

166. In light of the substantially smaller size of nearby airports (as agreed by NSC Officers) and the evidence that airports in London have a strong passenger base in the South West, this is considered to be at the top-end of the range of likely displacement⁸⁴.
167. During the course of the inquiry, NSC made requests for various inputs to the passenger allocation model that was developed to examine the issue of 'displacement' of economic benefits (see the quotation above). As Mr Sirault explains⁸⁵ that *"A passenger allocation model is used to determine the probability of an individual using one airport over another, or not flying at all, based on a range of factors including generalised cost (cost plus time taken to access each airport), airfare, frequency and destinations served."* The model examines, therefore, the extent to which employment and other economic benefits would be realised at other airports if Bristol Airport was not allowed to grow beyond 10mppa. It is important to note, however, that this dispute is not about the gross employment and GVA benefits that will arise in North Somerset, the wider sub-region and region if Bristol Airport is allowed to grow to 12mppa; those figures are agreed (as above).
168. NSC argues⁸⁶ that in order to understand how the passenger allocation ('logit') model works it is necessary for Mr Sirault to have access to the 'lambda value' within York Aviation's model and that *"In the absence of understanding the lambda value used and its justification, Jacobs is unable to advise the Council that the passenger allocation model utilised by York Aviation is robust."*⁸⁷ and that Jacobs has been unable to scrutinise the model. Mr Brass does not accept this characterisation of the issue and has specifically responded to these points made by Mr Sirault about his ability to scrutinise the model⁸⁸ and, for the reasons he sets out, he considers that *"It is clear that Jacobs could have scrutinised the logit allocation model, but it has simply not done so."*⁸⁹

⁸⁴ Mr Brass, Proof of Evidence (BAL/W5/2), page 25, para 4.4.12.

⁸⁵ (INQ/058), para 3.

⁸⁶ (INQ/058), para 2.

⁸⁷ (INQ/058), para 7.

⁸⁸ (INQ/083), para 12.

⁸⁹ (INQ/083), para 13.

169. The issue of the 'lambda value' formed no part of the Members' Reasons for Refusal nor indeed, is it in NSC's Statement of Case. This is an issue that has been created as part of a wider strategy of setting up artificial tests or requests for information that BAL has not complied with or cannot comply with in order to say that less weight should be placed on its evidence or that to take that evidence into account would create legal risk. The plain fact is that Jacobs is a major airport and socio-economic consultancy that could have, and indeed did, produce its own evidence on displacement. NSC has had over a year from the date of appeal to ask Jacobs to update its previous displacement report⁹⁰ and has simply failed to do so.

170. NSC's officers reported⁹¹ that:

"In response, BAL say airports are not homogenous and the four other airports in the South West / Wales offer a substantially different range of services in terms of destination and flight frequency compared to BAL. They suggest these airports will continue to serve their own smaller markets even if BAL expand, but this is unlikely to directly compete with the much broader range of routes at Bristol Airport. A point accepted by officers. Objectors disagree and say that the increased passenger growth from South Wales would be reduced if Cardiff Airport was expanded. BAL say the proposed development will have at most, a minimal impact on passenger displacement within the South-West and South Wales due to the different offers from the two airports. They do however consider that the growth of services at Bristol Airport could reduce the level of longer distance displacement to airports beyond the South West / Wales e.g. Birmingham or Heathrow. Officers, for the reasons set out above in relation to determining benefits, agree with BAL's position."

171. The irony of all this is that it is Mr Siraut himself who relies on displacement to argue that the economic benefits of the proposed development are, in effect, offset by a loss of potential economic benefits elsewhere.⁹² This was never a central theme of BAL's evidence.

172. BAL's response to Mr Siraut's arguments on displacement are, broadly, as follows:

- a. York Aviation has carried out an assessment of displacement, which shows that its effect would be limited. This position was agreed with NSC Officers and Jacobs own assessment was not that different (see above).

⁹⁰ (INQ/090).

⁹¹ (CD4.11), pdf p.27.

⁹² Mr Siraut, Proof of Evidence (NSC/W5/1), page 36, para 6.3.8. See also Table 6-5 on page 40.

- b. There is no policy that the Airport should not expand so that the economic activity that would be generated goes to another location, for example, Cardiff.⁹³ This is the case whether or not those other locations are areas of deprivation.
 - c. The proposed development will deliver real benefits to local communities in North Somerset. This includes two areas of deprivation, which fall within the labour market for the Airport. These should not be discounted on the basis that were the expansion not to occur, these jobs would simply be delivered elsewhere. Such an approach has no basis in policy, evidence or logic.
 - d. Indeed, taken to its logical conclusion, the generation of employment or GVA by any development could be discounted on the basis that if it did not occur in that location, it would merely occur somewhere else. This was acknowledged by Mr Siraut.⁹⁴
 - e. With population in the area expected to grow rapidly, there will be a need to generate a significant number of new jobs. It is simply not appropriate or safe to assume that these will simply appear, as Mr Siraut has done. The proposed development would provide only a small proportion of the jobs required in the future.
173. Standing back, it is surprising that NSC are pursuing such a line of argument. In effect, they are seeking to discount the very real local benefits in North Somerset on the basis that if the growth did not occur there, it would occur elsewhere in any event. The creation of jobs in Cardiff, Birmingham or Heathrow (leaving aside whether or not they would in fact occur) are of no value to the local people of North Somerset. Furthermore, Mr Siraut's whole argument runs contrary to NSC's own approach to the generation of local jobs through developments such as the Junction 21 Enterprise Area.
174. The real position is that potential displacement of economic activity to other areas if Bristol Airport did not expand does nothing to assist the very real economic needs of the 'local communities' around the airport – a theme that NSC seems keen to emphasise in relation to 'sharing the benefits' – and the agreed employment, GVA and other socio-economic benefits should be given considerable weight.⁹⁵

Outbound tourism

⁹³ This is the example relied on by Mr Siraut. Acknowledged by Mr Siraut, cross examination, Day 8, am session.

⁹⁴ Mr Siraut, cross examination, Day 8, am session.

⁹⁵ See BAL's response to NSC's legal submissions on this matter in Appendix 1 to these closing submissions.

175. In his Proof of Evidence, Mr Siraut presents a calculation of the negative economic impact of the proposed development of £123 million per annum.⁹⁶ He argues that this should count against the socio-economic benefits of the proposed development.
176. Arguments relating to the negative economic impacts associated with outbound tourism are long used and often repeated.⁹⁷ Such an approach ignores the well-established social and welfare benefit to outbound tourism which Mr Siraut agrees must be taken into account.⁹⁸ National policy both recognises these benefits and encourages outbound tourism. As explained above, there is no policy that seeks to limit overseas travel in order to retain spending domestically.
177. In any event, the Economic Impact Assessment Addendum considered the question of outbound tourism and concluded that any 'lost expenditure' from outbound tourism is unlikely to be significantly affected by the expansion of the Airport.⁹⁹

Cost Benefit Analysis

178. A further point of dispute concerns the scope of the socio-economic cost benefit analysis. A high level socio-economic cost benefit analysis was included within the Economic Impact Assessment.¹⁰⁰ This was used by BAL as an additional piece of evidence as to the socio-economic effects of the Proposed Development. It has not been used in the assessment of significance of the socio-economic effects in the ES or the ESA. Whilst it is not disputed with NSC that this is the appropriate role of the cost benefit analysis, the scope of this assessment remains in dispute. This can be summarised as follows:
- a. Whether the socio-economic cost benefit analysis should have included within its scope the negative environmental impacts of the proposed development,¹⁰¹ which Mr Siraut argues is required by the WebTAG guidance;
 - b. Whether it is appropriate and correct to include carbon costs within the cost benefit analysis; and

⁹⁶ Mr Siraut, Proof of Evidence (**NSC/W5/1**), page 52, para 8.3.6.

⁹⁷ Mr Brass, examination in chief, Day 9 am session.

⁹⁸ Mr Siraut, cross examination, Day 8 am session.

⁹⁹ (**CD2.22**), pages 18 – 23. This is supplemented by information contained in BAL's responses to the Regulation 25 requests in March 2019 (**CD3.4.3**).

¹⁰⁰ (**CD2.8**).

¹⁰¹ Mr Siraut, Proof of Evidence (**NSC/W5/1**), page 53, section 8.5.

- c. Whether the costs benefit analysis should have included the impact on GDP of outbound tourism, as suggested by Mr Siraut¹⁰².

179. These points are considered in turn.

180. BAL's firm position is that there is no requirement in law or policy to carry out a WebTAG assessment. None of the parties to the inquiry have been able to point to any basis at all for doing so. Indeed, reliance on the DfT's WebTAG Unit A5.2 guidance¹⁰³ is entirely misplaced. As that guidance makes clear, it applies to the appraisal of "*government interventions in the aviation industry*" and as such, "[t]he main user of this guidance is expected to be DfT itself"¹⁰⁴. As explained by Mr Brass, the original cost benefit analysis included in the economic impact assessment is not a WebTAG analysis but was intended to be a proportional assessment of different costs and benefits from socio-economic basis.¹⁰⁵ As such, there is no requirement for the socio-economic cost benefit analysis presented to be compliant with WebTAG guidance.

181. In any event, WebTAG guidance only requires negative environmental effects to be included within the assessment if they are likely to be significant.¹⁰⁶ Here, all the environmental effects have been assessed to be 'not significant'.

182. The original socio-economic cost benefit analysis carried out in the economic impact assessment undertaken at the time of the original planning application did not include carbon costs.¹⁰⁷ This is because carbon emissions are a national, and not a local issue, and that it is highly unlikely that carbon emissions at Bristol Airport would be net additional. Constraining Bristol Airport would simply lead many passengers to fly from elsewhere and the aircraft bound for Bristol Airport to be redeployed elsewhere in the UK or further afield, creating what is known as 'carbon leakage'. This illustrates the folly of including carbon in an airport-specific cost benefit analysis when this is really a national issue and subject to controls at a national level.

183. However, in response to comments made within the NSC Officers Report, in the Economic Impact Assessment Addendum report¹⁰⁸ York Aviation produced a cost benefit analysis in which the carbon costs were included based on the then BEIS guidance on carbon values and the

¹⁰² Mr Siraut, Proof of Evidence (**NSC/W5/1**), page 53, section 8.4.1.

¹⁰³ (**CD11.5**).

¹⁰⁴ (**CD11.5**), page 3, para 1.1.1 and 1.1.3.

¹⁰⁵ Mr Brass, examination in chief, Day 9 am session.

¹⁰⁶ (**CD11.8**), page 8, para 3.3.1 and para 3.3.2.

¹⁰⁷ (**CD2.08**), pages 56-59.

¹⁰⁸ (**CD2.22**), pages 33-38.

calculation of carbon emissions in the ESA¹⁰⁹. This is without prejudice to BAL's primary position that it is not appropriate to include these costs, as explained within the Economic Impact Assessment Addendum report¹¹⁰. The reasons for this position are also set out within the Economic Impact Assessment Addendum report¹¹¹ and are reiterated in York Aviation's submission to the Inquiry in relation to the new BEIS guidance on carbon values¹¹². In summary,

- a. The inclusion of carbon costs within the air fares that underpin the air traffic forecasts means that the societal costs associated with growth are internalised within air fares and paid for by passengers. This means that including carbon costs again as a separate item within the socio-economic cost benefit analysis is, in reality, likely to lead to double counting of carbon costs;
- b. Seeking to constrain an airport in the UK, such as Bristol Airport, is highly unlikely to lead to a reduction in the overall level of flying, as the aircraft capacity will simply move elsewhere in the UK or, indeed, overseas and still fly. As indicated above, this is a process known as carbon leakage. It is, therefore, essential that carbon emissions are dealt with nationally and internationally;
- c. Ultimately, carbon emissions will be controlled to meet the UK target of net zero and, to that end, aviation has been formally included within the Sixth Carbon Budget. Thus, any growth in emissions from Bristol Airport will have to be offset by reductions elsewhere. Hence, ultimately, there can be no additional carbon costs associated with the proposed development at a UK-wide level.

184. Since this assessment, BEIS has published new carbon values¹¹³, the implications of which are explained in the note produced by Mr Brass.¹¹⁴ Whilst BAL's position remains that it is not appropriate to include these within the cost benefit analysis, for the reasons set out above, even if one includes the latest BEIS carbon values in such an analysis, there remains a strong net positive benefit from the proposed development.¹¹⁵ In any event, however, the cost benefit assessment does not form an input to the assessment of significance of the socio-economic

¹⁰⁹ (CD2.22), page 36, section 4.

¹¹⁰ (CD2.22), page 33, para 4.2.

¹¹¹ (CD2.22), page 35-36, para 4.7-4.11.

¹¹² (INQ/074), pages 6-7.

¹¹³ (INQ/054).

¹¹⁴ (INQ/XX).

¹¹⁵ (INQ/074).

benefits of the proposed development. Mr Brass's note¹¹⁶ also makes clear that the BEIS value of carbon advice does not change his forecasts; a point accepted by Mr Siraut for NSC¹¹⁷.

185. As regards the inclusion of outbound tourism GDP effects within the socio-economic cost benefit analysis, Mr Siraut's position is simply incorrect and at odds with his own evidence. A socio-economic cost benefit analysis measures the impact of economic welfare as distinct from the impact on economic activity as measured by an impact on GDP. This is confirmed by Mr Siraut in his evidence in a quotation from the Green Book:

*"The appraisal of social value, also known as public value, is based on the principles and ideas of welfare economics and concerns overall social welfare efficiency, not simply economic market efficiency. Social or public value therefore includes all significant costs and benefits that affect the welfare and wellbeing of the population, not just market effects"*¹¹⁸ (Underlining added)

186. Mr Siraut's position as set out in his Proof of Evidence¹¹⁹ (and confirmed in oral evidence¹²⁰) is that outbound tourism is a welfare benefit to passengers.
187. Without prejudice to BAL's general position that outbound tourism is not a significant impact on GDP or a relevant consideration, it is clear therefore that inclusion of a GDP effect in a welfare analysis is not correct and, in fact, the welfare effect associated with outbound tourism would be a positive influence on the cost benefit analysis. This has been explained previously by Mr Brass¹²¹.

Rule 6 Parties' Position on Socio-Economic Benefits

PCAA

188. The arguments made by Mr Chapman on behalf of the PCAA also concern the need for a Green Book or WebTAG analysis. Mr Chapman explained in evidence that the reason for his position was that he considered the proposed development to be a "*government intervention in the*

¹¹⁶ (INQ/074), para 2.1.7

¹¹⁷ (INQ/075), para 35

¹¹⁸ Mr Siraut, Proof of Evidence (NSC/W5/1), page 51, section 8.3.3.

¹¹⁹ Mr Siraut, Proof of Evidence (NSC/W5/1), page 52, section 8.3.7.

¹²⁰ Mr Siraut, cross examination, Day 8, am session.

¹²¹ Mr Brass, Rebuttal Proof of Evidence (BAL/W5/3), page 53. Para 6.9.2.

aviation industry”,¹²² a position that is quite clearly wrong. For the reasons set out above, there is no requirement to carry out a WebTAG assessment.

Key Conclusions

189. Bristol Airport is an asset to North Somerset and the wider South West. The international connectivity it provides attracts tourism, employment opportunities, foreign direct investment and enables international trade. Both directly and indirectly it stimulates economic growth which brings tangible benefits to local people, including those living in areas of local deprivation. The connectivity provided by the Airport makes the region more attractive, both as a place to live and a place to do business.
190. The expansion provides an opportunity to strengthen this contribution, just at a time when national policy is emphasising the need to ‘level up’ the regions and ‘build back better’. The proposed development is wholly aligned with national, regional and local policy and aspirations. NSC’s own economic developments benefit from the international gateway that the Airport provides and indeed promote their proximity to this international gateway.
191. Even leaving aside the wider benefits of the proposed development, the scale of which are not agreed, the socio-economic benefits are substantial. This was the view reached by NSC Officers. Whilst NSC now seek to downplay the significance of the delivery of economic benefits on the basis that they could be delivered outside the region, BAL’s position is that the very real local benefits weigh heavily in favour of the proposed development.

¹²² Mr Chapman, cross-examination, Day 8, pm session.

NOISE

Introduction

192. As with all development that seeks to deliver substantial socio-economic benefits, there will inevitably be some degree of environmental impact associated with the delivery of those benefits. It falls to the planning system to reconcile the national and regional needs with the impacts that are borne most directly by the local community; and the delivery of infrastructure improvements, such as airport expansion, is no different.

193. The impact of noise is one of the environmental effects that policy recognises as a key concern for airport development.¹ MBU identifies the need to strike a balance between economic, social and environmental goals. It is for local planning authorities in the first instance, and Inspectors on appeal, to carry out this balancing exercise within the framework of national, regional and local policy.²

194. The impact of the proposed development in terms of noise is expressly referred to in reason for refusal 2, which alleges that the noise of aircraft, particularly at night, would have a significant adverse impact on the health and well-being of residents in local communities. The air noise impact also forms one of the environmental impacts referred to in reason for refusal 1. It was identified by the Inspectors at CMC1 as issue (e).

Scope of Dispute at Close of Evidence

195. The main point of contention between BAL and NSC concerns the evaluation of the air noise results. There is no dispute about the production of the noise contours or the numerical results drawn from them. The dispute concerns, *inter alia*, the use of $L_{Aeq,T}$ as a primary metric, the role of supplementary metrics within the assessment and the indicators of significance for night noise. There are also issues about the adequacy of mitigation.

196. The dispute concerning ground noise relates to the adequacy of the assessment carried out and the extent to which $L_{Aeq,T}$ captures all aspects of the noise impact. With regards to road traffic noise, there is no dispute that the impact of the proposed development would not be significant.

¹ APF (CD6.1), page 11, para 16.

² MBU (CD6.4), page 4, para 1.9.

197. It is fair to say, in this context, that BAL does not accept NSC's summary of the evidence on air noise effects in its closing submissions and considers that NSC has mischaracterised the 'significance' of the air noise effects. BAL will set out its own summary of that position below, but the suggestion that 100s or, indeed, 1000s of residents will experience 'significant' adverse air noise effects as a result of the proposed development is simply wrong; especially in a context where the results of the air noise assessment, as reported in the ES / ESA, are not challenged.

Policy Context

National Aviation Policy

198. The APF³ defines the Government's objectives and policies on the impacts of aviation. In respect of noise, the APF establishes the following:

- a. The Government's overall objective is to *"limit and where possible reduce the number of people in the UK significantly affected by aircraft noise"*, consistently with the Noise Policy Statement for England 2010 ('NPSE')⁴;
- b. The Government wants to *"strike a fair balance"* between the negative impacts of noise and the positive impacts of flights. *"As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities"*.⁵ It is agreed that in assessing whether or not there has been a sharing of the benefits, regard must be had to what is currently permitted;⁶ and
- c. The guiding principle for the provision of noise mitigation is that *"efforts should be proportionate to the extent of the noise problem and the number of people affected"*. It is *"neither reasonable nor realistic for such actions to impose unlimited costs on industry"*.⁷

199. It is notable, however, that there is no policy that airport development should not be permitted if it results in an increase in noise levels above existing levels. Indeed, the potential for airport development to result in an increase in noise level is clearly acknowledged in the APF.⁸

³ (CD6.1).

⁴ (CD6.1), page 11, para 17. NPSE is at (CD10.4).

⁵ (CD6.1), page 55, para 3.3.

⁶ Mr Fiumicelli, cross examination, Day 10, pm session.

⁷ (CD6.1), page 60, para 3.24.

⁸ See, for example (CD6.1), page 63, para 3.39 and the role of compensation schemes in these circumstances.

200. The NPSE⁹ provides the policy framework for noise management decisions, in order to ensure that noise levels do not place an unacceptable burden on society. NPSE introduces the following concepts for categorising noise effects:
- a. 'No Observed Adverse Effect Level' ('NOAEL'), being the level at which no effect can be detected;
 - b. 'Lowest Observed Adverse Effect Level' ('LOAEL'), being the level above which above which adverse effects on health and quality of life can be detected; and
 - c. 'Significant Observed Adverse Effect Level' ('SOAEL'), being the level above which significant adverse effects on health and quality of life occur.
201. The appropriate approach to these noise levels is specified in the Planning Practice Guidance ('PPG')¹⁰ as set out below.

National Planning Policy

202. Paragraph 185 of the NPPF (2021)¹¹ sets out the aim of ensuring that new development is appropriate for its location taking into account the likely effects of pollution on health, living conditions and the natural environment. In so doing, proposals should mitigate and reduce to a minimum potential adverse impacts from noise, avoid noise from giving rise to significant adverse impacts on health and quality of life, and identify and protect tranquil areas.
203. The PPG provides guidance on establishing whether noise is likely to be a concern and the relevant actions to be taken for noise at different levels.¹² It explains that as noise crosses the LOAEL threshold, it *"starts to cause small changes in behaviour and attitude"* such that *"consideration needs to be given to mitigating and minimising those effects"*.¹³ However this is expressly subject to the need to take account of *"the economic and social benefits being derived from the activity causing the noise"*.¹⁴

⁹ (CD10.4).

¹⁰ (CD10.40).

¹¹ (CD5.8.1) Previously para 180 of the NPPF (2019) (CD5.8). The text of the policy has not changed.

¹² PPG (CD10.40), page 3, para 005.

¹³ PPG (CD10.40), page 3, para 005.

¹⁴ PPG (CD10.40), page 3, para 005.

204. SOAEL is defined as the level at which there is “a material change in behaviour such as keeping windows closed for most of the time or avoiding certain activities during periods when the noise is present”.¹⁵ The guidance continues as follows:

“If the exposure is predicted to be above this level the planning process should be used to avoid this effect occurring, for example through the choice of sites at the plan-making stage, or by use of appropriate mitigation such as by altering the design and layout. While such decisions must be made taking account of the economic and social benefit of the activity causing or affected by the noise, it is undesirable for such exposure to be caused.” (emphasis added).

205. The ‘Noise Exposure Hierarchy Table’¹⁶ within the PPG says that at this level of exposure the action is ‘Avoid’. Where adverse noise impacts are identified and cannot be avoided, mitigation measures are recommended to ensure no significant residual effects on health and quality of life arise. The provision of mitigation measures is subject to the overarching principle that they should be proportionate.¹⁷ It is important to note that findings of noise levels above LOAEL or SOAEL do not mean that there is a ‘significant’ effect in terms of EIA (as explained further below). This is an important distinction that NSC’s closing submissions fail to properly acknowledge. EIA is concerned with the effects of the proposed development and the ‘change’ in noise levels is, therefore, central to an assessment of significance.

206. The PPG also introduces the concept of ‘Unacceptable Adverse Effect Level’ (‘UAEL’), which is described as follows: “At the highest extreme, noise exposure would cause extensive and sustained adverse changes in behaviour and / or health without an ability to mitigate the effect of the noise. The impacts on health and quality of life are such that regardless of the benefits of the activity causing the noise, this situation should be avoided.”¹⁸ For this level of exposure, the action identified is ‘Prevent’. It is agreed that there is no receptor above the UAEL at Bristol Airport.¹⁹

Local Policy

207. The local policies cited in reasons for refusal 1 and 2 are policy CS3, policy CS23 and policy CS26 of the North Somerset Core Strategy 2017²⁰. The local policy context for the assessment of

¹⁵ PPG (CD10.40), page 3, para 005.

¹⁶ (CD10.40.1).

¹⁷ PPG (CD10.40), Paragraph: 013.

¹⁸ PPG (CD10.40), Paragraph: 005; ‘Noise hierarchy table’.

¹⁹ Mr Fiumicelli, cross examination, Day 10, pm session.

²⁰ (CD5.6).

environmental impacts is set out in detail in the Proof of Evidence of Mr Melling²¹, but it is sufficient at this stage to note the following points:

- a. The test in policy CS3²² for development causing environmental pollution or harm to amenity is whether the potential adverse effects would be mitigated to an “acceptable” level. It is agreed that what is ‘acceptable’ reflects a balance between the impacts and the social and economic benefits of the development;²³
- b. The test in policy CS23²⁴ requires the “satisfactory resolution of environmental issues”. As such, if policy CS3 is satisfied, so is policy CS23;
- c. Local policy incorporates the NPPF and NPSE, the overall aims of which are to avoid significant adverse noise impacts and mitigate and minimise adverse noise impacts; and
- d. Policy CS26²⁵ is framed in positive terms; it supports “programmes and strategies” that increase and improve health services, promote healthier lifestyles and aim to reduce health inequalities. It is only of indirect relevance to the assessment of the noise impact of the proposed development, in that it requires a Health Impact Assessment (‘HIA’) to be carried out. It does not, however, impose a requirement that all development must contribute to the improvement of the health and well-being of communities.²⁶

Wider context

Geographical context

208. The geographical context of Bristol Airport is a relatively rural one. In comparison to airports situated in more urban environments, there are relatively very few dwellings that may experience noise impacts due to the low population density in the surrounding area.

209. In this regard, it is of course acknowledged that there are real noise impacts experienced by some individuals located in the vicinity of the airport, but in relative terms when compared to many airport expansion projects, the numbers of individuals adversely affected really are very

²¹ Mr Melling, Proof of Evidence, (BAL/W7/2), section 2.

²² (CD5.6), pdf page 33.

²³ Mr Fiumicelli, cross examination, Day 10, pm session.

²⁴ (CD5.6), pdf page 97.

²⁵ (CD5.6), pdf page 102.

²⁶ This is consistent with the treatment of this policy in the Officers’ Report (CD4.11), in which it was not treated as creating a positive obligation to improve health and was not considered as one of the most relevant policies for the determination of the application (see page 6). In the March Officers’ Report’ it was described of being of “limited relevance” to the application, save for the requirement to submit an HIA (CD4.13, page 5).

small. From a noise perspective, therefore, there are advantages in seeking to expand airports in more rural locations.

210. The rural location of Bristol Airport has led some parties, including NSC and XRE, to suggest that the proposed development will have an impact on the ‘tranquillity’ of the area. There has been no attempt by such parties to identify which areas affected by the proposed development are said to be ‘tranquil’. Indeed, there will be no newly overflowed areas as a result of the proposed development and it is principally in the context of ‘airspace change’ that an assessment of tranquillity is really most appropriate. In any event, the scale of the increase in flights, namely, 16% above the 10 mppa 2030 baseline²⁷, is unlikely to change the character of areas overflowed.²⁸

Existing planning conditions and obligations

211. The noise impact of Bristol Airport is currently limited by conditions imposed in connection with the grant of the 2011 Permission. This includes a cap of 12.42 km² on the area of the 57 dB L_{Aeq,16h} day-time contour (Condition 30), a noise quota count (‘QC’) system in order to control night-time noise levels (Condition 36), an overall limit and seasonal restriction on the number of night-time flights (Condition 38) and a limitation on the number of flights in the ‘shoulder-periods’ (Condition 39). These limitations are in addition to certain measures secured by condition and section 106 agreement, such as the Environmental Improvement Fund, which are used to offset and mitigate the local environmental impacts of the airport.

BAL’s assessment of noise effects

212. The operational phase of the proposed development has three potential noise sources, namely, air noise, ground noise and road traffic noise, all of which have been assessed in detail by BAL’s noise consultants. The results of these assessments, in addition to the potential noise impacts arising from construction and vibration, are set out in Chapter 7 of the ES²⁹.
213. The assessment of air noise impacts in the ES used as the primary metric L_{Aeq,16h} (day-time noise) and L_{Aeq,8h} (night-time noise) (as explained below). These metrics represent the air noise during the 92-day summer period; in other words, the busiest part of the year. In addition to this, however, it also presented the air noise impacts using the following supplementary metrics:³⁰

²⁷ (INQ/038), Table 1.

²⁸ Mr Williams, cross examination, Day 13, pm session.

²⁹ Main report (CD2.5.16), Appendices 7A to 7G (CD2.5.17) and Figures (CD2.5.18, CD3.4.4, CD3.4.5, CD3.4.6).

³⁰ ES, Chapter 7 (CD2.5.16), page 31, para 7.9.22.

- a. L_{den} , which is an annual average 24-hour metric that treats movements occurring in the evening and night periods as noisier than their actual noise levels;
 - b. L_{night} , which is an annual average 8-hour night metric;
 - c. Number of people likely to be highly annoyed;
 - d. Number of people likely to be highly sleep disturbed;
 - e. SEL and $L_{A_{Smax}}$ for the loudest typical individual aircraft events in different scenarios
 - f. N70 (day-time) and N60 (night-time) contours, which demonstrate the areas exposed to a given number of events above the specified value;
 - g. Single mode contours, which assume either 100% easterly or westerly operations and show the noise exposure levels expected for a given worst-case day, if all operations occurred in a single direction; and
 - h. Variation in noise level at representative locations, both between scenarios and over the day.
214. The air noise assessment has followed an approach, agreed with officers, and the overall conclusion reached in the ES was that the proposed development would not give rise to 'significant' adverse noise effects, either from air noise, ground noise or road traffic noise.³¹
215. This information provided in the ES was supplemented in April and October 2019 by responses provided by BAL to requests by NSC for further information under regulation 25 of the TCP (EIA) Regs 2017.³²
216. Consistently with the update to the air traffic forecasts in November 2020, the noise chapter of the ES was updated in section 6 of the ESA³³. The ESA presented updated $L_{Aeq,T}$ noise contours, in addition to the updated results for some of the supplementary metrics, namely, the number of people likely to be highly annoyed, the number of people likely to be highly sleep disturbed, 90 dB SEL and 80 dB $L_{A_{Smax}}$, and variation in noise levels at representative residential receptors.³⁴

³¹ (CD2.5.16), page 82, section 7.16.

³² (CD3.4.4 to 3.4.6) and (CD3.6.8).

³³ Main report (CD2.20.1), Technical Appendices 6A to 6B (CD2.20.4).

³⁴ ESA, section 6 (CD2.20.1) page 73 to 77.

217. As Mr Williams explains in his Proof of Evidence, the updated air noise assessment in the ESA reproduced the $L_{Aeq,T}$ metrics in full. A summary of these results are as follows:

- a. The number of dwellings exposed to the day-time LOAEL of 51 dB $L_{Aeq,16h}$ will be 3,100 in 2030 at 12 mppa. This is lower than the 2017 baseline (3,250 dwellings) and the modelled baseline of 10 mppa at 2024 (3,200 dwellings). At 2030 without the development, there would be a further reduction in the number of dwellings (2,600 dwellings);³⁵
- b. The number of dwellings exposed to the day-time SOAEL of 63 dB $L_{Aeq,16h}$ will be 250 in 2030 at 12 mppa. This is marginally higher than the 2017 baseline (150 dwellings) and the modelled baseline of 10 mppa at 2024 (200 dwellings). At 2030 without the development, there would be a reduction in the number of dwellings (100 dwellings);³⁶
- c. The number of dwellings exposed to night-time LOAEL of 45 dB $L_{Aeq,8h}$ will be 4,000 in 2030 at 12 mppa. This is only marginally higher than the 2017 baseline (3,750 dwellings) and the modelled baseline of 10 mppa at 2024 (3,800 dwellings). At 2030 without the development, there would be a reduction in the number of dwellings (3400 dwellings);³⁷ and
- d. The number of dwellings exposed to night-time SOAEL of 55 dB $L_{Aeq,8h}$ will be 250 in 2030 at 12 mppa. This is moderately higher than the 2017 baseline (150 dwellings) and the modelled baseline of 10 mppa at 2024 (200 dwellings). At 2030 without the development, there would be a further reduction in the number of dwellings (100 dwellings).³⁸

218. The day-time and night-time $L_{Aeq,T}$ contours are included in Technical Appendix 6B to the ESA.³⁹

219. In its closing, NSC has pointed to these overall numbers within certain contours, but it is the 'change' in air noise effects resulting from the proposed development that it most important in understanding significance. This is because the contours are shallow; that is, very small changes in level of noise have a disproportionate effect on the size of the contour and, therefore, the number of dwellings within it.

³⁵ ESA, section 6 (CD2.20.1), page 72, Table 6.8.

³⁶ ESA, section 6 (CD2.20.1), page 72, Table 6.8.

³⁷ ESA, section 6 (CD2.20.1), page 73, Table 6.9.

³⁸ ESA, section 6 (CD2.20.1), page 73, Table 6.9.

³⁹ (CD2.20.4), day-time (pdf pages 49, 50 and 51) and night-time (pdf pages 52, 53 and 54).

220. Importantly, therefore, the changes in absolute noise levels are as follows:

a. In respect of day-time impacts:⁴⁰

- i. As against the 10 mppa 2024 scenario, between the LOAEL and SOAEL, 2500 dwellings will experience a beneficial impact between 0 – 1 dB and 600 dwellings will experience an adverse impact of between 0 – 1 dB.
- ii. As against the 10 mppa 2024 scenario, above the SOAEL, 2 dwellings will experience a beneficial impact between 0 – 1 dB and 10 dwellings will experience an adverse impact of between 0 – 1 dB.
- iii. As against the 10 mppa 2030 scenario, between the LOAEL and SOAEL, 3050 dwellings will experience an adverse impact between 0 – 1 dB
- iv. As against the 10 mppa 2030 scenario, above the SOAEL, 10 dwellings will experience an adverse impact of between 0 – 1 dB.

b. In respect of night-time impacts:⁴¹

- i. As against the 10 mppa 2024 scenario, between the LOAEL and SOAEL, 20 dwellings will experience a beneficial impact of between 0 – 1 dB and 3750 dwellings will experience an adverse impact of between 0 – 1 dB. Only 2 dwellings will experience an adverse impact of between 1 – 2 dB.
- ii. As against the 10 mppa 2024 scenario, above the SOAEL, 250 dwellings will experience a 0 – 1 dB adverse change.
- iii. As against the 10 mppa 2030 scenario, between the LOAEL and SOAEL, 2350 dwellings will experience an adverse impact of between 0 – 1 dB and 1450 dwellings will experience an adverse impact of between 0 – 2 dB.
- iv. As against the 10 mppa 2030 scenario, above the SOAEL, 200 dwellings will experience an adverse impact of between 0 – 1 dB and 40 dwellings will experience an adverse impact of between 1 – 2 dB.

221. All of these changes are ‘negligible’ in EIA terms.

⁴⁰ Mr Williams, Proof of Evidence (**BAL/W2/2**), page 47, Table 7.

⁴¹ Mr Williams, Errata (**INQ/021**).

222. As such, the conclusions in the ESA, based on the $L_{Aeq,T}$ metrics, were comparable to those in the ES, save for showing an overall lower absolute noise impact at night. The conclusions reached in the ES were therefore not materially altered and there was no reason to believe that reassessing all of the supplementary metrics would reveal materially different results.⁴² The supplementary metrics that were updated in the ESA showed absolute impacts comparable to those assessed in the ESA.⁴³ In response to Mr Fiumicelli's Proof of Evidence⁴⁴, however, Mr Williams has subsequently presented the updated results using the N60 and N70 metrics in his Rebuttal Proof.⁴⁵
223. The results of the noise assessments were also subject to qualitative sensitivity testing against the faster and slower growth scenarios, but this did not indicate any material change in the levels of significance.

The position of NSC's officers

224. During the consideration of BAL's application, NSC Officers were advised by reputable aviation noise consultants, Jacobs. As set out in the Officers' Report, the methodology and results of the noise assessment in the ES were accepted and considered to be consistent with policy.⁴⁶ In particular, Officers considered that the use of $L_{Aeq,16h}$ and $L_{Aeq,8h}$ as the primary noise metrics was consistent with current and emerging policy.
225. Overall, Officers concluded that the difference in aviation noise between 10 mppa and 12 mppa (as then assessed) was "*minimal*".⁴⁷ The mitigation then proposed was considered to be compliant with policy and acceptable⁴⁸ and BAL has further improved on that mitigation during the inquiry in response to discussions with those now advising NSC.
226. The impacts arising from ground noise⁴⁹ and road traffic⁵⁰ were found to be acceptable by NSC Officers and do not feature in the reasons for refusal.

Areas of agreement

⁴² Mr Williams, Proof of Evidence (**BAL/W2/2**), page 89, paras 5.10.3 to 5.10.6.

⁴³ Mr Williams, Proof of Evidence (**BAL/W2/2**), page 90, paras 5.10.8.

⁴⁴ Mr Fiumicelli, Proof of Evidence (**NSC/W2/1**), page 88, para 6.20.

⁴⁵ Mr Williams, Rebuttal Proof (**BAL/W2/3**), pages 6 and 7, Tables 1 and 2.

⁴⁶ (**CD4.11**), page 65 – 66.

⁴⁷ (**CD4.11**), page 66.

⁴⁸ (**CD4.11**), page 70.

⁴⁹ (**CD4.11**), page 70.

⁵⁰ (**CD4.11**), page 77.

Air noise

227. There are nine main points that are now agreed between the parties in respect of the assessment of air noise impacts, as follows:
- a. The AEDT model is appropriate for air noise modelling;⁵¹
 - b. The air noise contours produced are correct on the basis of the inputs used;⁵²
 - c. $L_{Aeq,T}$ is an appropriate metric for the assessment of air noise impacts;⁵³
 - d. The ES produced the results of alternative metrics and these have subsequently been updated;⁵⁴
 - e. A daytime LOAEL of 51dBA is appropriate;⁵⁵
 - f. A daytime SOAEL of 63dBA is appropriate;⁵⁶
 - g. There are no receptors above the UAEL;⁵⁷
 - h. A 3dB change in noise level is a conventional indicator of significance;⁵⁸ and
 - i. 54dBA is the noise level that represents the onset of significant community annoyance.⁵⁹

Ground noise

228. There is no dispute about the results of the ground noise assessment using the $L_{Aeq,16h}$ and $L_{Aeq,8h}$ metrics. The remaining dispute mainly concerns the alleged failure to account for different characteristics or features of ground noise that may increase its impact.⁶⁰

Road traffic noise

⁵¹ Statement of Common Ground (**CD12.2**), page 41.

⁵² Mr Fiumicelli, cross examination, Day 10, pm session.

⁵³ Mr Fiumicelli, cross examination, Day 10, pm session. Statement of Common Ground (**CD12.2**), page 40.

⁵⁴ Statement of Common Ground (**CD12.2**), pages 40 – 41 in relation to the use of supplementary metrics in the ES. Mr Fiumicelli, cross examination, Day 10, am session.

⁵⁵ Statement of Common Ground (**CD12.2**), page 43.

⁵⁶ Statement of Common Ground (**CD12.2**), page 43.

⁵⁷ Mr Fiumicelli, cross examination, Day 10, pm session.

⁵⁸ Mr Fiumicelli, cross examination, Day 10, am session.

⁵⁹ Mr Fiumicelli, examination in chief, Day 10, am session. The Study of Noise Attitudes (**CD10.9**), has resulted in the adoption of 54dB $L_{Aeq,16h}$ being adopted the approximate onset of significant community annoyance.

⁶⁰ Mr Fiumicelli, Proof of Evidence (**NSC/W2/1**), page 133 to 134, para 8.3.

229. The impact of the proposed development in terms of road traffic noise is not a matter in dispute. NSC agree that the assessment is in line with the advice of Highways England (now National Highways) Design Manual of Roads and Bridges, and the impact would be negligible.⁶¹

Construction noise

230. It is agreed that the methodology adopted to assess the construction noise impacts of the proposed development is appropriate and that any potential impacts can be managed through a Construction Environmental Management Plan.⁶²

Outstanding Issues in Dispute

Air noise

Introduction

231. There are seven main issues that remain in dispute, as follows:
- a. The assumed fleet mix;
 - b. The role of different metrics in assessing the air noise impact;
 - c. The appropriateness of the indicators of significance used in the ES and ESA;
 - d. The evaluation of day-time impacts;
 - e. The evaluation of night-time impacts;
 - f. The impact of the proposed development on non-residential receptors;
 - g. The appropriate conditions and obligations.

232. These issues are discussed in turn.

Fleet mix

233. As a consequence of the dispute between BAL and NSC with regards to the outputs of the air traffic forecasts,⁶³ there is a dispute concerning the appropriate fleet mix to model for the purposes of assessing air noise. Mr Fiumicelli in his Proof of Evidence sets out a table comparing

⁶¹ Statement of Common Ground (CD12.2), page 51.

⁶² Statement of Common Ground (CD12.2), page 52.

⁶³ See the Forecasting Chapter above.

the York Aviation and Jacobs's fleet mixes⁶⁴ and the consequential difference in $L_{Aeq,T}$ modelled for a "*notional location*"⁶⁵. Mr Fiumicelli argues that this results in significant uncertainty about the noise effects of the proposed development.

234. Mr Williams has produced a note considering the noise effects of Mr Folley's most recent fleet mix.⁶⁶ That analysis shows that the Jacobs's fleet mix produces a day-time contour that is a little over 10% larger for the day and 20% larger at night.⁶⁷ It must be noted, however, that the proposed 12 mppa noise contour cap reflects the contours assessed in the ESA. A contour that was any larger than this simply would not be allowed to occur, therefore. Either the number of flights would have to reduce or, more likely, there would be pressure for modernisation of the fleet mix by airlines operating from Bristol Airport.⁶⁸ NSC's point about the need for full 'slot coordination' will be dealt with later.

Metrics

235. The ES uses $L_{Aeq,16h}$ and $L_{Aeq,8h}$ (together ' $L_{Aeq,T}$ ') as the primary (but not sole) metric to assess the air noise impacts of the proposed development in respect of day-time and night-time respectively.
236. It is important to understand the nature and role of the $L_{Aeq,T}$ metric. $L_{Aeq,T}$ assesses the A-weighted sound level over a period of time (16 hours for day-time and 8 hours for night-time) based on an average summer day or night; that is, the average day over the 92 day summer period. The $L_{Aeq,T}$ contours indicate the average noise levels experienced over a relevant period of time. $L_{Aeq,T}$ has been consistently recognised as the metric that best correlates with community response:
- a. The CAA's 2014 SoNA report, which is agreed to be the most recent major attitudinal survey on aviation noise in England⁶⁹, considered mean annoyance scores against average summer-day noise exposure. The study compared $L_{Aeq,16h}$, L_{den} , N70 and N65 and found that there was no evidence than other indicators correlated better with annoyance than $L_{Aeq,16h}$.⁷⁰ The study expressly considered whether $L_{Aeq,16h}$ remained the

⁶⁴ Mr Fiumicelli, Proof of Evidence (NSC/W2/1), page 111, Table 5.

⁶⁵ Mr Fiumicelli, Proof of Evidence (NSC/W2/1), page 112, Table 6.

⁶⁶ (INQ/030).

⁶⁷ (INQ/030), page 4, section 3.1.

⁶⁸ (INQ/030), page 4, section 3.1.

⁶⁹ Mr Fiumicelli, Proof of Evidence (NSC/W2/1), page 70, para 5.18.

⁷⁰ (CD10.9), pdf page 65, para 8.8.

most appropriate metric and concluded that *“evidence based decisions should continue to use $L_{Aeq,16h}$ ”*⁷¹; and

- b. The 2020 report from the Independent Commission on Civil Aviation Noise (‘ICAN’), which specifically looked at the extent to which different metrics correlated with community annoyance, similarly found that *“continued use of the L_{Aeq} -based metrics that are currently required in UK legislation and policy are appropriate.”*⁷² In relation to supplementary metrics, it recommended that they should be *“routinely published by airports to better reflect the way in which noise is experienced on the ground”* (emphasis added).⁷³ The report found in respect of $L_{Aeq,16h}$ that *“An Exposure Response Function (ERF) exists between this metric and annoyance”*, this was also thought to exist for other health effects.⁷⁴ With regards to $L_{Aeq,8h}$ the report recognises that this is the summer average night-time value, which is used to determine the percentage of people expressing self-reported sleep disturbance.⁷⁵ The report found that none of the other metrics, including single event metrics such as L_{Amax} (maximum A-weighted sound level of an event), N_x (number of events) and Single Event Level (‘SEL’) correlated as well with annoyance or sleep disturbance as $L_{Aeq,T}$.⁷⁶ It is agreed that weight should be given to this report in determining the appeal.⁷⁷

237. However, the fact that the $L_{Aeq,T}$ metric correlates well with community reaction does not mean that $L_{Aeq,T}$ represents the way in which individuals actually experience aircraft noise. The impact of aircraft noise will, of course, be experienced by individuals as a number of aircraft events spread out over the day. Indeed, this is expressly recognised in the APF, which explains that *“the Government recognises that people do not experience noise in an averaged manner and that the value of the L_{Aeq} indicator does not necessarily reflect all aspects of the perception of aircraft noise.”* Notwithstanding this, $L_{Aeq,T}$ has been shown to be the best metric for predicting people’s actual response to noise events. By contrast, there is far less data to show the results of the other supplementary metrics to be as well correlated with community response.

⁷¹ (CD10.9), pdf page 65, para 8.10.

⁷² (CD10.47), pdf page 63.

⁷³ (CD10.47), pdf page 6.

⁷⁴ (CD10.47), pdf page 26.

⁷⁵ (CD10.47), pdf page 27.

⁷⁶ (CD10.47), pdf page 38 to 41.

⁷⁷ Mr Fiumicelli, cross-examination, Day 10, pm session. Mr Fiumicelli described the report as *“a valuable contribution to the information we have available”*.

238. The use of $L_{Aeq,T}$ as the primary metric is also firmly embedded in policy. The APF recognises that *“average noise exposure contours are a well-established measure of annoyance and are important to show historic trends in total noise around airports”*. $L_{Aeq,T}$ noise contours are used by the Government to identify levels of noise at which policy identifies action should be taken,⁷⁸ such as the level at which noise insulation should be provided.⁷⁹ The Government’s Consultation Response on UK Airspace Policy confirms that $L_{Aeq,T}$ remains the primary metric for assessing airspace change and expresses the view that *“there is not at present any available hard evidence to link outcomes on health and quality of life with frequency-based noise metrics.”*⁸⁰
239. Whilst Mr Fiumicelli accepts that $L_{Aeq,T}$ has been shown by research to be *“the best metric”*, it is not, in his view, *“ideal”*⁸¹ because it does not reflect how people actually experience aircraft events. Because of this, he argues, equal weight must be given to a range of supplementary metrics in the assessment of air noise. In support of this position, Mr Fiumicelli relies upon the DfT’s Air Navigation Guidance,⁸² which explains that *“for communities further away from airports that will not be affected by noise above the LOAELs identified above, it is important that other aspects of noise are also taken into account where the total adverse effects of noise on people between different options are similar”*⁸³.
240. However, whilst not accepted by Mr Fiumicelli, that guidance makes clear that its primary relevance is to the assessment of airspace changes,⁸⁴ i.e. comparing the impacts of alternative flightpaths. In other words, the guidance supports the role of supplementary metrics in circumstances where there is a choice between two proposals, both of which have a similar noise impact when assessed using $L_{Aeq,T}$. In this respect, data from supplementary metrics should be used to supplement $L_{Aeq,T}$ results in order to better understand the differences between proposals. That does not suggest, however, that the use of supplementary metrics are to be preferred to $L_{Aeq,T}$ in the assessment of a specific development proposal, which does not involve any element of airspace change.

⁷⁸ APF (CD6.1), see, e.g. page 57, para 3.13 in respect of the production of noise exposure maps for noise-designated airports; page 58, para 3.17 in respect of the onset of community annoyance; page 63, para 3.36 and 3.37 in respect of the level at which airport operators are expected to provide assistance with the costs of moving or provide insulation.

⁷⁹ APF (CD6.1), page 63, para 3.37.

⁸⁰ (CD10.33), pages 18 to 19, paras 2.72 to 2.73.

⁸¹ Mr Fiumicelli, cross-examination, Day 10, pm session.

⁸² Mr Fiumicelli, Proof of Evidence (NSC/W2/1), page 84, para 6.9.

⁸³ (CD10.12), page 19, para 3.11.

⁸⁴ (CD10.12), page 18, para 3.5 and title.

241. The role of supplementary metrics, as agreed by NSC Officers and their consultants, is to provide context and to inform an understanding of the nature of the impacts. This is how they have been used in the ES and the ESA. NSC's approach seeks to elevate the status of supplementary metrics so that even if no significant effects are identified using L_{Aeq} , results from supplementary metrics can be used to support a finding of significance. There is no support in research or policy for this approach.

Indicators of Significance

242. The approach to EIA significance adopted in the ES and ESA has regard to both the absolute level of noise and change in noise level. The ES and ESA adopted LOAEL and SOAEL thresholds to consider first the absolute noise levels forecast in the modelling⁸⁵. As set out above, the absolute thresholds adopted for day-time are agreed. With regards to the change in noise levels, the threshold of significance adopted was 3dB for receptors with absolute levels between the LOAEL and the SOAEL, and 2dB for receptors above the SOAEL. The lower threshold of change above the SOAEL reflects evidence that people are more sensitive to increases in noise level at higher absolute levels.⁸⁶
243. The absolute values for night-time LOAEL and SOAEL remain in dispute. The ES and ESA adopt values of 45 dB $L_{Aeq,8h}$ and 55 dB $L_{Aeq,8h}$ for the night-time LOAEL and SOAEL. Mr Fiumicelli's position appears to be that the night-time SOAEL ought to be 50 dB $L_{Aeq,8h}$ and the night-time LOAEL ought to be 40dB $L_{Aeq,8h}$, which he says is informed by the Airport's rural location.⁸⁷
244. The reasons for selecting the absolute night-time thresholds used in the ES and ESA are explained in detail in the Proof of Evidence of Mr Williams,⁸⁸ however in summary:
- a. A night-time LOAEL of 45dB $L_{Aeq,8h}$ is consistent with the levels adopted in the Government's Consultation Response on UK Airspace Policy (2017).⁸⁹ Whilst this strictly relates to airspace change, the Government's adoption of this threshold as a LOAEL is premised on the view that adverse noise effects can be experienced down to these levels. It therefore provides support for the adoption of this value as a LOAEL for the purposes

⁸⁵ Mr Williams, Proof of Evidence (**BAL/W2/2**), page 40, para 4.2.31.

⁸⁶ Mr Williams, Proof of Evidence (**BAL/W2/2**), page 43, para 4.2.49.

⁸⁷ Mr Fiumicelli, Proof of Evidence (**NSC/W2/1**), page 104 to 105, para 6.77.

⁸⁸ Mr Williams, Proof of Evidence (**BAL/W2/2**), page 40, paras 4.2.31 to 4.2.42.

⁸⁹ (**CD10.33**), page 18, para 2.72.

of EIA. Indeed, Mr Fiumicelli accepts that the day-time LOAEL used in the ES and ESA, which is also derived from this document, is appropriate;

- b. A night-time SOAEL of 55dB $L_{Aeq,8h}$ is reflective of the level that the World Health Organisation ('WHO') Night Noise Guidelines 2009. The WHO adopts 40dB L_{night} as an environmental goal to aspire to and 55dB L_{night} as an "*interim target*".⁹⁰ Due to differences between the L_{night} and $L_{Aeq,8h}$ metrics, this would make BAL's SOAEL of 55dB $L_{Aeq,8h}$ a conservative threshold compared to the WHO's target;⁹¹ and
- c. The night-time SOAEL of 55dB $L_{Aeq,8h}$ is consistent with that adopted in relation to three recent airport applications, and only 1dB different from that adopted in respect of Stansted's recent planning application.⁹² Indeed, when asked, Mr Fiumicelli was unable to identify any airports, rural or otherwise, which have used a lower L_{Aeq} threshold than that adopted in the ES and ESA.⁹³

245. On the contrary, there is no support in policy or research for the use of the WHO 'target' as a night-time LOAEL as Mr Fiumicelli proposes. Indeed, the recent SoNA report on 'Aircraft Noise and Sleep Disturbance' published after the submission of proofs, identifies that the adoption of 40dB L_{night} target would require "*almost complete closure of all transport systems, including roads, railways and airports.*"⁹⁴ Whilst Mr Fiumicelli relies on the rural location of the Airport, the WHO's own evidence indicates that the role of ambient noise levels is not influential in the case of aircraft noise⁹⁵ and does not support the use of a lower threshold where there are lower ambient noise levels.

246. With regards to the level of change thresholds, the approach adopted in the ES and ESA represents a conventional but conservative approach:

- a. Mr Fiumicelli agrees that a 3dB change has "*conventionally*"⁹⁶ been used as the minimal perceptible under normal conditions;
- b. The APF identifies 3dB as the level of change at which acoustic insulation should be provided;

⁹⁰ (CD10.44), pdf page 8.

⁹¹ Mr Williams, Proof of Evidence (BAL/W2/2), page 41, para 4.2.40.

⁹² Mr Williams, Proof of Evidence (BAL/W2/2), page 42, Table 5.

⁹³ Mr Fiumicelli, cross examination, Day 10 pm session.

⁹⁴ (INQ/22), Pages 9 to 10, para 2.18.

⁹⁵ WHO Community Guidelines (CD10.1), pdf page 30, section 2.3.4.

⁹⁶ Mr Fiumicelli, Proof of Evidence (NSC/W2/1), page 96, para 6.55.

- c. Aviation 2050 identifies 3dB as the new minimum level of change (above 54 dB $L_{Aeq,16h}$) to be used as an eligibility criterion for assistance with noise insulation;⁹⁷
- d. The IEMA Guidelines identify a change of less than 2.9dB L_{Aeq} as “*none/not significant*”;⁹⁸ and
- e. This level of change is consistent with the approach accepted in the recent Stansted appeal decision,⁹⁹ and the Heathrow Cranford Agreement decision, in which 3dB was contested but insufficient evidence was found to depart from it.¹⁰⁰

247. Importantly, Mr Fiumicelli confirmed in cross-examination¹⁰¹ that, in considering the ‘significance’ of air noise effects, he was not proposing any alternative ‘change’ criteria to the 3dB below SOAEL and 2dB above SOAEL adopted in the ESA by BAL. There are, therefore, no alternative ‘change’ criteria advanced by NSC on which the inspectors can consider the EIA ‘significance’ of the air noise effects of the proposed development.

Evaluation of day-time impacts

248. The results of the day-time assessment are set out in detail in the ESA.¹⁰² In terms of the L_{Aeq} metric, the impacts are as follows:

- a. There will be a reduction in the number of dwellings above the LOAEL (51 dB) compared to 2017 (3,250 in 2017 to 3,100 in the 12 mppa (2030) scenario);
- b. The number of dwellings above the SOAEL (63 dB) will be the same with and without development at 2030 and remains low in all scenarios (20 in the 2017 and 10 mppa (2024) scenarios and 10 in both the 10 mppa and 12 mppa (2030) scenarios);
- c. Whilst there will be more dwellings above the LOAEL (51 dBA) ‘with’ development at 2030, than ‘without’ development at 2030, this is entirely to be expected when comparing the future ‘with’ and ‘without’ expansion scenarios.¹⁰³ This number is, however, lower than the number that would be affected under the currently permitted contour; and

⁹⁷ (CD6.5), page 80, para 3.122, fourth bullet.

⁹⁸ (CD10.5), pdf page 56, Table 7-12.

⁹⁹ (CD6.13), page 7, para 36.

¹⁰⁰ Mr Williams, Proof of Evidence (BAL/W2/2), page 104, Appendix 1, paras 1054 to 1062.

¹⁰¹ Mr Fiumicelli, cross-examination, Day 11, am session

¹⁰² (CD2.20.1), page 72 ff., section 6.5.

¹⁰³ (CD2.20.1), page 72, Table 6.8.

- d. The changes in day-time noise levels between the 10 mppa and 12 mppa scenarios are less than 1 dB and assessed as ‘negligible’ in the ESA.¹⁰⁴
249. With regards to the number of people highly annoyed, the ESA shows that there is a reduction in people in 2030 compared to the 2017 baseline.¹⁰⁵ Once again, not surprisingly, the number is higher in the 2030 ‘with development’ scenario than the ‘without development’ scenario.
250. With regards to the updated N70 results in Mr Williams’s Rebuttal Proof,¹⁰⁶ the following three points need to be borne in mind when assessing their significance:
- a. N70 defines the area exposed to a number of events of 70 dB or greater, but this threshold of 70 dB has no particular significance within the UK.¹⁰⁷ It represents an external exposure level, which results in an event of approximately 60 dB experienced internally when windows are fully open, 55 dB with windows half open, 45 dB with windows closed and 35 or 40 dB with noise insulation.¹⁰⁸ It is agreed that 60 dB represents the level of speech interference when experienced indoors and, as such, only with windows fully open would an N70 event result in this impact;
 - b. The N70 metric is insensitive to the scale of any change in noise level; an imperceptible change can result in a large increase in the number of events over the selected threshold. Indeed, all increases seen in the N70 results are a consequence of changes of less than 1dB;
 - c. The ICAAN report found that there was “*some limited evidence*” linking N70 to annoyance and no evidence to link it to a health issue.¹⁰⁹ Whilst Nx was considered the most appropriate “*complementary*” metric, further work is needed on defining the appropriate N value;¹¹⁰ and

¹⁰⁴ Mr Williams, Proof of Evidence (BAL/W2/2), page 47, Table 7.

¹⁰⁵ (CD2.20.1), page 73, Table 6.10.

¹⁰⁶ Mr Williams, Rebuttal Proof (BAL/W2/2), page 6, Table 1.

¹⁰⁷ Mr Williams, Rebuttal Proof (BAL/W2/2), page 8, para 3.1.14. As explained in the SoNA report (CD10.9), pdf page 72, the origins of the N70 metric was in Australia where a different outdoor to indoor transmission loss figure is used.

¹⁰⁸ Outdoor to indoor transmission loss figures taken from WHO Environmental Noise Guidelines for Europe (CD10.28). Figures for double-glazing taken from (CD10.44), page 30, para 1.3.5. These figures are agreed with Mr Fiumicelli, cross examination, Day 11, am session.

¹⁰⁹ ICCAN (CD10.47), pdf page 39, Table 3. Cf. health effects linked to $L_{Aeq,T}$ (Table 1 on pdf page 26).

¹¹⁰ ICCAN (CD10.47), pdf page 64.

- d. The SoNA report concluded that N70 and L_{Aeq} generally represent the same thing, but that L_{Aeq} is the most appropriate metric when the results diverge.¹¹¹

251. The ESA concluded that the proposed development would give rise to no significant adverse day-time noise effects.¹¹² The main point of criticism of this assessment in Mr Fiumicelli's Proof of Evidence concerns the failure to evaluate the N70 results.¹¹³ For the reasons set out above, the N70 results were considered but do not alter the conclusions reached in the ESA that there are no significant effects.

Evaluation of night-time impacts

252. The more significant area of disagreement concerns the methodology and evaluation of results of the night-time air noise assessment. The results of the night-noise assessment are set out in detail in the ESA.¹¹⁴ In terms of the L_{Aeq} metric, the impacts are as follows:

- a. The number of dwellings above the LOAEL increases from 3750 in 2017 to 4000 in 2030 (an increase of 250 dwellings). This represents an increase of 200 from the 10 mppa (2024) consented baseline;¹¹⁵
- b. However, all of these changes above LOAEL are between 0 and 2 dB, which is a level of change assessed in the ESA to be 'negligible'¹¹⁶ and considered by NSC Officers and their consultants to be "*imperceptible*";¹¹⁷
- c. The number of dwellings above the SOAEL increases from 150 in 2017 to 250 in 2030 (an increase of 100 dwellings) . This represents an increase of 50 above the 10 mppa (2034) consented baseline;¹¹⁸ and
- d. However, all of these changes above SOAEL are between 0 and 2 dB and therefore rated as 'negligible' in the ESA.¹¹⁹

253. Mr Fiumicelli's interpretation of these results is that they indicate that the proposed development is contrary to national policy due to the increase in the number of dwellings above

¹¹¹ SoNA (CD10.9), pdf page 72, Figure 11.

¹¹² ESA (CD2.20.1), para 6.1.1.

¹¹³ Mr Fiumicelli, Proof of Evidence (NSC/W2/1), page 116, para 7.6.

¹¹⁴ (CD2.20.1), page 77 ff.

¹¹⁵ (CD2.20.1), page 73, Table 6.9.

¹¹⁶ Mr Williams, Proof of Evidence (BAL/W2/2), page 49, Table 10.

¹¹⁷ Officers' Report (CD4.11), page 72.

¹¹⁸ (CD2.20.1), page 73, Table 6.9.

¹¹⁹ Mr Williams, Errata to his Proof of Evidence (INQ/021).

the SOAEL. The policy guidance for impacts above the SOAEL is ‘avoid’, in respect of which mitigation is agreed to play an important role. Indeed, in assessing these results, it should be noted that all of those experiencing external noise levels above the night-time SOAEL will be eligible for noise insulation under the Noise Insulation Scheme, for which the threshold is 55 dB.

254. The results of the assessment using supplementary metrics are set out in the ESA and Mr Williams’s Proof. This includes 90 dB SEL, 80 dB $L_{A_{Smax}}$, N60 and the number of people likely to be highly sleep disturbed. In headline terms, these results show the following:

- a. The number of dwellings above the threshold of 90 dB SEL or 90 dB $L_{A_{Smax}}$ at least once a night was the same in 2030 with and without development (350 dwellings for 90 dB SEL and 500 dwellings for 80 dB $L_{A_{Smax}}$);¹²⁰
- b. The population highly sleep disturbed is marginally higher in 2030 with development than the consented level at 10 mppa at 2024 and the 2017 baseline (an increase from 450 dwellings to 500 dwellings) The number of dwellings in 2030 at 10 mppa is marginally lower (400 dwellings);¹²¹ and
- c. The number of dwellings exposed to 10 events over 60 dB per night is 5,400 in 2030 with development, compared to 4,800 for 10 mppa in 2030.¹²²

255. However, as with the day-time impacts, the following points must be noted when interpreting these results:

- a. There are recognised weaknesses of the 90 dB SEL metric, which is identified as having a weak correlation with sleep disturbance.¹²³ The data in Appendix 6A to the ESA shows that the impact captured by these metrics equates to a change of one aircraft a night.¹²⁴
- b. The ICCAN report found that the 80dB $L_{A_{xmax}}$ metric has “*some correlation*” with sleep disturbance but that the “*strength of the correlation is unclear*”;¹²⁵

¹²⁰ Mr Williams, Proof of Evidence (BAL/W2/2), page 51, Table 11.

¹²¹ Mr Williams, Proof of Evidence (BAL/W2/2), page 52, Table 12.

¹²² Mr Williams, Rebuttal Proof (BAL/W2/3), page 7, Table 2.

¹²³ ICAAN report (CD10.47), page 35 and page 40.

¹²⁴ ESA Appendix 6A (CD2.20.4), page 8, Table 6A.7.

¹²⁵ ICCAN report (CD10.47), page 37.

- c. The N60 metric has some relation to the WHO Community Noise Guidance 1999, which refers to an outdoor level of 60dB $L_{Amax,f}$ for sleep disturbance.¹²⁶ As with the N70 metric, the results do not indicate the extent of any change in noise level. All impacts shown in the N60 metric are the result of a 0 – 2 dB change, which is assessed to be ‘negligible’;
 - d. In respect of each of these metrics, including N60, they relate to outside noise levels, which must be adjusted accordingly to understand the internal impacts; and
 - e. The population highly sleep disturbed is relevant as an input to the Health Impact Assessment (‘HIA’). The conclusion of the HIA is that the night-noise impacts of the proposed development do not result in a significant population health impact.¹²⁷
256. Mr Fiumicelli further argues that the likelihood of additional awakenings has not been properly assessed in the ESA.¹²⁸ BAL’s response to this is as follows:
- a. It is agreed that there is no policy requirement to assess awakenings.¹²⁹ Nor is there any requirement to do so in accordance with good practice;
 - b. “Awakenings” for these purposes is a technical term, which includes within its scope changes in sleep state that an individual would not be conscious of occurring. It is agreed that it is perfectly normal for individuals to experience several of these a night.¹³⁰ Indeed, Mr Fiumicelli’s evidence is that on average, individuals experience 24 awakenings a night quite independently of noise effects;¹³¹
 - c. This is reflected in the WHO Community Noise Guidelines 1999, which identifies that 80 to 90% of reported cases of sleep disturbance in noisy environments are caused by reasons other than noise;¹³²
 - d. Whilst Mr Fiumicelli relies heavily on the Basner method to assess additional awakenings, this method is not recommended for use by the WHO. Indeed, the WHO characterise the relationship between single event noise indicators and long-term health outcomes as “tentative”;¹³³

¹²⁶ ICAAN report (CD10.47), page 39.

¹²⁷ (CD2.20.1), page 74, Table 6.11.

¹²⁸ Mr Fiumicelli, Proof of Evidence (NSC/W2/1), page 117, para 7.10.

¹²⁹ Mr Fiumicelli, cross examination, Day 11 am session.

¹³⁰ Mr Fiumicelli, Proof of Evidence (NSC/W2/1), para 4.21.

¹³¹ Mr Fiumicelli, Proof of Evidence (NSC/W2/1), para 4.21.

¹³² (CD10.1), page 26, section 3.4.

¹³³ WHO Guidelines 2018 (CD10.28), pdf page 30.

- e. In any event, Mr Williams presented an awakenings assessment in his Proof of Evidence, which demonstrated that only one location would pass the Basner threshold of one additional awakening per night, and it would do so both in the 10 mppa and 12 mppa scenarios;
- f. Tables 8, 9 and 10 presented in Mr Fiumicelli's evidence setting out 'awakenings per week' for the 10 mppa and 12 mppa scenarios are not based on actual locations.¹³⁴ They do not, therefore, purport to provide an alternative assessment of awakenings to be used in the determination of the appeal.

257. Considering the results in the round, the ESA found that when comparing the 10 mppa (2024) with the 12 mppa (2030) scenarios, night-time noise levels would remain comparable with or without development, as the increase in flights would be offset by a high proportion of quieter aircraft. There would be no significant changes in respect of night-time air noise impacts. Whilst there would be a small increase in the number of dwellings above the LOAEL and above the SOAEL in 2030 as against the 2024 consented baseline, the level of change at each individual receptor is 'negligible' (between 0 and 2dB). Indeed, many of those affected will already have noise insulation through the Noise Insulation Scheme provided by the Airport in relation to the 2011 Permission. All those affected by increases above the SOAEL will, if they do not already have it, be eligible for noise insulation under the proposed Noise Insulation Scheme associated with the 12 mppa permission.

Non-residential receptors

258. The ES and ESA carried out an assessment of the impact of the proposed development on non-residential receptors using $L_{Aeq,16h}$. The results in the ESA demonstrated that only one school, Winford Primary School, would be exposed to noise impacts above the day-time LOAEL of 55 dB $L_{Aeq,30m}$.¹³⁵ However, the results show that there would be no change in the absolute noise level experienced by this receptor as between the 2017 baseline, the consented baseline of 10 mppa in 2024 and the proposed 12 mppa at 2030. In this regard there would be no worsening of the noise impacts experienced by the school without the development. Moreover, this school has consistently received financial support from the Airport.
259. Whilst the ES and ESA did not carry out a specific assessment of $L_{Aeq,30 mins}$, which is the metric identified in the Buildings Standards applicable to schools, the ESA used $L_{Aeq,1h}$ as a reasonable

¹³⁴ Mr Fiumicelli, Proof of Evidence (NSC/W2/1), pages 121 to 124.

¹³⁵ ESA (CD2.20.1), page 80, para 6.5.40.

approximation of the impact. The ESA concluded that a one hourly L_{Aeq} value could be around 3dB higher than the 16 hour average.

260. In his Proof of Evidence Mr Fiumicelli raises concerns about the health impacts of increase noise levels on pupils at school.¹³⁶ However both the studies he refers to relate to either to a 5 dB increase in noise levels, or the impact of noise above 60 dBA, neither of which arise in respect of the proposed development.
261. The ESA also assessed the impacts of the proposed development on places of worship and amenity areas. With regards to both of these assessments, Mr Fiumicelli accepts that there is no worsening of noise conditions from 2017 and indeed an improvement by 2030.¹³⁷ Mr Fiumicelli's only criticism of the assessment is the reliance on $L_{Aeq,16h}$ although he accepts that there is no policy requirement to use any other metric.¹³⁸

Ground noise

262. The ES and ESA assess the ground noise impacts using $L_{Aeq,16h}$ and $L_{Aeq,8h}$. The full results are set out in section 6.6 of the ESA.¹³⁹ In summary, the ESA found that the number of dwellings exposed to noise levels at or above the LOAEL does not materially change between 10 mppa (2030) and 12 mppa (2030) scenarios. The number of dwellings exposed to ground noise levels at or above the SOAEL is low in all scenarios: one property in 10 mppa (2030) scenario for both day and night, increasing to 2 at night in the 12 mppa (2030) scenario. The changes in ground noise level are assessed as 'negligible' and below the threshold of significance in the ESA. Indeed, for the majority of residential properties above the LOAEL, the proposed development is forecast to provide a benefit in terms of ground noise, due to additional screening provided by the proposed infrastructure works.
263. Mr Fiumicelli considers that the assessment of ground noise impact is "*inadequate*", as it fails to take account of features of the noise such as its intermittency, tones and/or substantial low frequency content. However, there is relevant no policy or standard prescribing an assessment methodology to be adopted and the approach used in the ESA is consistent with other UK airport assessments.¹⁴⁰ Mr Fiumicelli's criticisms about the use of the L_{Aeq} metric for the ground

¹³⁶ Mr Fiumicelli, Proof of Evidence (**NSC/W2/1**), pages 48 to 49, paras 4.50 to 4.51, referring to (**CD10.2**) and (**CD10.7**).

¹³⁷ Mr Fiumicelli, Proof of Evidence (**NSC/W2/1**), page 125, paras 7.27 to 7.29.

¹³⁸ Mr Fiumicelli, cross-examination, Day 11, am session.

¹³⁹ (**CD2.20.1**), page 83, section 6.6.

¹⁴⁰ Mr Williams, Proof of Evidence (**BAL/W2/2**), page 42, Table 5.

noise assessment is misplaced; the purpose of L_{Aeq} is to produce an average of the noise experienced. This inherently takes into account the number of episodes and the absolute noise level of each episode. It should be noted that the peak noise level of each event would only be different between the 10 mppa and 12 mppa scenarios if it were proposed that different aircraft were used, which there is not.

Conditions and obligations

264. This section provides an overview of the areas of outstanding dispute in respect of conditions and obligation, including the adequacy of proposed mitigation. It is not intended to capture all conditions that are relevant to noise which are contained in the draft conditions list provided to the Inspectors.¹⁴¹

BAL's proposed air noise conditions

265. The conditions proposed by BAL relating to noise are as follows:
- a. With regards to day-time noise, the area within the 57dB contour shall not be more than 11.56km² when passenger throughput exceeds 11 mppa. This area will reduce to 10.70km² from 12 mppa;
 - b. With regards to night-time noise, a new contour cap is introduced. The area within the 55dB contour shall not be more than 6.8km² when passenger throughput reaches 12 mppa;
 - c. It is proposed that the quota count ('QC') limit currently in place in respect of the 2011 Permission is retained in an amended form. The principal changes concern introducing additional QC bands in order to increase the control of air noise at certain times, the banning of older and noisier aircraft designated at 'QC' 2 or above and the phased removal over five years of the ability to borrow and carry over allowances from the QC budget between seasons;
 - d. The reduction in shoulder period (23:00 – 23:30 and 06:00 – 07:00) from 10,500 permissible aircraft movements to 9,500; and
 - e. The overall annual limit of 4000 night flights is retained, albeit the summer limit is removed.

¹⁴¹ By email on 5 October 2021.

266. These measures are proposed in order to mitigate and minimise the impact of air noise effects that arise above the LOAEL, in accordance with the guidance in NPSE. This is supplemented by the obligations set out below.

BAL's proposed obligations

267. Within the UU, BAL has undertaken to provide an enhanced Noise Insulation Scheme ('NIS') under which residents can apply for funding up to certain limits depending on the contour that they fall into. The provisions of the NIS are as follows:
- a. Dwellings exposed to 60 dB (A) $L_{Aeq, 16hr}$ or above are entitled to a sum of £8,000;
 - b. Dwellings exposed to 55 dB (A) $L_{Aeq, 8hr}$ or above are entitled to a sum of £5,500; and
 - c. Dwellings exposed to 57 dB (A) $L_{Aeq, 16hr}$ or above are entitled to a sum of £5,000.
268. These sums may be used for noise insulation, ventilation or other cooling devices. The assistance provided through the NIS assists in minimising and mitigating the noise effects for those experiencing noise levels above the SOAEL (and those below the SOAEL but above 60 dBA) during the day-time. In respect of night-noise, the NIS will contribute significantly to mitigating the impacts for all of the 250 dwellings above the SOAEL at night-time, and some that are below the SOAEL (55 dB) but above the LOAEL.

ATM limit

269. NSC's position remains that a cap on ATMs is an appropriate condition, in addition to the QC limit and the night-time and day-time contours. The reason for this is that NSC asserts that, within a particular noise contour, if each ATM event became significantly quieter, BAL could increase drastically the number of ATMs and remain within the noise contour. BAL's position remains that an ATM limit is neither necessary nor appropriate in light of the range of controls that are already to be imposed directly on noise levels. NSC's hypothesis regarding a dramatic increase in the number of flights fails to take account of the fact that BAL must comply with its passenger cap and airlines would have no incentive to fly empty planes.
270. Furthermore, an ATM cap would actually disincentivise airlines to introduce quieter aircraft then the air noise contour cap is reached, as they would not be able to fly additional movements. Setting a tight air noise contour cap, as proposed, but with the flexibility to allow some additional aircraft controls the adverse effect (air noise), but without limiting the ability of airlines to adopt new smaller but quieter aircraft.

Role of Slot Coordination

271. During the course of the Inquiry NSC raised a new argument that was not raised in the Officers Report or foreshadowed anywhere in its Statement of Case or its written evidence, which concerned the role of slot coordination in the Airport's ability to comply with a noise contour limit.¹⁴² NSC's position appears now to be that until Bristol Airport is fully "*slot coordinated*", the airport does not have the ability to control air transport movement numbers in order to comply with the contour.
272. This is particularly surprising in the context that the airport has successfully operated within its existing air noise contour cap since 2011 without the need for full slot coordination and without this ever being an issue between BAL and NSC.
273. As explained in the agreed note to the Inquiry¹⁴³, slot coordination is a status given in the UK by the Secretary of State for Transport to airports which are 'congested'.¹⁴⁴ It provides a means of intervening to help manage congestion and avoid delays. The legal conditions for coordinated status are prescribed in the Airports Slot Allocation Regulations 2006, which transpose EEC Regulation No 95/93 into domestic law.
274. Bristol Airport is currently partially coordinated for night-time operations during the summer peak, in recognition of the potential for congestion at these times. The Airport is not, however, coordinated for day-time operations as it has not been congested during such periods and so full coordination have not been necessary. Pre-pandemic BAL had in fact applied for full coordination in anticipation that it would become a congested airport as it approached its 10 mppa cap. That application was, however, withdrawn as the effects of the pandemic on Bristol Airport's operations became apparent as the prospect of congestion receded in time.
275. It is quite wrong for NSC to imply, however, that the airport is unable to control its growth without full slot coordination. The airlines at the airport operate under normal commercial contracts and it is up to BAL to decide when it wishes to release additional capacity. Clearly it will make that decision, as it always has, having regard to the planning conditions imposed upon it.

¹⁴² Raised during examination in chief of Mr Fiumicelli on Day 10, am session.

¹⁴³ (INQ/044).

¹⁴⁴ (INQ/044), para 1.5.

276. The suggestion that there is a need for slot coordination to be able to comply with the agreed conditions is, therefore, misplaced.
277. As and when the Airport becomes ‘congested’, BAL will apply for slot coordination (as it did in [2019]), in accordance within the legal framework for doing. On this basis BAL has proposed an alternative condition that would require it to apply for slot coordination before throughput reaches 11 mppa. BAL remains of the view that NSC’s proposed condition, which would require the Airport to be successful in gaining slot coordinated status in order to expand beyond 10 mppa is inappropriate. It is clear from the legal framework that BAL would not be successful in achieving slot coordinated status unless and until it is close to its passenger cap and therefore congested.
278. It is BAL’s view that the proposed air noise contour cap is properly enforceable without the need for full slot coordination to be in place before the airport reaches 10mppa, but BAL would be perfectly content for the inspectors to impose its suggested condition that it applies for full slot coordination by the time the airport reaches 11mppa, as it would intend to do this in any event.

Rule 6 Parties’ Position on Noise

PCAA

279. Mr Vaughn on behalf of the PCAA provided evidence in his capacity as a resident of Wrrington, in addition to making a number of criticisms of the approach adopted in the ES and ESA informed by his work for an environmental noise mapping company.¹⁴⁵ In many respects these criticisms mirror those of Mr Fiumicelli and BAL’s response to the points raised are as set out above. Mr Vaughn accepted, however, that he was not an expert in carrying out EIA for aircraft noise. In this respect, Mr Vaughn’s concerns cannot be treated as expert noise evidence when considering the adequacy of the ESA.

Key Conclusions

280. In the context of airport expansions, the noise impacts of the proposed development are modest. The proposed contour cap gives absolute certainty in relation to the maximum noise levels that will be experienced. The noise levels permitted under this cap are lower than those currently permitted under the 10 mppa contour limit.

¹⁴⁵ Mr Vaughn, Proof of Evidence (PCAA/W1/1).

281. In respect of the modest noise increases that will be experienced, all affected receptors will experience an increase of less than 2dB. This noise level is properly regarded as negligible. The number of properties newly experiencing noise levels above the LOAEL and SOAEL are low, and in many instances will reduce by 2030. All noise impacts that will be experienced are assessed to be 'not significant' in EIA terms.
282. The results from the noise assessments have been subject to sensitivity testing against the faster and slower growth scenarios. As explained by Mr Williams, the slower growth scenario (which is now agreed to be the more likely alternative scenario) would slightly reduce the air noise impacts of the proposed development.¹⁴⁶ Under the faster growth scenario there would be fewer new generation aircraft which would result in a slight increase in noise impacts. However, the impacts would not be likely to differ by more than 0.5dB from the Core Scenario assessment.¹⁴⁷
283. In order to mitigate and minimise the adverse noise effects that do arise, BAL has proposed an increased package of mitigation measures in the form of noise insulation. This will ensure that all dwellings exposed to noise levels of 57dB, $L_{Aeq,16h}$ or 55 dB, $L_{Aeq,8h}$ that do not already benefit from noise insulation will be eligible under the scheme.

¹⁴⁶ Mr Williams, Proof of Evidence (**BAL/W2/2**), page 86, para 5.8.8.

¹⁴⁷ Mr Williams, Proof of Evidence (**BAL/W2/2**), page 86, para 5.8.7.

AIR QUALITY

Introduction

284. The APF recognises that alongside noise, airport operations also have potential impacts on local air quality.¹ Sources of air pollution include aircraft emissions, airport-related traffic on local roads and surface vehicles at the airport.²
285. The impact of the proposed development on air quality is one of the two environmental impacts (alongside noise) that underpins reason for refusal 2. It is notable, however, that the reason for refusal is limited to the air quality impacts “*generated by the increase in aircraft movements*”. The reason for refusal does not refer to the air quality impact of increased road traffic, ground support equipment or car parks.
286. The impact of the proposed development on air quality was identified by the Inspectors at CMC1 as issue (d).

Scope of Dispute at Close of Evidence

287. The scope of the remaining dispute between BAL and NSC is narrow. There is general agreement in relation to the calculation of air quality impacts and the absence of any exceedances of the relevant air quality limit values. The outstanding issues concern the correct approach to evaluating these results, and the treatment of ultrafine particles (‘UFPs’) in the assessment.

Legal and Policy Context

Air Quality Legal and Policy Framework

288. The key criteria against which air quality impacts are to be assessed are as follows:
- a. Air Quality Standards (‘AQS’). The Air Quality Standards Regulations 2010³ impose a duty on the Secretary of State to comply with certain ‘limit values’ known as AQSs⁴. These remain domestic law after the UK’s withdrawal from the EU;

¹ (CD6.1), page 64, para 3.46.

² (CD6.1), page 65, para 3.48.

³ (CD8.3).

⁴ (CD8.3), pdf page 7, regulation 17(1). The limit values are contained in Schedule 2 on pdf page 15.

- b. Air Quality Objectives ('AQO'). AQOs are set by the Government in policy which reflect the legal standards. They are contained in the Air Quality Strategy⁵ and are a keystone of the Local Air Quality Management framework under which local authorities are expected to deliver compliance with the AQOs.
289. Both AQs and AQOs set limit values for air pollutants. For the purposes of this appeal, the AQs and AQOs are numerically the same. The limit values of greatest relevance for present purposes are the following:
- a. Annual mean concentration of NO₂ of 40 µg m⁻³;
 - b. Annual mean concentration of 40 µg m⁻³ of PM₁₀ and daily mean concentration of 50 µg m⁻³ not to be exceeded more than 35 times a year; and
 - c. Annual mean concentration of PM_{2.5} of 25 µg m⁻³.
290. The APF recognises that the relevant targets for air quality are set out in (then) EU legislation and states that the Government is *"committed to achieving full compliance with European air quality standards."*⁶ MBU identifies that the policy requirement in respect of air quality impacts are that *"adverse impacts ... are mitigated where possible."*⁷
291. In 2019 the Government published the Clear Air Strategy⁸. Whilst this post-dated BAL's application for planning permission and therefore could not have been taken into account at that time, the implications of the strategy were dealt with in BAL's regulation 25 response⁹. The following six points about the Clear Air Strategy are material to BAL's case:
- a. It does not (and could not) alter the statutory obligations created by the Air Quality Standards Regulations 2010;
 - b. It does not alter the AQOs set out in Government policy;
 - c. It identifies as the pollutants that are the focus of the strategy NO₂, NO_x, PM₁₀ and PM_{2.5}. It does not refer to ultrafine particles ('UFPs');¹⁰

⁵ Air Quality Strategy 2007 (CD8.2.1), pdf page 21, Table 2.

⁶ (CD6.1), page 64, para 3.47.

⁷ (CD6.4), page 8, para 1.22.

⁸ (CD8.7).

⁹ (CD3.4.10).

¹⁰ (CD8.7), page 15. Agreed by Dr Broomfield in cross examination, Day 14, am session.

- d. It commits to setting a new long-term target for PM_{2.5}, which was originally due to be published in early 2019. This target remains to be set;
 - e. The Strategy acknowledges the WHO PM_{2.5} guideline of 10 mg m⁻³, but does not adopt it as a new AQS or AQO;
 - f. It states that it will examine the action necessary to meet that limit but does not adopt a timescale within which to do so. This was recognised by the Inspectors in the Stansted Appeal Decision.¹¹
292. In March 2021, the Committee on Medical Effects of Air Pollutants published ‘Advice on health evidence relevant to setting PM_{2.5} targets’. As that document makes clear, it does not set new AQSs or AQOs but recognises that a target informed by associated costs and benefits would ensure that the target was “*proportionate*”.¹²
293. More recently, the WHO has published new guidance on global air quality¹³ (‘the WHO Guidelines’). As Mr Peirce points out in his note¹⁴ on the WHO Guidelines:
- “The new AQGs for PM2.5 and NO2 are much lower than the current AQOs in England. They are not currently met in most of England. According to Defra’s background maps (which do not account for local sources of pollution such as major roads, and therefore are expected to show concentrations lower than the actual concentration where there is a local source), the only places in England that currently meet the AQGs for both NO2 and PM2.5 are the most remote parts of the far southwest and the far northwest such as Dartmoor, the Lake District and the north Pennines ... Even by 2030, compliance for both these pollutants will only be achieved in the most rural parts of England ... Clearly, meeting the guidelines is a national and international issue.”*
294. As Mr Peirce explains¹⁵, it is clearly not WHO’s intention, therefore, that the Air Quality Guidelines should be directly transcribed into legal standards. What it is important for the inspectors to note, however, is that there is no change to air quality or planning policy in England as a result of the publication of the new guidelines¹⁶. As far as any potential implications

¹¹ (CD6.13), pages 11 to 12, para 66.

¹² (INQ/029), pdf page 12.

¹³ (INQ/085).

¹⁴ (INQ/097), pdf page 6, para 3.1.1.

¹⁵ (INQ/097), pdf page 8, para 4.1.7.

¹⁶ (INQ/097), pdf page 9, para 5.1.1.

of the WHO Guidelines for non-threshold health effects are concerned, that issues is considered in the health chapter below.

National Planning Policy (2021)

295. Paragraph 174(e) of the NPPF¹⁷ (2021) provides that planning decisions should prevent new development giving rise to unacceptable levels of air (and other) pollution and “*where possible*” help to improve local environmental conditions like air quality.¹⁸ Paragraph 185 says that development must be appropriate for its location in terms of the likely effects of pollution on public health and living conditions.¹⁹ Paragraph 186 says that decisions should “*sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones*” and local air quality action plans.²⁰
296. The PPG provides guidance on the role of mitigation in relation to air quality impacts, specifying that measures taken should be “*proportionate*”.²¹

Local Policy

297. The policies of the Core Strategy cited in reason for refusal 2 are policies CS3, CS23 and CS26.
298. The points previously made in this closing in relation to these policies in the context of noise are equally applicable to the consideration of air quality impacts. In particular, (i) that policies CS3 and CS23 seek the satisfactory resolution of environmental issues, ensuring that they are mitigated to an acceptable level, and (ii) that policy CS26 does not impose a positive requirement on all development to “*deliver improved health and well-being locally*”.²²

Key Themes from Policy

299. Drawing together the themes identified above, the policy framework for the consideration of air quality impacts can be summarised as follows:

¹⁷ (CD5.8.1).

¹⁸ (CD5.8.1), page 50, para 174(e).

¹⁹ (CD5.8.1), page 53, para 185.

²⁰ (CD5.8.1), page 53, para 186.

²¹ (CD8.26), para 008.

²² Dr Broomfield, Proof of Evidence, page 22, para 69 (NSC/W3/1).

- a. The primary consideration is the impact of a proposed development in the context of the AQSs and AQOs prescribed in regulations and policy, but this is not the end of the assessment;²³
- b. Air quality impacts must be mitigated to an “*acceptable level*”;²⁴
- c. Where there is compliance with air quality limit values (as here), decisions should “*sustain*” that compliance;²⁵
- d. Opportunities to improve air quality should be taken “*where possible*”;²⁶ and
- e. There is no policy requirement that every development must improve air quality, compared to the ‘without development’ scenario.²⁷

Wider context

300. Since the adoption of the APF in 2013, there has been a significant improvement in air quality nationally. In the area around Bristol Airport, the standards of air quality are generally good, and levels of all pollutants currently meet the relevant air quality limits²⁸.
301. Air quality will continue to improve in future, due to a range of measures taken locally, nationally and internationally. For example, all new petrol and diesel cars sold since 2018 are required to meet tight emission standards in terms of real-world performance, and these cars will make up most of the vehicle fleet by 2030, when it is expected that Bristol Airport will reach 12 mppa²⁹. Electric vehicles are even cleaner, and will also make up a significant proportion of the fleet by 2030, which will be supported through BAL’s continued investment in electric vehicle charging infrastructure.³⁰

BAL’s assessment of air quality effects

302. The impact of the proposed development on air quality has been assessed by Wood. The assessment is set out in Chapter 8 of the ES³¹ and updated in section 7 of the ESA³² consistently

²³ Agreed by Dr Broomfield, cross examination, Day 14, am session.

²⁴ Agreed by Dr Broomfield, cross examination, Day 14, am session.

²⁵ Agreed by Dr Broomfield, cross examination, Day 14, am session.

²⁶ Agreed by Dr Broomfield, cross examination, Day 14, am session.

²⁷ Not agreed by Dr Broomfield.

²⁸ (CD2.5.19), page 8-7, section 8.5.

²⁹ (CD2.20.1) page 102, para 7.7.17–7.7.21.

³⁰ Draft CCCAP (CD9.78), page 5, ‘medium term’ measure.

³¹ Main report (CD2.5.19) and Appendices 8A to 8E (CD2.5.20).

³² Main report (CD2.20.1) and Appendices 7A to 7B (CD2.20.5)

with York Aviation's revised forecasts. This was supplemented by information provided in response to a regulation 25 request in April 2019.³³

Methodology

303. Five potential sources of emissions were assessed, namely: aircraft, ground support equipment, road traffic (both airport and non-airport related), car parks and background sources. The assessment follows best practice guidance, including the approach recommended by the Project for the Sustainable Development of Heathrow (for aircraft emissions), the use of emission factors published by DEFRA and dispersion modelling from DEFRA's Local Air Quality Management Technical Guidance³⁴ (for road traffic emissions), and DEFRA's mapped background concentration data (for background sources). The methodology was agreed with NSC at the EIA scoping stage in August 2018.³⁵
304. The updated assessment in the ESA used the same methodology in the ES, but compared the 10 mppa scenario and 12 mppa scenario as at 2030 in line with the Core Case, and used updated data from Defra and other independent sources. The findings of the assessment were sensitivity tested against the faster and slower growth cases.

Results

305. The assessment in the original ES, based on the airport reaching 12 mppa in 2026, found that the air quality impacts of the proposed development would be of 'moderate significance' in EIA terms. Increases in annual mean NO₂ were predicted to result in impacts which are classified as 'moderate adverse' in terms of the IAQM/EPUK guidance³⁶ at seven receptors, and 'slight adverse' at a further 50 receptors, but no other significant air quality impacts at any human or ecological receptor were predicted.
306. The revised assessment in the ESA, using updated information, demonstrates that the air quality impacts of the proposed development are small or negligible and, overall, are 'not significant' in EIA terms³⁷. In summary, the NO₂ modelling results³⁸ show the following:
- a. There would be no 'moderate' impacts;

³³ (CD3.4.10).

³⁴ (CD8.10).

³⁵ NSC's Scoping Opinion (CD4.9).

³⁶ (CD8.6).

³⁷ Agreed by Dr Broomfield, cross examination, Day 14 am session.

³⁸ (CD2.20.1), page 99, Table 7.1, Figures 7.1, 7.2 and para 7.7.14.

- b. There would be 'slight adverse' impacts at fourteen receptors;
 - c. All other modelled receptors would be 'negligible'; and
 - d. The concentrations at all receptors would remain comfortably below the AQO, with a maximum NO₂ concentration of 30 µg m⁻³, less than 75% of the AQO.
307. These results show that predicted impacts on NO₂ levels are appreciably lower than those reported in the ES, as a result of a smaller contribution from road traffic sources due to reductions in emissions over time.
308. In respect of PM₁₀, there would be a 'negligible' impact at all receptors.³⁹ Similarly, in respect of PM_{2.5}, there would be a 'negligible' impact at all receptors and all concentrations would remain well below the AQO.⁴⁰ It is also agreed that there are no significant effects on ecological receptors.⁴¹

Sensitivity testing

309. The sensitivity testing carried out indicates that the principal effect of the faster and slower growth scenarios is the effect on NO_x emissions from road traffic, which are reducing as newer, cleaner cars enter the fleet.⁴² However, even in the faster growth scenario, pollutant concentrations are sufficiently low that the increased vehicle emissions do not present any risk of exceeding any AQOs. The faster growth case would have no material impact on PM₁₀ and PM_{2.5} and would not result in a significant effect.

Impact of Mr Folley's Fleet Mix

310. In response to a request by the Inspectors, Mr Peirce produced a note considering the implications of Mr Folley's fleet mix on the air quality modelling results.⁴³ The conclusions are summarised in section 5 of that note. In short, the re-modelled NO₂ results are *slightly* reduced and the PM_{2.5} impacts are *slightly* increased. Overall, however, the impacts would not differ substantially from those presented in the ESA indicating that the use of the Jacobs fleet forecast would not materially affect the conclusions of the air quality assessment presented in the ESA.

³⁹ (CD2.20.1), page 103 to 104, Table 7.2, para 7.7.29.

⁴⁰ (CD2.20.1), page 105, Table 7.3, para 7.7.35.

⁴¹ Statement of Common Ground (CD12.2), page 9, item 8.

⁴² ESA (CD2.20.1), page 112, para 7.7.65.

⁴³ (INQ/031).

The position of NSC officers

311. At the time of the original application, the methodology was agreed to be acceptable by NSC in its EIA Scoping Opinion⁴⁴ issued in August 2018. Officers and their advisers remained content with the methodology at the date of the Officers' Report⁴⁵, which said that *"the method used to establish the air quality results and the number and distribution of the assessment locations provide a realistic projection of the impacts."*

312. The Officers' Report⁴⁶ agreed with the results presented in the ES, which were greater than those presented in the ESA, concluding that:

*"For human health, there are no predicted exceedances of the annual mean air quality objectives for PM₁₀ and PM_{2.5}. For nitrogen dioxide (NO₂) however all but two receptors locations are expected to incur increase concentrations, but the projected levels remain below the air quality objective [sic]. In terms of Local Air Quality Management, all receptors comply with acceptable levels, although some are close to these limits. To ensure this remains the case, ongoing monitoring will be required together with an air quality action plan to improve air quality. This can be secured through a S106 agreement."*⁴⁷

313. The ES was also reviewed by Public Health England, who also agreed that *"the major pollutants of concern are nitrogen dioxide (NO₂) and particulate matter (PM₁₀/PM_{2.5})"* and that the proposals did not give rise to additional impacts that need to be mitigated.⁴⁸

Areas of agreement

314. There is a considerable amount of agreement in respect of the air quality assessment in the ESA and the results:

- a. It is agreed that the *"quantification of impacts is appropriate and robust"*;⁴⁹
- b. There is no dispute about the accuracy of the sensitivity testing carried out in the ESA;

⁴⁴ (CD4.9).

⁴⁵ (CD4.11).

⁴⁶ (CD4.11).

⁴⁷ Page 83 (CD4.11).

⁴⁸ Officer's Report (CD4.11), pages 146 and 208.

⁴⁹ Statement of Common Ground (CD12.2), pdf page 9.

- c. It is agreed that the scope and methodology adopted in the ESA is consistent with NSC's Scoping Opinion issued in August 2018;⁵⁰
- d. It is agreed that the impacts of the proposed development on levels of NO₂ and particulate matter are the main issues of concern;⁵¹
- e. It is agreed that surface transport is the main contributor to local air quality emissions and the impact of aircraft is less significant;⁵² and
- f. Whilst there remains a forecasting dispute about fleet mix, it is agreed that whichever fleet mix is assessed it is unlikely to make a material difference to the results of the air quality assessment.⁵³

Outstanding issues in dispute

315. There are only two issues that remain in dispute between BAL and NSC. They are as follows:

- a. The assessment of UFPs; and
- b. The evaluation of the modelling results.

316. These are addressed in turn below.

317. A separate point arises in relation to non-threshold air quality effects on health but this, and discussion of the new WHO Guidelines⁵⁴, are discussed in the 'health' chapter below.

UFPs

318. In his Proof of Evidence Dr Broomfield criticises BAL's assessment of UFPs (particles with a diameter of less than 0.1 microns) and reaches the conclusion that the proposed development is likely to result in an increase, which in turn would pose an increased risk to health.⁵⁵

319. However, even in respect of this point of dispute, there is much that is agreed:

- a. There was no mention of the need to assess UFPs in NSC's Scoping Opinion;⁵⁶

⁵⁰ Dr Broomfield, cross examination, Day 14, am session.

⁵¹ Dr Broomfield, cross examination, Day 14, am session, agreeing with the views of Public Health England.

⁵² This is reflected in Beyond the Horizon (**CD6.3**), page 63, para 6.25 and accepted by Dr Broomfield, Proof of Evidence, page 16, para 46 (**NSC/w3/1**).

⁵³ Dr Broomfield, cross-examination, Day 14 am session.

⁵⁴ (**INQ/085**).

⁵⁵ Dr Broomfield, Proof of Evidence, page 30 – 32, section 5.3 (**NSC/W3/1**).

⁵⁶ Dr Broomfield, cross-examination, Day 14, am session.

- b. UFPs are recognised in the Air Quality Expert Group Report (2018)⁵⁷ as a matter of emerging concern. However, there are no air quality standards that relate to UFPs anywhere in the world⁵⁸ and very little monitoring of UFPs in the UK;⁵⁹
 - c. It remains incredibly challenging to assess the impact of development on UFPs. Indeed, there is no recognised means of doing so;⁶⁰
 - d. As such, the magnitude of the impact of UFPs remains unclear;⁶¹
 - e. There is no existing policy basis on which to refuse an application on the basis of a lack of assessment of UFPs;⁶²
 - f. UFPs are, however, a subset of PM2.5.⁶³ As such, an assessment of PM2.5 is the best proxy available for the assessment of UFPs;⁶⁴ and
 - g. The assessment of PM2.5 shows that there are no exceedances.⁶⁵
320. In light of Dr Broomfield's acceptance of these points, any substance in his criticism of BAL's assessment falls away; there is no dispute that there can be no quantification of the impacts from UFPs and no basis on which to refuse planning permission because of an absence of such an assessment. The ESA indicates that the impact of the proposed development on PM2.5 (which is agreed to be a proxy for assessing UFPs) is 'negligible'.⁶⁶ In light of this, there is no reason to believe that UFPs are likely to have a significant population health effect, as suggested by Dr Broomfield.

Evaluation of results

321. Whilst there is no dispute about the modelling results set out in the ESA, there remains a dispute about the evaluation of these results.
322. Dr Broomfield's approach to evaluating the modelling results can be summarised as follows:

⁵⁷ (CD8.12).

⁵⁸ (CD8.12), pdf page 20, section 1.6. Agreed: Dr Broomfield, cross-examination, Day 14, am session.

⁵⁹ (CD8.12), pdf page 48. Agreed: Dr Broomfield, cross-examination, Day 14, am session.

⁶⁰ (CD8.12), pdf page 72. Agreed: Dr Broomfield, cross examination, Day 14, am session.

⁶¹ Aviation 2050 (CD6.5), page 84. Agreed: Dr Broomfield, cross examination, Day 14, am session.

⁶² Agreed: Dr Broomfield, cross examination, Day 14, am session.

⁶³ (CD8.12), pdf page 72. Agreed: Dr Broomfield, cross examination, Day 14, am session.

⁶⁴ (CD8.12) pdf page 18, section 1.5, para 3.

⁶⁵ Agreed by Dr Broomfield, cross examination, Day 14, am session.

⁶⁶ (CD2.20.1) page 104, para 7.7.25.

- a. The results must be considered in light of the policy context, which includes a “*policy requirement to improve air quality*”;⁶⁷
- b. One means by which this requirement should be achieved is through the adoption by airports of “*innovative solutions and incentives*” against “*ambitious targets*”. This requirement, which is set out in Aviation 2050, specifically requires the adoption of “*ambitious targets to improve air quality*”⁶⁸ (emphasis added);
- c. In the context of this policy framework, the assessment in the ESA shows ‘significant’ adverse effects in EIA terms⁶⁹ and a failure by BAL to adopt “*ambitious targets*” for the improvement of air quality.⁷⁰

323. However Dr Broomfield’s position rests on a misunderstanding of the policy context. As set out above, a proper reading of the policy context demonstrates that there is no requirement that all development must improve air quality. Indeed, Dr Broomfield agreed when taken to those documents in turn that the requirement to improve air quality applied only “*where possible*”.⁷¹

324. The Government expectation set out in Aviation 2050 that airports will adopt “*innovative solutions*” and “*ambitious targets*” is made in the context of “*sustainable journeys to the airport*”.⁷² It quite clearly relates to the adoption of ambitious mode share targets and innovative solutions for supporting sustainable transport options, which in turn delivers improvements in terms of carbon, congestion and air quality. Dr Broomfield places heavy reliance⁷³ on what is clearly a misinterpretation of this paragraph. There is no dispute that BAL has adopted a public transport mode share target, the merits of which is a matter for the parties’ transport witnesses.

325. In any event, when taken through the results of the air quality modelling, Dr Broomfield agreed that each set of results did not on its own indicate a ‘significant’ impact in EIA terms.⁷⁴

⁶⁷ Dr Broomfield, cross examination, Day 14, am session.

⁶⁸ Dr Broomfield, Proof of Evidence (**NSC/W3/1**), at para 50.

⁶⁹ Dr Broomfield, cross examination, Day 14 am session. (“I am arguing that there are significant effects in the context of a policy requirement to improve air quality”).

⁷⁰ Dr Broomfield, Proof of Evidence (**NSC/W3/1**), at para 135.

⁷¹ Dr Broomfield, cross examination, Day 14, am session.

⁷² (**CD6.5**), page 75, para 3.101.

⁷³ See, for example, Dr Broomfield, Proof of Evidence (**NSC/W3/1**), at para 50, para 53, para 54, para 71, para 105, para 109, para 119, para 121, para 127, para 135, para 138, para 139. Dr Broomfield, Rebuttal Proof (**NSC/W3/1**), para 7, para 9, para 10, para 15, para 18, para 19, para 20, para 22 and para 28. This was repeated by Dr Broomfield in examination in chief and cross examination.

⁷⁴ Dr Broomfield, cross examination, Day 14, am session.

326. Standing back, therefore, NSC's interpretation of the air quality modelling results is flawed. The conclusion that the proposed development will have a significant impact on air quality is not supported by the results themselves, which are by all accounts, relatively modest.

Rule 6 Parties' Position on Air Quality

327. No other parties to the Inquiry have provided expert evidence on matters relating to air quality.

Key Conclusions

328. The approach adopted in the ES and ESA is in accordance with guidance and agreed to be consistent with the approach agreed with NSC at the EIA scoping stage. Insofar as it is possible to do so, it provides an indication of the likely impacts on UFP concentrations.

329. The assessment is robust; any uncertainty regarding aircraft fleet forecasts or the precise year at which 12 mppa will be reached does not have a material impact on the conclusions of the assessment. The results indicate that the air quality impacts of the proposed development are small or negligible and, in any event, are 'not significant' in EIA terms. Even using the more pessimistic assumptions in the ES, the Officers' Report⁷⁵ found the impacts to be 'acceptable'.⁷⁶ To address the small increases in pollutants, mitigation is to be committed under a planning condition comprising of the preparation and implementation of an Air Quality Action Plan. This is in addition to the embedded mitigation built into the proposed development in order to reduce the air quality impact of the proposed development.

330. NSC's position rests on a misunderstanding of the policy position and is simply not supported by the air quality modelling results (which are in themselves agreed). It is notable that the arguments raised by Dr Broomfield on behalf of NSC are substantially similar to those raised by Dr Broomfield in the context of the Stansted appeal. Whilst Dr Broomfield did not accept it to be the case, the decision letter in that case makes clear that those arguments were rejected by the Inspectors.⁷⁷

⁷⁵ (CD4.11).

⁷⁶ Page 83 (CD4.11).

⁷⁷ (CD6.13), pdf page 10, para 57.

HEALTH

Introduction

331. The impact of the proposed development on population health is informed by an understanding of the environmental impacts of the proposed development as well as the socio-economic benefits that it will deliver. Just as the noise of aircraft has the potential to pose a risk to the health of those affected by it, securing good quality employment, especially for those living in deprivation, has the potential to have significantly positive health outcomes. The role of the planning system is to consider the ‘public health’ impacts, and take these into account in striking the planning balance. A ‘public health’ approach means focusing on population health. This is in contrast to clinical medicine, which focuses on the health of individuals. Planning Practice Guidance¹ and Public Health England (‘PHE’) guidance² for spatial planning emphasise taking a public health approach.
332. The impact of the proposed development on health is referred to in reason for refusal 2. It is relevant to the reason for refusal in the following two respects:
- a. That the noise and air quality impacts from the proposed development would have a *“significant adverse impact on the health and well-being of residents in local communities”*; and
 - b. That the proposed development *“would not contribute to improving the health and well-being of the local population”*.
333. There are two preliminary points to note about the scope of this reason for refusal. First, it refers to the impact on health of *“residents in local communities”*. The reason for refusal is not clear on the extent to which the alleged impact is a population health effect or not. Indeed the evidence given on behalf of NSC in the context of the appeal has focussed exclusively on individual health impacts.³ NSC have produced no evidence on the population health impacts of the proposed development.
334. Secondly, whilst the first element of the reason for refusal relates straightforwardly to the environmental effects of the proposed development, the second depends upon establishing that there is a positive obligation on development proposals to *“improve the health and well-*

¹ (CD20.67) PPG, pdf page 2.

² (CD20.66) PHE, in particular pdf page 23 para 3.10 and Table 5. Also pdf page 34, para 7.1.

³ Mr Pyper, examination in chief, Day 15 am session.

being of the local population". For the reasons explained in this closing, there is no such duty. In any case, the Health Impact Assessment ('HIA') shows that on balance the proposed development is likely to contribute to improving the health and well-being of the local population more than it detracts from it⁴.

335. The impact of the proposed development on population health was not identified by the Inspectors as a main issue at CMC1. Having received the Statement of Case of NSC⁵, however, BAL advised the Inspectors of its intention to call a health witness in order to respond to the points raised therein. Mr Pyper, on behalf of BAL, was the only witness at the Inquiry to give expert public health evidence.

Scope of Dispute at the Close of Evidence

336. Despite the scope of reason for refusal two, the absence of any other expert evidence in respect of public health means that there has been no meaningful challenge to BAL's HIA. There has been no suggestion that the scope of the HIA does not comply with that agreed with NSC at the scoping stage, nor has there been any alternative public health assessment that would indicate that the conclusions reached are incorrect. The challenges that remain outstanding are those raised by NSC's noise and air quality witnesses, both of whom have accepted that they are not public health experts⁶ and nor do they take into account the public health benefits of the proposed development in forming a rounded view of the issue.

Policy Context

337. The policy context for the HIA is discussed in detail in section 3.2 of Mr Pyper's Proof of Evidence. Insofar as the relevant themes relate to the environmental or economic impacts of the development, these have already been addressed in this closing and will not be repeated here.
338. As identified above, the development plan policies referred to in reason for refusal 2 are policies CS3, CS23 and CS26 of the Core Strategy⁷. Policies CS3 and CS23 are concerned with the acceptable resolution of environmental impacts. Policy CS26 ('Ensuring safe and healthy

⁴ Mr Pyper, Rebuttal Proof of Evidence (**BAL/W8/3**), pdf page 14, para 2.1.63.

⁵ (**CD21.2**). See, in particular, para 52, para 56 and para 61 (in relation to noise), para 73, para 74, para 76, para 77, para 78, para 82 and para 83 (in relation to air quality).

⁶ Mr Fiumicelli, cross examination, Day 11, am session: Mr Fiumicelli stated that it was not him to comment on the correct approach to carrying out an HIA ; Dr Broomfield, cross examination, Day 14, am session.

⁷ (**CD5.6**).

communities’)⁸ is central to the second element of NSC’s reason for refusal. NSC’s interpretation of this policy is that it imposes a positive and unqualified requirement to improve the health and well-being of the local population.⁹ As previously explained in this closing, this represents a misinterpretation of policy CS26, which is primarily concerned with the provision of health care services and encouraging a healthy way of life. If it were intended that policy CS26 impose such a demanding requirement on all development proposals to improve public health, it would undoubtedly have said so in terms. In any event, it is far from clear whether such a policy would be consistent with the NPPF.

339. As NSC Officers pointed out¹⁰, save for the requirement to submit an HIA, policy CS26 is of ‘limited relevance’ to the present appeal.

BAL’s assessment of population health impacts

340. In accordance with policy CS26 of the Core Strategy¹¹, BAL’s planning application was accompanied by an HIA which was contained in Chapter 16 of the ES¹². This was subsequently updated by section 9 of the ESA¹³.

Methodology

341. As explained by Mr Pyper, there is no overarching national guidance in England on the preparation of HIAs. The methodology adopted in the ES and ESA is informed by principles from specialist public health guidance, including the PHE guidance on HIA in spatial planning¹⁴ and the European Public Health Association (‘EUPHA’) and International Association for Impact Assessment (‘IAIA’) Reference Paper¹⁵. These sources present a robust consensus position on health in EIA.
342. Consistent with guidance¹⁶, the HIA takes a public health approach. This means that the conclusions on the likely significant effects of the proposed development are framed in terms of population health outcomes. This approach does not seek to deny or to downplay that there

⁸ (CD5.6), pdf page 104, para 3.320.

⁹ See the Proof of Evidence of Dr Broomfield (NSC/W3/1), para 69, Proof of Evidence of Mr Gurtler (NSC/W7/1), para 164, and NSC’s Statement of Case (CD21.2), para 73.

¹⁰ Officers’ Report (CD4.11), page 5.

¹¹ (CD5.6), pdf page 102.

¹² Main report (CD2.5.42) and Appendices 16A to 16B (CD2.5.43).

¹³ (CD2.20.1), pages 128 to 142.

¹⁴ (CD20.66).

¹⁵ (CD20.65).

¹⁶ (CD 20.67) PPG, pdf page 2. (CD 20.66) PHE, in particular pdf page 23 para 3.10 and Table 5. Also pdf page 34, para 7.1. (CD20.65), pdf page 42, para 7.2.17.

may be a small minority of people who may experience adverse health outcomes. However, the role of the conclusions on significance is to show where, at a population level, any harms or benefits should weigh strongly in the planning balance¹⁷. The guidance directs that for a health effect to be significant, a sizable proportion of the population must be affected, i.e. a large minority or the majority¹⁸. In terms of severity the guidance also indicates that significant effects relate to at least a moderate, rather than minor, change in morbidity, i.e. the rate of disease in the population¹⁹. As noted in Mr Pyper's evidence in chief and cross-examination²⁰ the application of these methods shows how the adverse environmental effects of the proposed development relate to small changes in risk factors, for a small minority of the population.

343. Methodologically when considering population health outcomes, even within the minority of the population who experience increased environmental exposures and who are potentially more sensitive to their effects, only a proportion would experience a change in risk factors; and of those, only a further sub-proportion may experience a change in health outcomes²¹. This small minority is further reduced by targeted mitigation, e.g. the enhanced noise insulation scheme. This point was made by Mr Pyper in his cross-examination²² with reference to the WHO Night Noise Guidance²³, which describes the effects on population health where a whole population is exposed to noise levels above 55 dB. The guidance indicates that above this level the occurrence of adverse effects within the population are more frequent and the risks of them doing so increase. But it is not the case that everyone in the population is subjected to a change in health outcomes. Nor is this Inquiry looking at a case of a whole population being subjected to such levels. The potential for a significant adverse population health effect is therefore put into perspective by the methods adopted in the HIA. The potential for significant adverse population health effects is very limited in the circumstances of a small change in risk factors for a small minority of the population.

344. As Mr Pyper explains, the population level approach allows for a robust understanding of the likely effects of development, avoiding the need to assess individual-specific risk factors and

¹⁷ Mr Pyper, Proof of Evidence (**BAL/W8/2**), pdf page 16, para 4.2.6.

¹⁸ (**CD20.65**), pdf page 85, row 'population extent' and pdf page 84, Figure C-2, population extent segment. (**CD 20.66**) PHE, pdf page 23 Table 5, statements about proportion of 'population affected'.

¹⁹ (**CD20.65**), pdf page 84, Figure C-2, severity segment. (**CD 20.66**) PHE, pdf page 23 Table 5, statements about 'severity'.

²⁰ Mr Pyper, examination in chief, Day 15 am session.

²¹ Mr Pyper, Proof of Evidence (**BAL/W8/2**), pdf page 37, para 5.2.9.

²² Mr Pyper, examination in chief, Day 15, pm session.

²³ (**CD 10.34**) WHO, page 17 executive summary, Table 3.

likely outcomes.²⁴ The latter approach would be problematic, not least because it would require the collection and the processing of confidential, individual level medical data. There are also accuracy challenges with taking an individual approach to assessment that are better met with a population health approach.²⁵ Moreover, adopting an individual health approach would mean that all health effects, positive and negative, were ‘significant’ in EIA terms for all projects.²⁶ Such a conclusion would be of no value to decision makers, undermining the purpose of assessment.

345. The HIA approach adopted by Mr Pyper is consistent with guidance in the EUPHA/IAIA Reference Paper, which states definitively that “*health in EIA takes a population health approach*”²⁷ and explains that effects to a few individuals are not population effects²⁸. This is also consistent with the PHE HIA guidance, which defines ‘significance’ in relation to population characteristics.²⁹
346. The ‘populations’ used for the assessment are the site-specific population near Bristol Airport, the local population of North Somerset Unitary Authority, the regional population of the South West of England and South East Wales and the national and international population of England and beyond the borders of England.³⁰ It is simply not right, therefore, to suggest that the HIA does not look at health effects below the local authority area level; it does specifically look at the site specific population near the airports as part of its overall assessment. Four further vulnerable population groups were also identified.³¹
347. The inputs to the assessment, which were agreed with NSC at the EIA scoping stage, included data from the traffic and transport chapter, the noise and vibration chapter and the air quality chapter of the ES.³² The effects included within the assessment are set out in ES Table 16.3.³³

²⁴ Mr Pyper, Proof of Evidence (**BAL/W8/2**), page 19, para 4.2.45.

²⁵ Mr Pyper, Proof of Evidence (**BAL/W8/2**), page 19, para 4.2.45.

²⁶ Mr Pyper, examination in chief, Day 15, am session.

²⁷ (**CD20.65**), pdf page 42, para 7.2.17.

²⁸ (**CD20.65**), pdf page 76 – 77, Table C-2.

²⁹ (**CD20.66**), page 23, para 3.10.

³⁰ ES (**CD2.5.42**), page 9, section 16.4, ‘Study area’.

³¹ ES (**CD2.5.42**), page 18, para 16.7.9 to 11.

³² ES (**CD2.5.42**), page 18, para 16.7.14.

³³ ES (**CD2.5.42**), page 19, Table 16.3.

348. The HIA links the assessment of each health issue to the relevant population groups, including beneficial and adverse effects to the local population³⁴. This includes showing the potential for health inequalities³⁵.
349. The approach to significance adopted in the ES and ESA is the product of the sensitivity of the receptor, magnitude of change between 10 mppa and 12 mppa³⁶ and professional judgment taking into account contextual evidence³⁷.

Results

350. The conclusions reached in the ES and ESA demonstrate that the proposed development would have an overall beneficial impact on population health, as accepted in the Officers' Report³⁸.
351. With regards to the impact of noise on population health (referred to in reason for refusal 2), the ES and ESA demonstrate that the significance of the effect would be 'negligible' for the general population and up to 'minor adverse' for vulnerable groups ('not significant' in EIA terms).³⁹
352. This conclusion reflects that there would be a small change in noise related risk factors for a small minority of the population. The inputs to the HIA take into account the mitigation measures proposed in order to avoid significant adverse effects from noise. Much of the remaining potential for adverse health effects, including to particularly vulnerable individuals, would be avoided by the enhanced noise insulation scheme. Being a voluntary scheme, and acknowledging subjective elements of how noise is experienced, there may be some residual, individual level, health effects. But this is true of almost any development scheme. The planning balance should, however, give weight to the HIA finding that there would not be significant population health effects from noise. There is existing consensus on this point with PHE and NSC Public Health Team⁴⁰.
353. Similarly, the air quality impact of the proposed development on population health is assessed to be 'negligible' for the general population and up to 'minor adverse' for vulnerable groups ('not significant' in EIA terms).⁴¹ This conclusion reflects the UK Government's view that

³⁴ ES (CD2.5.42), e.g. page 40, par 16.11.14

³⁵ ES (CD2.5.42), page 27, para 16.9.25.

³⁶ ES (CD2.5.42), page 27, Table 16.9.

³⁷ ES (CD2.5.42), page 25, para 16.9.15.

³⁸ (CD4.11).

³⁹ ES (CD2.5.42), page 39 ff., para 16.11.22.

⁴⁰ Officers' Report (CD4.11), page 130, final para and page 132, first para.

⁴¹ ES (CD2.5.42), page 37 ff., para 16.11.11.

compliance with AQOs and AQSs demonstrates an acceptable level of health protection, and that these air quality protection measures are produced in the knowledge that particular groups within a population will have particular health vulnerabilities⁴².

354. The expansion of the airport will, however, deliver important socio-economic benefits, in particular, the provision of good quality employment opportunities both directly at the airport, and indirectly through wider economic investment within the region enabled by the proposed development (the scale of which is agreed and set out above). Such opportunities have the potential to deliver long-term health benefits through reducing levels of poverty and inequality, as well as through additional household resources. Good quality employment is strongly associated with health, not only for those employed but also their dependants, including those who are young, old or in poor health⁴³. The ES and ESA assessment concludes that the significance of this effect would be up to 'minor beneficial' for the general population and up to 'moderate beneficial' ('significant' in EIA terms) for vulnerable groups.⁴⁴
355. These inputs to the HIA were updated in the ESA in line with the outputs from the other ESA chapters, but the conclusions remained unchanged.⁴⁵
356. The ESA demonstrates that the precise timing of growth in passenger demand does not have a material effect on the population health impacts of the proposed development.⁴⁶

The position of NSC's Officers

357. The Officers' Report⁴⁷ considered the findings of the HIA and in so doing, consulted PHE in addition to the Council's Public Health Team.⁴⁸ PHE considered that the HIA was carried out in accordance with good practice and the methodology and scope was considered proportionate.⁴⁹
358. NSC Officers accepted the assessment set out in the ES and concluded that:⁵⁰
- a. The HIA was "*realistic*";

⁴² Mr Pyper, Proof of Evidence, page 28, para 4.3.40 to 4.3.41.

⁴³ ES (CD2.5.42), page 44, para 16.11.36.

⁴⁴ ES (CD2.5.42), page 44 ff., para 16.11.43.

⁴⁵ (CD2.20.1), page 133, para 9.5.15 ff (noise), page 132, para 9.5.8 ff. (air quality) and page 136, para 9.5.33 ff.

⁴⁶ Mr Pyper, Proof of Evidence, para 4.4.8 to 4.4.12.

⁴⁷ (CD4.11)

⁴⁸ Officers' Report (CD4.11), p.130.

⁴⁹ Officers' Report (CD4.11), p.130.

⁵⁰ Officers' Report (CD4.11), p.135.

- b. There were no additional population health impacts that needed to be mitigated;
- c. The proposed development is likely to have a long-term beneficial effect on population health; and
- d. There were “*no overriding health or well-being impacts which would warrant refusal of the application*” as long as the planning conditions and obligations that had been agreed with BAL were imposed.

359. As between Officers, NSC’s Public Health Team and PHE, it was (and remains) clear that there is a “*public health consensus*”⁵¹ in relation to the health impacts of the proposed development.

Remaining Points of Dispute

360. There are three remaining points of dispute raised by NSC in its noise and air quality evidence, which are as follows:

- a. The impact of the air noise effects of the proposed development on the cardiovascular health outcomes of the local population;
- b. The impact of non-threshold effects from air pollutants; and
- c. The assessment of interrelated and/or in combination health effects.

361. These issues are discussed in turn.

Cardiovascular impacts

362. In his Proof of Evidence Mr Fiumicelli refers to the “*growing body of evidence*” that aviation noise has cardiovascular impacts.⁵² He concludes that as a result of the noise impacts of the proposed development, there is a “*risk of direct health effects*”.⁵³ BAL’s response to this point is set out in detail in Mr Pyper’s Rebuttal⁵⁴ and was explained further in his examination in chief.⁵⁵ In summary:

⁵¹ Mr Pyper, examination in chief, Day 15, am session.

⁵² Mr Flumicelli, Proof of Evidence (**NSC/W2/1**), page 47, para 4.45.

⁵³ Mr Flumicelli, Proof of Evidence (**NSC/W2/1**), page 48, para 4.48.

⁵⁴ Mr Pyper, Rebuttal (**BAL/W8/3**), pdf page 7, para 2.1.8 to 2.1.30.

⁵⁵ Mr Pyper, examination in chief, Day 15, am session.

- a. The WHO's analysis⁵⁶ of the evidence on the relationship between noise impacts and cardiovascular effects uses ischemic heart disease as a suitable indicator. The analysis shows that the relative risk ('RR') from exposure to an increase in absolute aircraft noise levels of 10dB is 1.09. A 1.00 RR is no change in likelihood of a health outcome and a RR of 2.0 would indicate twice the likelihood of a health outcome occurring. The 1.09 RR is therefore a small increase in the chances of the health outcome occurring from a very large increase in noise (10dB). Even this conclusion is based on evidence that is considered by the WHO to be "*very low quality*". The greatest increase in noise level that will be experienced as a result of the proposed development is far below 10dB (a maximum of only 2dB), indicating that the increase in RR would be significantly smaller. As noted above, it is also not the case that the whole population would be exposed to these changes in noise levels, which further reduces the potential for significant population health effects. On the alternative cardiovascular indicator of incidence of hypertension (high blood pressure) the WHO analysis found a RR of 1.00 per 10 dB increase, i.e. no change in increased risk.
- b. Such small scale effects are consistent with the recent SoNA Sleep Report⁵⁷ raised by NSC during Mr Pyper's cross examination⁵⁸. The report found that whilst night-time aviation noise is correlated with sleep disturbance and this correlates with mental wellbeing; there is neither a significant relationship between sleep disturbance and self-reported health, nor between self-reported health and the aircraft night noise exposure level.⁵⁹
- c. The specific cardiovascular impacts of the proposed development were not included within the agreed scope of the HIA;
- d. Indeed, Officers considered that the scope and methodology used in the HIA were appropriate and proportionate;⁶⁰ and

⁵⁶ WHO Environmental Noise Guidelines for the European Region (**CD10.28**), pdf page 84, Table 29, cardiovascular disease section.

⁵⁷ (**INQ/22**).

⁵⁸ Mr Pyper, examination in chief, Day 15, pm session.

⁵⁹ **INQ/22**, page 33, para 6.1 to 6.9.

⁶⁰ (**CD4.11**), page 135.

- e. In any event, the HIA identifies cardiovascular events as a relevant health outcome from noise impacts and provides a qualitative analysis of these impacts.⁶¹ This assessment demonstrates that the impact is unlikely to be discernible in population health terms.⁶²
363. Furthermore, Mr Fiumicelli's claim that the development would "[i]ncrease the number of people experiencing significant adverse impacts on health"⁶³ demonstrates a misunderstanding of the relationship between risk and population health outcomes. As explained by Mr Pyper, a small increase in risk for a very small proportion of the population means that an even smaller number of people will actually experience an adverse health outcome.⁶⁴ The change in aviation noise is neither a necessary nor sufficient cause of adverse health outcomes, it represents a small risk factor change. Indeed, a change in a particular risk factor is just one among very many risk factors for any particular outcome. For example, just because there is a small proportion of the population that is statistically likely to be highly sleep disturbed as a result of a development does not mean that they will suffer an adverse health impact, the probability of any particular adverse health outcome remains small. It should be noted that the recent SoNA Sleep Report⁶⁵ did not find a correlation between sleep disturbance from aviation noise and self-reported health. The mitigating effect of the enhanced noise insulating scheme also needs to be considered, as does the scale of the actual changes proposed, i.e. an additional three arrivals and four departures per night with no change in the noisiest aircraft.⁶⁶ The context of an existing operating airport is also relevant to people's response and potential for habituation.⁶⁷
364. Taking account of the contextual evidence and the range of quantitative measures provided by the ES noise chapter it is clear that a significant adverse population health effect would not be expected from the proposed development.

Non-threshold air quality effects

⁶¹ ES (CD2.5.42), page 55, 'Operation – noise' row.

⁶² ES (CD2.5.42), page 42, para 16.11.22.

⁶³ Mr Fiumicelli, Proof of Evidence (NSC/W2/1), pages 147 to 148, paras 10.3 to 10.4.

⁶⁴ Mr Pyper, examination in chief, Day 15 am session. Mr Pyper, Rebuttal (BAL/W8/3), pdf page 10, para 2.1.31 to 2.1.56.

⁶⁵ (INQ/22).

⁶⁶ Mr Pyper, Rebuttal (BAL/W8/3), pdf page 12, para 2.1.42

⁶⁷ Mr Pyper, Proof of Evidence (BAL/W8/2), pdf page 38, para 5.2.19.

365. In his Proof of Evidence Dr Broomfield argues that levels of air pollutants below the limit values can have adverse health impacts that must be taken into account.⁶⁸ The response to this is twofold.
366. First, as explained by Mr Peirce, the methodology adopted in the air quality assessment did not simply examine whether or not the limit values were exceeded. The assessment proceeded to assess whether or not the effect was significant, despite there being no exceedances of the limit values. It is worth bearing in mind, however, that the AQOs do provide a standard of acceptability by which to benchmark the acceptability of impacts in health protection terms. Indeed, these standards are selected by the UK Government for this purpose.⁶⁹
367. Secondly, the HIA very clearly considers the potential for non-threshold effects in reaching its conclusions on population health. The HIA expressly acknowledges that effects “*may not be limited to the area defined in relation to certain thresholds (e.g. air quality)*”.⁷⁰
368. In his Rebuttal, Mr Pyper identifies the multiple references within the ES and ESA to the potential [health] impacts of air pollutants within the limit values. The ES and ESA very clearly consider the non-threshold of effects of air pollutants.⁷¹
369. This is the context within which it is necessary to view the recent WHO Guidelines on global air quality.⁷² As Mr Peirce makes clear in his note of the WHO Guidelines⁷³:

“The HIA methodology also takes account of local health priorities, baseline conditions, regulatory standards, health policy context and consultation responses. Even with the new WHO position providing scientific evidence for lower levels at which adverse health effects occur from certain air quality pollutants, this does not change the HIA assessment. The HIA has already taken non-threshold effects into account. By definition this is all the way down to zero, i.e. no lower threshold. This is lower than the new WHO guidelines. The HIA also placed such small changes in risk factors into the context of other evidence sources and the UK regulatory regime. Having consulted with Mr Pyper on the issue of the new WHO guidelines, he confirms that the HIA conclusions are not changed by the new WHO guideline values.”

⁶⁸ Dr Broomfield, Proof of Evidence (**NSC/W3/1**), page 25, para 70. This is also set out in NSC’s Statement of Case (**CD21.2**), page 22, para 74.

⁶⁹ Mr Pyper, Proof of Evidence (**BAL/W8/2**), page 38, para 5.2.34.

⁷⁰ ES (**CD2.5.42**), page 9, para 16.4.3.

⁷¹ Mr Pyper, Rebuttal (**BAL/W8/3**), pdf page 16, para 2.2.1 to 2.2.10.

⁷² (**INQ/085**).

⁷³ (**INQ/097**), para 6.1.4.

370. It is important to understand, therefore, that the method adopted in the HIA that already looks at non-threshold effects down to zero, is not changed by the new WHO Guidelines.

Interrelated and in combination effects

371. The second point of dispute arising from NSC's air quality evidence relates to the assessment of interrelated and in combination effects. Dr Broomfield accepts and acknowledges that the ES and ESA does carry out an assessment of cumulative and in-combination effects on health.⁷⁴ However he argues that there remains the "*potential*" for inter-related effects, as the ES and ESA do not take into account (i) the policy requirement to "*improve*" air quality, and (ii) the potential for non-threshold effects.
372. This argument stands or falls with Dr Broomfield's interpretation of the policy context as it applies to air quality, and his concerns about non-threshold effects (both of which are discussed above). The ES and ESA contained a chapter dedicated to the assessment of cumulative effects, as required by the 2017 EIA Regs⁷⁵. The conclusion reached in the ESA was that there were no significant cumulative impacts.⁷⁶

Key Conclusions

373. The inputs to the assessment of the proposed development on health, namely, noise, air quality and socio-economic benefits, are robust. The approach adopted in the ES and ESA for determining the significance of health impacts is in line with national and international guidance on good practice and consistent with the scope agreed with NSC.
374. Standing back, there is simply no evidential basis on which to argue that the proposed development will have a "*significant adverse impact*" on public health at a population level. This is a conclusion with which NSC Officers, PHE, NSC's Public Health Team and now Mr Pyper all agree. Indeed, the assessment indicates that the proposed development would have a beneficial impact on public health through the provision of real socio-economic benefits such as good quality employment.

⁷⁴ Dr Broomfield, Proof of Evidence (NSC/W3/1), page 29, para 97.

⁷⁵ (CD5.5) Schedule 4, para 5.

⁷⁶ ESA (CD2.20.1), pdf page 189, para 11.3.2.

TRANSPORT

Introduction

375. The impact of the proposed development in terms of highways, transport and car parking is relevant to reasons for refusal 1, 4 and 5.
376. Reason for refusal 1 relates to *inter alia* the generation of additional traffic and off-airport car parking and the impact on “*an inadequate surface access infrastructure*”. Reason for refusal 4 relates to the proposed extension to the Silver Zone car park and the year round use of the seasonal car park. Whilst this reason for refusal relates primarily to the application of Green Belt policy, the assessment of car parking demand informs this analysis. Reason for refusal 5 relates to the claimed insufficiency in the proposed public transport provision and the extent to which it will reduce reliance on access to the airport by car.
377. There are four preliminary points to make about the scope of these reasons for refusal, as follows:
- a. Nowhere is there any objection to the proposed development based on the lack of a travel plan and nor is the development plan policy that relates to travel plans referred to in the reasons for refusal¹;
 - b. They do not contain any allegation of gaps or issues with the highways modelling;
 - c. Nor do they contain any criticism of the design of the A38 mitigation works;
 - d. In fact, the reasons for refusal disclose no technical highways objections at all.
378. This is important, as the scope of NSC’s evidence during the course of the Inquiry has substantially departed from the scope and wording of the original reasons for refusal, raising matters that simply did not form part of the Committee’s objections to the proposal.
379. The Inspectors identified the effects of the proposed development upon sustainable transport objectives, the highway network, highway safety and parking provision as CMC1, issue (c).

Scope of dispute at the close of evidence

¹ Policy DM26, DMP (CD5.4), pdf page 68. This is acknowledged by NSC; Mr Colles, cross-examination, Day 17 pm session.

380. Somewhat unusually, by the close of the evidence the scope of the dispute between BAL and NSC is greater than it first appeared from the reasons for refusal. Mr Colles's Proof of Evidence makes six 'technical' concerns about the A38 improvement works, in addition to a number of complaints about the provision of information relating to the design. This is surprising given that the design of these works was produced in collaboration with NSC itself and agreed with officers before the determination of BAL's application. In respect of the methodology and results of the highways modelling, My Colles's Proof of Evidence identifies [six] main issues. By the close of the evidence four of these remain.
381. With regards to car parking, very little is agreed; NSC disputes both the methodology and the results of the Parking Demand Study Update.

Policy context

Aviation Policy

382. National aviation policy does not deal in detail with matters relating to highways and surface access. However, there is a consistent theme across all aviation policy documents that supports the transition to low carbon modes of surface access transport², the aim and importance of encouraging public transport mode share in order to minimise congestion and other impacts³. Aviation 2050 supports the development of airports as regional transport hubs,⁴ highlighting the importance of good surface access links⁵ and the requirement to develop innovative solutions and incentives against ambitious targets⁶.

National Policy

383. The NPPF (2021) is a material consideration for the purpose of the determination of this appeal. The relevant paragraphs from the NPPF are as follows:
- a. Paragraph 105 encourages the focussing of significant development on locations which are or can be made sustainable, through offering a genuine mode of transport choices. However, as recognised by the NPPF, it should be taken into account that opportunities to maximise sustainable transport solutions vary between urban and rural areas;

² APF (CD6.1), page 37, para 1.96.

³ APF (CD6.1), page 75, para 5.11. Aviation 2050 (CD6.5), page 74, para 3.99.

⁴ (CD6.5), page 96, para 4.32.

⁵ (CD6.5), page 66, para 3.67.

⁶ (CD6.5), page 75, para 3.101.

- b. Paragraph 111 makes clear that development should only be refused on highway grounds if there would be an *“unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”* Indeed, it is agreed that this is the test to be applied when considering the future performance of junctions with the proposed development;⁷
- c. Paragraphs 110 and 112 seek to ensure that applications for development take opportunities to increase sustainable transport modes.
- d. Paragraph 113 requires development proposals that generate significant additional traffic to include a transport assessment and a sustainable travel plan to reduce vehicle trips.

Regional and Local Policy

384. The West of England Joint Local Transport Plan 4 (‘JLTP’)⁸ was adopted in March 2020 and sets out the strategy for improving connectivity in the West of England. For trips beyond the region, the focus is primarily on *“supporting the role of the ... airport”*.⁹ Policy B1 seeks to *“enhance competitiveness of major gateways and improving connectivity to international markets”* by means of working with Bristol Airport to maximise the airport’s transport connectivity as a local, sub-regional and regional transport interchange.¹⁰ In particular, the JLTP sets out the objective of working to *“increase public transport in the short term with improvements to bus and coach services serving the airport, and in the long term through a high-frequency mass transit corridor.”* The mass transit corridor is identified as a long term and high cost *“Transformational Major Scheme”*.¹¹
385. The JLTP includes a number of other potential early investment schemes. This includes A38 improvements between the A368 and Bristol Airport, and improvements to the Downside Road junction. The latter is proposed to be delivered by BAL as part of the proposed development.
386. The following policies of the NSC Core Strategy¹² and DMP¹³ are relevant to CMC1 issue (c):

⁷ Mr Colles, cross examination Day 17 pm session.

⁸ (CD7.5).

⁹ (CD7.5), page 34.

¹⁰ Pages 37 – 38.

¹¹ (CD7.5), page 38, section 6, second para.

¹² (CD5.6).

¹³ (CD5.4).

- a. Policy CS1 of the Core Strategy sets out principles applicable to addressing climate change and carbon reduction. It provides that opportunities for walking, cycling and the use of public transport should be maximised through new development, emphasising the aim to encourage and facilitate modal shift towards more sustainable transport modes in existing areas;
- b. Policy CS10 of the Core Strategy relates to transportation and movement. It provides support for development proposals that encourage an improved and integrated transport network, and allow for a wide choice of modes of transport;
- c. Policy CS11 of the Core Strategy relates to car parking. Insofar as it is relevant to the proposed development, it requires that adequate parking is provided and managed to meet the needs of anticipated users;
- d. Policy CS23 of the Core Strategy relates to the airport specifically. It provides that *“proposals for the development of Bristol Airport will be required to demonstrate the satisfactory resolution of environmental issues, including the impact of growth on surrounding communities and surface access infrastructure”*;
- e. Policy DM24 of the DMP provides that development will not be permitted if it would prejudice highway safety. Development giving rise to a significant number of travel movements will only be permitted if it is (i) not likely to have a severe residual cumulative impact on traffic or (ii) generate traffic that cannot be accommodated without demonstrable harm to the character and function of the surrounding area, and (iii) is accessible by non-car modes that can readily be integrated with public transport where appropriate. Development which gives rise to a significant detrimental impact on travel patterns or exacerbates existing transport problems will only be permitted where acceptable counter measures or mitigation is possible. Where a development is otherwise acceptable, planning permission may be granted subject to legal agreements to fund necessary improvements;
- f. Policy DM50 of the DMP relates to Bristol Airport. It provides that development in the Green Belt inset will be permitted provided that, *inter alia*, appropriate provision is made for surface access to the airport.

Wider context

387. Bristol Airport is located in a generally rural area 11km south west of Bristol. It has close links to Bristol and Bath, as well as some larger towns such as Weston-super-Mare, and smaller towns and villages across North Somerset and Bath and North East Somerset ('B&NES').
388. Historically, access to the airport has been heavily car dependent. The primary access to the airport is by the A38, which runs north to Bristol and south west to Weston-super-Mare. As part of the 2011 Permission, an ambitious passenger public transport mode share target of 15% was agreed and supported by substantial enhancements. Despite not having yet reached 10 mppa, BAL has made significant progress towards delivering public transport enhancements¹⁴ and achieving an enhanced public transport mode share. The CAA 'last mode' share data shows consistent improvements in public transport mode share since 1985, reaching circa 22% in 2019. It is agreed that as a matter of fact, BAL has been, and is continuing to, take steps to reduce and minimise pick up and drop off, and encourage a shift to public transport mode share.¹⁵
389. The A38 corridor is the subject of a current Major Road Network ('MRN') funding bid to the DfT to deliver improvements along the A38 for all road users. This major scheme is a joint venture between North Somerset Council and Somerset County Council with the majority of funding coming from the DfT.
390. The MRN scheme includes proposed improvement works at a number of locations along the A38 corridor between the South Bristol Link Road (Colliters Way) in North Somerset and Edithmead Roundabout at Junction 22 of the M5 motorway in Somerset. Notably, the improvements include a scheme at West Lane to the Airport Terminal Roundabout, which involves the widening of the A38 to two lanes in each direction and the provision of new facilities for pedestrians and cyclists. Mr Colles agreed that the MRN scheme design is "*almost identical*" to that proposed by BAL as part of the proposed development, and that NSC agree that that scheme can be worked up at the detailed stage into an acceptable design.¹⁶

Pre-application discussions

¹⁴ Proof of Evidence of Mr Witchalls, para 4.3.1 to 4.3.2 (**BAL/4/2**).

¹⁵ Mr Colles, cross-examination, Day 17 pm session.

¹⁶ See the Outline Business Case at (**INQ/048**) and the scheme drawing at (**INQ/049**). See also Mr Colles, cross-examination, Day 17 pm session.

391. When considering reasons for refusal 1, 4 and 5, insofar as they relate to transport, it is important to bear in mind the extent to which relevant matters were subject to discussion, scrutiny and agreement with NSC officers prior to the determination of BAL's application.
392. From early EIA and TA scoping discussions in June 2018, BAL worked closely with NSC and its transport consultants to develop the methodology and approach to be adopted in the Transport Assessment ('TA')¹⁷. In September 2018 the TA Scoping Report¹⁸ was submitted by BAL and a meeting was held at which this was discussed. Agreement in respect of the scope of the TA was reached with NSC and Highways England.¹⁹ This included agreement on the study area, the parameters of the assessment, the assessment approach and the basis for the TA forecasts, in respect of which it was agreed that the core case would be used with an assumed public transport mode share of 15%.²⁰ Final meetings before submission were held in November 2018.²¹
393. Even after the submission of the application in December 2018, BAL and its consultants continued to meet with NSC and Highways England between January 2019 and July 2019. In January 2019, BAL provided post-submission sensitivity testing of the results in the TA. Neither NSC nor its consultants, Jacobs, raised any issue with either the methodology or the results. Later that year, in May 2019 BAL's transport consultants produced a TA Supplementary Document²² in order to capture all changes agreed with NSC, South Gloucestershire, B&NES and Highways England. Two further notes were produced by BAL in order to address further queries raised by NSC with regard to some of the junction modelling which were fully resolved.
394. The same methodology as that agreed with NSC officers, Jacobs and Highways England was used for the TAA.²³

BAL's transport assessment

Methodology

¹⁷ (CD2.9.1).

¹⁸ (CD4.8.1 to CD4.8.7).

¹⁹ Mr Witchalls, Proof of Evidence (BAL/W4/2), para 5.1.5. See ES Chapter 6 – Transport (CD2.5.8), page 17, section 6.5, especially para 6.5.2.

²⁰ Mr Witchalls, Proof of Evidence (BAL/W4/2), paras 5.1.1 to 5.1.2.

²¹ Mr Witchalls, Proof of Evidence (BAL/W4/2), para 5.1.4.

²² (CD3.6.13).

²³ (CD2.20.1), page 25, para 5.1.6.

395. The methodology adopted in the TA and TAA is discussed in detail in the Proof of Evidence of Mr Witchalls.²⁴
396. To inform the baseline transport conditions, the TA uses 2017 as the baseline year for passenger throughput at the airport. The following sources of data informed the 2017 baseline: 24-hour classified turning counts carried out in July 2018, collision data for the most recent five year period for areas within NSC and Bristol City Council's local authority areas, data from the 2017 Employee Travel Survey, 2015 CAA survey data and 2017 published data and Bristol Airport's 2017 ticket, commercial and other published data.
397. The assessment focussed on the transport implications of the increase in throughput at the airport from the consented level of 10 mppa to 12 mppa. The passenger trips reflecting these increases were calculated using a peak-week flight schedule in August, which provides the number of seats available by hour. The distribution of passengers was informed by the most recent CAA survey data from 2015, which provides information on surface origin and destination information. The daily profile was adjusted using 'dwell-time' information. The mode share information was applied to the passenger numbers in order to determine the number of journeys across the study area by each mode per hour. This was then adjusted to match the target passenger public transport mode share of 15%, which it was agreed would be used as the basis of the assessment. Employee trips were calculated using a peak estimation of FTEs on site for a typical day in August. Bristol Airport business partners provided shift pattern information and start and finish times, which was used to quantify the proportion of FTEs that would travel to the airport on any given day based on a target of 25% non-single occupant car trips, and create a daily profile. Vehicle trip profiles for an average day were generated using logistics information from the Airport and its business partners.
398. At the time of the TA, the forecast year for reaching 12 mppa was 2026. Growth rates were applied to the recorded traffic volumes using TEMPro.
399. In line with the updated forecasts, in November 2020 the TAA was prepared. The TAA adopted the same methodology as in the TA, but was informed by updated information to reflect 2018 passenger levels, updated 2019 CAA mode share data and TEMPro growth rates. A qualitative assessment of the faster and slower passenger growth cases was carried out, in order to reflect the potential for different rates of growth.

²⁴ (BAL/W4/2), sections 5.1, 5.2 and 5.3.

400. As explained by Mr Witchalls²⁵, the methodology adopted a ‘worst case’ approach²⁶ in terms of highways and traffic impact assessment in the following ways:

- a. A passenger mode share of 17.5% was assumed, which is lower than the share of 21.8% shown in the 2019 CAA mode share data;
- b. A staff mode share target for non-single occupant car trips of 25% was used, instead of the 30% target that BAL has adopted for staff;
- c. The TEMPro growth rates were applied to all traffic, including existing airport traffic, as well as including the additional airport traffic generated by the growth in passengers from 8.9mppa to 12mppa. This means that there is an element of double counting;
- d. The TEMPro growth rates were not adjusted for the impact of COVID, which one would expect to delay the growth of background traffic;
- e. The TAA uses busy day passenger flows from the peak month of August, but applied these to the July background traffic flows (which are higher than August);
- f. The annual average passenger car occupancy has been applied to the August passenger forecasts (when typically, car occupancy is higher because of the number of holiday groups);
- g. Taxis are assumed to return from the Airport empty, when the reality will be that some will have passengers on both legs of the journey;
- h. For priority junctions, the ARCADY / PICADY model outputs for the peak half hour within the peak hours assessed for the peak month have been used; and
- i. The TAA assumes that a large proportion of airport traffic continues to use Junction 1, when in reality much more would use Junction 2 to access the Silverzone car parks.

401. As a result, the flows, queues and delays modelled do not indicate what would happen in reality but a worst case representation of the impacts in the busiest peak hourly periods at the busiest time of the year.

Results

²⁵ Mr Witchalls, evidence in chief, Day 20 am session.

²⁶ ESA, Appendix 5A (**CD2.20.3**), page 13 – 15 and 46.

402. The vehicular increases at each junction under the Core Case during the AM (08:00 to 09:00) and PM peak (17:00-18:00) and the airport afternoon peak ('AP') (13:00 – 14:00) periods is set out in Table 5.2 of Mr Witchalls Proof of Evidence.²⁷ In summary, the percentage increases are as follows:

- a. Junction 1 (A38 / Bristol Airport Northern Roundabout) - AM: 5.0%, AP: 11.4%, PM: 13.2%.
- b. Junction 2 (A38 / Bristol Airport Southern Roundabout) - AM: 1.1%, AP: 4.2%, PM: 4.2%.
- c. Junction 3 (Downside Road / Bristol Airport Service Access) - AM: 1.5%, AP: 2.9%, PM: 5.4%.
- d. Junction 4a (A38 / Downside Road) – AM: 3.6%, AP: 9.0%, PM: 10.1%.
- e. Junction 4b (A38 / West Lane) – AM: 3.5%, AP: 9.3%, PM: 10.1%.
- f. Junction 5 (A38 / Barrow Lane) – AM: 2.7%, AP: 8.5%, PM: 8.8%.
- g. Junction 6 (A38 / Barrow Street) – AM: 2.5%, AP: 8.2%, PM: 8.4%.
- h. Junction 7 (A38 / A4174 South Bristol Link Road) – AM: 1.8%, AP: 6.3%, PM: 6.4%.
- i. Junction 8 (A370 / A4174 South Bristol Link Road) – AM: 1.1%, AP: 4.7%, PM: 4.7%.
- j. Junction 9 A370 / Brockley Combe Road / Brockley Lane) - AM: 0.7%, AP: 1.1%, PM: 1.9%.
- k. Junction 10 (A370 / Dark Lane / Station Road) - AM: 0.2%, AP: 0.3%, PM: 0.5%.
- l. Junction 11 (A370 / Smallway)- AM: 0.4%, AP: 0.6%, PM: 1.2%.
- m. Junction 12 (A370 / High Street) - AM: 0.4%, AP: 0.6%, PM: 1.0%.
- n. Junction 13 (A38 / A368) – AM: 0.8%, AP: 3.8%, PM: 3.4%.

403. The predicted impacts at Junctions 1 to 7 were considered potentially material, as the increase in traffic flows was predicted to be over 5%. Detailed junction modelling was undertaken on these junctions, in addition to Junction 13 as had been previously requested by NSC. The modelling showed that Junction 2, Junction 3, Junction 6 and Junction 7 would operate within

²⁷ (BAL/W4/2), page 38, Table 5.2.

capacity at 10 mppa and 12 mppa at 2030 without the need for mitigation. With regards to Junctions 1, 4, 5 and 13, the results of the detailed modelling are as follows:

- a. Junction 1 would operate at capacity in the PM peak and within capacity at the AM peak and airport peak,²⁸ even on the basis of the worst case assumptions adopted in the TAA. These results do not take account of the proposals to widen the A38 northern exit from the northern roundabout to create two lanes which would provide a further capacity improvement.²⁹
- b. Junction 4 would operate over capacity, but it would do so in the 2030 baseline, 10 mppa at 2030 and 12 mppa at 2030. In order to mitigate the impact of the proposed development, capacity and highway improvement works are proposed to widen the A38 and Downside Road and the addition of traffic signals to the West Lane Junction. These works will ensure that the junctions operate within capacity at 2030 with a substantial reduction in queues and delays compared with the 'no development' case;³⁰
- c. Junction 5 shows queuing on the side road (Barrow Lane), but the A38 through route would operate well within capacity. The airport traffic makes no addition to the traffic on Barrow Lane, since it does not use this route.³¹ Any improvements on the side roads would be likely to adversely affect strategic traffic on the A38 route and lead to rat-running;³²
- d. Junction 13 would only be marginally affected in 2030 with delays and queues predicted to be relatively insignificant.³³ This view was supported by NSC officers.³⁴ The results show that this junction would operate at or just over capacity in the AM and PM peak hour periods for all scenarios tested.

404. Overall, the TAA demonstrated that the proposed development would not have a significant adverse impact on the operation of the wider local or strategy highway network. This is so even on the basis of the 'worst case' approach adopted. Indeed, the A38 improvement scheme would deliver a significant overall improvement to the operation of the strategic network.

²⁸ Mr Witchalls, Proof of Evidence (**BAL/W4/2**), page 41, para 5.6.14.

²⁹ Mr Witchalls, Proof of Evidence (**BAL/W4/2**), page 41, para 5.6.14.

³⁰ Mr Witchalls, Proof of Evidence (**BAL/W4/2**), page 42, para 5.6.21.

³¹ Mr Witchalls, Proof of Evidence (**BAL/W4/2**), page 46, para 5.6.30.

³² Mr Witchalls, Proof of Evidence (**BAL/W4/2**), page 46, para 5.6.30.

³³ Mr Witchalls, Proof of Evidence (**BAL/W4/2**), page 46, para 5.6.46.

³⁴ Officers' Report (**CD4.11**).

Proposed A38 works

405. As noted above, the proposed development includes works on the A38 to improve capacity and facilities for pedestrians and cyclists at the A38 / West Lane and Downside Road junction.
406. The improvement works involves widening the A38 carriageway for approximately 520 metres running north from the main airport roundabout access to a point about 130 metres north of the West Lane junction. The scheme has five main elements; (i) widening the A38 from one to two lanes between these two points, (ii) widening of Downside Road to two lanes approaching the junction with West Lane, (iii) signalling the West Lane junction, (iv) providing a new pedestrian / cycle path between the Airport Roundabout and Downside Road, and (v) providing new pedestrian and cycle crossing facilities at the signalled junctions.
407. The scheme design went through a rigorous audit process with NSC officers and their consultants, culminating in officers agreeing the current design in writing on 13 May 2019.³⁵ Mr Colles has since identified a range of issues with the design which he considers renders it substandard and undeliverable. These points are addressed in detail below.

BAL's assessment of appropriate public transport mode share

408. Prior to, and following, the submission of the planning application, BAL worked with officers to develop an ambitious but achievable public transport mode share target, based on historical data, operational experience and an analysis of potential improvements.³⁶ CAA survey data, which is typically used as the benchmark for understanding mode share at airports, is typically updated every four years at Bristol. As such, BAL used historical summary bus ticket data held by the airport in order to ascertain the 2017 mode share figure. BAL agreed with officers a "stretch target" of a 2.5% increase over a five year period.
409. The target adopted was supported by analysis of the historical change in mode share, the effects of potential public transport improvements and a comparison with other regional airports.³⁷ The analysis of potential measures was informed by historical knowledge of the success of implemented services, combined with data about passenger catchment areas.³⁸ Further analysis, which considered the impact of bus, metrobus and rail improvements, is set out in

³⁵ Email from Frankie Mann (NSC) to Liz Higgins (BAL), Mr Witchalls, Proof of Evidence (**BAL/W4/2**), Apx C.

³⁶ Mr Witchalls, Proof of Evidence (**BAL/W4/2**), page 53, section 6.1.1-6.1.4.

³⁷ Mr Witchalls, Proof of Evidence (**BAL/W4/2**), pages 55 to 56, para 6.3.2.

³⁸ Mr Witchalls, Proof of Evidence (**BAL/W4/2**), page 57, para 6.5.2.

detail in the Proof of Evidence of Mr Witchalls.³⁹ The conclusions reached show that bus frequency improvements could deliver a 1.97% increase in public transport mode share from the total airport passengers, the introduction of the demand responsive transport could deliver 0.02%, and rail improvements could increase the mode share by 0.3%.⁴⁰ A similar analysis was carried out in respect of staff travel, which demonstrated that a 30% non-single occupancy vehicle target was achievable on the basis of the measures proposed in the ASAS and Workplace Travel Plan.⁴¹

410. On the basis of the 2019 CAA main mode share data, Bristol Airport has a better public transport mode share than Cardiff, Birmingham and Manchester Airports.⁴² This is notwithstanding that Birmingham benefits from a free 'Air-Rail Link' system that takes two minutes to get to the airport terminal, and Manchester has a railway and Metrolink tram station.⁴³
411. Following the submission of the application, the 2019 CAA data was published, indicating that the mode share at Bristol Airport was higher than the summary bus ticket data had indicated.⁴⁴ The CAA data showed a public transport mode share of 21.8% in 2019, indicating that the measures taken by Bristol Airport to improve the public transport provision had been more successful than indicated by the bus ticket data alone. Under the stretch target approach, the public transport mode share target of 2.5% would be in addition to the re-baselined 10mppa public transport mode share. BAL has agreed with Officers that monitoring of the public transport mode share will be consistent with the CAA method of measurement.

BAL's assessment of car parking

Methodology

412. The Parking Demand Study ('PDS') was prepared by Teneo in order to identify the level of car parking required up to 12 mppa and explore potential options for meeting that demand.
413. The methodology adopted in the PDS calculated a monthly forecast demand, which takes into account a range of factors that would impact future demand such as the proportion of foreign passengers, group size, sub-regional transport options, changes to the UK catchment and other

³⁹ Mr Witchalls, Proof of Evidence (BAL/W4/2), page 58, Tables 6.4-6.7.

⁴⁰ Mr Witchalls, Proof of Evidence (BAL/W4/2), page 63, Table 6.6.

⁴¹ Mr Witchalls, Proof of Evidence (BAL/W4/2), page 68, Table 6.9.

⁴² Mr Witchalls, Proof of Evidence (BAL/W4/2), page 56, Table 6.3.

⁴³ Mr Witchalls, Proof of Evidence (BAL/W4/2), page 56, para 6.4.4.

⁴⁴ Mr Witchalls, Proof of Evidence (BAL/W4/2), page 54, Table 6.1.

demographic changes.⁴⁵ The model was used to project the assessed level of demand to 12 mppa using York Aviation's passenger forecasts. The peak forecast parking demand was then based on a ratio of peak occupancy (actual spaces used at any one time) to monthly total demand (months cars parked). Mr Witchalls presented the baseline model validation check carried out at the time of the PDS to ensure 'modelled' peak demand for spaces is close to the actual peak demand.⁴⁶

414. The PDS was updated in November 2020 by the Parking Demand Study Update ('PDSU').⁴⁷ The overarching methodology has remained the same, but updates to the PDS have been made, including the updated passenger forecasts, the CAA passenger survey data (2019) and the data from car park entries and exits.⁴⁸

415. There are three points to note about the methodology used in the PDS and PDSU, as follows:

- a. The PDS and PDSU adopt a deliberately conservative approach to assessing car parking demand. Unlike the TA and TAA, the parking studies assume larger average car group size and a higher public transport mode share of 21.8% (based on the CAA 2019 data) plus a 2.5% uplift. This ensures that the TAA assesses the highest possible flows in terms of car trips, and the PDS calculates the lowest possible demand.
- b. NSC now seeks to argue that because the 21.8% figure is not a re-baselined figure, there is a prospect that the public transport mode share may be higher than 21.8% (on the CAA figures) at 10 mppa, with a resulting effect on the level of parking demand. However, a slight variation in the public transport mode share figure does not translate directly into a reduction in the number of parking spaces required. It is agreed that this relationship is non-linear. Indeed, an increase in public transport may result in a reduction in pick up and drop off, or taxi rides, as opposed to car parking. In any event, the monitor and manage condition proposed in the UU would ensure that only the demand that actually arises is met.
- c. The calculation of the number of spaces required to meet the total demand takes into account the existence of off-site car parking providers. The report uses the term "*unofficial*" to refer to these collectively, which it defines as "*off-airport car parks which*

⁴⁵ PDS (CD2.11), page 5, para 1.5.

⁴⁶ Mr Witchalls, Rebuttal Proof (BAL/W4/3), page [], para 2.3.15 and pdf page 351, Appendix J ('Model validation; variance to transactions' line)

⁴⁷ (CD2.23).

⁴⁸ All updates to the model inputs are in Table 1 (CD2.11), page 5.

*are not operated, regulated, or sanctioned by BAL.”*⁴⁹ As the PDS explains, “*Bristol Airport does not have 100% market share of Park & Fly car parking demand as there are several alternative parking options available near to the airport.*” The PDSU identifies that peak forecast demand at 2030 is 30,200 (for the month of August).⁵⁰ The total car parking provision that the PDSU concludes should be provided to meet demand is 22,300 spaces.⁵¹ This reflects the competition assumptions adopted in the PDS and PDSU, which assumes that 0.27 million of the total 1.23 million demand is met on-site at the airport, with the rest met at competitor off-site sites.⁵²

Conclusions reached in the PDSU

416. The PDSU reached the following conclusions in respect of parking demand:⁵³
- a. At 10 mppa in 2024, 19,100 spaces would be required, as compared to 18,700 reported in the 2018 Parking Demand Study; and
 - b. At 12 mppa in 2030, 22,200 spaces would be required, as compared to 21,900 in the 2018 Parking Demand Study.
417. As explained by Mr Witchalls, the difference between the conclusions reached in the PDS and the conclusions reached in the PDSU are the result of changes to a number of factors that influence demand. These are identified in the PDSU and include factors such as the UK/foreign split of passenger demand, the geographical segmentation of UK passenger demand, the updated CAA passenger survey data and occupancy and demand ratios.⁵⁴ There is nothing ‘opaque’ about these issues, as suggested by NSC, and information has either been supplied⁵⁵ or is publicly available.
418. The conclusions in the PDSU were validated by Stantec against the approach used in the TA and TAA.⁵⁶ The results of this exercise show that the TAA methodology leads to a forecast additional demand of 8,821 spaces including off-site demand, compared with a PDSU equivalent of 7,350 spaces. This is the result of applying ‘worst-case’ assumptions in terms of highways impact,

⁴⁹ PSD (CD2.11), page 10, para 2.6 and fn 2.

⁵⁰ PDSU (CD2.23), page 20, Figure 15.

⁵¹ PDSU (CD2.23), page 26, para 7.3.

⁵² PDSU (CD2.23), page 17, Figure 12.

⁵³ Mr Witchalls, Proof of Evidence (BAL/W4/2), page 37, para 5.5.15.

⁵⁴ (CD2.23), page 5, Table 1.

⁵⁵ (INQ/99).

⁵⁶ Mr Witchalls, Proof of Evidence (BAL/W4/2), page 72, section 7.2.

which leads to a higher overall parking demand than that indicated in the PDSU, indicating that the results in the PDSU are the minimum level of car parking required.⁵⁷

The position of NSC's officers

419. At the time of the determination of BAL's application, NSC was advised by experienced transport consultants, Jacobs. Following extensive discussions, both before and after submission of the application, officers reached the following conclusions in respect of the proposed development:⁵⁸

- a. The scope and methodology of the highways assessment were acceptable and officers agreed with the traffic projections and modelling outputs.⁵⁹ Officers concluded that "*the proposed development would not have an unacceptable effect in terms of vehicle trip numbers and impacts*" subject to the agreed mitigation.⁶⁰ It was considered to accord with relevant policies of the North Somerset Development Management Policies: Sites and Policies Plan Part 1 ('DMP')⁶¹;
- b. Officers had no objections in relation to the surface access strategy and considered that it complied with relevant policies in the Core Strategy, JLTP and the NPPF;⁶²
- c. Officers considered that the proposed highway works were "*proportionate to the added traffic impacts*", and therefore were acceptable under policies in the Core Strategy and DMP. The final specifications could be agreed prior to the commencement of works, which could be controlled by condition;⁶³ and
- d. The quantum of parking proposed was considered to be the minimum required.⁶⁴

420. In the updated Officer's Report in March 2020, officers reiterated that the transport assessment had been "*examined and challenged in depth*" by NSC and its independent consultants.⁶⁵ It noted further that the transport assessment did not support the Committee's conclusions that

⁵⁷ Mr Witchalls, Proof of Evidence (BAL/W4/2), page 72, para 7.2.6.

⁵⁸ (CD4.11), page

⁵⁹ (CD4.11), pages 93 and 95.

⁶⁰ (CD4.11), pages 99.

⁶¹ (CD5.4).

⁶² (CD4.11), pages 92.

⁶³ (CD4.11), page 101.

⁶⁴ (CD4.11), page 104.

⁶⁵ (CD4.13), page 7.

“a safe and suitable access cannot be achieved” nor that “the increase in traffic volumes, congestion and parking on the local road network would have a severe impact”.

Areas of agreement

421. The following issues are now agreed:

- a. That the base traffic flows and trip generation assessment have been correctly applied and incorporated into the junction capacity models;
- b. The methodology, results and conclusions included in the updated analysis of accident data;
- c. That the width of the proposed cycle lane on the west side of the A38 complies with relevant standards; and
- d. That the input parameters to Junction 6 (A38/Barrow Street) are correct.

Outstanding issues in dispute in respect of surface access

Introduction

422. There are three general areas of dispute, namely surface access, public transport mode share target and parking demand. These main areas are addressed in turn.

423. The remaining points of dispute relating to surface access fall into two broad categories;

- a. general issues about the junction modelling and results in the TAA; and
- b. criticisms of the proposed A38 improvement works.

424. With regard to general issues about junction modelling, there are the following four outstanding issues:

- a. The need for queue surveys in order to validate the models;
- b. The assessment of faster and slower growth scenarios;
- c. The acceptability of the impact on the performance of Junction 5 (A38 / Barrow Lane); and
- d. The acceptability of the impact on the performance of Junction 7 (A38 / A4174 South).

425. With regards the A38 improvement works, there are the following six outstanding issues:

- a. The absence of a swept path analysis and the potential for vehicle collisions;
- b. The absence of a Road Safety Audit for revision 11 of the A38 proposed works design;
- c. The lack of a further Walking, Cycling, Horse Riding Assessment and Review ('WCHAR');
- d. The deliverability and effectiveness of the proposed works at Junction 1 (A3 / Bristol Airport Northern Roundabout);
- e. The deliverability and effectiveness of the proposed works at Junction 4(a)(A38 / Downside Road); and
- f. The deliverability and adequacy of the design of the proposed works at Junction 4(b) (A38 / West Lane).

426. These issues are dealt with in turn.

Junction modelling and results

Criteria for assessing performance of junctions

427. At the heart of Mr Colles's position that various junctions assessed in the TAA would not operate adequately in 2030 in the 'with development' scenario is his interpretation of the applicable guidance. In particular, Mr Colles extracts certain principles from the Junctions 9 User Guide⁶⁶ that he then applies to the modelling results. These include the following:

- a. That a junction should not be allowed to operate with a flow to capacity ratio ('RFC') of above 0.85⁶⁷; and
- b. That in respect of T-junctions, a level of service ('LOS') of F is "*unacceptable performance*".⁶⁸

428. Mr Colles confirmed in evidence that he had used 0.85 RFC as a 'threshold of acceptability' because, "*beyond that queues grow exponentially*".⁶⁹ However the guidance itself does not support this approach. It explains that ⁷⁰ "[t]he RFC provides a basis for judging the acceptability of junction designs and typically an RFC of less than 0.85 is considered to indicate satisfactory

⁶⁶ (CD7.22).

⁶⁷ Mr Colles, Proof of Evidence (NSC/W4/1), page 16, para 3.4.13.

⁶⁸ Mr Colles, Proof of Evidence (NSC/W4/1), page 16, para 3.4.14.

⁶⁹ Mr Colles, cross-examination, Day 17 pm session.

⁷⁰ (CD7.22)

performance. This depends however on the context of the study and so the user's own judgement is also required."⁷¹ Indeed, Mr Colles accepted that there are very many junctions that operate above 0.85 RFC⁷² and that a range of factors must be looked at to decide whether or not a junction operated satisfactorily, such as the existing performance of the junction, the impact of the proposed development, the type of forecasts used and the wider interest of the travel network.⁷³ To adopt an RFC of 0.85 as a threshold of acceptability as Mr Colles has done both misinterprets the guidance and over-simplifies the assessment of performance.

429. In respect of the use of LOS level 'F' too, Mr Colles's approach has been to conclude that any T-junction with such a score is inadequate. There is nothing in the Junctions 9 guidance to support Mr Colles's approach that LOS F is "*unacceptable*". A decision on whether a junction will operate adequately depends upon the LOS before and after development, the nature of the road and an assessment of the impact of any potential improvement on a particular route.
430. Similarly, Mr Colles refers to the TfL Traffic Modelling Guidelines Version 3 (not relied on by Mr Witchalls) as the basis that a degree of saturation ('DoS') beyond 90% for signalised junctions and 85% for unsignalised junctions is "*unacceptable*".⁷⁴ However that guidance makes clear that a PRC above zero means that there is practical reserve capacity on all approaches. It notes that it is "*useful to be aware of*" the relationship between DoS and traffic delay, and "*be mindful*" of an increase in delay beyond 85%. Nowhere does the guidance support the use of these figures as thresholds.
431. This erroneous use of these concepts as thresholds by Mr Colles underpins the majority of his concerns about the impact on the highways network, as explained below.

Need for queue surveys

432. In his Proof of Evidence Mr Colles argues that in order to validate the junction capacity models, queue length surveys for all junctions assessed are required.⁷⁵ In the absence of this data, he argues, the conclusions in the TA and TAA cannot be relied upon.⁷⁶

⁷¹ (CD7.22), page 93.

⁷² Mr Colles, cross-examination, Day 17 pm session.

⁷³ Mr Colles, cross-examination, Day 17 pm session.

⁷⁴ Mr Colles, Proof of Evidence (NSC/W4/1), page 17, para 3.4.19.

⁷⁵ Mr Witchalls, Proof of Evidence (BAL/W4/2), page 21, para 4.4.1.

⁷⁶ Mr Witchalls, Proof of Evidence (BAL/W4/2), page 21, para 4.4.2.

433. As explained by Mr Witchalls⁷⁷, the basis for Mr Colles's argument is the TfL Traffic Modelling Guidelines Version 3. That guidance makes clear, however, that queue surveys are "*not a validation criterion*" but "*can be used as measure of model's performance*".⁷⁸ Mr Colles accepted this.⁷⁹ Indeed, the junction models produced by Stantec were validated prior to submission in June 2018 and shared with NSC and its then advisers, Jacobs, who raised no issue regarding their validation or need for further queue survey validation.

Sensitivity testing

434. The third issue identified by Mr Colles concerns the alleged failure to assess slower and faster growth scenarios in the TAA.⁸⁰ However as Mr Colles agreed, faster growth would have lesser highways impacts as a result of lower levels of background traffic.⁸¹ With regards to the slower growth scenario, which would have the potential to worsen highways impacts, Mr Witchalls has carried out a qualitative assessment using TEMPro growth factors.⁸² The conclusion reached is that the changes are so small that it would not make a material difference to the overall assessment, even on the basis of the 'worst case' assumptions adopted. The assessment shows that the impact of slower growth is a c.1% increase in traffic flows in the AM and PM peak only. In other words, it is insufficient to result in a severe cumulative impact. In light of this, there is no need to carry out any further assessment.

Junction 5

435. One of the 'outstanding technical concerns' identified by Mr Colles concerns the performance of Junction 5. Mr Colles argues that the junction capacity modelling results exceed the capacity in the AM peak, airport peak and PM peak, but no mitigation is proposed. This would have an unacceptable severe impact on traffic which could "*harm highway safety*".⁸³
436. However it is important to understand the nature of the junction being assessed. Junction 6 is the junction between the main strategic A38 route and a narrow countryside road, Barrow Lane. As explained by Mr Witchalls, whilst the modelling results show LOS 'F' on the side road, the main network (A38) has an LOS of 'A'. Indeed Barrow Lane has an LOS of 'F' both with and

⁷⁷ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), pages 4 to 5, paras 2.2.4 to 2.2.8.

⁷⁸ (**CD7.21**), para 5.4.2.5. Mr Colles, cross examination, Day 17 pm session.

⁷⁹ Mr Colles, cross examination, Day 17 pm session.

⁸⁰ Mr Colles, Proof of Evidence (**NSC/W4/1**), page 25, section 4.10.

⁸¹ Mr Colles, cross examination, Day 17 pm session.

⁸² Mr Witchalls, Proof of Evidence (**BAL/W4/2**), page 36, Table 5.1. Reproduced from the TAA.

⁸³ Mr Colles, Proof of Evidence (**NSC/W4/1**), page 32, paras 4.16.1 to 4.16.2.

without development. This was noted by NSC officers.⁸⁴ The proposed development will not add traffic to the side road, as that does not provide a route to the Airport.⁸⁵ Any proposed mitigation on this route could have an adverse impact, namely, encouraging rat-running along the route.⁸⁶ This too was accepted by officers.⁸⁷

437. It is notable too that NSC's MRN scheme does not propose any capacity improvement at this junction. If NSC were concerned about its performance, one would expect that it would propose improvement works as part of its own scheme.

Junction 7

438. Mr Colles's criticism in respect of Junction 7 (A38/A4174 South) is that the junction capacity results reported in the TAA do not fully represent the LinSig modelling results.⁸⁸ Mr Colles argues that the queues shown in the LinSig model would exceed the lane length, leading to the junction becoming blocked.⁸⁹ This, he argues, indicates that the junction would not operate within capacity.

439. However the LinSig models criticised by Mr Colles were agreed with NSC and Jacobs.⁹⁰ In interpreting the LinSig model for this signalised roundabout, it is important to understand that the maximum queue values for the internal stop-lines are not static but moving during the green phase. The maximum queue referred to by Mr Colles would be present for approximately one second maximum, and would entirely clear well before the end of the green signal meaning that no blocking would occur. Indeed, Mr Colles agreed that the queues shown are not substantial.⁹¹

A38 improvement works

Preliminary

440. As noted above, the A38 improvement works were developed in collaboration with NSC and Jacobs, and ultimately agreed as appropriate. The appropriateness of the design does not feature in the reasons for refusal and as such it can be assumed that the committee too were

⁸⁴ (CD4.11), page 97.

⁸⁵ Mr Witchalls, Proof of Evidence (BAL/W4/2) para 5.6.29. The flow diagrams are in Appendix C to his Proof of Evidence.

⁸⁶ TAA (CD2.20.3), para 5.7.5.

⁸⁷ (CD4.11), page 97.

⁸⁸ Mr Colles, Proof of Evidence (NSC/W4/1), page 33, para 4.17.1.

⁸⁹ Mr Colles, Proof of Evidence (NSC/W4/1), page 33, para 4.17.1.

⁹⁰ Mr Witchalls, Rebuttal Proof (BAL/W4/3), page 19, para 2.2.92.

⁹¹ Mr Colles, cross-examination, Day 17 pm session.

satisfied with it. Indeed, Mr Colles accepted the description of his own position as “*very much an outlier on this*”, but maintained that he was presenting the current view of NSC on this issue.⁹²

441. It must be borne in mind, when considering the issues raised by NSC, that there is no dispute that NSC’s own MRN scheme is substantially the same as that proposed by BAL. Whatever the view of Mr Colles, it would be odd indeed if NSC was continuing to promote a scheme that it itself considered to be flawed.

Swept path analysis

442. In his Proof of Evidence, Mr Colles criticised the lack of a swept path analysis for the proposed mitigation drawing.⁹³ However, as pointed out by Mr Witchalls, a swept path analysis was provided to NSC officers in April 2018.⁹⁴ Comments from NSC were subsequently received in writing and are included in Mr Witchalls’s evidence.⁹⁵ The full results of this analysis are also included in Mr Witchalls’s Proof.⁹⁶
443. As explained by Mr Witchalls the swept path drawings show that all movements could be accommodated safely or that only very minor modifications will be required at the detailed design stage, all of which would be within the red line area.⁹⁷ The ‘pinch points’ that do exist within the design are the same as those that exist in NSC’s MRN scheme.⁹⁸ These are the type of minor detailed modifications one would expect to make at this stage. Moreover, as Mr Colles accepts, the existing road is narrower than that proposed and therefore results in a higher risk of conflicts than with the proposed improvement works.⁹⁹

Road safety audit

444. Mr Colles further criticises the lack of a road safety audit in respect of revision 11¹⁰⁰ of the A38 mitigation works drawing. However, an independent road safety audit was carried out in respect of revision 8, the results of which are contained in Mr Witchalls CPO Proof of

⁹² Mr Colles, cross-examination, Day 17 pm session.

⁹³ Mr Colles, Proof of Evidence (**NSC/W4/1**), page 22, para 4.6.1.

⁹⁴ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page 6, para 2.2.16.

⁹⁵ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), pdf page 97, para 15 and Appendix C.

⁹⁶ Mr Witchalls, Proof of Evidence (**BAL/W4/2**) pdf page 295 – 300, Appendix D drawings.

⁹⁷ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page 7.

⁹⁸ Agreed: Mr Colles, cross-examination, Day 17 pm session.

⁹⁹ Mr Colles, cross-examination, Day 17 pm session.

¹⁰⁰ (**CD1.37**).

Evidence.¹⁰¹ NSC, as highways authority, also responded to the audit with comments, which were subsequently taken into account by the design team.¹⁰² Only minor changes were made between revision 8 and revision 11. The only obvious change made was the removal of the proposed left turn filter lane exiting the airport, which was introduced in order to improve highway safety and was informed by the road safety audit process itself.¹⁰³

445. In any event, the current design is not yet at the detailed design state. There is no dispute that a road safety audit will be carried out at that stage.¹⁰⁴ This is consistent with the approach agreed with NSC officers.¹⁰⁵

WCHAR

446. Mr Colles makes a similar point in respect of the absence of a WCHAR in respect of revision 11 of the mitigation drawing.¹⁰⁶ As explained by Mr Witchalls, however, a WCHAR was carried out in respect of revision 9 of the design. There have been only minor changes between version 9 and version 11, which consist of clarification of certain road markings and the decision not to relocate the cross facility at the Airport northern roundabout.¹⁰⁷ These changes were agreed with NSC¹⁰⁸, and do not warrant a further WCHRAR. In any event, a further assessment could still be undertaken at the detailed stage.

Junction 1

447. Whilst there is no dispute about the modelling results in respect of Junction 1 (A38 / Bristol Airport Northern Roundabout), Mr Colles raises two issues in respect of the deliverability and effectiveness of the A38 improvement works.
448. First, Mr Colles's position is that the land level differences between the land required for the proposed carriageway widening and the existing carriageway mean that it cannot be determined whether or not the scheme is deliverable.¹⁰⁹ In response to this, BAL provided Mr Colles with a topographical survey in early June 2021. As Mr Witchalls explains, the survey shows that the maximum level difference is 2 metres; the scheme drawing allows for a c.6 metre

¹⁰¹ Mr Witchalls, Proof of Evidence (CPO), Appendix F.

¹⁰² Mr Witchalls, Proof of Evidence (CPO), Appendix G (designer's response) and Appendix I (NSC response).

¹⁰³ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page 7, para 2.2.21.

¹⁰⁴ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page 7, para 2.2.20.

¹⁰⁵ Officers' Report (**CD4.11**), page 135.

¹⁰⁶ Mr Colles, Proof of Evidence (**NSC/W4/1**), page 25, para 4.9.3.

¹⁰⁷ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page 10, para 2.2.34.

¹⁰⁸ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), Appendix C.

¹⁰⁹ Mr Colles, Proof of Evidence (**NSC/W4/1**), page 26, paras 4.12.2 and 3.

wide embankment at a 1 in 3 gradient.¹¹⁰ Indeed the land required for the proposed works is entirely within the adopted highway or land owned by the Airport. There cannot, therefore, be any concerns about the deliverability of the scheme on this basis.

449. Secondly, Mr Colles argues that the performance of the junction is unacceptable and does not comply with policy.¹¹¹ This position is based on the fact that the modelling results show an RFC of 0.94 and 0.89. Mr Colles's analysis of this, based on his interpretation of the guidance as set out above, is that these exceed the "*acceptable capacity thresholds*"¹¹². As noted above, however, Mr Colles's concerns about the capacity of this junction rests entirely on his treatment of certain metrics as thresholds of acceptability. In this instance, the results indicate that there is some practical reserve capacity, even on the basis of the 'worst case' assessment carried out in the TAA.

Junction 4(a)

450. Mr Colles's concerns about Junction 4 (a) (A38 / Downside Road) are similar. Mr Colles points to the geometrical difficulty of delivering the proposed works due to the land level changes, and secondly the capacity of the junction.¹¹³ In respect of the capacity of the junction, Mr Colles argues that the results indicate that the A38 (N) is very close to its PRC (the northern arm operating at a DoS of 88.2%). He further argues that the pedestrian and cycle crossing facilities are not accounted for in the operation of the signals, which is likely to result in the junction exceeding the "*acceptable PRC and experiencing long queues and delays*" when factored in.¹¹⁴
451. There are four points to make in response, as follows:
- a. The junction testing methodology was agreed with NSC and Jacobs;¹¹⁵
 - b. The impact of the pedestrian crossing on capacity at the junction is minor; on average it is 'called up' three times an hour;¹¹⁶
 - c. In any event, Mr Witchalls has carried out a re-assessment of the junction capacity, assuming that the crossing was called up 5 to 6 times an hour to reflect a 'worst case'

¹¹⁰ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page [], para 2.2.43.

¹¹¹ Mr Colles, Proof of Evidence (**NSC/W4/1**), page [], paras 4.12.4 to 6.

¹¹² Mr Colles, Proof of Evidence (**NSC/W4/1**), page [], paras 4.12.6.

¹¹³ Mr Colles, Proof of Evidence (**NSC/W4/1**), page [], paras 4.13.1 – 2 and paras 4.13.4 – 5.

¹¹⁴ Mr Colles, Proof of Evidence (Proof of Evidence (**NSC/W4/1**), page 28, para 4.13.4.

¹¹⁵ Technical Note TN011 (**CD3.4.2**), page 20, para 1.2.1.

¹¹⁶ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page [], para 2.2.68.

scenario.¹¹⁷ This demonstrates that the junction would still operate within capacity and deliver a huge improvement in the performance of the junction compared to the ‘without development’ scenario, which will mean a significant reduction in queues and delays¹¹⁸; and

- d. Mr Colles’s concerns about exceeding the “*acceptable PRC*” levels are a further example of his erroneous treatment of these metrics as acceptability thresholds (as explained above).

452. Mr Colles raises a further issue relating to the access to Lilac Cottages.¹¹⁹ However Mr Colles’s criticism relates to the existing access to the property. The proposed mitigation works will not significantly change anything on the eastern kerb line, save for certain minor improvements.¹²⁰ Indeed, it was agreed with NSC not to alter the access to the property,¹²¹ which is consistent with the NSC A38 MRN scheme. Furthermore, it is agreed that there is no evidence of any worsening in the rate of accidents in this location.¹²²

Junction 4(b)

453. In respect of Junction 4(b) (A38 / West Lane), Mr Colles makes five points, namely, that the width of the shared pedestrian and cycle lane is substandard, that the proposed merge lane and splitter islands are substandard both in width and alignment, and that the impact of the crossing facilities will be that the junction will have an unacceptable level of capacity.

454. BAL’s response to these points are as follows:

- a. The new link is a pedestrian only connection and is proposed to be 1.8m in width which complies with the relevant guidelines
- b. The shared pedestrian / cycle lane on the eastern side of the A38 is the existing facility that NSC officers previously agreed did not need to be widened;¹²³
- c. The merge lane is similarly in accordance with standards,¹²⁴

¹¹⁷ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), Appendix G, pdf pages 151 to 154 (am), pdf pages 158 to 161 (ip), pdf pages 165 to 168 (pm).

¹¹⁸ Mr Witchalls, Proof of Evidence (**BAL/W4/2**), pdf pages 49 to 51, Tables 5.4 to 5.6.

¹¹⁹ Mr Colles, Proof of Evidence (**BAL/W4/1**), page [], para 4.13.3.

¹²⁰ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), pdf page 94, Appendix C (March 2019), point 5.

¹²¹

¹²² Mr Colles, Rebuttal Proof (**NSC/W4/3**), page [], para 5.1.3 – collision review is acceptable.

¹²³ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page [], para 2.2.72.

¹²⁴ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page [], para 2.2.74.

- d. The splitter islands are between 1.3m and 1.5m in width and in accordance with standards;¹²⁵
 - e. There is no dispute that the splitter island on West Lane will need to be very slightly adjusted, however this can be done as part of the detailed design process;¹²⁶ and
 - f. The concerns about the impact of the crossing facilities is the same point as that discussed above.
455. As such, all of these concerns are baseless, and/or are matters that can be easily resolved at the detailed design stage.

Outstanding issues in dispute in respect of public transport mode share

456. The outstanding issues in dispute in respect of the public transport mode share are twofold:
- a. The adequacy of the evidence provided; and
 - b. Whether the target is sufficiently ambitious.
457. These are considered in turn.

Adequacy of the evidence

458. In his Proof of Evidence, Mr Colles asserts that *“BAL's Transport Assessments suffer from a number of deficiencies which do not allow the effects of the Proposed Development in relation to public transport to be fully understood.”*¹²⁷ As set out above, Mr Witchalls's evidence presents a detailed analysis of the potential public transport measures and the likely impact of those, demonstrating that a 2.5% increase in public transport mode share is an ambitious but realistic target.¹²⁸ Mr Colles maintains a number of vague criticisms in his Rebuttal Proof¹²⁹, but has carried out no assessment himself to indicate that the analysis carried out by Mr Witchalls is in any way incorrect.

Whether target ambitious enough

¹²⁵ Mr Witchalls, Rebuttal Proof (BAL/W4/3), page 16, para 2.2.76.

¹²⁶ Mr Witchalls, Rebuttal Proof (BAL/W4/3), page 17, paras 2.2.77 to 78.

¹²⁷ Mr Colles, Proof of Evidence (NSC/W4/1), page 41, para 6.2.1.

¹²⁸ Mr Witchalls, Proof of Evidence (BAL/W4/2), pages 55 to 56, para 6.3.2.

¹²⁹ Mr Colles, Rebuttal Proof (NSC/W4/3), pages 3 to 4, section 4.

459. NSC officers, advised by Jacobs, considered that a public transport mode share of an additional 2.5% was challenging, but acceptable¹³⁰ However they considered that a target of an additional 5 to 10% public transport mode share was not realistic.¹³¹
460. In his Proof of Evidence, Mr Colles stated that it was not possible to determine the maximum sustainable mode share that could be achieved.¹³² Despite this conclusion, Mr Colles somehow reaches the conclusion that a 5% additional public transport mode share target should be achievable.¹³³ This internally inconsistent position is simply not supported by the detailed analysis carried out by Mr Witchalls.¹³⁴ The basis on which Mr Colles says this would be achievable is not set out in detail, but includes “*a mass transit scheme from central Bristol*”¹³⁵, something that is clearly not part of the proposed development and recognised by the JLTP as a as a long term and high cost “*Transformational Major Scheme*”.¹³⁶

Outstanding issues in dispute in respect car parking

461. With regards to car parking, the following five matters are in dispute between BAL and NSC:
- a. The assumptions around operational utilisation of the car park;
 - b. The use of demand to capacity ratios;
 - c. The growth in parking provision relative to passenger numbers;
 - d. The public transport mode share target used in the PDS and PDSU; and
 - e. Inconsistencies between the TAA and PDSU.
462. These are considered in turn.

Operational utilisation

463. BAL’s Parking Demand Study notes that a 95% operational utilisation rate is assumed in order that the proposed car parking can operate effectively.¹³⁷ Mr Colles wrongly attributes this assumption to the IStruE ‘Design recommendations for multi-storey and underground car parks’

¹³⁰ (CD4.11), page 90.

¹³¹ (CD4.11), page 90.

¹³² Mr Colles, Proof of Evidence (NSC/W4/1), page 41, para 6.2.3.

¹³³ Mr Colles, Proof of Evidence (NSC/W4/1), page 44, para 6.3.14.

¹³⁴ Mr Witchalls, Proof of Evidence (BAL/W4/2), pages 55 to 56, para 6.3.2.

¹³⁵ Mr Colles, Proof of Evidence (NSC/W4/1), page 43, para 6.3.10.

¹³⁶ (CD7.5), page 38, section 6, second para.

¹³⁷ (CD2.11), page 10, para 2.5.

(Fourth edition),¹³⁸ despite the fact that that guidance relates primarily to the design of multi-storey car parks and not the operation of large, long stay, surface level car parks. The suggested need for a 5% operational reserve capacity has been informed by the car parking operator at the Airport.

464. Mr Colles has misunderstood the role of this operational utilisation figure in the PDSU; it is not an input to the model of parking demand. The assessment does not operate so that 5% capacity is added onto the total provision in order to allow for 95% utilisation. The ratio of forecast peak demand to number of spaces is actually closer to 99% (total capacity of 22,300 and total demand 22,200).¹³⁹

Demand to capacity ratios

465. Similarly, Mr Colles incorrectly assumes that future airport parking demand has been calculated by applying a historical utilisation of spaces factor in addition to demand.¹⁴⁰ As explained above, the peak forecast demand is based on a ratio of peak occupancy (actual spaces) to monthly total demand (monthly cars parked). This is taken from historically observed data.¹⁴¹ It is therefore based on actual usage and not available supply¹⁴² as Mr Colles accepts, it is apparent from a comparison of the figures that no such addition has been applied.¹⁴³

Growth in parking provision relative to passenger numbers

466. Mr Colles seeks to demonstrate that the ratio of car parking spaces per million passengers is increasing. To do so, he uses a figure of 18,100 spaces as the 10 mppa level of parking. However this figure is a theoretical one, based upon the assumed build out of the 12 mppa scheme. The consented level of parking is 18,700. The level assumed in the PDSU is influenced by a number of factors, including the ongoing construction at 10 mppa.¹⁴⁴
467. The more appropriate comparison is the number of parking spaces that would exist at 10 mppa if the proposed development were not consented (approximately 18,700), which equates to 1870 per million passengers. This shows that the level of parking provision per million passengers has decreased by 5% between 2019 (1975 spaces per million passengers) and the

¹³⁸ (CD7.23).

¹³⁹ (CD2.23), page 24, Table 5.

¹⁴⁰ Mr Colles, Proof of Evidence (NSC/W4/1), page 37, paras 5.3.6 to 5.3.8.

¹⁴¹ PDS (CD2.11), page 5, para 1.6.

¹⁴² Mr Witchalls, Rebuttal Proof (BAL/W4/3), page 22, para 2.3.14.

¹⁴³ Mr Colles, cross-examination, Day 18 am session. See PDSU (CD2.23), page 24.

¹⁴⁴ PDSU (CD2.23), page 24, Table 5. This shows an under provision of 1900 at 18,100 spaces.

point at which 10 mppa is reached.¹⁴⁵ In 2030, the parking provision for 12 mppa will be 22,200, equating to 1858 spaces per million passengers, a further proportionate reduction.

Public transport mode share target used in PDS and PDSU

468. Mr Colles further misunderstands the relationship between the public transport mode share target and the calculation of parking demand in the PDSU, wrongly assuming that the studies *“are based upon a Sustainable Transport Mode Share of 12.5% with a sensitivity test of an increase to 15%”*.¹⁴⁶ He argues that on the basis of the latest CAA data, the parking requirement is actually far lower than calculated in the PDSU.
469. As Mr Witchalls explains, the PDSU uses 2019 as its base year, including parking data and CAA data for that year. This means that a public transport mode share of 21.8% has been used in the 2019 baseline and an uplift of 2.5% to reflect the public transport mode share target has been applied to the 12mppa forecasts¹⁴⁷. However, it is also important to note that the relationship between public transport use and parking is not linear;¹⁴⁸ for example, a transfer of passengers from taxi to public transport would not have any effect on the level of car parking required.

Inconsistencies between TAA and PDSU

470. As explained above, the perceived inconsistencies between the assumptions in the PDSU and the TAA are due to the adoption of a ‘worst case’ approach to the highways assessment, and a conservative estimation of the number of parking spaces required. Were the TAA assumptions to be used in the PDSU, the forecast additional peak demand would be 8,821 spaces, significantly higher than those to be provided.

Rule 6 Parties’ Position on Surface Access, Car Parking and Public Transport Mode Share

BALPA

471. The British Airline Pilots Association (‘BALPA’) called evidence from Mr Renshaw in respect of car parking. However, the degree of agreement between BAL and BALPA is significant:¹⁴⁹
- a. BALPA does not object to the proposed development on the basis of highways impact;

¹⁴⁵ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page 23, para 2.3.23.

¹⁴⁶ Mr Colles, Proof of Evidence (**NSC/W4/1**), page 38, paras 5.3.11 to 5.3.12.

¹⁴⁷ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page 24, para 2.3.25.

¹⁴⁸ Mr Witchalls, Rebuttal Proof (**BAL/W4/3**), page 24, para 2.3.26. This is agreed; Mr Colles, cross-examination, Day 18 am session.

¹⁴⁹ Mr Renshaw, cross-examination, Day 18, am session.

- b. There is no challenge to the conclusions in the TAA;
 - c. BALPA does not challenge the calculation of the total number of spaces required if the airport were to expand or the requirement to provide a mix of parking; and
 - d. There is no dispute that the car parking demand identified should be met.
472. BALPA's sole point of concern relates to where that car parking is located and, in particular, whether moving the area of staff car parking to the northside of the airport could remove the need for the development of further low cost car parking in the Green Belt. To the extent that these matters concern the application of Green Belt policy, they are dealt with later in this closing. As Mr Renshaw accepted, the location of staff car parking on the southside of the airport was included in a previous planning application¹⁵⁰. There is no proposal to change that as part of the proposed development. Whilst not accepted by Mr Renshaw, it is clear that the sufficiency or merits of the staff parking provision itself are not material planning matters for the Inspectors determining this appeal.
473. Insofar as BALPA's evidence challenged the staff transport mode share, the survey of Easjet pilots at Bristol Airport¹⁵¹ relied on by BALPA is far from representative of how staff at the airport do travel to work, as shown in Mr Witchalls's Proof¹⁵².

Mr Peirce (Heathfield Park)

474. The purpose of Mr Peirce's involvement as a Rule 6 party to the inquiry is in order to promote his alternative site for off-airport car parking. Indeed, an application for planning permission for a park and ride had been submitted to NSC prior to the commencement of the inquiry. On 1 September 2021, NSC determined that application, refusing planning permission for 11 reasons¹⁵³. The evidence given by Ms Sutherland on behalf of Mr Peirce did not substantively challenge BAL's highways evidence, but was rather an attack on NSC policy on off-airport car parking and an attempt to demonstrate why the view shared by NSC and BAL about the appropriateness and availability of the Heathfield site is wrong.

XR Elders

¹⁵⁰ Mr Renshaw, cross-examination, Day 18, am session.

¹⁵¹ Mr Hatton, Proof of Evidence (**BALPA/W2/1**), Appendix B.

¹⁵² Mr Witchalls, Proof of Evidence (**BAL/W4/2**), page 68, Table 6.9.

¹⁵³ Decision notice is at (**INQ/050**).

475. The principal points raised by Ms Beth on behalf of XR Elders that related to the highways evidence were that the public transport mode share at Bristol Airport was lower than other airports because taxis should be counted as a mode of public transport, and second, that consideration needs to be given to off-airport car parking¹⁵⁴. Both of these points are somewhat surprising. The categorisation of private taxis as a form of public transport is not supported by the standard CAA definition of public transport measurement across all airports and is quite clearly wrong. Nor would the promotion of taxis, as supported by XR Elders, help to reduce the total number of trips to and from the airport.

476. Secondly, the PCAA have provided substantial first hand evidence of the problems that can be caused by off-airport car parking. It is surprising that XR Elders do not support the objective of seeking to reduce these impacts. In any event, however, Ms Beth accepted that XR Elders had produced no analysis of parking demand or parking strategy in order to challenge that carried out by BAL¹⁵⁵.

PCAA

477. The evidence from many of the witnesses on behalf of the PCAA relates to the impact of the airport on congestion and the impact of off-airport car parking on local amenity. With regards to the latter of these, the evidence of the PCAA supports the approach and findings in the Parking Demand Study in respect of off-airport car parking. BAL, as well as NSC, recognise the importance in seeking to reduce the harm to amenity caused by unauthorised or unofficial car parking, some of which takes place in the Green Belt.

Proposed Conditions

Public transport mode share

478. As explained above, the public transport mode share target of 2.5% has been adopted on the basis of a careful analysis of the potential improvements that could be introduced and the effect of those measures. NSC's position remains that this target is inappropriate, and should be increased to 5%, notwithstanding that there is no evidence before the Inquiry that such a level could be achieved.

¹⁵⁴ Both of which were not foreshadowed in Ms Beth's written evidence but came out in evidence in chief and cross-examination during the Inquiry. Day 18 pm session.

¹⁵⁵ Ms Beth, cross-examination, Day 18 pm session.

479. Because of the nature of the outstanding dispute, the public transport mode share target has been included within BAL's UU. Due to the existing public transport mode share, which relies on bus ticket data, and the proposed public transport mode share, which will rely on CAA data, the UU provides for the re-baselining of the public transport mode share at 10 mppa, in accordance with an approved methodology. The target of 2.5% (measured in accordance with CAA data) will then apply on top of that re-baselined figure.

Junction 22

480. In order to address concerns raised by National Highways, a condition has been proposed that requires that before the Airport exceeds 11 mppa, BAL has submitted a detailed improvement scheme for Junction 22 on the M5 to NSC for approval and that approved has been implemented in full. National Highways has submitted evidence in support of this condition and appeared at the Inquiry to explain why it considered it was required.¹⁵⁶

Monitor and manage

481. The proposed monitor and manage condition will require BAL to submit Parking Demand and Capacity Report within 12 months of commencement of the development and annually thereafter. This monitoring will ensure that parking is brought forward in line with demand, and that the parking provision does not undermine the public transport mode share target.
482. The purpose of this condition is not to express any uncertainty on BAL's part about its car parking demand forecasts, but simply to recognise that it will be trying to increase its public transport mode share, even beyond its stretch target, and that other unforeseen events can happen that could reduce future car parking demand and that, in that context, it would be responsible to offer a monitor and manage condition so that parking is brought forward in line with demand as it actually emerges.
483. This condition is also considered in the green belt chapter below.

Key Conclusions

484. The methodology in the TAA was agreed with NSC and Highways England. It is robust. In every respect possible, it adopts 'worst case' assumptions. Even on this basis, the threshold in the NPPF for the refusal of planning permission on highways grounds is far from met. The residual impacts on the local transport network is 'not significant' in EIA terms. Many of the points

¹⁵⁶ (INQ/084).

raised by Mr Colles are simply forensic points that do nothing to impact the overall conclusions of the assessment.

485. With regards to the design of the A38 improvement works, it is surprising that NSC now appear to have such fundamental concerns with it. The design was agreed by NSC officers and their consultants prior to the determination of the application. That design is the very design that NSC itself is promoting as part of its MRN scheme¹⁵⁷. Nor does the design of the improvement works feature in the reasons for refusal. It is important to note, however, that despite the criticism of the works by NSC, Mr Colles confirmed that if the appeal were to be allowed, NSC would want the improvement works to be delivered.¹⁵⁸
486. The public transport mode share has been the product of a detailed analysis of potential public transport improvement measures and the likely impact of those. The target adopted is ambitious, but achievable; BAL have deliberately adopted a stretching target, which will be accompanied by a substantial package of sustainable transport measures.
487. The assessment of the level and type of car parking required in association with the increase in passenger numbers has been the subject of a careful analysis by Teneo which has been subsequently validated by Stantec. The assessment is robust, and the level of parking to be provided is conservative; it seeks combine the need to encourage public transport use whilst avoiding the detrimental impacts of failing to deliver adequate low cost parking on surrounding communities. The proposed 'monitor and manage' approach will ensure that car parking is only provided as and when required, and will not undermine the ambitious public transport mode share target.

¹⁵⁷ (INQ/049).

¹⁵⁸ Mr Colles, cross-examination, Day 17 pm session.

CARBON AND CLIMATE CHANGE

Introduction

488. The need to decarbonise in order to address the effects of climate change is well-recognised and well-evidenced; it is also fully supported by BAL. An important difference, however, between the parties at this inquiry is that whilst objectors seek to rely on airport capacity limits to meet climate change objectives, BAL seeks to rely on aviation carbon limits to achieve the objectives. BAL's approach is consistent with the Government's message that *"It's not about stopping people doing things: it's about doing the same things differently. We will still fly on holiday, but in more efficient aircraft, using sustainable fuel."*¹
489. The issue of climate change is a global one. Achieving the stabilisation of global temperatures requires an international led response. This is reflected in the approach that has long been taken to tackling greenhouse gas emissions. Within the framework on the UN Framework Convention on Climate Change and the various agreements and protocols that flow from it, it is for each nation to determine the extent to which it can contribute to this global effort.
490. The UK's response to climate change has been to impose a legally binding commitment to reduce the net UK carbon account by 100% against the 1990 baseline by 2050²; that is 'net zero'. In order to meet this target, there must be changes in all sectors of the economy. The Government has made this clear.
491. BAL recognises the role that it must play; the draft CCCAP will see Bristol Airport become carbon net zero by 2030 and, through Government led action in the aviation sector, carbon net zero as a whole by 2050. The approach adopted in the draft CCCAP reflects that adopted by NSC itself in the North Somerset Climate Emergency Strategy and its Strategic Action Plan, which identifies those emissions within the control of NSC, those which it can influence at a local level, and those that it can support national action in respect of.³
492. The greenhouse gas emissions generated by the proposed development and the associated impact on climate change forms the basis for reason for refusal 3. That reason for refusal makes three allegations, namely that the scale of greenhouse gas emissions generated (i) *"would not reduce carbon emissions"*, (ii) *"would not contribute to the transition to a low carbon future"* and (iii) *"would exacerbate climate change"*. The legal and policy provisions cited are the NPPF,

¹ Decarbonising Transport (CD9.134), page 4.

² (CD9.007).

³ (CD9.12) and (CD9.13), page 2 ff.

policy CS1 of the Core Strategy and the duty in the Climate Change Act 2008 to achieve the 'net zero' target by 2050.

493. The impact of the proposed development on greenhouse gas emissions and the ability of the UK to meet its climate change obligations was identified by the Inspectors as CMC1 issue (f).

Scope of Dispute at Close of Evidence

494. Significantly, there is no dispute between BAL and NSC about the calculation of the carbon impacts of the proposed development. Nor is there any dispute about the primary test to be applied when considering the significance of these emissions⁴. The outstanding dispute concerns the application of that test, namely, whether the emissions from the proposed development are so significant as would materially impact the ability of the UK to meet its carbon budgets and target of net zero greenhouse gas emissions by 2050.
495. In respect of this issue, the dispute is fundamental; this is reflected in the way that the parties have presented their evidence. Whilst NSC's approach is that we simply cannot answer this question without a national level assessment of the impact of all airport development (and presumably all other development) on the UK's ability to meet its climate change obligations, BAL's approach has been to look at the legal and policy framework within which the UK Government is operating and consider the scale of the emissions from the proposed development and whether this would have a material impact of the ability of the Government to meet its climate change obligations in that context.

Legal and Policy Context

International context

UNFCCC 1992

496. The United Nations Framework Convention on Climate Change ('UNFCCC') entered into force on 21 March 1994 and has since been ratified by 197 countries. The ultimate objective of the UNFCCC was to stabilize greenhouse gas concentrations "*at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system.*"⁵ Article 4 sets out the commitments of parties to the convention, including to adopt national policies and

⁴ That is the test set out at para 5.82 of the ANPS (CD6.9)

⁵ (CD9.19), pdf page 9, Article 2.

take measures to mitigate climate change, recognising the need for “*equitable and appropriate contributions*” by parties to the global effort towards the objective.⁶

Kyoto Protocol 1997

497. The Kyoto Protocol to the UNFCCC, which was adopted in December 1997, imposed an obligation on state parties to “*pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization*”⁷. The emissions referred to as outside the Montreal Protocol include emissions from international aviation and shipping. Article 3 defines the “*commitment period*” as between 2008 and 2012⁸, within which state parties shall ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts, calculated pursuant to their quantified emission limitation and reduction commitments in Annex B. Annex A identifies six greenhouse gases to which the obligations in the Protocol apply.⁹ Annex B identifies the state parties’ commitments, which has since been replaced by NDCs in the Paris Agreement.¹⁰ In this way, the Kyoto Protocol placed aviation emissions outside the Annex B commitments to be dealt with internationally through the United Nations body, the International Civil Aviation Organisation (ICAO).

Paris Agreement 2015

498. The Paris Agreement¹¹ is a legally binding, but unincorporated, international treaty on climate change within the framework of the UNFCCC¹². It has no direct effect in domestic law, save to the extent it is incorporated. It was adopted at COP21 in Paris on 12 December 2015 and entered into force on 4 November 2016.
499. BAANCC seems to argue that the Paris Agreement is capable of giving rise to rights that are directly enforceable in domestic law; this is wrong. English law is a dualist legal system under

⁶ (CD9.19), pdf page 10, Article 4.

⁷ (CD9.20), pdf page 3, Article 2(2).

⁸ (CD9.20), pdf page 4, Article 3(1).

⁹ (CD9.20), pdf page 22.

¹⁰ (CD9.20), pdf page 24.

¹¹ (CD9.26).

¹² (CD9.19).

which an international treaty has legal force at the domestic level only after it has been implemented (i.e. incorporated) by a national statute¹³.

500. The Paris Agreement sets out the “*long term temperature goal*”¹⁴ of limiting global warming to “*well below*” 2 degrees Celsius above pre-industrial levels and “*pursuing efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels*”¹⁵.
501. In order to achieve the ‘long term temperature goal’, parties aim to reach global peaking of greenhouse gas emissions as soon as possible and to undertake rapid reductions thereafter in accordance with best available science “*so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century*”¹⁶. It is notable that whilst this aim is effectively the attainment of ‘net zero’, the obligation to reach ‘net zero’ by 2050 is not contained in the Paris Agreement. The origin of the UK net zero target is in domestic law. The mechanism by which these ambitions are delivered is through each country publishing and accounting for ‘Nationally Determined Contributions’ (‘NDC’) ¹⁷. At paragraph 71 of the Supreme Court’s decision¹⁸ in the *Airports National Policy Statement* challenges, the Court made clear that “*Notwithstanding the common objectives set out in articles 2 and 4(1), the Paris Agreement did not impose an obligation on any state to adopt a binding domestic target to ensure that those objectives were met. The specific legal obligation imposed in that regard was to meet any NDC applicable to the state in question.*” Thus the common objectives of the ‘long term temperature goal’ are to be met through NDCs.
502. Whilst the UK was part of the EU, it declared its NDC through the EU. Since the UK’s exit from the EU, the UK has declared its own NDC, which was submitted in December 2020. It is through the NDCs that the responsibilities of “*developed countries*”¹⁹ are delivered. The Paris Agreement does not, however, require the inclusion of aviation within its scope. In this regard, it did not amend the position under the Kyoto Protocol. The way in which the UK’s NDCs are delivered domestically is considered next.

¹³ Dr Ösund-Ireland, proof of evidence (**BAL/W6/2**) para 6.2.4 and fn67 reference to *J. H. Rayner (Mincing Lane) Ltd. v Department of Trade and Industry* [1990] 2 A.C. 418, at p.500 per Lord Oliver of Aylmerton, and *R. v Secretary of State for the Home Department, ex p. Brind* 1 A.C. 696, at p.747F-H per Lord Bridge of Harwich.

¹⁴ Article 4(1).

¹⁵ (**CD9.26**) Pdf page 5, Article 2(1)(a).

¹⁶ (**CD9.26**), pdf page 6, Article 4(1).

¹⁷ Article 4(2) and 4(13).

¹⁸ *R (on the application of Friends of the Earth Ltd) v Heathrow Airport Ltd* [2020] UKSC 52 (**CD9.106**), para 71

¹⁹ (**CD9.26**), Article 4(4).

National context

*Climate Change Act 2008*²⁰

503. The UK's contribution towards meeting the 'long term temperature goal' in the Paris Agreement is enshrined in domestic law through the Climate Change Act 2008 ('CCA')²¹. When the CCA came into force in December 2008 it placed a legal duty on the Secretary of State to ensure that the 'net UK carbon account'²² for the year 2050 was at least 80% lower than the 1990 baseline (section 1(1)), but this 'target' was subsequently amended in June 2019 to be at least 100% below the baseline (this is the UK's 'net zero' target)²³. This refers to UK emissions of targeted greenhouse gases.²⁴ It requires that there is a balance between emissions produced and those removed; 'net zero' does not mean 'absolute zero' emissions.
504. In addition to the 2050 target, the CCA imposes an obligation on the Secretary of State to set five yearly carbon 'budgets' in order to achieve the 2050 target.²⁵ Each five yearly budget is to be set 12 years in advance as a series of interim targets. The carbon budgets must be set to achieve the 2050 carbon target.²⁶ Section 4 places an obligation on the Secretary of State to ensure that the carbon budget is met.
505. During the inquiry NSC has sought to develop an argument that the legal duty to "*ensure*" that the 'net zero' target by 2050 and five-yearly carbon budgets means that "*a grant of planning permission would be contrary to the statutory to the statutory duties to ensure attainment contained in s1 and s4 of the CCA 2008 and unlawful.*"²⁷ This is completely wrong. The sections 1 and 4 duty to 'ensure' is a duty on the Secretary of State; it is not a duty on individual planning inspectors (or local planning authorities) determining planning applications up and down the country. The duties on the planning inspectors to determining applications derive from the Town and Country Planning Act 1990; not the Climate Change Act 2008.
506. To conclude that "*If there is uncertainty whether a grant of planning permission would be consistent with the attainment of the 6CB target of net zero by 2050, it cannot be rationally*

²⁰ (CD9.2).

²¹ (CD9.2).

²² (CD9.2), pdf page 21, section 27.

²³ Order (CD9.7).

²⁴ (CD9.2), pdf page 49, section 92 identifies the six Kyoto greenhouse gases.

²⁵ (CD9.2), pdf page 8, sections 5 and 8.

²⁶ (CD9.2), pdf page 3, section 5(1)(b).

²⁷ NSC speaking note, para 29

concluded that granting planning permission would ‘ensure’ attainment of these targets”²⁸ and would, therefore, be “unlawful” would bring the UK planning system to its knees, as no applicant for planning permission could demonstrate such a thing. This is not, however, what the law requires.

507. The duty to ‘ensure’ that the carbon budgets and target are met lies with the Secretary of State. Planning inspectors should have regard to the carbon emissions of a development (as BAL has made clear), but in the context of this inquiry should then apply the agreed test to determine the significance of such emissions²⁹ within the context of the legal powers available to Government at a national level. In this regard, it will be necessary for the inspectors to form a planning judgement in the context of the scale of those emissions (which is not challenged), but also recognise that aviation (along with energy) falls within the traded sector; that is, its emissions are capped. For application relating to non-traded sectors the considerations may be different – as they may have been for the inspectors dealing with the A38 Derby Junctions DCO – but that is not this case.
508. Returning to the CCA from that slight diversion, section 30 of the CCA makes clear that emissions from international aviation do not count as emissions from sources within the UK;³⁰ it provides that “[e]missions of greenhouse gases from international aviation or international shipping do not count as emissions from sources in the United Kingdom for the purposes of this Part, except as provided by regulations made by the Secretary of State...”. However section 10 requires that, in setting carbon budgets, the Secretary of State “take into account”³¹ “the estimated amount of reportable emissions from international aviation and international shipping for the budgetary period or periods in question”³². The “estimated amount of reportable emissions” means “the aggregate of the amounts relating to emissions of targeted greenhouse gases from international aviation ... that the Secretary of State ... will be required to report for that period in accordance with international carbon reporting practice”³³.
509. Section 32 of the CCA established the Committee on Climate Change (‘CCC’) to advise the Government on matters relating to climate change, including the carbon target,³⁴ carbon

²⁸ NSC speaking note, para 29

²⁹ Para 5.82 of the ANPS (CD6.9)

³⁰ (CD9.2), pdf page 22, section 30(1).

³¹ (CD9.2) pdf page 11, section 10(1).

³² (CD9.2) pdf page 11, section 10(2)(i).

³³ (CD9.2) pdf page 11, section 10(3).

³⁴ (CD9.2) pdf page 24, section 33.

budgets³⁵ and international aviation³⁶. There is no dispute that the role of the CCC is advisory only; the CCC does not make policy.³⁷ Only where its advice is adopted by Government as policy does it have this status.

510. Six carbon budgets have been adopted to date. The fifth, which runs for the period between 2028 and 2032, was set in 2016. Emissions from international aviation and shipping were not formally included within the first to fifth carbon budgets. Instead, these emissions were ‘taken into account’ in accordance with section 10 of the CCA by setting the budgets at a level that allowed ‘headroom’ for these emissions; in other words, the budgets were set lower by the amount of the headroom. The figure allowed for aviation emissions in the first to fifth carbon budgets was 37.5MtCO₂ per annum; this figure is also known as the ‘planning assumption’³⁸.

*Sixth Carbon Budget Order 2021*³⁹

511. On 21 April 2021, the UK Government announced the Sixth Carbon Budget. This budget covers the period from 2033 to 2037 and is set to align with the UK’s latest NDC under the Paris Agreement. At the same time, the Government announced a new target to reduce emissions by 78% compared to 1990 levels by 2035.
512. For the first time, the Sixth Carbon Budget will formally include emissions from international aviation and shipping within the budget figure, rather than being accounted for as a ‘planning assumption’. Whilst this changes the formal means of reflecting emissions from international aviation in a carbon budget, it does not change the fact that such emissions have always been accounted for in the carbon budgets.
513. The Sixth Carbon Budget Order 2021⁴⁰ provides that “[t]he carbon budget for the 2033-2037 budgetary period is 965,000,000 tonnes of carbon dioxide equivalent”. It is not further broken down and, as there is no longer any ‘headroom’ to be taken into account; in other words, there is no ‘planning assumption’ for this budget.
514. The formal inclusion of international aviation in the Sixth Carbon Budget reflects the approach recommended by the CCC in its Sixth Carbon Budget Report on aviation in December 2020.⁴¹ In

³⁵ (CD9.2) pdf page 24, section 34.

³⁶ (CD9.2) pdf page 25, section 35.

³⁷ Acknowledged: Dr Hinnells, Proof of Evidence (NSC/W6/1), page 11, para 23.

³⁸ This is explained in the APF (CD6.1), pdf page 47, para 2.32.

³⁹ (CD9.38).

⁴⁰ (CD9.38).

⁴¹ (CD9.66).

that report, the CCC explored five scenarios in order to present the Government with advice on alternative policy directions. One of which was identified as the ‘balanced pathway’, under which, aviation was assumed to produce 23 MtCO₂ by 2050.⁴² As part of this pathway, the CCC recommended that there be no net expansion of airport capacity. Whilst Government has adopted the CCC’s recommendation of including international aviation in the carbon budget, it rejected the other recommendations made by the CCC, including the proposed constraint on additional airport capacity and the disaggregation of the carbon budget by sector. This can be seen clearly from the BEIS press release from April 2021, in which it was explained that “[t]he government will look to meet this reduction target through investing and capitalising on new green technologies and innovation, whilst maintaining people’s freedom of choice, including on their diet. That is why the government’s sixth Carbon Budget of 78% is based on its own analysis and does not follow each of the Climate Change Committee’s specific policy recommendations.”⁴³

*Greenhouse Gas Emissions Trading Scheme Order 2020*⁴⁴

515. Since 2005, the UK has participated in the EU Emissions Trading Scheme (‘EU ETS’), which has included the aviation sector since 2012. As part of the UK’s withdrawal from the EU, the UK ETS has replaced the UK’s participation in the EU ETS with effect from 1 January 2021. The UK ETS was established through the Greenhouse Gas Emissions Trading Scheme Order 2020⁴⁵. This trading scheme was established under section 44 of the Climate Change Act 2008⁴⁶. Schedule 2 para 2 of the CCA 2008 requires any trading scheme to specify the ‘period’ to which it relates and the 2021 Order relates to the period to 2030.⁴⁷ Clearly, the CCA 2008 anticipates that further Orders will be made in due course to reflect the Secretary of State’s legal duties under section 4 of the CCA 2008 in order to meet the ongoing 5-yearly cycles of carbon budgets.
516. Aviation emissions from flights to destinations within the European Economic Area (‘EEA’) have been brought within the UK ETS and it is anticipated that airlines will be given allocations of carbon allowances that will be consistent with UK carbon budgets. The total number of ‘given allocations’ for all participants in the UK ETS, including airlines, is approximately 60% of the total

⁴² (CD9.66), pdf page 21 / 23.

⁴³ (CD9.37), pdf page 4, top paragraph.

⁴⁴ (CD9.36).

⁴⁵ (CD9.36).

⁴⁶ (CD9.2).

⁴⁷ (CD9.36), art 20.

number within the UK ETS. The remaining 40% are available for purchase by any participants in the scheme.

517. Regulation 16 establishes the UK ETS and specifies that it includes (emphasis added) “*aviation activities of aircraft operators*”⁴⁸ (not the operators of airports). It is important to understand, however, that the UK ETS is not a scheme that relates solely to aviation, but is the scheme for the entire UK trader sector, including (most obviously) energy. Under the UK ETS, a cap on allowances each year has been initially set at 5% below the UK’s expected notional share of the EU ETS cap with year on year reductions in the cap specified up to 2030 (the current trading scheme period). Regulation 23 permits the ‘trading’ of allowances.⁴⁹ Regulation 28 prescribes the mechanism for aviation ‘monitoring plans’ under which ‘aircraft operator’ monitors emissions and reports to Government.⁵⁰ Regulation 34 provides for the surrender of allowances against emissions and sets up a system of penalties in the following year for operators that exceed their allocated allowances.⁵¹ Enforcement provisions are provided in regulation 44.⁵² The scope of the UK ETS is set out in Schedule 1⁵³, namely, flights to and from the UK and EEA. This includes between 88 and 90% of flights into and out of Bristol Airport.⁵⁴
518. As stated above, further Orders may be made under section 44 of the CCA and the Government has clearly stated its intention to consult on an appropriate trajectory for the UK ETS cap following the CCC’s Sixth Carbon Budget Report, with the aim of aligning the cap with the net zero trajectory by January 2023.⁵⁵ It is quite wrong, therefore, to suggest that just because the current ETS Order sets caps to 2030 this leaves some sort of legal / policy gap after that date.
519. What is also important, however, is that the Government has chosen the UK ETS as one mechanism to control aviation carbon emissions. It is a matter for Government to ensure that it is effective in the context of the legal duty imposed by section 4 on the Secretary of State to ensure that the carbon budgets are not exceeded. An attempt to challenge the UK ETS on the basis that the emissions cap is too high to meet the obligations under the Paris Agreement has

⁴⁸ (CD9.36), pdf page 13.

⁴⁹ (CD9.36), pdf page 15.

⁵⁰ (CD9.36), pdf page 16.

⁵¹ (CD9.36), pdf page 18.

⁵² (CD9.36), pdf page 22.

⁵³ (CD9.36), pdf page 37.

⁵⁴ Dr Ösund-Ireland, Proof of Evidence (BAL/W6/2), page 90, Table 3.1.

⁵⁵ Explanatory Memorandum to the Greenhouse Gas Emissions Trading Scheme Order 2020 (CD9.45).

been considered and rejected by the High Court⁵⁶. There can be no doubt, therefore, about the appropriateness of the way the UK ETS is meant to operate.

The Air Navigation (Carbon Offsetting and Reduction Scheme for International Aviation) Order 2021

520. The CORSIA is a global scheme adopted by ICAO in 2016 in pursuance of the Kyoto Protocol. Its purpose is to supplement industry initiatives to tackle the carbon emissions from international aviation. The 2021 Order notifies ICAO of the UK's participation in CORSIA⁵⁷ and implements the monitoring, reporting and verification requirements of the CORSIA contained in Volume IV of Annex 16 to the Convention on Civil Aviation adopted by the Council of the ICAO on 27 June 2018. The Order came into force in domestic law in May 2021. The monitoring, reporting and verification requirements of UK ETS, EU ETS and CORSIA are consistent; one tonne of CO₂ is accounted for in the same way for all three schemes.
521. CORSIA has three phases; the pilot and first phase which run from 2021 to 2023 and 2024 to 2026 respectively, and the second which runs from 2027 to 2035. The pilot and first phases, in which the UK intends to participate, are voluntary. The second phase would include the majority of countries based on the proportion of aircraft movements. From 2025, the CORSIA facilitates the reporting and offsetting of 'aeroplane operators' emissions. Again, it is quite wrong to suggest that the fact that the current CORSIA scheme only runs to 2035 leaves a legal / policy vacuum after that. The Government will still be required to comply with its section 1/4 duties in relation to any roll forward, or replacement, of the current CORSIA scheme.
522. The Government has consulted on the interaction between the UK ETS and the UN's CORSIA. CORSIA will apply to those emissions not covered by the UK ETS (i.e. flights beyond the EEA) and enables airline operators to purchase carbon credits from the carbon market to offset emissions. As explained by Dr Ösund-Ireland in his Proof of Evidence,⁵⁸ seven policy options for the interrelation between the UK ETS and CORSIA have been proposed, with a preference for a 'supply adjusted' hybrid scheme under which aeroplane operators could claim a reduction in their UK ETS obligations equivalent to their CORSIA obligations on flights from the UK and EEA states. In effect, every CORSIA carbon credit would be matched by the removal of one UK ETS allowance. The CCC considers this approach would work, but requires consideration of how to

⁵⁶ *R (Elliot-Smith) v Secretary of State for Business, Energy and Industrial Strategy* [2021] EWHC 1633.

⁵⁷ Article 7.

⁵⁸ Dr Ösund-Ireland, Proof of Evidence (**BAL/6/2**), page 30, para 3.4.10

avoid the lower price of CORSIA carbon credits distorting the value of UK ETS allowances⁵⁹. In its consultation response, the Government has explained that a further statutory instrument (or an amendment to the Air Navigation (CORSIA) Order) will cover the second part of CORSIA implementation⁶⁰. The intention is that this statutory instrument will come into force from spring 2022.⁶¹

523. The importance of international agreement, such as through schemes like CORSIA, for meeting the challenges of climate change has recently been reiterated in the Decarbonising Transport strategy⁶² and the Jet Zero Consultation.⁶³

*APF (2013)*⁶⁴

524. National aviation policy contains guidance on the treatment of carbon and climate change in decision making on airport development. There are four main points to note about the APF in this context:

- a. The APF recognises that climate change is a global issue to be dealt with at a national and international level.⁶⁵ In so doing, it recognises the need for global action⁶⁶;
- b. It refers to the EU ETS (now replaced by the UK ETS) being a “*key component*” of the strategy to tackle aviation’s emissions.⁶⁷ There has been no amendment to this policy position;
- c. It is the Government’s objective to ensure that the aviation sector makes a significant and cost effective contribution towards reducing global emissions.⁶⁸ The emphasis for this is on global action, but action will be taken at the national level where “*appropriate and justified in terms of the balance between benefits and costs*”⁶⁹; and
- d. The APF remains current policy to be accorded ‘full weight’.⁷⁰

⁵⁹ Letter: UK Emissions Trading Scheme and CORSIA - Climate Change Committee (CD9.11).

⁶⁰ (CD9.43), pdf page 3.

⁶¹ (CD9.43), pdf page 3.

⁶² (CD9.134), page 117.

⁶³ (CD9.135), page 16ff.

⁶⁴ (CD6.1).

⁶⁵ APF (CD6.1), page 10, paras 12 to 13.

⁶⁶ APF (CD6.1), page 41, para 2.8.

⁶⁷ APF (CD6.1), page 10, paras 14 to 15.

⁶⁸ APF (CD6.1), page 41, para 2.4 to 2.5.

⁶⁹ APF (CD6.1), page 41, para 2.4 to 2.5.

⁷⁰ Mr Melling, cross examination, day 31, pm session.

MBU (2018)

525. Similarly, there are three points to note at this stage about MBU⁷¹:

- a. MBU identifies that the role of local planning policy is on issues such as noise and air quality,⁷² “[t]here are, however, some important environmental elements which should be considered at a national level.”⁷³ One such issue identified as a matter of national policy concern is the impact of carbon emissions from aviation.
- b. MBU sets out the Government’s policy position as follows: “*the government is supportive of airports beyond Heathrow making best use of their existing runways.*” It is recognised that the development of airports has both positive and negative local impacts, and leaves it to local decision makers to consider each case on its own merits;⁷⁴
- c. MBU remains current Government policy and continues to have “*full effect*” in planning decisions. As set out above, this has been restated on a number of occasions, including most recently in correspondence to NSC concerning the present appeal;⁷⁵ and
- d. There is no policy in MBU that directs growth to some airports and not others.

ANPS 2018

526. As outlined above, the ANPS⁷⁶ is not directly applicable to the present appeal but is nevertheless a material consideration.

527. The ANPS states in terms that “*Any increase in carbon emissions alone is not a reason to refuse development consent, unless the increase in carbon emissions resulting from the project is so significant that it would have a material impact on the ability of Government to meet its carbon reduction targets, including carbon budgets.*”⁷⁷ This formulation of the policy test to be applied in considering the appeal is reflected in the Inspectors’ CMC1 issue (f) and is accepted by all the parties⁷⁸.

⁷¹ (CD6.4).

⁷² MBU (CD6.4), page 4, para 1.9.

⁷³ MBU (CD6.4), page 4, para 1.11.

⁷⁴ MBU (CD6.4), page 9, para 1.29.

⁷⁵ DfT letter to NSC (INQ/042).

⁷⁶ (CD6.9).

⁷⁷ (CD6.9), pdf page 60, para 5.82.

⁷⁸ See Proof of Evidence of Dr Hinnells (NSC/W6/1) paras 70/71 and Proof of Evidence of Mr Gurtler (NSC/W7/1) paras 193/4.

Decarbonising Transport

528. On 14 July 2021, after the preparation of Proofs of Evidence by the parties to the appeal, the DfT published its ‘Decarbonising Transport: A Better, Greener Britain’ strategy⁷⁹. The strategy sets out the Government’s plan for *“delivering the additional reductions needed to deliver transport’s contribution to legally binding carbon budgets and delivering net zero by 2050.”*⁸⁰ On the same day, the Government launched its ‘Jet Zero’ consultation.
529. On 20 July 2021, the Inspectors invited the parties to prepare further submissions on the implications of both the Decarbonising Transport strategy and the Jet Zero consultation for the appeal. BAL produced an Addendum Proof of Evidence by Dr Ösund-Ireland including an Appendix prepared by Mr Brass.⁸¹ Dr Ösund-Ireland identifies the following key points from the Decarbonising Transport strategy⁸² and Jet Zero consultation:⁸³
- a. The UK Government’s commitment to the aviation sector being net zero by 2050 is clear;⁸⁴
 - b. The pathway that will ultimately lead to achieving net zero aviation cannot be set out step by step at this stage, but different pathways have been considered and are available;⁸⁵
 - c. All pathways to net zero considered by UK Government anticipate accommodating an increase in passenger numbers of between 58 – 60%, including Bristol Airport at 12 million passengers per annum (mppa);
 - d. The UK Government does not anticipate the introduction of measures to limit the capacity of UK airports in order to meet its climate change commitments.⁸⁶ Indeed it is *“not about stopping people doing things”* but doing the same things differently⁸⁷;
 - e. Overall, the direction of UK policy and legislation with respect to carbon and aviation has not changed;

⁷⁹ (CD9.134).

⁸⁰ (CD9.134), page 16.

⁸¹ (BAL/W6/4).

⁸² (CD9.134).

⁸³ (BAL/W6/4), page 5, para 1.1.5.

⁸⁴ (CD9.134), page 41. See also (CD9.135), page 4.

⁸⁵ (CD9.134), page 44. See also (CD9.135), page 12.

⁸⁶ (CD9.134), page 41. (CD9.135), page 38, para 3.41.

⁸⁷ (CD9.134), page 4 (Foreword).

- f. The UK Government considers the aviation sector as being at the heart of the UK's economy and is committed to *"retaining the connectivity we cherish"*⁸⁸;
- g. The UK Government will encourage the aviation industry to achieve carbon net zero through innovation⁸⁹, which itself provides huge economic opportunities. The means by which industry will be incentivised includes through the operation of the UK ETS, the Renewable Transport Fuels Obligation⁹⁰ and the Sustainable Aviation Fuels Mandate⁹¹;
- h. With regards to Bristol Airport, the draft Carbon and Climate Change Action Plan ('CCCAP') that will be delivered as part of the Appeal Proposal is fully aligned with the Government's position and trajectory, in some instances reaching the Government's ambitions faster than the timeline set out by Government. Bristol Airport is mentioned by name in the strategy in respect of its objective of being net zero by 2030⁹² ; and
- i. MBU remains current Government policy, to be given full weight in decision making.⁹³

530. It should be noted that whilst Decarbonising Transport is Government policy, the Jet Zero Consultation document is not. However, there are certain things on which the Jet Zero Consultation is not consulting⁹⁴, this includes the ANPS, the APF and MBU policy.

NPPF (2021)

531. Paragraph 188 of the NPPF⁹⁵ provides as follows:

*"The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively."*⁹⁶

532. Aircraft emissions of carbon are subject to a separate legal and policy control regime under the CCA, carbon budgets and the UK ETS. On this basis, the Inspectors should assume that those regimes will operate effectively.

⁸⁸ (CD9.135), page 5.

⁸⁹ (CD9.134), page 8.

⁹⁰ (CD9.137), pdf page 4.

⁹¹ (CD9.133) and (INQ/040).

⁹² This is expressly recognised in Decarbonising Transport (CD9.134), page 121.

⁹³ (CD9.135), page 51, footnote 39.

⁹⁴ (CD9.135), page 8, para 1.6.

⁹⁵ (CD5.8.1.).

⁹⁶ (CD5.8.1), pdf page 54.

533. BAANCC seeks to challenge this policy presumption, by arguing that it can only be a rebuttable presumption. Whilst of course a policy presumption may be rebutted, it is important to remember that here the control regime is operated by Government within the context of a fully sovereign Parliament and a clear legal duty under sections 1 and 4 of the CCA 2008 to meet its net zero target and carbon budgets. It is difficult to understand, within this legal framework, how it could be reasonably concluded that the UK's national regime for controlling greenhouse gas emissions will not operate effectively; in other words, how the policy presumption in paragraph 188 of the NPPF could properly be rebutted.

Core Strategy

534. At the local policy level, policy CS1 of the Core Strategy provides that *“North Somerset Council is committed to reducing carbon emissions and tackling climate change, mitigating further impacts and supporting adaptation”*. To achieve this, policy CS1 identifies *“development should demonstrate a commitment to reducing carbon emissions, including reducing energy demand through good design, and utilising renewable energy where feasible and viable in line with standards set out in Policy CS2”*. This is of primary relevance to carbon emissions from airports buildings, ground operations and surface access, which are matters of local policy concern.

BAL's Assessment of the Carbon Impact

Approach to Assessment

Fallacies

535. It is helpful, first, to identify and debunk a number of fallacies that have been presented during the course of the Inquiry. These are as follows:

- a. The fallacy that BAL relies on MBU as a basis for excluding the carbon emissions from the proposed development as a material consideration in the determination of this appeal⁹⁷;
- b. The fallacy that consent cannot be granted for any airport development until the Government has carried out an assessment of the carbon impact of all UK airport projects and determined whether any airport expansion is compatible with net zero and if so, which⁹⁸; and

⁹⁷ This was suggested by Mr Hunter-Jones as the approach adopted by BAL in examination in chief, Day 23, am session.

⁹⁸ Dr Hinnells, Proof of Evidence (NSC/W6/1), page 36, section 3.5.8.

- c. The fallacy that because the UK is currently assessed to be ‘off track’ to meet its future climate change budgets that it will not meet those budgets when they arise.
536. With regards to the first fallacy, at no point has it been BAL’s case that the carbon emissions from the proposed development are not a material consideration in the determination of the appeal. There has been, therefore, no “*shift in approach*”⁹⁹, as is suggested by BAANCC; this is part of the fallacy. The simple fact is that BAL’s position has either been misunderstood or mischaracterised, but it has been clear and consistent throughout.
537. The original planning application was accompanied by the ES, which contained a detailed calculation and evaluation of significance of the carbon emissions from all sources of emissions¹⁰⁰. BAL’s Statement of Case explained as follows:¹⁰¹
- “The assessment presented in Chapter 17 of the ES established, based on a methodology agreed with NSC officers, that aviation emissions associated with the addition of 2 mppa would represent only 0.28% of the 37.5 MtCO₂/annum ‘planning assumption’ adopted by Government, which was not considered to materially affect the UK’s carbon budgets. Accordingly, in line with the approach in Aviation 2050, aviation emissions from Bristol Airport would not therefore amount to a significant effect. This is the correct approach to assessing the significance of additional carbon emissions and this was accepted by NSC officers in recommending approval of the planning application.”*
538. Dr Ösund-Ireland’s Proof of Evidence identifies that at their peak in 2030 under all scenarios, the international aviation emissions associated with the proposed development are projected to equate to 0.22% of the 37.5MtCO₂ ‘planning assumption’ relevant for the fourth and fifth carbon budgets; this reduces to 0.17 – 0.20% in 2050¹⁰². Compared to the CCC’s ‘balanced pathway’ assumption for aviation of 23 MtCO₂ in 2050, the contribution of the proposed development would only be 0.29 – 0.34%.
539. Furthermore, Dr Ösund-Ireland explained that the total aviation emissions are reported in the ESA as between 0.41285 – 0.48829 MtCO₂ in 2050 (lower to upper emissions scenarios), with the central emissions scenario (0.44301 MtCO₂) representing a 6% decrease compared to the 2017 baseline.¹⁰³ Considering these emissions in the context of the mechanisms put in place by

⁹⁹ BAANCC closing, para 69

¹⁰⁰ ES, Chapter 17 (**CD2.5.44**) and Appendix 17A (**CD2.5.45**).

¹⁰¹ (**CD21.1**), page 17, para 7.4.

¹⁰² Dr Ösund-Ireland, Proof of Evidence (**BAL/W6/2**), page 46, para 4.3.2

¹⁰³ Dr Ösund-Ireland, Proof of Evidence (**BAL/W6/2**), page 50, para 4.4.4.

Government to meet net zero by 2050 (including the inclusion of aviation in the Sixth Carbon Budget, the UK ETS, the role of CORSIA, in addition to a series of investments in green technology¹⁰⁴ including the Renewable Transport Fuels Obligation¹⁰⁵ and the Sustainable Aviation Fuels Mandate¹⁰⁶)¹⁰⁷ and the retained ability of Government to put in place further measures as and when required, the emissions from the proposed development as not so significant that they would have a material impact on the Government's ability to achieve the Sixth Carbon Budget or net zero by 2050¹⁰⁸. On this basis, Dr Ösund-Ireland rightly concludes that the aviation emissions from the proposed development are 'not significant' in EIA terms.

540. It is quite clear, therefore, that BAL does not suggest (and has never suggested) that the carbon emissions from the proposed development, including those from aviation, are not material to the determination of the appeal. Those emissions have been calculated (in respect of which there is agreement) and the significance of those considered in the context of the carbon budgets and the Government's net zero target. By the nature of the second test of significance (namely, whether the emissions are so significant that they would materially impact the ability of the Government to meet its climate change obligations), it is necessary to consider how the Government will seek to meet these obligations and the impact of these emissions on that ability.
541. BAL's reliance on MBU is twofold; first, it provides in principle policy support for Bristol Airport 'making best use' of its existing runway (subject to the resolution of environmental issues) and second, it identifies a distinction between issues that are within the remit of local policy, and issues that are addressed by national policy. The prime example of matters to be dealt with at the national level are aircraft emissions of carbon. This does not, however, mean that aircraft emissions of carbon associated with the development are not material; they need to be taken into account, but within the context of the mechanisms to control them at a national level in order to meet the carbon target and budgets.
542. With regards to the second fallacy, NSC and BAANCC have presented arguments that are, in essence, the same; namely, that permission cannot be granted for this development (or any airport development) unless and until the UK Government has (i) identified in detail the trajectory to net zero, (ii) carried out an assessment of the total emissions from all proposed

¹⁰⁴ Outlined at Dr Ösund-Ireland, Proof of Evidence (**BAL/W6/2**), page 50, paras 4.4.10 and 4.4.11.

¹⁰⁵ (**CD9.137**), pdf page 4.

¹⁰⁶ (**CD9.133**) and (**INQ/040**).

¹⁰⁷ Dr Ösund-Ireland, Proof of Evidence (**BAL/W6/2**), page 50, para 4.4.7.

¹⁰⁸ Dr Ösund-Ireland, Proof of Evidence (**BAL/W6/2**), page 51, para 4.4.12.

projects to identify whether any increase in airport capacity is compatible with that trajectory, and (iii) if so, assessed which airport project should be permitted. This second fallacy reflects, in part, NSC and BAANCC's position on 'cumulative effects', an issue that is covered later.

543. There are five points to make in response:

- a. The implication of this approach is that the Government's policy of 'making best use' is rendered meaningless. MBU provides in principle support for any airport outside Heathrow making best use of its existing runway, subject to the resolution of environmental issues. If there can be no airport expansion until the Government has carried out a central assessment of airport development projects and determined which of these should come forwards, then the policy of making best use in the APF and MBU has no effect. The implication of this approach is that there is, at present, a moratorium on airport development. This would be distinctly at odds with the Government's very recent reiteration of MBU as 'current policy' which is to be given 'full effect' in decision making¹⁰⁹.
- b. Indeed, this approach finds no basis in any published policy or Government statement.¹¹⁰ If the Government considered it necessary to carry out an assessment of all airport development projects before any particular project could come forwards, it would have said so. This is particularly so in light of the recent publications of the Decarbonising Transport Strategy¹¹¹, the launch of the Jet Zero Consultation¹¹² and the publication of the accompanying Evidence and Analysis document¹¹³. Indeed, the Jet Zero Consultation document envisages that there will be a growth in demand of between 58% and 60% by 2050.¹¹⁴ Those documents also make clear that the Government does not envisage restricting airport 'capacity' as a means of achieving net zero.¹¹⁵
- c. This approach is also clearly inconsistent with the decision by Government not to recover jurisdiction in the present appeal. If the approach advocated by NSC and BAANCC was correct, it would be necessary to recover jurisdiction for this appeal (and indeed all other

¹⁰⁹ See Jet Zero Consultation (CD9.135), page 51, footnote 39, and the DfT's letter to NSC (INQ/042).

¹¹⁰ Accepted by Dr Hinnells, cross-examination, Day 21 pm session. Dr Hinnells accepted that there is "*no statement from government that there is a moratorium.*"

¹¹¹ (CD9.134).

¹¹² (CD9.135).

¹¹³ (CD9.136).

¹¹⁴ Mr Brass, Appendix to Dr Ösund-Ireland's Addendum Proof (BAL/W6/4), page 3, para 2.1.6.

¹¹⁵ See Decarbonising Transport (CD9.194), page 4, page 8 and page 41. Jet Zero Consultation (CD9.135), page 38, para 3.41. Jet Zero 'Evidence and Analysis' (CD9.136), page 7, para 2.12, page 9, para 2.21.

airport planning applications) to ensure that planning permission is not granted ‘prematurely’ for any particular airport development;

- d. This approach is also not borne out by the approach adopted in other recent planning and appeal decisions relating to airport development. This includes the Stansted Appeal Decision (which too was not recovered or called in),¹¹⁶ which granted permission for the expansion of Stansted Airport in the absence of a central Government assessment of the type suggested by NSC and BAANCC.
- e. Taken to its logical conclusion, this reasoning would be applicable to all forms of development and result in a blanket ban on granting permission for any development that could have a positive carbon impact (however small) until central Government has identified the trajectory to net zero for the whole economy. Indeed, as the BEIS Energy and Emissions Update 2019 demonstrates, within the non-traded sector, the major contributor to greenhouse gas emissions is the residential sector.¹¹⁷ On this basis, NSC and BAANCC’s approach would mean that planning permission could not be granted for any residential development unless and until the Government has identified how the residential sector will reach net zero in 2050 and ensured that any particular residential development is compatible with this; this is nonsense.

544. Standing back, it is surprising that NSC has continued to pursue this line of argument; Dr Hinnells expressly accepted that there is no moratorium on airport development¹¹⁸ and accordingly no statement in Government policy to that effect.

545. With regards to the third fallacy, both NSC and BAANCC have sought to rely on the CCC’s Progress Report to Parliament 2021¹¹⁹ to demonstrate that the UK is not currently performing in line with the trajectory to net zero and the fourth and fifth carbon budgets. There is a legal duty on the Secretary of State to meet the fourth and fifth carbon budgets and he has the ability to take measures to ensure the UK does so. As Dr Hinnells agrees, the Inspectors should assume that the Secretary of State will comply with its legal obligations and these carbon budgets will be met.¹²⁰

¹¹⁶ May 2021 (CD6.13).

¹¹⁷ (CD9.78), pdf page 16.

¹¹⁸ Dr Hinnells, cross examination, Day 21 pm session: “that would be a moratorium and we do not have that”.

¹¹⁹ Dr Hinnells, Rebuttal Proof (NSC/W6/3), page 11, Figure 2.

¹²⁰ Dr Hinnells, cross examination, Day 21, pm session.

546. Furthermore, being off track now in relation to a budget period that have not even started and in respect of which further legal and policy measures can be taken is, in reality, meaningless. The reason that BEIS and the CCC publishes future performance projections is exactly to allow the Government to take the necessary measures to meet its legal obligations to meet future budgets in a timely and efficient manner. Thus being 'off track' now against a future budget that does not apply for some years does not mean that that budget will not be complied with when it arises. Clearly, the Government will not actually be on or off track to meet any particular budget until that budget period has ended and those for the fourth, fifth and sixth budgets have not even started.

Correct Approach

547. There are four preliminary points to make about the correct approach to assessing the impact of the proposed development in terms of carbon emissions and climate change, as follows:

- a. It is not for Inspectors in the context of a local planning inquiry to review the merits of current Government policy. The Inspectors must have regard to, and attach appropriate weight to, current government policy. The question of weight is a matter for the Inspectors.
- b. It is not for the Inspectors to advise Government on the formulation of new Government policy;
- c. Nor is it for the Inspectors to make findings on the likely success or otherwise of advances in aircraft technology or greenhouse gas removals over next 30 years; and
- d. When considering the carbon emissions from the proposed development, the source of the emissions is relevant. The legal and policy framework for airline (i.e. aviation) emissions is distinct to the framework for emissions from ground and surface access emissions.

Assessment in ES and ESA

548. Chapter 17 of the ES assessed the carbon emissions from the proposed development and evaluated the significance of those emissions.¹²¹ This assessment was updated in section 10 of the ESA¹²², in accordance with the updated air traffic forecasts by York Aviation.

¹²¹ (CD2.5.44).

¹²² (CD2.20.1), page 143 ff, section 10.

Sources of emissions

549. There are five relevant sources of carbon emissions that were assessed in the ES and ESA; aviation, surface access, airport buildings and operations, and construction (including embodied carbon). These emissions comprise scope 1, 2 and 3 emissions.
550. As Dr Ösund-Ireland has explained, there is an important distinction between airline (or aviation) emissions on the one hand, and airport emissions (including ground emissions) on the other.¹²³ This distinction is reflected in MBU¹²⁴; whilst the former is a national policy matter, the latter is a local one.
551. The detailed methodology adopted for the quantification of carbon emissions from the five sources is set out in Appendix 10A of the ESA¹²⁵. In overview, the approach to the assessment of emissions has been to forecast the relevant sources for the ‘with development’ scenario and ‘without development’ scenario for 2024, 2030, 2040 and 2050.¹²⁶ The assessment uses a range of scenarios in order to reflect the uncertainties in the projection. These included an upper emission scenario, central emission scenario and lower emission scenario, reflecting different levels of greenhouse gas emissions based on policy or market trends¹²⁷.
552. As shown in Table 4.1 in the Proof of Evidence of Dr Ösund -Ireland¹²⁸, the assumptions made in the ES and ESA about the future reductions in emissions from aviation can be described as a “reasonable worst case” when compared to the five scenarios considered by the CCC in the Sixth Budget Report.¹²⁹ The central emissions scenario assumes +20% increase in passenger numbers as a result of demand management, 1.13% efficiency improvements year on year and 10% share of biofuels by 2050. This is more conservative than the CCC’s balanced pathway, which assumes +25% increase in passenger numbers as a result of demand management, efficiency improvements of 1.4% year on year, and a 17% biofuel + 8% synthetic jet fuel share by 2050. Even the lower emissions scenario adopted in the ESA adopts more conservative assumptions in terms of demand management and fuel share than the balanced pathway.
553. It should be noted too, that the quantum of emissions calculated in the ESA does not reflect the trajectory to decarbonise aviation, as set out in the Decarbonising Transport strategy, or the

¹²³ Dr Ösund-Ireland, Proof of Evidence (**BAL/W6/2**), pages 49 to 53, paras 4.4.1 to 4.4.22.

¹²⁴ MBU (**CD6.4**), pdf pages 5 and 6, para 1.11 and 1.19.

¹²⁵ (**CD2.20.6**).

¹²⁶ ESA (**CD2.20.1**), page 156, para 10.5.6.

¹²⁷ ESA (**CD2.20.1**), page 156, para 10.6.8.

¹²⁸ Dr Ösund-Ireland, Proof of Evidence (**BAL/W6/2**), page 42, Table 4.1.

¹²⁹ Dr Ösund-Ireland, Proof of Evidence (**BAL/W6/2**), page 42, para 4.2.2.

removal of greenhouse gases from the atmosphere. In other words, the move to Jet Zero for the UK's domestic and international aviation will also be reflected in the emissions of flights to / from Bristol airport, meaning that its forecast emissions will reduce over time compared with the quantified figure given. Thus the emissions in the ESA are very much a 'worst case' in the long term.

Carbon emissions

554. The results of the calculation of carbon emissions from the proposed development are set out in Table 10.5 and Figure 10.1 in the ESA.¹³⁰ The total greenhouse gas emissions, without considering offsetting commitments in the 2017 baseline, is 0.67076 MtCO₂e/yr. The results are summarised as follows, with all emissions quoted in MtCO₂e/yr to compare directly with the 37.5 MtCO₂e/yr 'planning assumption':

- a. In the upper emissions scenario, the total greenhouse gas emissions without considering offsetting commitments, would be 0.73603 with development in 2024 (against 0.68493 without development), 0.77910 with development in 2030 (against 0.64569 without development), 0.73596 with development in 2040 (against 0.61501 without development), and 0.65512 with development in 2050 (against 0.55577 without development).
- b. In the central emissions scenario, the total greenhouse gas emissions without considering offsetting commitments, would be 0.73141 with development in 2024 (against 0.68064 without development), 0.76303 with development in 2030 (against 0.63254 without development), 0.63653 with development in 2040 (against 0.53283 without development), and 0.48363 with development in 2050 (against 0.40544 without development).
- c. In the lower emissions scenario, the total greenhouse gas emissions without considering offsetting commitments, would be 0.72198 with development in 2024 (against 0.67726 without development), 0.71408 with development in 2030 (against 0.59201 without development), 0.54993 with development in 2040 (against 0.46148 without development), and 0.42305 with development in 2050 (against 0.35545 without development).

¹³⁰ ESA (CD2.20.1) pdf pages 161 to 2.

555. When Bristol Airport's off-setting commitments are taken into account, the results are as follows (the 2017 baseline remains the same):

- a. In the upper emissions scenario, the total greenhouse gas emissions with considering offsetting commitments, would be 0.53526 with development in 2024 (against 0.49089 without development), 0.56771 with development in 2030 (against 0.47191 without development), 0.55160 with development in 2040 (against 0.46348 without development), and 0.49747 with development in 2050 (against 0.41795 without development).
- b. In the central emissions scenario, the total greenhouse gas emissions without considering offsetting commitments, would be 0.53094 with development in 2024 (against 0.48690 without development), 0.56010 with development in 2030 (against 0.46558 without development), 0.53500 with development in 2040 (against 0.44937 without development), and 0.44672 with development in 2050 (against 0.37551 without development).
- c. In the lower emissions scenario, the total greenhouse gas emissions without considering offsetting commitments, would be 0.52654 with development in 2024 (against 0.48837 without development), 0.54959 with development in 2030 (against 0.45686 without development), 0.51830 with development in 2040 (against 0.43581 without development), and 0.41651 with development in 2050 (against 0.35031 without development).

556. These results are shown on graphical form and broken down by source in the ESA. The 'without offsetting' results are presented in Figure 10.1¹³¹ and 'with offsetting' results are presented in Figure 10.2¹³². These results have been sensitivity tested against the faster and slower growth scenarios. The assessment concluded that if 12 mppa is reached earlier or later than 2030 (either in 2027 or 2034), the trajectory of emissions will vary, but will ultimately reach the same point in 2050 as the central growth estimate. On this basis, the impacts of the proposed development will not be substantially different from the 2030 Core Case.¹³³

Criteria of significance

¹³¹ (CD2.20.1), page 162, Figure 10.1.

¹³² (CD2.20.1), page 164, Figure 10.2.

¹³³ ESA (CD2.20.1), pages 177 to 178, para 10.8.26.

557. The assessment of significance in the ES and ESA is based on a combination of receptor sensitivity and magnitude of impact. In accordance with IEMA Guidance, the relevant receptor for the assessment of greenhouse gas emissions is the global climate, which is considered highly sensitive¹³⁴.

558. The ESA has carried out two assessments of significance, in short, as follows:¹³⁵

- a. The extent to which the scheme materially affects the ability of the UK to meet the aviation ‘planning assumption’; and
- b. The extent to which the scheme materially impacts the ability of the UK to meet its carbon budgets and target of net zero greenhouse gas emissions by 2050.

Conclusions on significance

559. With regards to the first assessment of significance, the evidence of Dr Ösund-Ireland explains that the proposed development would result in an additional contribution of between 0.17 to 0.20% of the planning assumption in 2050. This incremental increase is not significant when compared with the planning assumption of 37.5 MtCO₂. This has been sensitivity tested against the lower figure of 23 MtCO₂ used by the CCC in its balanced pathway option to net zero. Against this figure too, the increase is ‘not significant’. Indeed, taken as a percentage of the Sixth Carbon Budget figure as a whole (2033-2037), the contribution of the proposed development for that period is less than 0.07%.¹³⁶

560. Indeed, the proposed increase in carbon emissions from the expansion of Bristol Airport is one of the lowest of the various proposed airport projects,¹³⁷ and well below the contribution of the recently consented Stansted Airport expansion. Moreover, the assessment indicates that Bristol Airport’s share of emissions from international flights departing from the UK is unlikely to increase with the proposed development, and the proposed development would most likely result in aviation emissions being reduced compared to 2017.¹³⁸

561. With regards to the second assessment of significance, the emissions from the proposed development are a very small percentage of the 37.5 MtCO₂ ‘planning assumption’ and an even

¹³⁴ ES (CD2.05.44), pdf page 20 para 17.9.2 and pdf page 21, para 17.9.11.

¹³⁵ Dr Ösund-Ireland, Proof of Evidence (BAL/W6/2), pages 44 to 45, paras 4.2.7 to 4.2.8.

¹³⁶ CB6 (CD9.38) is a total of 965,000,000 tonnes for period 2033-2037 – The contribution of the proposed development for this period is c.652,450 tonnes (being (CD2.20.1 Table 10.5) 763.03kT – 632.54kT (2030 figure) = 130.49kT pa x 5 years) – And so Bristol expansion as percentage of CB6 = 0.068%.

¹³⁷ Dr Ösund-Ireland, Proof of Evidence (BAL/W6/2), Table 4.3.

¹³⁸ Dr Ösund-Ireland, Proof of Evidence (BAL/W6/2) page 48, paras 4.3.8 to 4.3.12.

smaller percentage of the Sixth Carbon budget, as outlined above. Furthermore, the ESA assesses aviation emissions at 0.44301 MtCO₂ in 2050 (as the central scenario), which represents a decrease of 6% compared to the 2017 baseline.

562. These emissions can be influenced by BAL, but are ultimately controlled at the national level through measures taken by Government. This includes the Sixth Carbon Budget and the inclusion of both domestic and international aviation emissions within the UK ETS, which can be supplemented by CORSIA. In particular, the UK ETS means that emissions from international aviation within the EEA¹³⁹ are capped; they cannot exceed that cap. The assessment of significance must take into account these measures, but also the Government's ability to take further measures, as necessary. The context for this ability is the legal duty on the Secretary of State to set the carbon budgets in accordance with the net zero target and ensure that both are met.¹⁴⁰
563. Taking into account the quantification of the emissions, the measures already in place to achieve the Government's climate change obligations and the ability to take further measures, the aviation emissions from the proposed development are not so significant that they have a material impact on the Government's ability to meet its climate change target and budgets and so, on this test of significance too, are 'not significant'.
564. With regards to the emissions from ground operations, airport buildings and surface access, the draft CCCAP sets out a range of measures by which these will be addressed, the detail of which is set out below. In light of these measures, the non-aviation emissions are also assessed as being 'not significant' in EIA terms.

Position of NSC's officers

565. NSC officers concluded that the greenhouse gas emissions from the proposed development were *"unlikely to have a material impact on the ability of the Govt to meet its CC obligations"*.¹⁴¹ On this basis, officers had no objection to the application in terms of its impact on climate change.¹⁴²

¹³⁹ Approximately 90% of BAL's movements; Dr Ösund-Ireland, Rebuttal (**BAL/W6/3**), Table 3.1.

¹⁴⁰ CCA 2008 (**CD9.2**), sections 1, 4, 5 and 8.

¹⁴¹ Officers' Report (**CD4.11**), page 42.

¹⁴² Officers' Report (**CD4.11**), page 42.

566. The draft CCCAP was considered to demonstrate an ongoing commitment on the part of BAL to agreeing practical measures to reduce carbon emissions through day to day operations in its direct control and other 'scope 3' sources.¹⁴³
567. Within the overall planning balance, Officers acknowledged the objections received from objectors on the basis of the increase in greenhouse gas emissions at a time when the overall objective was to reduce emissions¹⁴⁴. Officers noted the recent change to the CCA to establish the 'net zero' target and acknowledged the report of the CCC in respect of the challenges and broad approach to reach net zero. The report concluded "*Officers are satisfied that the level of additional carbon emissions resulting from the proposed development is not significant against these budgets and are unlikely therefore to compromise the UK's ability to meet its climate change obligations.*"¹⁴⁵ The draft CCCAP was considered to comply with the requirement in policies CS1 and CS2 for applicants to implement measures to reduce, as far as practical, their carbon footprint¹⁴⁶.

Areas of agreement

568. There are a number of key points of agreement between BAL and NSC, as follows:
- a. The methodology for the calculation of the carbon emissions produced by the proposed development;¹⁴⁷
 - b. The output of that methodology as a matter of mathematics;¹⁴⁸
 - c. An appropriate test of significance is whether the carbon emissions of the proposed development are so significant as to have a material impact on the Government's ability to meet its carbon reduction targets;¹⁴⁹
 - d. In considering the significance of the carbon emissions from the proposed development, the Inspectors must take into account the national legislative and policy measures to control aviation emissions;¹⁵⁰

¹⁴³ Officers' Report (CD4.11), page 42.

¹⁴⁴ Officers' Report (CD4.11), page 141.

¹⁴⁵ Officers' Report (CD4.11), page 142.

¹⁴⁶ Officers' Report (CD4.11), page 142.

¹⁴⁷ The methodology was agreed with NSC officers prior to BAL's application; methodology accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁴⁸ Statement of Common Ground Part 2, pdf page 13.

¹⁴⁹ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁵⁰ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

- e. In so doing, the Inspectors must assume that the Secretary of State will comply with the law.¹⁵¹ This includes its legal duties under the CCA 2008.¹⁵² Indeed, the Secretary of State “can ensure that carbon budgets are met and has a legal duty to do so”,¹⁵³
- f. One such mechanism is the UK ETS, but the Government can adopt other mechanisms to achieve the target in section 1 of the CCA 2008.¹⁵⁴ The cap under the UK ETS is a matter for Government;¹⁵⁵
- g. There is no adopted Government policy of ‘no net expansion of UK airports’ as proposed by the CCC¹⁵⁶ nor is there any other capacity cap.¹⁵⁷ Nor is there any proposal to introduce capacity caps in the Jet Zero consultation or Decarbonising Transport;¹⁵⁸
- h. The Sixth Carbon Budget does not include any sub-budget or sector target for aviation;¹⁵⁹
- i. It is not the role of the Inspectors to advise on future Government policy;
- j. Paragraph 188 of the NPPF is relevant to the determination of the appeal insofar as it applies to national regimes for controlling carbon emissions, such as the UK ETS;¹⁶⁰ and
- k. There is no UK policy requirement that one should seek to quantify the non-CO₂ warming effects in development control decisions.¹⁶¹

Outstanding issues in dispute

569. In addition to the fallacies set out above, the outstanding dispute centres on the interpretation and evaluation of the results set out in the ESA; these points can be broken down as follows:
- a. Whether MBU is ‘out of date’ and should be afforded reduced weight;

¹⁵¹ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁵² Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁵³ Dr Hinnells, cross-examination, Day 21, pm session. When Dr Hinnells was asked the question in these terms, his response was “correct”.

¹⁵⁴ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁵⁵ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁵⁶ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁵⁷ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁵⁸ Accepted by Dr Hinnells, cross-examination, Day 21, pm session. It was put to Dr Hinnells that there was nothing in Jet Zero that indicated that capping capacity is part of what is needed; Dr Hinnells response was “not in Jet Zero”.

¹⁵⁹ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁶⁰ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁶¹ Accepted by Dr Hinnells, cross-examination, Day 21, pm session. Dr Hinnells view is that “best practice” would require this.

- b. The continued relevance of evaluating the significance of the emissions against the ‘planning assumption’;
- c. Whether weight can be placed on the UK ETS; and
- d. The need to carry out a “*cumulative assessment*” of all airport expansion projects.

570. In addition to those concerning the evaluation and interpretation of the results, there is an outstanding dispute concerning the assessment of non-CO₂ impacts from the proposed development.

Whether MBU is ‘out of date’

571. At the crux of NSC’s case is the argument that MBU as a policy is out of date and should accordingly be given “*little weight*”¹⁶². The basis on which it is argued that this is the case is that the position is now “*fundamentally different*” from the time when MBU was adopted.¹⁶³ This is because MBU was adopted in a policy context without net zero and before the Sixth Carbon Budget and the inclusion of international aviation within it.¹⁶⁴

572. In this context, it is important to recognise that MBU always recognised that “*there remains uncertainty over future climate change policy and international arrangements to reduce CO₂ and other greenhouse gases*”.¹⁶⁵ It is axiomatic that circumstances will often change during the life of Government policy, but in this case there have been recent and frequent re-statements of that policy, as identified elsewhere in this closing. These statements have confirmed the Government’s clear position that MBU remains “*the most up to date*” policy and should be given “*full effect*” in decision making. Extraordinarily, Dr Hinnells seeks to argue that these statements do not mean that MBU is up to date nor that it should be given full weight.¹⁶⁶ Dr Hinnells distinguishes between policy that is “*the most up to date*” and policy that is “*up to date*”; whilst MBU is the most up to date, it is (apparently) still out of date. Furthermore, Dr Hinnells argues, there is a distinction between “*full effect*” in decision making and “*full weight*” in decision making.

¹⁶² Dr Hinnells, Proof of Evidence (NSC/W6/1), page 30, para 111.

¹⁶³ Dr Hinnells, Proof of Evidence (NSC/W6/1), page 29, para 108.

¹⁶⁴ Dr Hinnells, Proof of Evidence (NSC/W6/1), page 29, para 107.

¹⁶⁵ MBU (CD6.4) para 1.14

¹⁶⁶ Dr Hinnells, Supplementary Proof (NSC/W6/4), page 12, para 40. Dr Hinnells repeated this in examination in chief, Day 21, am session.

573. Dr Hinnells’ interpretation of these statements strains the actual words used to breaking point and beyond. The Government has made its position abundantly clear; MBU, including the support for airports ‘making best use’ of their existing runways, is current,¹⁶⁷ up to date, policy that is to be given “full effect” in decision making. If Government thought otherwise it could have made this clear or, indeed, revoked the policy; it has done neither. MBU remains a material consideration in the determination of the appeal, just as it was before the adoption of net zero or the Sixth Carbon Budget, and it should be accorded full weight.
574. In any event, Dr Hinnells sought to clarify his position on MBU during cross-examination. He explained that whilst the “words” of MBU could be given full weight, the “numbers” could not.¹⁶⁸ What Dr Hinnells means is that the analysis carried out in MBU as to the impact of airports making best use on achieving the UK’s climate change targets¹⁶⁹ was not carried out in the context of net zero or the Sixth Carbon Budget. The response to this is twofold:
- a. As explained above, the Government has re-stated MBU as a policy position since the adoption of net zero and the Sixth Carbon Budget. It remains current Government policy notwithstanding the changes in the legal framework;
 - b. More fundamentally, the fact that the mathematical analysis in MBU was carried out in a pre-‘net zero’ and pre-Sixth Carbon Budget world only matters if one subscribes to the second ‘fallacy’, identified above, namely that there must be a national level assessment of the carbon impacts of all airport development projects in order to be sure which can come forwards compatibly with net zero. This provides the basis for NSC’s argument that it would be premature to grant permission for any airport assessment in advance of such an assessment. For the reasons explained above, this approach results in a moratorium on airport development that Dr Hinnells accepts is not reflective of UK law or policy,¹⁷⁰ and deprives MBU of any effect.
575. Indeed, it is apparent from Mr Gurtler’s Proof of Evidence that the approach he has adopted to MBU (and indeed, the APF) renders it entirely incapable of being a material consideration in the planning balance. As he explains, “*MBU does not provide any in principle support per se for applications to increase the use of existing runways. MBU only provides weight in favour of a*

¹⁶⁷ This is agreed: Dr Hinnells, cross-examination, Day 21, pm session.

¹⁶⁸ Dr Hinnells, cross-examination, Day 21, pm session.

¹⁶⁹ MBU (CD6.4), page 5, para 1.12 to 1.13 and Tables 1, 2 and 3.

¹⁷⁰ Dr Hinnells, cross-examination, Day 21, pm session.

scheme once it is established that the benefits outweigh the costs¹⁷¹ (underlining added). The implication of this approach is that where the planning balance indicates planning permission should be granted (without taking into account MBU), MBU supports that outcome. Where it is determined that planning permission should not be granted (again, without taking into account MBU), MBU is simply not engaged. On this basis, there is simply no way that MBU can ever have a material impact on the outcome of the planning balance. If this approach were to be adopted by the Inspectors it would constitute a failure to take into account a material consideration. In cross-examination¹⁷², even Mr Gurtler appeared to doubt his own approach.

Whether weight can be placed on the UK ETS

576. Dr Hinnells's Rebuttal Proof states that "*no reliance can be placed on UK ETS*" (sic).¹⁷³ The stated reason for this is that "[t]he detail remains so uncertain and the timescale longer than the timescale for a decision in this appeal".¹⁷⁴ This, however, is not consistent with Dr Hinnells's oral evidence, in which he agreed that in considering the significance of the carbon emissions from the proposed development, the Inspectors must take into account the national legislative and policy measures to control aviation emissions,¹⁷⁵ and that one such mechanism is the UK ETS,¹⁷⁶ the cap for which is a matter for Government.¹⁷⁷ Nor is there any dispute between the parties as to the legal framework or operation of the UK ETS.¹⁷⁸

577. In this regard it remains unclear whether or not weight has been given to the UK ETS in NSC's consideration of the carbon impacts of the proposed development. It is clear that the UK ETS is a key mechanism for meeting the Sixth Carbon Budget and the net zero target, and cannot be ignored when considering the significance of the emissions from the proposed development.

Relevance of the 'planning assumption'

578. The 'planning assumption' is relevant to the Fourth and Fifth Carbon Budgets, which run from 2023 to 2027 and 2028 to 2032 respectively. The test of significance used in the ES (prior to the adoption of the Sixth Carbon Budget) was to compare the carbon emissions that would be

¹⁷¹ Mr Gurtler, Proof of Evidence (**NSC/W7/1**), pages 28 to 29, para 106.

¹⁷² Mr Gurtler, cross examination, Day 30, pm session.

¹⁷³ Mr Hinnells, Rebuttal Proof (**NSC/W6/3**), page 5, para 9(e).

¹⁷⁴ Mr Hinnells, Rebuttal Proof (**NSC/W6/3**), page 5, para 9(e).

¹⁷⁵ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁷⁶ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁷⁷ Accepted by Dr Hinnells, cross-examination, Day 21, pm session.

¹⁷⁸ Discussed with Dr Hinnells, cross-examination, Day 21, pm session.

produced from the proposed development against the planning assumption. In the ESA, this forms one of the two tests of significance used.

579. Whilst there is no dispute that there is no ‘planning assumption’ in the context of the Sixth Carbon Budget, it remains relevant to assess the emissions from the proposed development in the context of the Fourth and Fifth Carbon Budgets too. Indeed, the Fifth Carbon Budgets it the relevant budget for the year in which the Core Case forecasts 12 mppa will be reached, and the Fourth Carbon Budget would be the relevant budget for that year under the Faster Growth Scenario.

Cumulative assessment

580. The argument relating to the need for a cumulative assessment is closely allied to the second ‘fallacy’ identified above; namely, that planning permission cannot be granted for the proposed development in the absence of a Government led analysis of the extent of airport capacity compatible with the trajectory net zero in order to inform the Government’s selection of airport projects to come forwards. However, there are three additional points to make in respect of this argument:
- a. First, the assessment in the ES, ESA and the evidence of Dr Ösund-Ireland has sought to contextualise the emissions from the proposed development against the ‘planning assumption’. It has also identified emissions from other known expansion projects¹⁷⁹ and explained the effect of including aviation within the Sixth Carbon Budget in the context of the UK ETS and CORSIA;
 - b. Secondly, setting carbon budgets and the allocation of allowances under the UK ETS are, by their nature, cumulative exercises. They are set at a national level and apply equally to all airlines operating in the UK; and
 - c. Thirdly, whilst the TCP (EIA) Regs¹⁸⁰ require the cumulative assessment of the proposed development with other projects¹⁸¹, this is limited to those that are consented and/or approved and does not include any obligation to assess the cumulative impacts of emissions on the global climate as a receptor. This is indicative of the fact that climate change is a matter of national, and indeed international, concern. There is no

¹⁷⁹ Dr Ösund-Ireland, Proof of Evidence (**BAL/W6/2**), page 47, Table 4.3.

¹⁸⁰ (**CD5.5**).

¹⁸¹ Regulation 18(3)(f) and Schedule 4(5) (**CD5.5**).

requirement for any further cumulative assessment, either in law or policy, of all known airport expansion projects.

Non-CO₂ impacts

581. As recognised by the CCC in its Sixth Budget Report¹⁸², the UK Government in Aviation 2050¹⁸³ and, recently, by the Inspectors into the Stansted Airport appeal¹⁸⁴, there is great uncertainty in assessing the climate change impact of non-CO₂ emissions. The ESA identifies the role of non-CO₂ warming impacts, but explains that they have not been quantified in the assessment.¹⁸⁵ Indeed, it is agreed between BAL and NSC that there is no policy requirement to quantify non-CO₂ impacts. This position is reflected in the draft CCCAP which states that non-CO₂ impacts cannot be ignored and need to be considered as part of selecting the appropriate balance of greenhouse gas emission reduction measures, but in light of the scientific uncertainty, this is not a reasonable basis to resist the proposed development (as found by the Inspectors into the Stansted Airport appeal¹⁸⁶).
582. The further difficulty with non-CO₂ effects is that such effects are not within the NSCs declared under the Paris Agreement or the UK's carbon budgets and its 'net zero' target. In other words,, non-CO₂ effects cannot simply be added to CO₂ effects and then compared, for example, to the Sixth Carbon Budget, as the Sixth Carbon Budget was not set at a level that includes non-CO₂. Furthermore, non-CO₂ effects, such as contrails and cirrus clouds, are short terms effects and reversible¹⁸⁷. To quantify such effects, therefore, risks producing a number that is potentially misleading as it cannot meaningfully be used in assessing the likely significant effects of the proposed development.

Draft CCCAP

583. BAL has already done significant work to reduce non-aviation emissions from the Airport's buildings and ground operations. This work will be supplemented and strengthened by the draft CCCAP¹⁸⁸ once adopted. Indeed, Dr Hinnells confirmed that in broad terms, the draft CCCAP is "*welcomed*"¹⁸⁹ by NSC.

¹⁸² (CD9.64/5).

¹⁸³ (CD9.29).

¹⁸⁴ (CD9.107).

¹⁸⁵ (CD2.20.1), pages 159 to 160, para 10.6.20 ff.

¹⁸⁶ Para 98.

¹⁸⁷ Tim Johnson (PCAA), cross-examination, Day 23, pm session

¹⁸⁸ (CD9.48).

¹⁸⁹ Agreed by Dr Hinnells, cross-examination, Day 21, pm session.

584. The CCCAP embodies the Airport's vision to be carbon neutral by 2021 for Scope 1 and 2 emissions¹⁹⁰, carbon 'net zero' by 2030 and the longer term aim for the airport as a whole being carbon 'net zero' by 2050. The draft section 106 agreement for the proposed development provides a number of measures to improve public and active transport access, in order that BAL may continue to influence surface access emissions. These measures supplement BAL's practice of offsetting surface access to the airport by passengers travelling by road, which it adopted in 2020.

Rule 6 Parties' Position on Carbon and Climate Change

BAANCC

585. BAANCC called three climate change witnesses. Much of the evidence covered by these witnesses reflects the themes discussed above. In summary, the main points of BAAN CC's case are as follows:

- a. The warming impact of non-CO₂ emissions has not been taken into account;¹⁹¹
- b. The proposed development is "*incompatible*" with the CCC's balanced pathway;¹⁹²
- c. The proposed development would have an unacceptable impact on the 'local carbon budget';¹⁹³
- d. The technological advancements required to meet net zero aviation emissions are unrealistic and will not be achieved in time;¹⁹⁴
- e. Any increase in carbon emissions would make the achievement of the UK's climate change obligations more difficult;¹⁹⁵
- f. The proposed development would be inconsistent with the CCC's advice that recommends there should be no net expansion of airport capacity.¹⁹⁶

¹⁹⁰ Scope 1 are direct emissions resulting from an organisation's activities; Scope 2 emissions are indirect emissions from the production of energy used by an organisation.

¹⁹¹ Prof Anderson, Proof of Evidence (BAAN/W1/1), page 27, section 6.1.

¹⁹² Prof Anderson, Proof of Evidence (BAAN/W1/1), page 31, section 6.4.

¹⁹³ Prof Anderson, Proof of Evidence (BAAN/W1/1), page 35, section 6.7.

¹⁹⁴ Mr Asher, Proof of Evidence (BAAN/W2/1), page 20, para 6.8.

¹⁹⁵ Mr Hunter-Jones, Proof of Evidence (BAAN/W3/1), page 22, para 6.1.

¹⁹⁶ Mr Hunter-Jones, Proof of Evidence (BAAN/W3/1), page 23, para 6.8.

586. Insofar as it is not already set out above, a summary of BAL's response to these points is as follows:

- a. Save to the extent that it is adopted as Government policy, the CCC's advice to Government does not have status as policy. This includes the proposal that there is a net expansion of airport capacity;
- b. As Professor Anderson accepts, 'local carbon budgets' have no basis in law or policy;¹⁹⁷
- c. It is not for these Inspectors to determine the success or otherwise of technological advancements;
- d. Adopting the position that any increase in carbon emissions would make the achievement of the UK's climate change obligations more difficult means that every development that produces carbon emissions has a significant effect in EIA terms, whatever the scale of those emissions. On BAANCC's approach, this would mean that any development that produces positive carbon emissions (leaving aside the ability to mitigate these) is unacceptable in terms of carbon and climate change. This amounts in practical terms to a moratorium on not only airport development, but all development. Such an approach finds no basis in law or policy and is clearly not correct.

PCAA

587. PCAA called one witness in respect of climate change. Mr Johnson's evidence repeats many of the points raised by NSC and BAANCC's witnesses.

Key Conclusions

588. Six witnesses gave evidence in respect of climate change during the course of the Inquiry. Other than Dr Ösund-Ireland, those witnesses barely so much as mentioned the quantum of carbon emissions that are actually forecast to result from the proposed development. The focus of NSC, BAANCC and the PCAA was entirely upon the broader international and national legal and policy framework and the advice of the CCC. However an assessment of the significance of the carbon emissions from "*the project*" must start with an appreciation for the scale of the emissions to be produced; those emissions are, on all reasonable bases, very small indeed.

¹⁹⁷ Prof Anderson, cross-examination, Day 22, pm session.

589. BAL's approach, whilst an outlier within the context of this Inquiry, is not proposing anything radical or new; it is the agreed policy approach to considering the climate change effects of the proposed development. The assessment in the ESA acknowledges the need to take into account the carbon emissions from the proposed development, it places those in the context of the 'planning assumption', and considers the extent to which these would materially impact on the UK's ability to meet its climate change obligations. There is no dispute that this requires an understanding of the mechanisms in place for meeting those obligations. That includes the Sixth Carbon Budget, the UK ETS and CORSIA, and incentive schemes such as the Renewable Transport Fuels Obligation and the Sustainable Aviation Fuels Mandate. Under the UK ETS, emissions from international aviation within the EEA are capped. Beyond the EEA, the CORSIA regime applies. Crucially, however, the Government also retains the ability to take further action. Understood in the context of the Government's legal duty to meet its climate change obligations and the existing and available mechanisms for doing so, the quantum of emissions from 'the project' calculated in the ESA are not 'so significant' that they would 'materially impact' the 'ability' of Government to meet its climate change obligations and are, therefore, 'not significant' in EIA terms.
590. On the contrary, the approach suggested by NSC invites the Inspectors to disregard current Government policy (in the face of recent reiterations of the relevance of that policy), impose, in effect, a moratorium on airport development (without any basis at all in current policy and despite Government's refusal to call in the appeal), and place no reliance on one of the primary mechanisms by which carbon emissions are controlled (namely, the UK ETS). NSC's approach is completely wrong and finds no basis in law or policy.

GREEN BELT

Introduction

591. The area surrounding Bristol Airport comprises the Bath-Bristol Green Belt. The development plan defines an 'inset' that excludes land on the northern side of the airfield from the Green Belt. Land to the south of the existing terminal building, including, *inter alia*, the runway and the existing seasonal Silver Zone long-stay car park, are within the Green Belt¹.
592. Reason for refusal 4 concerns (i) the proposed year-round use of the existing seasonal Silver Zone car park ('Cogloop 1') and (ii) the further extension of the car park proposed ('Cogloop 2'). The reason for refusal states that such development constitutes inappropriate development for which no very special circumstances have been demonstrated that are capable of outweighing the harm to the Green Belt and any other harm, including the encroachment of the development into the countryside and loss of openness. Policy DM12 of the DMP and the NPPF are cited.
593. It should be noted at the outset that reason for refusal 4 expressly refers to the development that it considers inappropriate development in the Green Belt; this is restricted in scope to the proposed year-round use of the existing seasonal Silver Zone car park (Cogloop 1) and the further extension to the Silver Zone (Cogloop 2).
594. At CMC1, the Inspectors identified the proposed development's impact on the Green Belt and compliance with Green Belt policy as issue (b).

Policy Context

National policy

595. Chapter 13 of the NPPF (2021)² contains Green Belt policy. Great importance is attached to Green Belts, the fundamental aim of which is to prevent urban sprawl and keep land permanently open³. The purposes of Green Belt are identified in paragraphs 138 of the NPPF as follows:
- a. To check unrestricted sprawl of large built-up areas;

¹ See Appendix A to the Proof of Evidence of Mr Melling, Figure 1.1 (BAL/W7/2).

² (CD5.8.1).

³ Paragraph 133 of the NPPF (CD5.8).

- b. To prevent neighbouring towns merging into one another;
- c. To assist in safeguarding the countryside from encroachment;
- d. To preserve the setting and special character of historic towns; and
- e. To assist in urban regeneration, by encouraging the recycling of derelict and other urban land. Paragraphs 149 and 150 of the NPPF provide for the types of development that are considered not to constitute ‘inappropriate development’ in the Green Belt. Development that is ‘inappropriate’ in the Green Belt is by definition harmful, and should not be approved except in ‘very special circumstances’.⁴

596. Paragraph 148, which is reflected in policy DM12 of the DMP⁵, provides that:

“When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. ‘Very special circumstances’ will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations.”

Local policy

597. Policy CS26 of the NSC Core Strategy⁶ concerns the approach to the Green Belt, including in respect of Bristol Airport specifically. It notes that the Replacement Local Plan created an inset in the Green Belt to accommodate *“the medium term expansion requirements of Bristol Airport”*, and that further Green Belt amendment would be premature in advance of *“exceptional circumstances being demonstrated through evidence regarding future expansion and its land use implications”*.

598. Policy DM12 reflects the test for development in the Green Belt in paragraph 148 of the NPPF.⁷

599. The supporting text to policy DM50, which relates to development within the Green Belt inset, makes it clear⁸ that the inset was considered to be sufficient to deal with *“minor development”* that requires a grant of planning permission, not the *“major development”* that was expected to form the subject-matter of a more detailed planning policy document. In fact that further policy document never materialised, but it is within that context that the supporting text to

⁴ Paragraph 143.

⁵ (CD5.4), page [x].

⁶ (CD5.6).

⁷ (CD5.4).

⁸ (CD5.4) pdf p.119/120

policy DM50 reiterates that outside the inset, Green Belt policy applies, such that it is for a developer to demonstrate ‘very special circumstances’ that outweigh the harm to the Green Belt and any other harm.

600. Policy DM30 concerns provisions for off-airport car parking and is therefore not of direct relevance to this application. However, as part of the policy justification it states that the policy aim includes protecting the Green Belt from off-airport car parking. This aim is mainly achieved through the Green Belt status itself, which precludes inappropriate development including car parking.

Wider Context

History of the Green Belt and Green Belt inset

601. As noted above, the development plan defines an inset that excludes land on the northern side of the airfield from the Green Belt. Land to the south of the existing terminal building, including (*inter alia*) the runway and the existing Silver Zone long stay car parking area is within the Green Belt. The inset was first established through the North Somerset Replacement Local Plan, which was adopted in March 2007, and was subsequently confirmed through the adoption of the North Somerset Core Strategy (2017)⁹ and Sites and Policies Plan Part 1 (2016).¹⁰ The development plan confirms that outside the Green Belt inset, Green Belt policy applies.

Previous applications for development

602. There have been three previous planning applications that relate to Airport parking development in the Green Belt to the south of the airfield, namely the 10 mppa planning application (granted in 2011), the 2016 application for the Silver Zone extension¹¹, and the 2018 planning application for the temporary variation of condition 9 which restricts the Silver Zone extension to seasonal use.¹² All these applications were considered within substantially the same policy matrix as that which applies to development in the Green Belt now.¹³
603. The 2011 Planning Permission included consent for the construction of the Silver Zone extension and a seasonable overflow car park (Cogloop 1), both of which are located within the

⁹ (CD5.6).

¹⁰ (CD5.4).

¹¹ (16/P/1486/F), (CD4.4).

¹² (18/P/400/FUL) (CD4.10).

¹³ Mr Gurtler agreed that he did not point to anything that had changed in the policy context since these applications; Mr Gurtler, cross-examination, Day 28 am session.

Green Belt. The policy matrix included the Air Transport White Paper (2013), which supported airports ‘making best use’ of their existing infrastructure, and substantially the same national and local policy requirements in respect of Green Belt policy. The need to deliver additional car parking to facilitate the expansion of the Airport to a throughput of 10 mppa and the lack of any alternative available sites were considered by NSC to constitute ‘very special circumstances’ outweighing the limited harm to the Green Belt.¹⁴

BAL’s Assessment of Harm to Openness of the Green Belt

Introduction

604. It is notable that at the time that BAL’s planning application was submitted and the Officers Report was published, BAL had not conducted a detailed assessment of the impact of the proposed development on the Green Belt. The reason for this was that Officers were well aware of the issues raised, as they had dealt with these many times before¹⁵, and they did not therefore require an assessment of openness and harm from BAL. It became very clear, however, following refusal that NSC’s current consultant team were not adopting the Officers’ position and BAL has since produced a detailed Green Belt assessment, which is contained in Appendix A to Mr Melling’s Proof of Evidence¹⁶. This assessment was designed to present a detailed analysis of the issues, of which Officers themselves were already aware, for the purposes of the appeal.

Proposed development in the Green Belt

605. There are three aspects of the proposed development that would be located within the Green Belt, namely (i) the removal of the seasonal use restriction on Cogloop 1 (and associated permanent infrastructure) and the proposed extension of the car park to create Cogloop 2, (ii) the improvements to the A38 and its junction with Downside Road, and (iii) a limited number of elements of the new airside infrastructure, namely, the proposed taxiway widening and fillets and eastern taxiway link.

Extent of inappropriate development

606. It is common ground with NSC that the proposed year-round use of the existing seasonal Silver Zone car park and the car park extension constitute inappropriate development in the Green

¹⁴ Officer’s Report, application 09/P/1020/OT2 (**CD4.1a**).

¹⁵ Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix A, pdf page 151, para 1.1.2.

¹⁶ Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix A.

Belt. This was the view expressed in the Officers' Report,¹⁷ and is reflected in reason for refusal 4. The remaining dispute about other elements of the proposed development is addressed later in this section.

Assessment of harm to the Green Belt

Nature of the proposed development

607. It is worth bearing in mind the nature of the proposed development. The proposed development in the Green Belt comprises car parking and associated lighting columns. By its nature, parked cars are low rise; there is no proposal to construct any buildings within the Green Belt. Cogloop 1 is already in use seasonally (May to October) for parking with the associated netpave and temporary lighting. The change to year-round use would therefore only be appreciated in the winter months and when the car park is in use.
608. With regards to Cogloop 2, the proposal will again predominantly use netpave, with hardstanding used only for access routes. There is no dispute that netpave can be lifted and removed.¹⁸ The greatest impact on the Green Belt from both Cogloop 1 and Cogloop 2 is at times when the car parks are at capacity; this will only be at times of peak demand.

Baseline

609. The Technical Note containing BAL's Green Belt assessment is at Appendix A to Mr Melling's Proof of Evidence¹⁹. It has been informed by expert landscape analysis from Mr Furber, a qualified landscape architect, and Mr Deanwood, a chartered town planner with significant Green Belt assessment experience.²⁰ There is no prescribed methodology for conducting a Green Belt assessment, but there is no dispute about the methodology adopted by BAL.²¹
610. The methodology adopted by BAL assesses the contribution of the land immediately to the south of Bristol Airport to the five Green Belt purposes in order to establish the baseline. For these purposes, the land is divided into four parcels, namely S1, S2, S3 and S4,²² which were identified using well defined physical features. The assessment concluded as follows:

¹⁷ Page 106.

¹⁸ Mr Gurtler, cross examination, Day 28 am session.

¹⁹ Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix A.

²⁰ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 87, para 5.3.2.

²¹ Mr Gurtler, cross examination, Day 28 am session.

²² Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix A, pdf page 155, para 3.1.1. Shown on Figure 3.1.

- a. Parcel S1 makes a limited contribution to one Green Belt purpose, namely, assisting to safeguard the countryside from encroachment;²³
- b. Parcel S2 makes a limited contribution to the Green Belt purpose of checking the unrestricted sprawl of large built-up areas and a contribution to the purpose of assisting to safeguard the countryside from encroachment;²⁴
- c. Parcel S3 makes a limited contribution to checking the unrestricted sprawl of large built-up areas and a contribution to assisting to safeguard the countryside from encroachment;²⁵ and
- d. Parcel S4 makes a contribution to one Green Belt purpose, namely, assisting to safeguard the countryside from encroachment.²⁶
- e. *Impact on openness*

611. The evaluation criteria used to assess the harm to the Green Belt arising from the proposed development are set out in the Technical Note.²⁷ Conclusions on the impact on openness is a product of physical openness (also known as spatial openness²⁸), visual openness, the quality of boundaries (permanence)²⁹ and a consideration of proposed mitigation measures.

612. In relation to physical openness, the assessment concluded that parcel S1 has ‘low’ physical openness, reflecting the development of the Green Belt in this location for car parking and airport ancillary uses. Parcels S2, S3 and S4 scored ‘high’, reflecting their open countryside character, with limited built development.

- a. In relation to the Cogloop 1 site, the assessment concluded that there would be no discernible effect of development on physical openness and permanence. This reflects a balance of the existing seasonal use of the Cogloop 1 site for car parking with consequent known physical and visual effects, the introduction of permanent lighting and CCTV columns, and the enclosure of the site physically and visually.

²³ Mr Melling, Proof of Evidence (BAL/W7/2), Appendix A, pdf page 158.

²⁴ Mr Melling, Proof of Evidence (BAL/W7/2), Appendix A, pdf page 160.

²⁵ Mr Melling, Proof of Evidence (BAL/W7/2), Appendix A, pdf pages 161 to 162.

²⁶ Mr Melling, Proof of Evidence (BAL/W7/2), Appendix A, pdf pages 162 to 163.

²⁷ Mr Melling, Proof of Evidence (BAL/W7/2), Appendix A, pdf page 166, Table 4.1 and Table 4.2.

²⁸ It is simply wrong of NSC to assert that the assessment did not consider physical (aka spatial) openness.

²⁹ Mr Melling, Proof of Evidence (BAL/W7/2), Appendix A, pdf pages 166 to 167.

- b. For Cogloop 2, the assessment concluded that there would be some effects of development on physical openness or permanence, but with clear opportunities for mitigation. The harm arising in this case reflects a balance of the size of the site, being approximately the same size as the existing car parking site immediately to the north, extension of development into open countryside with uses which include 'urbanised' built form such as lighting and CCTV columns, and traffic generation.
613. With regards to visual openness, the Green Belt assessment identified five potential visual receptor groups, namely, residents of three properties off Winters Lane, road users along Winters Lane, users of the public rights of way network to the west and north of Redhill, residents of properties around Hailstones Farm and the A38 and users of the AONB. The photography from a representative selection of vantage points from these receptors is contained in the Technical Note.³⁰ The assessment was informed by the LVIA carried out in respect of the original planning application in 2018³¹ and a further field study carried out Mr Furber, Mr Deanwood and Mr Melling in April 2021.
614. The results of the assessment found that the visual impact of the proposed development would either be of no effect or negligible effect, save for a localised fleeting view from the right-angle bend on Winters Lane to the south of the airport runway³². The assessment found that there was there was no adverse glint and glare issues upon users of Winters Lane and that any theoretical glint and glare experienced by receptors in the AONB would not be discernible over the 5km intervening distance.³³ In terms of night-time impact, the proposed indicative lighting regime for Cogloop 2 would have a only minor adverse impact on the visual amenity of receptors located within the surrounding Green Belt.³⁴ This is based on the type of lighting proposed to be used, which is designed to reduce light spill. This conclusion also reflects the use of mitigation planting, which will further reduce this impact over time.³⁵ The impact of the lighting in Silver Zone Phase 1 would be reduced compared to the current baseline.³⁶
615. The conclusions reached in the Green Belt assessment in respect of the impact of the proposed development on openness are as follows:

³⁰ Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix E.

³¹ (**CD2.5.21 to 2.5.24**).

³² Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix B, Photo A.

³³ Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix A, pdf pages 173, para 4.4.26.

³⁴ Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix A, pdf pages 174, para 4.4.32.

³⁵ Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix A, pdf pages 174, para 4.4.32.

³⁶ Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix A, pdf pages 173, para 4.4.28.

- a. The impact of Cogloop 1 is assessed to be 'limited' (i.e. no discernible effect on openness). This reflects the existing seasonal use of the site, the enclosure of the site both physically and visually, and the introduction of permanent lighting and CCTV columns. Substantial landscaping bunds and planting have already been introduced on the southern and western boundaries, and will, over time, form a progressively more effective screen. Reinforcement of this boundary will also serve as a long-term landscape feature which is clearly defined. The wider Green Belt to the south will continue to function to prevent encroachment into the open countryside (the only purpose served by this area of the Green Belt). Whilst there will be an impact on physical openness through the introduction of cars, lighting and fencing, their profile is low (under 2m) compared to the buildings on the airport site (which are at least 5m high).³⁷
- b. The impact of Cogloop 2 is assessed to be 'moderate to limited' (i.e. some effects of development on physical and/or visual openness or permanence). This harm reflects the size of the site, being approximately the same site as the car parking immediately to the north, the extension of development into open countryside with uses which include urbanised form such as lighting and CCTV columns, and traffic generation. However, there is substantial boundary vegetation, which would be strengthened. This is typical of the character of the area and would create a long-term landscape feature. The wider Green Belt to the south and west will continue to function to prevent encroachment into the open countryside (the principal purpose of this area of the Green Belt). Taking into account the effect of visual mitigation measures, the impact is judged to be limited.³⁸

Very Special Circumstances

616. Mr Melling's evidence identifies three very special circumstances that outweigh any harm to openness of the Green Belt, and any other harm caused by the proposed development. It is notable that very similar circumstances were previously accepted by NSC in decisions to approve the development of the Airport to accommodate 10 mppa and in relation to other car parking proposals.³⁹ These very special circumstances are as follows:

- a. The need for additional car parking in the Green Belt;
- b. No further suitable and available sites for car parking outside the Green Belt; and

³⁷ Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix A, pdf pages 175, Table 4.5.

³⁸ Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix A, pdf pages 176, Table 4.6.

³⁹ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 88, para 5.4.2.

- c. The needs for, and benefits of, the growth of Bristol Airport.
617. With regards to the last very special circumstance, the provision of additional parking is integral to the proposal for an expanded Bristol Airport and forms part of a strategy that makes best use of the existing Airport, in accordance with national aviation policy. In this respect, the third very special circumstance captures the overall need for, and benefits, of the proposed development, and reflects many of the matters discussed in the overall planning balance. For this reason, it is not dealt with in detail within this section of the closing but is considered generally in the planning balance section.
618. The first two very special circumstances outlined above are considered in turn below, but there is an inevitable degree of overlap between them.
- a. The need for additional car parking in the Green Belt
619. The need for additional car parking in the Green Belt is driven by the following factors:⁴⁰
- a. The car parking demand associated with an additional 2 mppa;
 - b. Insufficient capacity for additional spaces in the Green Belt inset to meet the full car parking demand, and the consequences of not meeting the residual requirement;
 - c. The absence of any suitable off-site alternatives;
 - d. The absence of any suitable off-site alternatives within the Green Belt and Bristol Airport's operational area, beyond the existing seasonal car park; and
 - e. The opportunity to bring forward car parking on land contiguous to Bristol Airport's operational boundary to meet the residual requirement for car parking and benefits this delivers.
620. The car parking demand associated with an additional 2 mppa was calculated in the Parking Demand Study Update.⁴¹ As set out above, the Parking Demand Study Update identifies that parking capacity at Bristol Airport in 2019 was around 17,700 spaces and that the peak demand in 2030 at 12 mppa would be 22,200 spaces. On this basis, the Study identifies a requirement for some 4,200 additional car parking spaces during the peak months.⁴² This figure has been

⁴⁰ Mr Melling, Proof of Evidence (BAL/W7/2), page 89, para 5.4.3.

⁴¹ (CD2.23).

⁴² Mr Melling, Proof of Evidence (BAL/W7/2), pages 89 to 90, paras 5.4.4 to 5.4.10.

validated by Mr Witchalls, who has confirmed that it is a conservative estimate of the parking spaces required.

621. Taking into account the consented capacity in MSCP2 and the proposed MSCP3 (providing an additional 1,500 net spaces), there is a residual requirement for some 2,700 spaces. Further surface level car parking is not capable of being accommodated within the Green Belt inset due to the limited space available and security requirements, which prevent the development of car parking airside. The Parking Strategy therefore considered the extent to which the residual parking requirement could be accommodated in the Green Belt inset through further MSCP (beyond MSCP3) or decked car parking.⁴³
622. A further MSCP or decked parking option was ultimately rejected by BAL on the basis that further development of this nature within the Green Belt inset would amount to overdevelopment and would have substantial visual impacts on residential receptors along Downside Road. This conclusion was supported by NSC Officers.⁴⁴ This conclusion has now been verified by an assessment of the comparative landscape and visual impact of the option and the proposed Silver Zone extension undertaken by Mr Furber.⁴⁵
623. Importantly, parking of this type would also fail to meet the identified demand for low cost car parking. As Mr Melling explains in his Proof of Evidence, the demand for low cost car parking is driven by the following factors:⁴⁶
- a. Historic preference and underlying demand for low-cost parking;
 - b. An increasing propensity for leisure passengers to use low-cost parking due to (*inter alia*) their length of stay and willingness to pay;
 - c. Growth in passengers from catchments that are more distant from the airport and more likely to choose low-cost parking; and
 - d. Growth in based aircraft with passengers on the first wave-based aircrafts leaving early in the morning being more likely to drive and park than at other points during the day.
624. Whilst the Parking Demand Study submitted with the planning application has been updated, these fundamental drivers have not changed.

⁴³ (CD2.12), page 27, para 5.2.1 (1).

⁴⁴ Officers' Report (CD4.11), page [x].

⁴⁵ Mr Melling, Rebuttal Proof (BAL/W7/3), Appendix B.

⁴⁶ Mr Melling, Proof of Evidence (BAL/W7/2), page 97, para 5.4.35.

625. The impact of not meeting this low cost parking demand would be severe; unauthorised or unofficial low cost car parking is already a serious issue that causes harm to the Green Belt and amenity of the local area. This type of parking also undermines BAL's ASAS and the delivery of public transport mode shares, as evidenced in the appeal decisions cited by Mr Melling⁴⁷. This was recognised by NSC officers.⁴⁸ A failure to meet the increased low cost parking demand on-site would quite logically exacerbate this problem. Indeed, it is because of the issues associated with unauthorised car parking that BAL is proposing measures to address this issue, principally through contribution towards enforcement action.⁴⁹ If the failure to provide adequate low cost parking on-site exacerbated this issue, it would undermine the measures proposed.
626. Furthermore, failing to meet the demand for low cost parking will encourage drop-off and pick-up to and from the Airport. Drop off doubles the number of trips to and from the Airport, increasing the volume of vehicles using the local highway network and for this reason it is at the bottom of the Airport's transport hierarchy, as agreed with NSC.⁵⁰ Increasing the likelihood of drop-off and pick-up would undermine the measures that BAL have already taken to reduce this mode, including through increases to its charging scheme, and those proposed in the section 106.⁵¹
627. Having considered the extent to which further parking could be accommodated in the Green Belt inset, the Parking Strategy considered the availability of suitable off-site alternatives within the Green Belt and Bristol Airport's operational area, beyond the existing seasonal car park.⁵²
628. The availability of suitable off-site alternatives outside the Green Belt is considered in more detail under very special circumstance 2 and is therefore not repeated here.
629. Having established that there are no suitable off-site alternatives, two on-site options were identified in the Parking Strategy, namely southside decked car parking and the year-round use of the existing seasonal car park.⁵³ Decked car parking on the southside of the Airport would be located over the existing Silver Zone car park, within the Green Belt. Due to the nature and scale of development in this location, the landscape impacts and harm to openness would be

⁴⁷ Mr Melling, Proof of Evidence (**BAL/W7/2**), pages 93 to 94, paras 5.4.18 to 5.4.21.

⁴⁸ (**CD4.11**), page 104.

⁴⁹ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 94, para 5.4.21.

⁵⁰ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 94, para 5.4.22.

⁵¹ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 94, para 5.4.23.

⁵² (**CD2.12**), page 27, para 5.2.1 (2) and (3).

⁵³ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 95, para 5.4.27.

greater than surface level car parking.⁵⁴ This has been confirmed by the comparative landscape assessment contained in Appendix A to Mr Melling's Rebuttal.⁵⁵

630. Furthermore, due to the increased capital costs of constructing decked parking, the parking would not be charged at a rate that could meet the low cost demand, despite not having the convenience of being located adjacent to the terminal.⁵⁶ This option would therefore exacerbate the off-site parking issues identified above. For these reasons, this option was rejected which is the same conclusion as that reached by Officers. The second option, the year-round use of the seasonal car park, is proposed as part of the selected parking strategy in order to cater for peak winter demand and make best use of the existing facility; however, this option will not address the residual requirement for 2,700 spaces.⁵⁷

631. A further extension to the Silver Zone car park to meet the residual demand for parking has six benefits that are identified in the Parking Strategy:⁵⁸

- a. It is operationally well-located, allowing car parking to the south of the Airport to be consolidated;
- b. It benefits from the existing services and facilities associated with the Silver Zone car park, including the reception building and associated shuttle bus services;
- c. The site is well-suited to block parking, allowing the use of the land to be maximised without the need for significant additional built development and lighting;
- d. It provides good access to the A38 and terminal via the existing southern access road;
- e. It can be readily integrated with wider surface access proposals and improvements associated with development of the Airport to 12 mppa; and
- f. It is not within or adjacent to any national or local designated sites.

632. Critically, an extension to the Silver Zone car park meets the demand for low cost parking, which would avoid contributing to increased drop off and pick up and off-site car parking.

The lack of alternative sites outside the Green Belt

⁵⁴ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 95, para 5.4.28.

⁵⁵ (**BAL/W7/3**) Appendix A.

⁵⁶ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 95, para 5.4.28.

⁵⁷ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 95, para 5.4.29.

⁵⁸ (**CD2.12**), reproduced in Mr Melling, Proof of Evidence (**BAL/W7/2**), page 96, para 5.4.31.

633. As set out above, the Parking Strategy considered the ability to accommodate the identified parking demand using a sequential approach, as follows: (i) maximising the car parking in the Green Belt inset to the northside of the Airport, (ii) exploring the provision of car parking spaces at locations remote from the Airport, (iii) maximising the level of car parking within the existing Airport site and (iv), exploring the provision of car parking in the Green Belt, contiguous to the Airport.⁵⁹
634. With regards to off-site sites outside the Green Belt, the Parking Strategy identified 25 sites, which were assessed against a list of long-list criteria. Twelve sites were short-listed for further assessment. The conclusion reached was that there were no alternative suitable sites to meet the residual parking demand, which was agreed by Officers following consultation with other local planning authorities.⁶⁰ No party to the Inquiry has produced any substantive evidence to cast doubt on this conclusion.

The position of NSC Officers

635. NSC Officers considered the delivery of additional low cost car parking “*essential*” and the absence of any sites outside the Green Belt amounted to very special circumstances.⁶¹

Areas of agreement

636. There are 10 matters of agreement between BAL and NSC, which broadly fall into the following three categories:
- a. With regards to policy, there is no dispute about the test to be applied;
 - b. With regards to the methodology used in BAL’s Green Belt assessment:
 - i. It is agreed to be acceptable⁶² and, as a generality, “*a good assessment*”;⁶³
 - ii. The principal difference between BAL’s methodology and that used by NSC in the context of the local plan is the level of granularity in the assessment; BAL’s

⁵⁹ (CD2.12), page 27, para 5.2.1.

⁶⁰ Mr Melling, Proof of Evidence (BAL/W7/2), page 102, para 5.4.54. Officers’ Report (CD4.11), page 111.

⁶¹ Mr Melling, Proof of Evidence (BAL/W7/2), page 85, para 5.1.6. NPPF (2021) (CD4.11), page 111.

⁶² Mr Gurtler confirmed that this is an “*acceptable method*” and that it is close to that used by NSC itself and a number of other local authorities; Mr Gurtler, cross examination, Day 28 am session.

⁶³ Mr Gurtler, cross examination, Day 28 am session.

assessment divides the site into [four] parcels rather than a single one. However it is agreed that approach produces a “*useful assessment*”⁶⁴;

- c. With regards to the assessment of harm to openness:
- i. There is no dispute that an assessment of the impact on openness must take into account the particular context of the site, including the topography, views and extent of screening;⁶⁵
 - ii. There is no dispute about the relevance of any existing car parking development in the Green Belt as part of the baseline for any assessment;⁶⁶
 - iii. As such, there is no dispute that when assessing the impact on openness arising from the year-round use of the existing seasonal car park, the Inspectors must take into account the existing development on the site;⁶⁷
 - iv. There is no dispute that the only viewpoint from which there is a visual impact is from Winters Lane;⁶⁸
 - v. In relation to the visual impact of Cogloop 2, it is agreed that it would be extremely difficult to gain a view of either the parked cars or the landscape bunds from footpaths or publicly accessible areas in the AONB⁶⁹ and that the impact would not be material;⁷⁰
 - vi. Indeed, Mr Gurtler agreed that he does not point to any viewpoint where people will experience harm to openness caused by Cogloop 2;⁷¹ and
 - vii. The fact that part of the proposed site for Cogloop 2 is ‘best and most versatile agricultural land’ is not a Green Belt consideration.⁷²

Outstanding issues in dispute

Introduction

⁶⁴ Mr Gurtler, cross examination, Day 28 am session.

⁶⁵ Mr Gurtler, cross examination, Day 28 am session.

⁶⁶ Mr Gurtler, cross examination, Day 28 am session.

⁶⁷ Mr Gurtler, cross examination, Day 28 am session.

⁶⁸ Mr Gurtler, cross examination, Day 28 am session.

⁶⁹ Mr Gurtler, cross examination, Day 28 am session.

⁷⁰ Mr Gurtler, cross examination, Day 28 am session.

⁷¹ Mr Gurtler, cross examination, Day 28 am session.

⁷² Mr Gurtler, cross examination, Day 28 am session.

637. For the purpose of considering the issues that remain in dispute in respect of Green Belt, the outstanding disagreement about overall parking demand is put to one side. The extent of this dispute is a matter on which transport evidence has been given, as is summarised above.
638. There are six broad issues that remain in dispute between BAL and NSC:
- a. The baseline contribution of this area of the Green Belt to the give Green Belt purposes;
 - b. The extent to which the proposed development in the Green Belt is 'inappropriate';
 - c. The extent of harm to openness resulting from the proposed car parking development;
 - d. The demonstration of 'very special circumstances';
 - e. The weight to be given to the harm to openness; and
 - f. The extent to which the proposed 'monitor and manage' condition undermines the demonstration of 'very special circumstances'.
639. These issues are considered in turn.

Baseline contribution to Green Belt purposes

640. BAL's Green Belt assessment considers the contribution of the four parcels of land including Cogloop 1 and 2 to Green Belt purposes. The findings of this assessment are set out above. Overall, the conclusion reached is that parcel S1 (which contains Cogloop 1) makes a limited contribution overall and parcel S2 makes some contribution overall.
641. Mr Gurtler's conclusion in respect of the baseline is that the area of land comprising Cogloop 1 makes a 'contribution' and that Cogloop 2 makes a 'significant contribution'.⁷³
642. Whilst ultimately the contribution of these parcels is a matter of judgment on which the Inspectors will form their own view, there are two points to note:
- a. NSC, unlike BAL, has not carried out its own Green Belt assessment. It relies on the assessment conducted in relation to the local plan process in April 2021. In this regard, the assessment is less fine grained than that carried out by BAL, considering this area of the Green Belt as a single unit; and

⁷³ Mr Gurtler, Proof of Evidence (NSC/W7/1), paras 51 and 61.

- b. It is agreed that there are no more appropriate parcels of land than those proposed for the development of Cogloop 1 and Cogloop 2.⁷⁴ There is, therefore, no suggestion that BAL has selected the wrong parcel of land.

Extent of inappropriate development

643. As indicated above, there is no dispute that the proposed car parking is ‘inappropriate development’ in the Green Belt.
644. With regards to other elements of the proposed development that are situated in the Green Belt, the position of BAL, NSC Officers and (it would appear) the Planning Committee are similarly aligned; they do not constitute inappropriate development in the Green Belt⁷⁵. Indeed, Mr Gurtler, NSC’s planning witness, acknowledges that the reason for refusal is limited in scope to the impact of the proposed car parking development.⁷⁶
645. Despite this, however, Mr Gurtler proceeds to “*record his view*” on other aspects of the proposal, namely the elements of airside infrastructure and the A38 improvements. Both of these elements, he argues, are inappropriate development in the Green Belt by virtue of their impact on openness.⁷⁷ This is a clear departure from the position of both NSC Officers and the Committee that determined the application. The widening of the objection relating to Green Belt was not foreshadowed in NSC’s Statement of Case, which was properly limited in scope to the impact of the proposed car parking development⁷⁸. This is despite the fact that Mr Gurtler’s evidence on this point should have been reflected in NSC’s Statement of Case; alternatively, it may simply indicate that this point was a ‘make-weight’ only introduced at the last minute. The first indication that NSC sought to broaden the scope of reason for refusal 4 was in the Statement of Common Ground (Part 2)⁷⁹. It is said that, as a professional witness, Mr Gurtler is under a duty to express his views on these matters, but that cannot be an adequate explanation. Mr Gurtler is called as a witness for NSC to support its reasons for refusal; the Council had no reasons for refusal on these issues. Mr Gurtler is not some sort of *amicus curiae* to the inquiry

⁷⁴ Mr Gurtler, cross examination, Day 28 am session.

⁷⁵ Officer’s Report (CD4.11), page 106. The absence of a reference to the other aspects of the development as constituting inappropriate development in the Green Belt indicates that the Committee adopted NSC Officers’ assessment of this matter in the determination of the appeal.

⁷⁶ Mr Gurtler, Proof of Evidence (**NSC/W7/1**), para 43.

⁷⁷ Para 46 and para 49 (**NSC/W7/1**).

⁷⁸ (**CD21.2**), in particular, para 122.

⁷⁹ (**CD12.2**).

and NSC should not have endorsed a position whereby he sought to extend the stated reasons for refusal on their behalf.

646. As explained by Mr Melling, the proposed improvements to the A38 constitute 'local transport infrastructure', which are identified in paragraph 150(c) of the NPPF as a form of development that are not inappropriate in the Green Belt, provided they preserve its openness and do not conflict with the purposes of including land within it.⁸⁰ The A38 works are required to mitigate the traffic effects associated with the increase in throughput and can only be located in the Green Belt. In its location within and alongside the existing highway, the proposed works will preserve the openness of the Green Belt and will not conflict with Green Belt purposes.⁸¹ As Mr Melling explains, the additional land take required for the works is extremely limited and the works themselves will take place at or near surface level.⁸²
647. Mr Gurtler's current position is also inconsistent with the position adopted by Bristol City Council and NSC in respect of the South Bristol Link road, the route of which crosses the Green Belt.⁸³ In relation to that development, the position adopted by NSC and Bristol City Council when determining the planning application was that there was no harm to openness, this is notwithstanding the much greater length of works proposed there than the A38 works⁸⁴. The Inspectors into the South Bristol Link Compulsory Purchase Order agreed with this position.
648. With regards to the airside infrastructure, the proposed development constitutes 'engineering operations', which is also identified in the NPPF as a form of development that is not inappropriate development in the Green Belt in paragraph 150(b).⁸⁵ These works comprise the laying of hardstanding only within the boundary of the existing Airport⁸⁶, which will have no impact on the openness of the Green Belt. Nor would these operations conflict with the purposes of including land within the Green Belt; the operations are enclosed within the perimeter fence of the Airport and would not, therefore, encroach into the countryside. It is readily apparent from the images produced that there would be no visual change in the

⁸⁰ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 85, para 5.1.6. NPPF (2021) (**CD5.8.1**), page 44. This is agreed: Mr Gurtler, Proof of Evidence (**NSC/XXX**), para 47.

⁸¹ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 85, para 5.1.7

⁸² Mr Melling, Rebuttal Proof (**BAL/W7/3**), page 30, para 4.2.3.

⁸³ Mr Melling, Rebuttal Proof (**BAL/W7/3**), page 31, para 4.2.5 to 4.2.6.

⁸⁴ This is acknowledged by Mr Gurtler; Mr Gurtler, cross examination, Day 28 am session.

⁸⁵ (**CD5.8.1**), page 44. This is accepted by Mr Gurtler; Mr Gurtler, cross examination, Day 28 am session.

⁸⁶ (**CD1.8**), pdf page 1.

character of the site.⁸⁷ Indeed, Mr Gurtler accepts that from viewpoints 10 and 11, the airside infrastructure would be “*indistinguishable from the taxiway*”.⁸⁸

649. Mr Gurtler’s position in respect of the airside infrastructure is also inconsistent with that adopted by NSC in relation to the planning application for expansion to 10 mppa in 2011.⁸⁹

Extent of harm to openness

650. Whilst there is no dispute that there is an impact on openness arising from the development of car parking in the Green Belt, there remains a dispute about the degree of harm. It is recognised that harm to openness can arise as a result of physical (aka spatial) impact or as a result of visual impact, both of which are included in BAL’s assessment. Mr Gurtler considers that the overall harm to the Green Belt is ‘significant’ in respect of both Cogloop 1 and 2.⁹⁰
651. It should be noted that NSC has not carried out its own detailed Green Belt assessment for the purposes of the appeal, but relies on the high level assessment carried out in relation to the Local Plan process in April 2021 to establish the baseline.⁹¹ That assessment does not, however, break down the Airport site into detailed cells, as BAL’s assessment does as it was not prepared to inform an assessment of the impact on openness at the site level. Mr Gurtler’s conclusions on the visual impact on openness has not been informed by a qualified landscape architect. Nor is it consistent with the findings of BAL’s LVIA, with which NSC Officers agreed and in respect of which NSC has never indicated disagreement.
652. Moreover, Mr Gurtler confirmed that he has not visited the site during the operation of the seasonal car park. Whilst this may have been a matter over which he had no control, he accepted that such a visit would be required for a proper understanding of the extent of impact of the proposed development.⁹² BAL’s assessment of the harm on openness is set out in detail above.

Cogloop 1

653. In terms of visual harm, the only place from which Mr Gurtler identifies a discernible visual impact from Cogloop 1 is from Winters Lane.⁹³ The visual extent of the impact from these

⁸⁷ (CD2.5.23), pdf pages 16 and 17.

⁸⁸ Mr Gurtler, cross examination, Day 28 am session.

⁸⁹ Officers’ Report (10 mppa application) (CD4.1a), pdf pages 73 to 81 and bottom of page 79.

⁹⁰ Mr Gurtler, Proof of Evidence (NSC/W7/1), page [x], para 72.

⁹¹ Confirmed by Mr Gurtler. Mr Gurtler, cross-examination, Day 28, am session.

⁹² Mr Gurtler, cross-examination, Day 28, am session.

⁹³ Mr Gurtler, Proof of Evidence (NSC/W7/1), page [x], paras 60 and 63.

viewpoints can be seen in Figures 9.29a, Figure 9.29b and Figure 9.29c in the ES.⁹⁴ As Mr Melling explains, only road users and those using the public right of way would experience this view, and these transient receptors they would experience it as fleeting or glimpsed only⁹⁵. This assessment has been validated by Mr Furber, a landscape architect, and on this basis Mr Melling concludes that the extent of visual harm will be extremely limited. Mr Gurtler further agrees that the existing bund and landscaping restricts views of the seasonal car park and that the level of screening will increase as the landscaping matures.⁹⁶ As explained by Mr Melling, over time, this bund will appear as part of the natural landscape and in this way, will not impact on openness.⁹⁷

654. Whilst Mr Gurtler tentatively refers in his Rebuttal Proof to long range views from the AONB, he concludes that these would be “*not distinguishable*”. He confirmed in his oral evidence that it would be “*extremely difficult*” to see either the bunds or the cars from viewpoints in the AONB. The visual extent from these viewpoints can be seen in Figures 9.31a, Figure 9.31b and Figure 9.31c in the ES.⁹⁸ Any suggestion that there is a visual impact from the AONB is not supported by either the LVIA⁹⁹ or the Officers’ Report¹⁰⁰.
655. In respect of physical / spatial openness, Mr Gurtler contends that year-round use of the existing seasonal car park will lead to a significant impact. In his Rebuttal Proof, Mr Gurtler attributes this to the introduction of permanent built development into the Green Belt and the use of the site for block parking “*365 days in the year, rather than the seasonal use currently permitted*”.¹⁰¹
656. However, the seasonal car park is an existing car parking facility and the principle of car parking in this exact location has already been established and accepted. As Mr Melling explained in his oral evidence, the additional built development associated with this component of the proposal comprises of CCTV and lighting columns only and, consistently with the current operation of the facility, cars will be valet parked to minimise land-take and activity levels.¹⁰²

⁹⁴ ES Volume 3 (CD2.5.24), pdf pages 11 and 12.

⁹⁵ Mr Melling, Proof of Evidence, (BAL/W7/2), Appendix A, pdf pages 170 to 172.

⁹⁶ Mr Gurtler, Proof of Evidence (NSC/W7/1), page 17, para 60.

⁹⁷ Mr Melling, cross examination, Day 29 pm session.

⁹⁸ ES Volume 3 (CD2.5.24), pdf pages 18 to 21.

⁹⁹ Mr Melling, Proof of Evidence, (BAL/W7/2), page 130, para 6.3.5 and Appendix A, para 4.4.22.

¹⁰⁰ (CD4.11), pages 114 and 115.

¹⁰¹ Mr Gurtler, Rebuttal Proof (NSC/W7/3), page 23, Table row 32.

¹⁰² Mr Melling, evidence in chief, Day 29 am session.

657. Further, it is misleading to state that cars will be parked on the site 365 days per year; in fact, it is anticipated that the proposal will enable the Airport to accommodate peak winter demand¹⁰³ such that the site is unlikely to be in full use year-round. In consequence, any additional impact on physical / spatial openness over and above the current situation will be very limited. Mr Melling's conclusion is consistent with that of the Inspector in his report into the examination of the Core Strategy, which stated that car parking *"has relatively little effect on the essential openness or visual amenity of the surrounding rural Green Belt, save from close viewpoints, when compared with the prominent built form of the terminal and associated structures within the present inset"*.¹⁰⁴
658. In light of the degree of agreement, and Mr Gurtler's own positions on openness, his assessment of the impact as 'significant' is clearly overstated.

Cogloop 2

659. Despite Mr Gurtler's conclusion that the impact on visual openness that would arise from the proposed further extension to the Silver Zone car park is 'significant', he accepts that he identifies no viewpoints from which people will experience this harm.¹⁰⁵ Nor does Mr Gurtler identify any other way in which the impact on openness could be experienced. Mr Gurtler's position is that the harm arises from the development of an undeveloped site, and that it need not be capable of being experienced to be significant.¹⁰⁶
660. As Mr Melling explains in his Proof of Evidence, parking bays would be grassed and a proposed landscape perimeter bund will screen close range views; the adoption of a lighting strategy will prevent any upward lighting and minimise any light spillage in the same way as has been successfully implemented for the existing seasonal car park.¹⁰⁷
661. In this regard, the harm to openness identified by Mr Gurtler can only be spatial in nature (albeit that it will not be appreciated as such).
662. Mr Melling accepts that the proposed development of the car park will result in the loss of physical / spatial openness. However, as he explained in his oral evidence, the scale and nature of the development is such that physical harm to openness will be limited. Specifically, he

¹⁰³ Parking Demand Study Update (**CD2.23**), page 19, para 4.18.

¹⁰⁴ (**CD15.2**), page [xx], para 64.

¹⁰⁵ Mr Gurtler, cross examination, Day 28 am session.

¹⁰⁶ Mr Gurtler, cross examination, Day 28 am session.

¹⁰⁷ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 88, para 5.3.5.

highlighted that the development is low-rise, that activity on the site will be relatively limited and the proposed landscape bund will, over time, form a natural-looking feature in the landscape.¹⁰⁸ Further, the site constitutes only a very small proportion of the wider Green Belt.

663. On this basis, it is very difficult to understand how Mr Gurtler concludes that the harm arising from the proposed extension to the Silver Zone car park will be significant.

Very special circumstances

664. Assuming, for these purposes, that the residual parking demand of 2,700 spaces is made out, Mr Gurtler agreed that there are three alternative scenarios if the Silver Zone extension is not provided.¹⁰⁹ These are as follows:

- a. That those passengers park in unofficial, off-site car parks;
- b. That those passengers arrive by taxi and other forms of pick up and drop off; or
- c. That those passengers all arrive by public transport.

665. With regards to the first scenario, the additional car parking would exacerbate an already significant problem. One of the key concerns highlighted by members of the PCAA and local residents in the opening week of the inquiry was the level of unofficial car parking that exists, much of it unauthorised without the benefit of any planning permission and located within the Green Belt and/or in nearby villages. These are real concerns that relate to not only the harm the Green Belt, which would be to a much greater degree than the proposed development, but are also associated with a whole host of other amenity issues. Both NSC and BAL are agreed that this type of parking is completely unacceptable in planning terms.¹¹⁰ Indeed, NSC has sought help from BAL in addressing this problem, which it proposes to offer through measures agreed in the section 106 agreement.

666. With regards to the second scenario, the outcome would be a greater number of trips on the local highway network and an exacerbation of a number of problems that the PCAA members and local residents explained were associated with antisocial behaviour by taxi drivers waiting in local villages, car parks or lay-bys. Indeed, Mr Gurtler agrees that if this were the consequence of underproviding parking, that would be “*extremely undesirable*”.¹¹¹

¹⁰⁸ Mr Melling, cross-examination, Day 29 am session.

¹⁰⁹ Mr Gurtler, cross examination, Day 28 am session.

¹¹⁰ Mr Gurtler, cross examination, Day 28 am session.

¹¹¹ Mr Gurtler, cross examination, Day 28 am session.

667. The third scenario requires the assumption that all those passengers that are forecast to require parking in the Silver Zone extension will transfer to public transport. This would far exceed the public transport mode share uplift that Mr Witchalls has shown would be achievable and, indeed, ambitious. There is simply no evidence, either in Mr Colles's evidence or elsewhere, to show that this would be possible. To underprovide onsite car parking in the simple hope that all passengers will simply transfer to public transport would fail to recognise that there is not a direct, linear relationship between parking provision and mode share.¹¹² It would be inherently risky and it would be local communities that would bear the severe consequences of such a strategy; furthermore, there was no indication from local residents that they considered such a strategy appropriate.
668. In terms of the availability of alternative sites, there is no alternative assessment carried out by NSC (or any other party) to indicate that BAL's assessment is not robust. Indeed, NSC's only alternative suggestion is that the residual demand for 2,700 spaces may be met by a further MSCP in the Green Belt inset.¹¹³ However, BAL's response to this is fourfold:
- a. BAL has demonstrated that there is not a site within the Green Belt inset that could properly accommodate a further MSCP or sufficient decked parking. The Green Belt inset is already very densely developed and the need for adequate circulation space and other landside activities (and indeed the configuration of the land not already developed with buildings or proposed buildings¹¹⁴) means that there is no credible alternative site. Certainly Officers did not suggest such a site in the negotiations leading to the determination of the application and nor did Mr Gurtler suggest such a site, other than the observation that he could see some open land from the window of his onsite hotel¹¹⁵. If there had been a suitable site within the Green Belt inset then this would, surely, have been identified and promoted as such in NSC's written evidence; it was not. Nor did XRE propose any adequate solution to accommodating a further 2,700 car parking spaces in the Green Belt inset, other than generalised comments about single decked car parking.
 - b. It is clear, however, that accommodating a total of four MSCPs in the Green Belt inset would amount to overdevelopment and could not be accommodated in a manner that

¹¹² Indeed, this is agreed with Mr Colles as explained in the Transport Chapter above.

¹¹³ Mr Gurtler, Proof of Evidence (**NSC/W7/1**), page 22, paras 79.

¹¹⁴ See plan at (**CD1.8**).

¹¹⁵ This is not, however, a suitable site for the reasons explained by Mr Melling in his evidence in chief Day 29, AM session.

did not result in harm to landscape and, importantly, residential amenity.¹¹⁶ This was assessed in the Parking Strategy and, subsequently, by a landscape architect in the Comparative Study contained at Appendix A to Mr Melling's Rebuttal Proof of Evidence and no alternative assessment has been presented to indicate this is incorrect. Moreover, it is a view supported by NSC Officers¹¹⁷;

- c. In any event, further MSCPs or decked car parking would not meet the need for low cost parking. Whilst there has been much debate about the need for an MSCP viability assessment, such a requirement is completely misplaced. Whilst there are examples where viability assessments are required in planning appeals – usually in the context of the policy requirement to provide affordable housing within residential developments¹¹⁸ – there is no such policy requirement in this case and nor is one appropriate. Thus the apparent reliance by NSC on the requirement for transparency in such an assessment simply does not arise.¹¹⁹
- d. BAL's position on this issue is quite different and relates to the much higher costs of constructing an MSCP, as against a surface level car park, and in that context its inability to offer low cost parking in its MSCPs that would be able to more effectively compete with unofficial low cost parking in the Green Belt. Mr Gurtler accepted that the cost of constructing a MSCP would be much higher than that of surface car parking¹²⁰ and this is also consistent with XRE's evidence.¹²¹ Mr Melling makes the same point in his evidence.¹²² The essential point is simple; an expensive piece of infrastructure which requires investment will need to be charged at a level that reflects that investment.¹²³ That is wholly consistent with what is done at other airports and is not novel. There is, in

¹¹⁶ Parking Strategy (**CD2.12**), pdf page 27, section 5.3.

¹¹⁷ (**CD4.11**).

¹¹⁸ See, for example, NSC's policy CS16 (**CD5.6**)

¹¹⁹ NSC's reliance on the decision in *R (oao Holborn Studios) v LBC* [2021] JPL 17 simply illustrates this point. In that case the local planning authority had a policy requiring a 'viability assessment' for certain mixed-use development. A viability assessment was submitted with the application, but only posted on the Council's website in a 'redacted' form and the background papers were not made available for public inspection. The question then arose as to whether these documents were 'exempt' under the obligation on local authorities to disclose information under s.100D (Inspection and publication of background papers) of the Local Government Act 1972. It was held that they were not exempt and that they should have been disclosed by the local planning authority. However, no such situation arises here as (i) there is no requirement to produce a viability assessment, (ii) no such viability assessment has, therefore, been produced and so there is nothing to disclose, and (iii) the section 100D duty on a local authority to allow inspection of background papers is simply not engaged in relation to a private sector developer.

¹²⁰ Gurtler, cross-examination, Day 25 am session.

¹²¹ Liz Beth PoE (**XR/W4/1**) para 5.9, Table 1

¹²² Melling PoE (**BAL/W7/2**), section 5.5 and Melling Rebuttal (**BAL/W7/3**) section 4.3

¹²³ This was explained by Mr Melling in cross-examination; Mr Melling, cross-examination, Day 29 am session.

addition, a competition law risk associated with NSC's (apparent) proposal that BAL should 'cross-subsidise' MSCP parking, in order to compete with cheaper, unofficial off-site car parking.¹²⁴ Ultimately, if the need for low cost parking is not met, the adverse consequences set out above are likely to materialise.

Phasing

669. It is the view of Mr Gurtler that BAL should be required to maximise parking in the inset prior to the delivery of additional capacity in the Green Belt. On this matter, NSC has proposed a condition requiring that MSCP3 is forward ahead of both the proposed year-round use of the existing seasonal car park and the extension of the Silver Zone Car Park.
670. Mr Melling has comprehensively addressed this matter in his evidence. He makes the following key points:¹²⁵
- a. BAL's proposed phasing brings forward MSCP2 (including a PTI), alongside the year-round use of the existing seasonal car park and the early delivery of public transport improvements, prior to the delivery of the extension of the Silver Zone Car Park. On that basis, the delivery of MSCP2 (and public transport improvements) have been prioritised.
 - b. As set out above, MSCP3 would not meet the specific demand for low-cost car parking as the higher capital costs associated with the construction of a multi-storey car park facility would mean that BAL, like other UK airports, would have to impose a higher parking charge for these spaces than for surface car park spaces. In-turn, not meeting this specific demand would lead to an increase in unauthorised offsite car parking. Indeed, this was the same conclusion as that reached by NSC Officers, is consistent with previous decisions taken by NSC and, as Mr Melling has explained in his evidence, is a view upheld in the Courts¹²⁶.
 - c. BAL has received legal advice (at Appendix B to Mr Melling's Rebuttal Proof of Evidence) which indicates that, if it were to build MSCP3 and offer parking in this facility at prices similar to those in the Silver Zone Car Park, this may give rise to competition law risks under the Competition Act 1998. Furthermore, to cross-subsidise MSCP car parking

¹²⁴ Mr Melling, Rebuttal (**BAL/W7/3**), Appendix B.

¹²⁵ Mr Melling, Proof of Evidence (**BAL/W7/2**), pages 112 to 114, paras 5.5.29 to 5.5.34.

¹²⁶ (**CD15.1**).

charges would also compromise BAL's mode share targets that seek to encourage the use of public transport.

- d. Both the extension to the Silver Zone Car Park and MSCP3 will be required to accommodate 12 mppa. From a Green Belt perspective, when they are brought forward is therefore irrelevant as the same limited harm to the Green Belt will occur.
- e. The delivery of car parking will be subject to BAL demonstrating, through a monitor and manage approach, that there is a need for the facilities in the context of an updated ASAS and public transport mode share targets. This will further ensure that the right facility is brought forward at the right time to meet overall passenger demand.

671. On this basis, Mr Melling has concluded that BAL's car parking solution represents a balanced approach that is in accordance with Policy CS11 of the development plan.

The weight to be given to harm to openness

672. Whilst BAL's assessment of the harm to openness and the purposes of the Green Belt concludes that the harm is 'limited', there is no dispute that the NPPF requires that substantial weight should be given to this harm.¹²⁷

673. However, as Mr Melling explained in cross-examination, there is no basis in the NPPF or elsewhere for 'scaling up' the weight to be given to the harm to reflect the degree of harm.¹²⁸ Whilst limited harm is to be given substantial weight, moderate or substantial harm to openness should not be given any greater degree of weight.

674. Nevertheless, when considering whether the harm is outweighed by the very special circumstances identified, it is important to take into account the degree of harm.¹²⁹ In this regard, the fact that the harm is 'limited' in nature is relevant. Limited harm will be easier to outweigh than a greater degree of harm, despite substantial weight being given to any degree of harm.

675. In this context, and as Mr Melling has explained, the weight he has applied to Green Belt harm in his planning balance is derived from the application of paragraph 148 of the NPPF and the minor/limited harm to the Green Belt arising from the development, as identified in the Green Belt assessment. In his planning balance, he has also taken into account his conclusion that any

¹²⁷ Accepted by Mr Melling. Mr Melling, cross-examination, Day 29 am session.

¹²⁸ Mr Melling, cross-examination, Day 29 am session.

¹²⁹ Mr Melling, cross-examination, Day 29 am session.

harm to the Green Belt, and any other harm resulting from the development, is outweighed by the very special circumstances outlined above. It is on this basis that Mr Melling has concluded that limited weight should be applied to Green Belt harm in the planning balance.

'Monitor and manage'

676. As explained above, the monitor and manage condition provides an approach to the provision of car parking capacity that is responsive to parking demand, passenger throughput and any other facilities that come forward. It ensures that parking will only come forward when there is sufficient demand for it. This approach will also take into account the type of demand.¹³⁰
677. NSC argue that if the full parking demand is made out, the monitor and manage condition is not 'necessary'. As explained by Mr Melling, however, whilst BAL is confident in its assessment of the total demand for car parking, it is also looking to cater for unforeseen changes in circumstances that mean that the level or type of demand changes, and as a result the phasing required.¹³¹ It is worth remembering that the Parking Demand Study Update seeks to assess the level of demand in 2030, nearly nine years into the future. Whilst that assessment is as robust as it can be at the current time, BAL wants to ensure that the delivery of parking continues to respond to demand into the future, as well as ensuring that it compliments BAL's public transport mode share targets and the associated investment in public transport measures. In the event that BAL do exceed the 2.5% mode share target, the monitor and manage approach will continue to be relevant to ensuring that further progress is not prevented.
678. For the avoidance of doubt, however, BAL does not anticipate there being any material change to the overall quantum of car parking that is required to accommodate an additional 2 mppa, which has been clearly established in the Parking Demand Study Update and validated by Mr Witchalls. On this basis, there is no question that all of the proposed car parking is required.

Rule 6 parties' position on Green Belt

BALPA

679. As set out above, BALPA's sole concern relates to the location of staff parking. As part of its case, it seeks to demonstrate that the relocation of staff parking to the northside would allow the existing staff parking area in the Silver Zone to be used for block parking for passengers.

¹³⁰ As explained by Mr Melling. Mr Melling, examination in chief, Day 29 am session.

¹³¹ Mr Melling, cross-examination, Day 29 am session.

This, BALPA argue, would reduce (but not remove¹³²) the need for the proposed Silver Zone extension.

680. The current location of staff parking is in accordance with the 2011 Permission. There is no proposal to alter it as part of the proposed development.

681. In any event, as explained by Mr Witchalls and Mr Melling, BALPA's proposal would (as Mr Renshaw accepted), simply "*transfer*" parking from one area to another. Even on Mr Renshaw's own calculations, it would generate only 400 additional parking spaces and not negate the need for further car parking provision to the south of the airport site. This must be considered in the context of the 2,700 spaces to be provided by Cogloop 2.

682. Moreover, as the Parking Demand Study Update demonstrates, all parking will be required to meet the forecast need and that includes both low cost and MSCP (premium) parking. Indeed, BALPA accepts that it has not carried out an alternative assessment of the demand or the mix of parking required.¹³³ In this context, there is a real risk that BALPA's proposal would result in an under provision of premium car parking spaces.

XR Elders

683. XR Elders case focusses predominantly on the alternative of delivering decked parking in the Green Belt inset. For the reasons set out above, this is not an appropriate option.

Peirce (Sutherland)

684. As explained above, the nature of Mr Peirce's case seeks to promote his own site for off-airport car parking in the context of very special circumstance 2. That site, Heathfield Park, was considered by Mr Melling in detail in his Proof of Evidence.¹³⁴ The issues identified by Mr Melling have subsequently been shown to be matters of agreement with NSC, who refused the planning application for the site on 1 September 2021 for substantially the same reasons as identified by Mr Melling. The site is therefore neither appropriate nor available.

685. Mr Melling has confirmed that no other suitable and available off-airport car parking sites have been identified in either the Parking Strategy or by Officers. Notwithstanding this, Mr Melling highlights in his Proof of Evidence that BAL's proposed parking solution does not preclude the

¹³² Mr Renshaw accepted that it would not remove the need for Cogloop 2; Mr Renshaw, cross-examination, Day 26 am session.

¹³³ Mr Renshaw, cross-examination, Day 26 am session.

¹³⁴ Mr Melling, Proof of Evidence (**BAL/W7/2**), pages 102 to 103, paras 5.4.58 to 5.4.60.

delivery of an appropriately sited and managed P&R facility that aligns with, and contributes towards, BAL's ASAS. In fact, the monitor and manage approach currently proposed by BAL would take specific account of the capacity provided by authorised off-site park and ride facilities in establishing whether there is sufficient demand to bring forward additional car parking at the Bristol Airport site.

Key conclusions

686. Substantial weight must be given to the harm to openness of the Green Belt. However, in considering whether that harm is outweighed by very special circumstances, the degree of harm must be taken into account.
687. The only aspect of the proposed development that is properly identified as inappropriate development in the Green Belt is the proposed car parking elements to be located to the south of the airfield. Mr Gurtler alone disagrees with this position. Harm is caused to the Green Belt by virtue of the inappropriateness of this development. However, the harm to openness and to Green Belt purposes is assessed to be 'limited', taking into account the extent of both visual and spatial harm. BAL's assessment of harm is the only Green Belt assessment that has been prepared by any party to the Inquiry in relation to the proposed development. It has been informed by expert advice from a landscape architect.
688. This degree of harm must be weighed against the three very special circumstances identified; specifically, the need for the development, the absence of alternative sites outside the Green Belt, and the overall need for, and benefits of, the expansion of Bristol Airport.
689. The need for car parking in the Green Belt arises from a robust assessment of the demand for additional capacity and a detailed analysis of the ways in which this demand can be met. It has been established that the proposed development already maximises the use of land within the Green Belt inset through the commitment to deliver MSCP2 (permitted under the 2011 Permission) and a further MSCP3. Surface level car parking cannot be accommodated within the inset, and there is insufficient capacity to accommodate further MSCPs or decked car parking. Further MSCP or decked car parking would also not meet the identified demand for low cost parking. The implications of failing to meet this demand are significant; it would inevitably lead to an exacerbation of unofficial car parking and the associated amenity issues that it causes, in addition to posing a risk to BAL's ASAS and public transport mode share target.

690. The Parking Strategy has examined in detail the availability of sites outside the Green Belt and away from the Airport; there are no sites available. No party has presented substantive evidence to the Inquiry to indicate otherwise.
691. The third very special circumstance concerns the overall benefits of the proposed development. This is dealt with in detail in the planning balance section of this close. By way of summary, the identified demand must be met if the Airport is to grow in a manner that does not exacerbate existing amenity issues experienced by local communities. The provision of car parking is integral to BAL's proposals to make best use of the airport site and meet forecast passenger demand.
692. As explained later in this closing, the need for the development of car parking in the Green Belt, the absence of any alternative available sites, and the considerable socio-economic benefits that the proposed development brings, are more than capable of outweighing the limited harm to the Green Belt, and other harm identified, when considered within the framework of local and national policy.¹³⁵ In this regard, the proposed development is in accordance with policy DM12 of the DMP and paragraph 148 of the NPPF (2021).

¹³⁵ This is the conclusion reached by Mr Melling. Mr Melling, Proof of Evidence (**BAL/W7/2**), page 125, para 5.6.4.

OTHER MATTERS

Introduction

693. There are two other substantive matters that have arisen during the Inquiry and which have been considered by Mr Melling when carrying out the planning balance. These issues do not feature in the reasons for refusal and therefore were not identified as issues by the Inspectors at CMC1, but have since been raised by Rule 6 parties to the appeal. These matters are as follows:

- a. The landscape and visual impact of the proposed development, in particular having regard to the impact on the setting of the Mendip Hills Area of Outstanding Natural Beauty ('AONB'); and
- b. The ecological impact of the proposed development.

694. The first of these issues was raised by XR Elders, who called evidence from Ms Tudor on the impact of the proposed development on the AONB. Mr Furber, on behalf of BAL, produced a Rebuttal Proof of Evidence in response to the evidence of Ms Tudor.¹

695. The second was identified by the PCAA, originally in its Statement of Case,² and has subsequently been the subject of legal submissions by the PCAA dated 1 October 2021. No party to the Inquiry has called expert evidence in respect of ecology, other than the Technical Note appended to Mr Melling's proof of evidence³. The purpose of this section, therefore, is to summarise, in factual terms, the assessments carried out by BAL in respect of ecology and the relevant findings. Insofar as the PCAA's submission raises legal issues in respect of ecology, they are addressed in Appendix 1 to this closing.

Landscape and Visual Impact

Introduction

696. As noted above, the only parties to call evidence on landscape and visual impact were XR Elders and BAL. Ms Tudor, on behalf of XR Elders, raised concerns relating exclusively to the impact of the proposed development on the Mendip Hills AONB. This issue is therefore the subject of the

¹ (BAL/W9/1).

² (CD21.4), paras 37 to 38.

³ Mr Melling, Proof of Evidence (BAL/W7/2), Appendix B

evidence provided in response by Mr Furber on behalf of BAL and is the focus of this section of the closing submissions.

Legal context

697. Section 85 of the Countryside and Rights of Way Act 2000 ('CROW 2000') imposes a general duty on public bodies in the following terms:

"General duty of public bodies etc.

(1) In exercising or performing any functions in relation to, or so as to affect, land in an area of outstanding natural beauty, a relevant authority shall have regard to the purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty".

698. This duty applies to the Inspectors In reaching their decision on the appeal.

BAL's assessment of landscape and visual impact

699. BAL carried out a landscape and visual impact assessment ('LVIA') of the proposed development in Chapter 9 of the original ES.⁴ The scope of this assessment was agreed with NSC at the EIA scoping stage.⁵ Whilst other assessments were updated in the ESA, the LVIA was scoped out on the basis that the revised forecasts were not likely to have a material impact on the assessment carried out.

700. The nearest part of the AONB is situated 2.9km from Bristol Airport. In order to include parts of the AONB itself and its "setting", the study area was extended to 10km.⁶ The area assessed is shown on Figure 9.4 in the ES.⁷ The AONB Management Plan was used to gain understanding of key features, characteristics and sensitivities of those parts of study area within AONB.⁸

701. The LVIA contained a detailed assessment of the landscape effects on the AONB in Table 9F.1.⁹ This is organised by 'special quality', as identified in the AONB Management Plan. The assessment considered the potential for direct impacts (including views of the proposed development from the AONB) and indirect impacts (impacts on the AONB or its setting arising from air and road traffic and lighting). The overall effect is assessed as a product of sensitivity

⁴ Main report (CD2.5.21) and Appendices 9A to 9G (CD2.5.22), Figures part 1 (CD2.5.23) and part 2 (CD2.5.24).

⁵ (CD4.9).

⁶ (CD2.5.21), pdf page 5, paras 9.4.1 to 9.4.2.

⁷ (CD2.5.23), pdf page 4, Figure 9.4.

⁸ ES Chapter 9 (LVIA) (CD2.5.21), pdf page 6.

⁹ ES, Appendix 9F (CD2.5.22), pdf page 42.

of receptor and magnitude. The sensitivity of the AONB is identified as 'high'.¹⁰ Against the twelve special qualities assessed, the LVIA concludes that there is no effect.

702. The LVIA also carried out an assessment against eleven landscape character areas ('LCAs') between the Airport and the AONB which were scoped into the LVIA. These form the 'setting' of the AONB. No significant effects were identified.¹¹

The position of NSC officers

703. NSC officers considered that BAL's LVIA was consistent with GLIVA3 and used an appropriate LVIA study area, which included parts of the AONB.¹² The Officers' Report concluded that "*the visual impact assessment provides an extensive representation of the projected visual impacts of the proposals*".¹³ Officers noted that the most severe impacts would be from the proposed MSCP3 from receptors along Downside Road.¹⁴ In respect of views from the AONB, Officers acknowledged that it would be "*difficult to distinguish*" the Silver Zone extension. The broader impact of the proposed development on the AONB was considered generally 'minor' due to the distance and vastness of the AONB.¹⁵ Overall, however, the proposed development was considered acceptable in terms of its landscape and visual impact.¹⁶
704. The position of Natural England was that the degree of change associated with the proposed development was unlikely to result in significant impacts on views out from the AONB.¹⁷ Natural England's view, however, was that an increase in activity from aircraft over-flying the AONB and increased road traffic could be significant and requires further consideration.
705. Following Natural England's letter, and in response to regulation 25 requests by NSC, in April 2019 BAL provided further information on the percentage increase in road traffic and aircraft that would be experienced in the AONB.¹⁸
706. Natural England did not, however, consider that these activities would give rise to a 'significant' impact and did not make an objection to the proposed development.

¹⁰ ES, Appendix 9F (CD2.5.22), pdf page 1.

¹¹ See the details of these assessments in ES, Appendices 9D (pdf page 36), 9E (pdf page 40) and 9F (pdf page 45). Summary table at ES Chapter 9 (CD2.5.21), pdf page 53, Table 9.10.

¹² Officer's Report (CD4.11), page 113.

¹³ OR (CD4.11), page 114.

¹⁴ OR (CD4.11), page 114.

¹⁵ OR (CD4.11), page 114.

¹⁶ OR (CD4.11), page 114.

¹⁷ (INQ/069) and (INQ/070).

¹⁸ (CD3.4.6), Part 1 (CD3.4.7) and Part 2 (CD2.4.8).

Issues in dispute raised by XR Elders

707. As set out above, the scope of Ms Tudor's evidence is narrow; it concerns the landscape and visual impact of the proposed development on the AONB.¹⁹ Ms Tudor's position is that the proposed development gives rise to 'significant' landscape and visual impacts on the AONB and that the assessment in the LVIA is flawed.
708. As set out above, the approach adopted in the LVIA is both in accordance with the Guidelines for Landscape and Visual Impact Assessment 3 ('GLVIA3') (agreed to be the appropriate guidance²⁰) and robust. Mr Furber responds in detail in his Rebuttal Proof to the points raised by Ms Tudor, demonstrating that all the criticisms made are misplaced.²¹
709. With regards to Ms Tudor's conclusion on significance, her evidence presents no alternative assessment of the impact of the proposed development on the AONB. Nor does it even seek to identify the particular aspects of the proposed development she alleges will result in a 'significant' impact. The evidence contains no consideration of the actual levels of aircraft noise in or close to AONB, the number of additional vehicles on roads in or close to AONB, the change in air quality levels, or the lighting effects associated with the car parking development.
710. Any robust LVIA must be based on a proper understanding of the aspects of the proposed development that may give rise to impacts. As set out in the ES and BAL's regulation 25 responses,²² these are as follows:
- a. There will be less than one additional arrival into runway 27 per hour during the busiest time of year. This will be at a height of 5000 to 6000 ft over the AONB;
 - b. There will be a further, very small number of aircraft departing from runway 09 (only 5% of departures), which will be at a height of 10,000 ft over the AONB;
 - c. The increase in average noise levels that will be experienced in the AONB are in the region of 1dB $L_{Aeq,16h}$ in the context of an absolute noise level in the region of 35 dB $L_{Aeq,16h}$;
 - d. The increase in road traffic levels will be less than 5%; and
 - e. The increase in noise levels from road traffic will be 0.2 dBA or less.

¹⁹ Ms Tudor, Proof of Evidence (**XRE/W5/1**), page 1, para 1.1.

²⁰ Ms Tudor, cross-examination, Day 18 am session.

²¹ Mr Furber, Rebuttal Proof (**BAL/W9/1**), page 16, section 2.6.

²² (**CD3.4.6**), pdf pages 24 and 25.

711. It is clear from the assessment in the LVIA, which did take into account the very nature of the proposed development, that there will be no significant adverse impact on the AONB as asserted by Ms Tudor.

Conclusion

712. As Ms Tudor accepts, her view departs from that of Mr Furber, NSC Officers and Natural England.²³ XR Elders, nor any other party, has offered an alternative substantive assessment to that contained in the LVIA. The assessment carried out by BAL is in accordance with guidance, comprehensive and robust. It takes account of the actual changes that will arise as a result of the proposed development. Insofar as the Inspectors must discharge the duty under section 85 of the CROW 2000, the conclusion reached by this assessment is that there are no significant effects in terms of landscape and visual impacts, which includes no significant effects on the AONB.

Ecology

Introduction

713. As noted above, no party to the Inquiry has presented evidence on the ecological impact of the proposed development, apart from the Technical Note appended to Mr Melling's proof of evidence²⁴. Nor has any party questioned or disputed the technical assessment carried out by BAL. The only issue raised is presented as a legal one;²⁵ namely, whether the proposed replacement foraging habitat for greater and lesser horseshoe bats for which the North Somerset and Mendip Bats Special Area of Conservation ('SAC') is designated, is 'mitigation' or 'compensation'.
714. Insofar as this question turns on the legal definitions to be applied, it is dealt with in Appendix 1 to this closing. However, it is notable that the scope of the dispute about the legal test to be applied is limited. There is general agreement between BAL and the PCAA about the tests to be extracted from the applicable case law. The real point of dispute concerns the application of these legal definitions. That, however, is a matter of professional judgment to be formed on the basis of technical evidence.

²³ Ms Tudor accepted that she was alone in her views. Ms Tudor, cross-examination, Day 18 am session.

²⁴ Mr Melling, Proof of Evidence (**BAL/W7/2**), Appendix B

²⁵ PCAA's legal submissions dated 1 October 2021.

715. As explained below, the view reached by BAL's expert ecologist is clear; the proposed replacement foraging land, which will be in place and mature prior to any works commencing on Cogloop 2, meets the legal test for 'mitigation'. This was the position agreed by NSC officers and Natural England, the expert body for responsibility for the natural environment, including ecology and biodiversity. There is no expert evidence before the Inquiry that supports an alternative conclusion.

BAL's assessment

716. The proposed development will result in a loss of 3.7 hectares of agricultural land to allow the delivery of Cogloop 2, and 0.16 hectares of woodland edge habitat in order for the A38 improvement works to be delivered. Both areas of land are situated outside the boundary of the North Somerset and Mendip Bats SAC, but within the 'consultation zone' (bands B and C) as identified in the NSC North Somerset and Mendip Bats Special Area of Conservation Guidance on Development: Supplementary Planning Document²⁶. Due to the proximity of this land to the SAC and evidence gathered through surveys, it is considered to provide foraging land for bats and therefore functionally linked land to the SAC.
717. In order to avoid any impact on the integrity of the SAC, it is proposed that replacement foraging habitat is provided in advance of any works being carried out that will affect existing foraging land. The evidence of BAL's ecologist, Mr Johns, which is contained in a Technical Note at Appendix B to Mr Melling's Proof of Evidence, is as follows:

*"From a scientific or technical perspective, it is my view that it is sufficiently certain that the replacement land will make an effective contribution to avoiding harm, guaranteeing beyond all reasonable doubt that the project will not adversely affect the integrity of the SAC. It will be secured before development commences such that the success of the measure will be established prior to the taking of any action that has the potential to give rise to an adverse impact."*²⁷

718. This conclusion is reached on the basis of a proper understanding of the legal framework and having regard to the technical evidence about the proposed measures.

The position of NSC officers

²⁶ (CD5.17).

²⁷ Mr Melling, Proof of Evidence (BAL/W7/2), Appendix B, page 6, para 1.1.22.

719. NSC officers carried out an appropriate assessment pursuant to the Conservation of Species and Habitats Regulations 2017 ('Habitats Regs') informed by the information provided by BAL.²⁸ The appropriate assessment reached the conclusion that there will be no cumulative impacts on the integrity of roost sites and functionally-linked habitat for lesser and greater horseshoe bat populations within the North Somerset and Mendip Bats SAC.²⁹
720. NSC officers considered biodiversity as 'Issue 14' in the Officers' Report.³⁰ Consistently with the appropriate assessment, the Report concluded that the proposed replacement foraging land constituted mitigation land that would avoid adverse effects on the integrity of the SAC.³¹

Conclusion

721. The ecological impacts of the proposed development do not constitute a reason for refusal. BAL's ecologist, NSC officers and Natural England are satisfied that the proposed development will not result in adverse effects on the integrity of the SAC. No party has presented any technical evidence to demonstrate that this conclusion is incorrect.

²⁸ Including the shadow HRA (CD4.15).

²⁹ (CD5.17), page 45.

³⁰ (CD4.11), page 116.

³¹ (CD4.11), page 118.

PLANNING BALANCE

Introduction

722. BAL's assessment of the planning balance depends upon the conclusions reached in respect of each of the reasons for refusal, as set out above. It is informed by the obligations agreed with NSC in the section 106 agreement and those contained in BAL's unilateral undertaking ('UU'), as well as the proposed conditions. It is not the purpose of this section to repeat the analysis of the evidence set out above, but to draw on that analysis in the context of the legal and policy framework for the planning balance.
723. The acceptability of the proposed development with regard to adopted and emerging local and national policy was identified by the Inspectors as CMC1 issue (a).

Legal and policy framework

724. In accordance with section 38(6) of the Planning and Compulsory Purchase Act 2004, the appeal must be determined in accordance with the development plan unless material considerations indicate otherwise.
725. BAL and NSC have agreed a list of development plan policies that are relevant to the determination of the appeal.¹ The development plan comprises the North Somerset Core Strategy (adopted 10 January 2017), the Sites and Policies Plan Part 1: Development Management Policies (adopted 19 July 2016) and the Sites and Policies Plan Part 2: Site Allocations Plan (adopted 10 April 2018). It is agreed that full weight can be given to the development plan.²
726. A detailed discussion of the development plan policies that apply to each issue considered in the evidence has already been set out in this closing. The extent to which the approach to be adopted is agreed, and the outstanding issues in dispute, are set out below.

Approach to planning balance

Areas of agreement

727. With regards to matters of approach and the policy context within which the Inspectors must strike the planning balance, the following key points are agreed between BAL and NSC:

¹ Statement of Common Ground (Part 1), para 15 (CD12.1).

² Statement of Common Ground (Part 1), para 14 (CD12.1).

- a. International connectivity is of great importance to the UK Government, as reflected in national policy;³
- b. In particular, air links and the connectivity they provide, play a vital role in achieving the Government's vision of 'global Britain';⁴
- c. As confirmed in the APF, the Government's "*primary objective*" is to achieve long-term economic growth, and the aviation sector is a major contributor to the economy;⁵
- d. Bristol Airport in particular is recognised as playing a vital role in the economic success of the South West;⁶
- e. The Government's 'levelling up' agenda is important in terms of backdrop to the assessment of the proposed development;⁷
- f. NSC, like the UK Government, supports the provision of economic opportunities such as the generation of employment;⁸
- g. The Government does not see a contradiction between economic growth, the provision of jobs, 'levelling up' and the vision of 'global Britain' on the one hand, and the attainment of net zero on the other;⁹
- h. The policy position in respect of 'outbound tourism' is "*clear*" in relation to the quality of life benefits it provides;¹⁰
- i. Leaving aside the question of weight, it is clear from the words of MBU that the Government has a policy of 'making best use' of existing runways (outside Heathrow).¹¹ This policy position is also contained in the APF and is a long-standing policy position adopted by successive Governments;¹²

³ Mr Gurtler, cross-examination, Day 30 pm session. Discussed specifically in the context of the APF, but echoed in a number of other policy documents as set out above.

⁴ Mr Gurtler, cross-examination, Day 30 pm session.

⁵ Mr Gurtler, cross-examination, Day 30 pm session.

⁶ Mr Gurtler, cross-examination, Day 31 am session.

⁷ Mr Gurtler, cross-examination, Day 30 pm session.

⁸ Mr Gurtler, cross-examination, Day 31 am session.

⁹ Mr Gurtler, cross-examination, Day 30 pm session.

¹⁰ Mr Gurtler, cross-examination, Day 30 pm session, referring to pdf page 19 of the APF.

¹¹ Mr Gurtler, cross-examination, Day 30 pm session. Mr Gurtler explained this had been the case ever since the Air Traffic White Paper (2003).

¹² Mr Gurtler, cross-examination, Day 30 pm session.

- j. As recognised in MBU, regional airports have an important role in accommodating wider forecast growth, which could help take pressure off London’s airports;¹³
- k. The Government could have but has chosen not to revoke MBU. Indeed, it has reaffirmed MBU and confirmed it has “*full effect*”;¹⁴
- l. The correct approach is to weigh MBU within the planning balance;¹⁵
- m. There is nothing in the NPPF nor anything cited in evidence to provide a basis on which to apply less weight to Government policy;¹⁶
- n. In policy terms, climate change is a global and national issue¹⁷ and the Government is entitled to adopt a policy stating that climate change is a matter to be dealt with in this way;¹⁸
- o. Paragraph 188 of the NPPF includes within its scope the UK ETS, such that policy says that the UK ETS should be assumed to be effective in controlling carbon emissions;¹⁹
- p. There is no express concept of environmental ‘headroom’ in national or local policy.²⁰ The correct approach is simply to balance the positive and negative effects of airport development;²¹ and
- q. With regards surface access, it is agreed that the test in paragraph 111 of the NPPF is that planning permission should only be refused if the proposed development would have an unacceptable impact on highway safety or the residual cumulative impacts of the road network would be severe.²²

Outstanding points of dispute

¹³ Mr Gurtler, cross-examination, Day 30 pm session. Referring to MBU (CD6.4), page 10, para 10.

¹⁴ Mr Gurtler, cross-examination, Day 30 pm session.

¹⁵ Mr Gurtler, cross-examination, Day 30 pm session.

¹⁶ Mr Gurtler, cross-examination, Day 30 pm session. When Mr Gurtler was asked to confirm that he had not cited a basis for this, he confirmed: “*No, I haven’t cited anything*”.

¹⁷ Mr Gurtler, cross-examination, Day 30 pm session. Mr Gurtler: “*it is a national issue, government has to set policy at a national level*”.

¹⁸ Mr Gurtler, cross-examination, Day 30 pm session.

¹⁹ Dr Hinnells, cross-examination, Day 21 pm session.

²⁰ Mr Gurtler, cross-examination, Day 30 pm session. Mr Gurtler confirmed that it was a “*useful term*” but could not point to any basis in policy.

²¹ Mr Gurtler, cross-examination, Day 30 pm session.

²² Mr Gurtler, cross-examination, Day 31 am session.

728. The overarching point of disagreement between BAL and NSC, unsurprisingly, is the extent to which the proposed development complies with the development plan and the role of material considerations. Both parties have presented their evidence on the planning balance and the Inspectors must strike their own balance, in light of all the evidence. However, there are five issues in particular that are in dispute in respect of the policy context and that inform this overall position. They are as follows:

- a. The nature of the support provided in MBU (and the APF) for ‘making best use’ of existing runways and the role of this within the planning balance;
- b. The ‘weight’ to be given to MBU (and national policy in general);
- c. The meaning of the ‘levelling up’ agenda included in the Government’s BBB plan;
- d. The way in which the balancing of benefits and effects must be carried out, with regard to the “*local communities*” experiencing them; and
- e. The policy approach to be applied to assessing the residual environmental effects of the proposed development.

729. These are considered in turn.

Role of MBU and the APF

730. The approach to national aviation policy adopted by Mr Gurtler is restated a number of times in his Proof of Evidence. This approach is as follows: the support for the growth of airports provided by the APF and MBU is not “*unconditional*”²³, but rather, “*it is only once it has been demonstrated that the benefits of that scheme outweigh its costs that the APF provides policy support which weighs in favour of the proposed development in the planning balance.*”²⁴ In certain instances, Mr Gurtler has in his Proof of Evidence even underlined the word “*only*” to make clear that it is ‘only’ once the planning balance has been carried out, and that balance has tipped in favour of granting permission, that MBU or APF weigh in favour of a proposal.

731. The effect of this interpretation is clear (although not accepted by Mr Gurtler); the clear²⁵ policy support for airports making best use of their existing runways can never play an operative role in the planning balance. In other words, the policy support in those documents can never be

²³ Mr Gurtler, Proof of Evidence (NSC/W7/1), paras 87, 89, 94, 95 and 106.

²⁴ Mr Gurtler, Proof of Evidence (NSC/W7/1), page 26, para 95.

²⁵ This is agreed: Mr Gurtler, cross-examination, Day 30 pm session.

weighed in the balance because, on Mr Gurtler's interpretation, that support is not engaged until the outcome of the planning balance is known.²⁶

732. That this is the case can be seen by considering the role of this policy support in circumstances where the planning balance is struck in favour of, and against, development:

- a. In the former case, a decision-maker will consider the policies of the development plan, reach a conclusion on compliance, consider other material considerations and reach a conclusion that planning permission should be granted because the benefits outweigh the costs. Only at this point would Mr Gurtler permit the policy support from MBU or the APF to be taken into account. Quite clearly, however, once the planning balance has been struck in favour of granting permission, the policy support can merely confirm the conclusion already reached and is therefore, in effect, redundant.
- b. Similarly, where the planning balance comes down against the grant of planning permission, because the costs outweigh the benefits, Mr Gurtler's interpretation would mean that the policy support in the APF or MBU never becomes relevant because *"it is only once it has been demonstrated that the benefits of that scheme outweigh its costs that the APF provides policy support which weighs in favour of the proposed development in the planning balance."*

733. In either circumstance, the policy support for 'making best use' cannot be a material consideration in the planning balance. It cannot make a difference to the outcome because, on Mr Gurtler's position, the outcome must be known before the policy support is engaged, or not engaged, as the case may be.

734. Not only does this approach rob national policy of any practical effect, but it deprives it of its status as a material consideration, i.e. one capable of making a difference to the outcome of a decision. Nor is this approach consistent with Mr Gurtler's acceptance in cross-examination that MBU (and the APF) should be weighed within the planning balance. This approach means that, at most, the policy support can provide merely a confirmatory nod in favour of development, once the planning balance has determined that planning permission should be granted.

735. Whilst Mr Gurtler was unable to confirm clearly the interpretation he had adopted and why, it is clear that his planning balance does not take into account the support in national aviation

²⁶ Mr Gurtler, Proof of Evidence (NSC/W7/1), page 62, para 254.

policy for ‘making best use’, as he does not consider that such support is engaged on his assessment of the planning balance. This approach is not one supported by Mr Melling, who clearly explains that MBU and the APF provide ‘in principle’ support for ‘making best use’, which is weighed in the planning balance as an ‘other material consideration’.²⁷

Weight to be given to MBU (and national policy)

736. It follows from the above that despite the extensive discussion about “*weight*” to be given to MBU by various witnesses before the Inquiry, Mr Gurtler has ascribed no weight to the policy support for ‘making best use’ policy in the planning balance, limited or otherwise. Moreover, for the reasons explained above, Mr Gurtler’s approach would logically never allow weight to be ascribed to this policy within the planning balance. Whilst a decision-maker could notionally ascribe a degree of weight to the policy, it would (on Mr Gurtler’s approach) not play an operative role in the planning balance (that having already been determined) and would therefore be meaningless.
737. Despite this, however, Mr Gurtler confirmed in cross-examination that he had in fact relied on the introduction of the Sixth Carbon Budget and the net zero target to reduce the weight to be given to MBU.²⁸ Mr Gurtler’s position, and that echoed by Dr Hinnells, is that because MBU is now ‘out of date’, it should be afforded “*little, if any, weight*”.
738. There are three points to make in response to this argument:
- a. As set out in detail above, the policy in MBU has been expressly re-stated by Government on a number of occasions since both the adoption of the net zero target and the Sixth Carbon Budget. It has not been revoked or revised, but remains current Government policy to be given ‘full effect’;
 - b. In these circumstances, there is simply no basis on which to reduce the weight to be attached to it by arguing it is ‘out of date’. To do so is simply to attack the merits of Government policy by the ‘back door’. It is not open to NSC to do so; and
 - c. In any event, the concept of national policy being ‘out of date’ cannot be transposed directly from the local plan policy context. For decision making, statute requires that planning applications are determined in accordance with the development plan.²⁹ The

²⁷ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 145, para 8.3.10 to 8.3.11.

²⁸ Mr Gurtler, cross-examination, Day 30 pm session.

²⁹ Town and Country Planning Act 1990, section 38(6).

NPPF makes specific provision for determining an application where the development plan (which it must be determined in accordance with) is out of date.³⁰ By way of contrast, national policy does not have this status in statute, but is a material consideration for the determination of an application. There may be a range of reasons why a decision maker considers it appropriate to give national policy greater or lesser weight in the planning balance, like all material considerations. Weight is, of course, a matter for the decision maker. Where Government has, as here, recently re-stated its national policy, it cannot be right to treat it as equivalent to an ‘out of date’ local plan policy and not to give it ‘full effect’ (i.e. full weight in the decision-making process) would appear to be an attack on the merits of that policy and, therefore, impermissible.

739. As explained below, the role of the policy support for ‘making best use’ in the APF and MBU within the planning balance is as a material consideration that supports the granting of planning permission for the proposed development. This policy support is significant; ‘making best use’ is a recently affirmed national policy in support of the very type of development that BAL seeks permission for. But it does not in some way prejudge or dictate the outcome of the planning balance exercise. It is weighed alongside compliance with the development plan, other elements of national aviation and planning policy, the need for, and the benefits of, increasing the capacity of Bristol Airport and the residual environmental effects.

‘Levelling up’ agenda

740. Whilst it is agreed that the Government’s ‘levelling up’ agenda is an important part of the backdrop to the determination of the appeal, there remains a dispute about the interpretation and application of this policy position.
741. Mr Gurtler explained in examination in chief that it was NSC’s position that it would be contrary to the ‘levelling up’ agenda to allow the expansion of Bristol Airport, if that would mean that the associated socio-economic benefits would not accrue in the area surrounding Cardiff Airport.³¹ The basis for this had been expanded upon by Mr Siraut, who explained that the Cardiff area had been categorised as a ‘level 3’ priority area for levelling up by the Government.³² By way of contrast, Mr Siraut explained that the West of England is more prosperous than both the South West and South Wales.³³ On this basis, NSC’s approach is that

³⁰ NPPF (2021) (CD5.6.1), para 11 (d).

³¹ Mr Gurtler, examination in chief, Day 30 pm session.

³² Mr Siraut, examination in chief, Day 7 pm session.

³³ Mr Siraut, examination in chief, Day 7 pm session.

if granting permission for the expansion of Bristol Airport displaced economic activity from Cardiff, the proposed development would be contrary to the 'levelling up' agenda. This line of argument is related to NSC's 'displacement' theme³⁴ dealt with in the socio-economic chapter above.

742. This approach finds no basis in the Government's BBB plan, or the 'levelling up' agenda. Taken to an extreme, NSC's interpretation of 'levelling up' would mean that any development that is not targeted at the area of greatest need in the UK would risk displacing socio-economic activity from a more deprived area and would be contrary to national policy. This is clearly not the Government's intention when seeking to 'level up' and 'build back better' and nor have any witnesses from NSC produced any evidence in support of their novel interpretation.
743. NSC's application of this approach to BAL's application is also based on a factual misunderstanding. As Mr Melling pointed out, Cardiff Airport is located in the Vale of Glamorgan and some distant from the Cardiff 'level 3' priority area. Bristol and Cardiff Airports are both, therefore, located in 'level 2' priority areas for the purposes of 'levelling up' and are therefore equally deserving of economic activity, on NSC's analysis.
744. Leaving aside the disputes around the precise scale of the socio-economic benefits that will be delivered by the proposed development, BAL and NSC are agreed in respect of the direct, indirect and induced employment and GVA figures, in addition to those generated by inbound tourism. These figures show substantial economic benefits, that are quite consistent with the 'levelling up' agenda. Indeed, these benefits will support NSC's own economic initiatives such as the Junction 21 enterprise area. If NSC's approach were applied to that development, it too would be contrary to national policy if there were a risk that it displaces economic activity from areas of greater deprivation.

Balancing of benefits and effects

745. A major theme of NSC's evidence has been the concept of "*sharing the benefits*". This originates from national aviation policy, but is also reflected, NSC argues, in the Core Strategy.
746. The APF, which expressly refers to the concept of "*sharing the benefits*", provides as follows:

"Noise

³⁴ And its criticisms of the passenger allocation model

...

We want to strike a fair balance between the negative impacts of noise (on health, amenity (quality of life) and productivity) and the positive economic impacts of flights. As a general principle, the Government therefore expects that future growth in aviation should ensure that benefits are shared between the aviation industry and local communities. This means that the industry must continue to reduce and mitigate noise as airport capacity grows. As noise levels fall with technology improvements the aviation industry should be expected to share the benefits from these improvements."³⁵ (Emphasis added).

747. Whilst this statement in the APF is made in the context of aviation noise, it has become a key part of NSC's case and a requirement that it says must be applied much more broadly.

748. In support of this approach, NSC also relies on MBU.³⁶ The relevant passage of the MBU provides as follows:

*"The government recognises the impact on communities living near airports and understands their concerns over local environmental issues, particularly noise, air quality and surface access. As airports look to make the best use of their existing runways, it is important that communities surrounding those airports share in the economic benefits of this, and that adverse impacts such as noise are mitigated where possible."*³⁷

749. This theme, NSC argues, is also reflected in the policies of the Core Strategy. The supporting text to policy CS23 provides that *"Proposals for the development of Bristol Airport will be required to demonstrate the satisfactory resolution of environmental issues, including the impact of growth on surrounding communities and surface access infrastructure."*³⁸

750. On the basis of these passages, NSC argues that there is a policy requirement for BAL to demonstrate that the benefits of the proposed development will be *"shared"* with *"local communities"*. There are two principal points made by NSC in respect of this principle, as follows:

³⁵ (CD6.1), page 55, para 3.3.

³⁶ Mr Gurtler, Proof of Evidence (NSC/W7/1), page 29, para 107.

³⁷ MBU (CD6.4), para 107.

³⁸ Core Strategy (CD5.6), para 3.293.

- a. That the “*local communities*” referred to in these passages are those living geographically “*near the airport*”;³⁹ and
- b. That it must be the very same people that experience the adverse effects of the airport’s growth that also experience its positive economic benefits.⁴⁰

751. NSC’s position is that BAL has failed to present any evidence to demonstrate that those affected by the noise impacts are those that will experience the economic benefits identified⁴¹ and as such, the proposed development has not met the requirements of the APF, MBU and local plan policy.

752. There are three points to make by way of response:

- a. As Mr Gurtler agreed, when considering the principle of ‘sharing the benefits’ there is no definition of “*local communities*”.⁴² Indeed, the concept of ‘local communities’ will change depending on the effect being considered.⁴³ Whilst those living nearest the airport will, of course, be the people that will experience effects such as noise and congestion, the economic benefits will be experienced both at the local level but also over a much wider area, including the sub-region and region as a whole. Mr Gurtler accepted that this would be the case.⁴⁴ To interpret policy as requiring that the very same people that experience noise effects must also experience the economic benefits is to completely distort the principle set out in policy. Indeed, Mr Gurtler confirmed that he was not saying that there would not be benefits at the local community level and nor was he saying that any benefits beyond the community or district level were not to be taken into account and important.⁴⁵ He agreed that it would not be the correct approach to ‘atomise’ assessment of benefits and ask whether people effected by one effect are the same people that benefit. Indeed, most if not all infrastructure projects would fail Mr Gurtler’s test.
- b. In any event, it is clear that the proposed development does share the economic benefits of the development with local communities within North Somerset and more widely and does share improvements in aircraft noise performance, with the forecast noise contours

³⁹ Mr Gurtler, examination in chief, Day 30 am session.

⁴⁰ Mr Gurtler, examination in chief, Day 30 am session.

⁴¹ Mr Gurtler, examination in chief, Day 30 am session.

⁴² Mr Gurtler, cross-examination, Day 30 pm session.

⁴³ Mr Gurtler, cross-examination, Day 30 pm session.

⁴⁴ Mr Gurtler, cross-examination, Day 30 pm session.

⁴⁵ Mr Gurtler, cross-examination, Day 30 pm session.

being materially smaller than those imposed upon the 2011 Permission for 10 mppa. The investment in public transport infrastructure will be available for use by local people in their day to day lives and not just for travelling to and from the Airport. There may well be residents of the immediate locality that benefit directly from new employment opportunities at the Airport, or indirectly through the growth in the local economy, wider opportunities for job generation and increase in GVA within the region; and

- c. The premise for NSC's position is that the principle of 'sharing the benefit' is a requirement of national aviation policy (and local plan policy) to be applied to applications for airport development. This approach elevates a general expression of Government 'expectation' into a development control policy that must be met if a development proposal is to be granted planning permission. There is no indication in the APF or MBU that the above passages are intended to be applied in this manner.

753. NSC's approach is simply a further demonstration of its attempt to identify increasing numbers of unrealistic policy 'tests' in respect of which it asserts BAL has provided no evidence.

Satisfactory resolution of environmental issues

754. There remains a dispute about what is required in order for policies CS3 and CS23 of the Core Strategy to be met. Policy CS3 requires that potential adverse environmental effects are mitigated to an "*acceptable level*".⁴⁶ Similarly, policy CS23, which refers specifically to proposals relating to Bristol Airport, requires the "*satisfactory resolution of environmental issues*".⁴⁷

755. The approach adopted by NSC throughout the Inquiry has been to, in effect, require the improvement of environmental conditions as against the future baseline. This can be seen in the following ways:

- a. NSC's approach to the noise effects of the proposed development has been to criticise the failure to "*improve*" the noise impacts on local communities, as (Mr Fiumicelli argues) the APF and MBU require;⁴⁸

⁴⁶ (CD5.6), page 31.

⁴⁷ (CD5.6), page 95.

⁴⁸ Mr Fiumicelli, Proof of Evidence (NSC/W2/1), pages 147 to 148, para 10.3, fifth bullet point.

- b. NSC's case in respect of air quality is that there is a "*requirement to deliver improvements in air quality*" which should be delivered through the adoption of ambitious targets⁴⁹; and
- c. NSC's position is that there is a requirement to demonstrate that the proposed development will "*improve*" the health and wellbeing of local communities, but that it fails to do so;⁵⁰ and
- d. NSC's approach to the impact of the proposed development on highways has criticised the absence of proposed improvement in respect of junctions, despite the fact that the proposed development would not result in a material impact on them.⁵¹

756. As explained in respect of each of these topics, this approach has no basis in the words of the development plan itself and nor is it reflective of NSC's reasons for refusal. This approach imposes a wholly unrealistic development control test, which goes far beyond requiring the "*satisfactory*" resolution of environmental issues.

757. As Mr Melling explained in cross-examination that the correct approach to what is 'acceptable' or 'satisfactory' will depend on the nature of the development, the scale of any mitigation proposed and the benefits that it would deliver. Mr Melling is clear that the modest scale of the residual environmental effects, none of which are significant adverse effects, is capable of being outweighed by the substantial socio-economic benefits that the proposed development would provide, which aligns with both the priorities of the UK Government and NSC.

Position of NSC's officers on the planning balance

758. The planning balance presented by Mr Melling is wholly consistent with the view of NSC officers at the time of writing the Officers' Report. Officers concluded as follows:⁵²

- a. The proposed development would achieve substantial economic benefits, which is a matter of significant weight in favour of the proposal;
- b. The level of additional carbon emissions is 'not significant' and are unlikely therefore to compromise the UK's ability to meet its climate change obligations;

⁴⁹ Dr Broomfield, Proof of Evidence (**NSC/W3/1**), page 18, para 51. Reiterated at page 18, para 53 and elsewhere.

⁵⁰ NSC's Statement of Case (**CD21.2**), page 18, para 60(f).

⁵¹ See, for example, Mr Colles's criticism of the treatment of Junction 6 (A38 / Barrow Lane). Mr Colles, Proof of Evidence (**NSC/W4/1**), page 32, section 4.16.

⁵² (**CD4.11**), pages 141 to 146, 'Issue 24'.

- c. Subject to the agreed conditions and obligations, there is no objection to the proposed development in terms of noise impacts;
- d. The harm caused to the openness of the Green Belt is outweighed by very special circumstances;
- e. There is no objection to the proposed development in respect of air quality;
- f. The public transport mode share target is “*ambitious and realistic*”. The highways mitigation works are technically acceptable, and the residual impact on roads and junctions are considered acceptable;
- g. There will be no additional public health impacts that need to be mitigated.

759. On this basis, it was found that the proposed development accorded with the development plan taken as a whole, the NPPF and was supported by national aviation policy.⁵³

760. Whilst there has been some suggestion during cross-examination of Mr Melling that NSC officers’ recommendation would not have been the same had they known about circumstances as they now are, this is clearly misconceived. It is true that since February 2020, some things have moved on; there has been a global pandemic, the Sixth Carbon Budget has been adopted and the Jet Zero consultation has been launched, to name a few. However, to suggest that any of these factors would be sufficient to change the Officers’ recommendation in respect of BAL’s application has absolutely no basis in evidence whatsoever. On the contrary, despite all these changes in circumstance, NSC did not call a single officer to give evidence. There can be no doubt that had Officers changed their minds and felt able to support NSC’s current case, they would have been called to explain this; they didn’t. The inference is clear.

BAL’s assessment of the planning balance

Overview

761. Section 8 of the Proof of Evidence of Mr Melling contains a detailed analysis of the planning balance.⁵⁴ The structure of this assessment is as follows:

- a. First, a consideration of the extent to which the proposed development complies with policies of the development plan.⁵⁵ This is structured around NSC’s reasons for refusal

⁵³ (CD4.11), page 141.

⁵⁴ Mr Melling, Proof of Evidence (BAL/W7/2), page 139, section 8.

⁵⁵ Mr Melling, Proof of Evidence (BAL/W7/2), page 139, section 8.2.

and the policies cited therein, but also reflects other issues raised by Rule (6) parties that are not in the reasons for refusal; and

- b. Second, a consideration of other material considerations. This includes the consistency of the proposed development with the NPPF and national aviation policy, and the need for, and benefits of, increasing capacity at Bristol Airport.⁵⁶

762. Mr Melling's conclusion has had regard to the ES, the ESA and other documents submitted with BAL's planning application, the measures proposed to mitigate the adverse impacts of the proposed development and the evidence of other expert witnesses.⁵⁷

Accordance with the development plan

Reason for refusal 1

763. Reason for refusal 1 concerns the environmental impacts of the proposed development and the absence of sufficient benefits to outweigh these impacts.⁵⁸

764. As explained by Mr Melling in his Proof of Evidence, the economic benefits of the proposed development, which include increased connectivity, the creation of 4,000 employment opportunities and the generation of £310 million GVA (the majority of which is agreed)⁵⁹, will be significant.⁶⁰ The proposed development will take Bristol Airport's total economic impact to £2.3 billion. Crucially, these benefits will have a direct impact on the South West region's economic recovery from the COVID-10 pandemic and will help 'level up' the region.⁶¹ The connectivity provided will be all the more important for achieving a 'global Britain' in the aftermath of the UK's departure from the EU, both in terms of international transport and trade.⁶²

765. The proposed development will also deliver quality of life benefits; not just through the recognised social benefits of travel, but through the provision of important skills and employment benefits for those in the surrounding communities, including areas of deprivation.⁶³ This will be supported by a Skills and Employment Plan that BAL will bring

⁵⁶ Mr Melling, Proof of Evidence (BAL/W7/2), page 139, para 8.1.2.

⁵⁷ Mr Melling, Proof of Evidence (BAL/W7/2), page 139, para 8.1.2.

⁵⁸ (CD4.16).

⁵⁹ See explanation in the Socio-economics Chapter about scope of agreed matters.

⁶⁰ Mr Melling, Proof of Evidence (BAL/W7/2), page 139, para 8.2.2.

⁶¹ Mr Melling, Proof of Evidence (BAL/W7/2), page 139, para 8.2.2.

⁶² Mr Melling, Proof of Evidence (BAL/W7/2), page 139, para 8.2.2.

⁶³ Mr Melling, Proof of Evidence (BAL/W7/2), page 140, para 8.2.3.

forwards to ensure that deprived communities are able to realise the benefits associated with increasing the capacity of the airport. More broadly, the growth of the Airport will catalyse regeneration in surrounding communities, making the area a more attractive place to live and work⁶⁴ and supporting NSC's own initiatives, such as the Junction 21 Enterprise Area.

766. The assessment of the environmental effects of the proposed development have been thoroughly assessed. A substantial package of mitigation measures has been proposed, which includes new measures such as the Environmental and Amenity Improvement Fund, providing over £600,000 for community projects in the area, on-site and off-site habitat improvement, an enhanced noise insulation scheme, a substantial package of public transport improvement measures and the proposed A38 improvement works.⁶⁵ Through the draft CCCAP, Bristol Airport has undertaken to become a carbon net zero airport by 2030, ahead of the decarbonising pathway proposed by the Government.
767. All the residual environmental effects are assessed as 'not significant' in EIA terms. The ES and ESA demonstrates how the environmental effects, including noise, air quality and surface access infrastructure, have been minimised and satisfactorily resolved. This conclusion was supported by NSC officers,⁶⁶ who were themselves professionally advised.
768. On this basis, the adverse effects of the proposed development are not unacceptable. The proposal therefore accords with policy CS23 and policy DM50 of the development plan.⁶⁷

Reason for refusal 2

769. Reason for refusal 2 alleges that the noise and air quality impacts of the proposed development would have a significant adverse impact on the health and well-being of residents in local communities and would not contribute to improving the health and well-being of the local population.⁶⁸
770. With regards to air quality, the ESA has established that all concentrations of pollutants in the vicinity of the Airport would remain comfortably within the AQO limits. This will 'sustain' the current compliance with all relevant limit values.⁶⁹ These levels will be further reduced by

⁶⁴ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 140, para 8.2.3.

⁶⁵ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 140, para 8.2.4.

⁶⁶ (**CD4.11**), page 146.

⁶⁷ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 140, para 8.2.6.

⁶⁸ (**CD4.16**).

⁶⁹ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 140, para 8.2.7. This is the key test in paragraph 186 of the NPPF.

mitigation measures proposed by BAL, including an Air Quality Action Plan and investment in public transport, and through wider measures taken by the aviation industry.

771. The ESA has assessed the noise impacts of the proposed development using a methodology that is consistent with policy and supported by that adopted in relation to other airport developments. The assessment has demonstrated that the proposed development will not result in significant adverse noise impacts. As Mr Melling explains, whilst the number of properties predicted to experience average night-time air noise levels above the SOAEL will increase, the changes in noise level for any individual receptor will be small and not significant.⁷⁰ With regards to ground noise, some receptors will in fact experience a benefit, due to the additional mitigation proposed.
772. In order to mitigate the noise effects identified, BAL has proposed an enhanced noise insulation scheme, which removes the match funding previously required. Furthermore, BAL has agreed that there will be no financial cap to this scheme and has increased the payments within each eligible contour band. These measures go beyond the recommendations in Aviation 2050 and, indeed, the requirements in the APF.⁷¹
773. The ES and ESA contain a health impact assessment, which considers the outputs of the air quality and noise assessments. Mr Pyper, who was the only expert to give public health evidence, has confirmed that this assessment is robust. The ESA concludes that there will be no significant adverse impacts on health and, indeed, there will be health benefits that arise from the generation of jobs in particular.⁷²
774. As explained above, whilst the premise for the second part of reason for refusal 2 is that there is a positive obligation on every development to 'improve' the health and well-being of the local population, there is in fact no such requirement in policy. On the basis that there are no significant adverse air quality, noise or consequential health effects, but an overall health benefit, the proposed development complies with policies CS3, CS23 and CS26 of the development plan.⁷³

Reason for refusal 3

⁷⁰ Mr Melling, Proof of Evidence (BAL/W7/2), page 141, para 8.2.8.

⁷¹ Mr Melling, Proof of Evidence (BAL/W7/2), page 141, para 8.2.9.

⁷² Mr Melling, Proof of Evidence (BAL/W7/2), page 141, para 8.2.9.

⁷³ Mr Melling, Proof of Evidence (BAL/W7/2), page 141, para 8.2.10.

775. Reason for refusal 3 concerns the scale of greenhouse gas emissions from the proposed development, which, it is alleged, “*would not reduce carbon emissions*”, “*would not contribute to the transition to a low carbon future*” and “*would exacerbate climate change*”.⁷⁴
776. As explained in the context of the climate change evidence, the criteria of significance adopted is whether the emissions from the proposed development would be so significant that it would have a material impact on the ability of Government to meet its climate change obligations.⁷⁵ This is agreed to be an appropriate test of significance and is reflected in the ANPS.⁷⁶ In this context, it is important that there is no dispute about the quantum of emissions that would be produced.
777. As explained by Mr Melling, insofar as the emissions from the proposed development arise from international aviation, these are controlled at the national level by Government.⁷⁷ The Government has chosen to include international aviation within the Sixth Carbon Budget, and it has (and will continue to) introduced measures in order to meet this.⁷⁸ These include the UK ETS, the UN’s CORSIA scheme and such other measures as Government considers appropriate from time to time. The Government has a legal obligation to meet the carbon budgets and net zero, and retains the ability to take whatever measures it considers necessary to ensure that they are met. The emissions arising from the proposed development are very small in the context of the current ‘planning assumption’⁷⁹ (37.5 MtCO₂) which applies to the fourth and fifth carbon budgets, and even smaller in the context of the Sixth Carbon Budget.⁸⁰
778. With regards to non-aviation emissions, BAL has published its draft CCCAP which includes ambitious targets for reducing its scope 1 and 2 emissions, and influencing the reduction of scope 3 emissions. This approach is aligned with NSC’s own Climate Emergency Strategic Action Plan.⁸¹
779. Considering the scale of the emissions within the legal and policy context, the ESA concludes that they would not be so significant that it would have a material impact on the ability of Government to meet its climate change obligations. Taking into account BAL’s draft CCCAP,

⁷⁴ (CD4.16).

⁷⁵ Mr Melling, Proof of Evidence (BAL/W7/2), page 141, para 8.2.11.

⁷⁶ Agreed by Dr Hinnells. See Climate Change Chapter for scope of agreed matters.

⁷⁷ Mr Melling, Proof of Evidence (BAL/W7/2), page 141, para 8.2.11.

⁷⁸ Mr Melling, Proof of Evidence (BAL/W7/2), page 141, para 8.2.11.

⁷⁹ Mr Melling, Proof of Evidence (BAL/W7/2), page 141, para 8.2.11.

⁸⁰ Less than 0.07%. See fn136 in Climate Change Chapter.

⁸¹ (CD9.13).

which will see it become net zero by 2030, it is clear that the proposed development complies with policy CS1 of the development plan.⁸²

Reason for refusal 4

780. Reason for refusal four concerns the proposal to use the existing seasonal car park all year round and to deliver an extension to the Silver Zone car park in the Green Belt.⁸³
781. As explained by Mr Melling, BAL has sought, in the first instance, to maximise development in the Green Belt inset by delivering an additional MSCP (MSCP3) which is alongside a commitment to bring forward, early, MSCP2 (and PTI)⁸⁴ However, there is a demonstrable need for additional low cost car parking capacity, which is integral to the delivery of growth at the Airport. The proposed car parking development will result in only limited harm to the Green Belt; this limited harm, and any other harm caused by the proposed development is outweighed by the three ‘very special circumstances’ identified above. These include the need for additional car parking in the Green Belt, the lack of alternative, available and suitable sites for parking outside the Green Belt, and the need for, and benefits of, growth at Bristol Airport.⁸⁵ The harm to the Green Belt from the delivery of car parking will only arise when required; this is the outcome of BAL’s proposed monitor and manage approach.⁸⁶
782. The very special circumstances identified are capable of outweighing any harm to the Green Belt and any other harm, such that the proposed development is in accordance with policy DM12, as well as DM50, of the development plan.⁸⁷

Reason for refusal 5

783. Reason for refusal 5 relates to the proposed public transport provision in association with the proposed development, which it is alleged, would fail to reduce reliance on car to access to the airport, resulting in an “unsustainable development”.⁸⁸
784. The TAA demonstrates that the additional traffic associated with the proposed development will not prejudice highway safety or result in severe cumulative impacts on traffic congestion. Indeed, it is common ground that the A38 improvement works will deliver local capacity and

⁸² Mr Melling, Proof of Evidence (BAL/W7/2), page 142, para 8.2.13.

⁸³ (CD4.16).

⁸⁴ Mr Melling, Proof of Evidence (BAL/W7/2), page 142, para 8.2.14.

⁸⁵ Mr Melling, Proof of Evidence (BAL/W7/2), page 142, para 8.2.15.

⁸⁶ Mr Melling, Proof of Evidence (BAL/W7/2), page 142, para 8.2.16.

⁸⁷ Mr Melling, Proof of Evidence (BAL/W7/2), page 142, para 8.2.17.

⁸⁸ (CD4.16).

safety benefits.⁸⁹ The use of ‘worst case’ assumptions in the TAA means that this assessment is robust, and the actual impacts will be less than those assessed.

785. To the extent that the requirements set out in policy CS10 apply to the proposed development, it is agreed that the requirement to enhance facilities for pedestrians and cyclists is achieved,⁹⁰ the requirement to improve bus services is met,⁹¹ and the objective of improving road safety is achieved through the A38 improvements.⁹² With regards to policy CS10 overall, it is agreed that the policy identifies seven objectives, and the proposed development seeks to meet those seven objectives.⁹³ Indeed, it is important to note that policy CS10 provides that development proposals that encourage an improved and integrated transport network and allow for a wide choice of modes of transport as a means of access to jobs, homes, services and facilities will be *“encouraged and supported”*.

786. The proposed public transport modal share is ambitious but achievable. It is based upon a careful analysis of the impact of potential measures and has taken full account of, and has informed, BAL’s assessment of parking demand. It will build on the progress already made by the Airport to encourage forms of sustainable travel. These efforts have resulted in Bristol Airport having one of the highest public transport mode share of any regional airport, based on the 2019 CAA data.⁹⁴ The additional 2.5% will be supported by a comprehensive package of deliverable, sustainable transport measures.

787. On this basis, Mr Melling concludes that the proposed development is in accordance with policies CS1, CS10 and CS23, as well as policies DM54 and CS11 of the development plan.⁹⁵

Conclusion

788. In addition to the issues identified in the reasons for refusal, Mr Melling has considered a number of additional matters, including: landscape and visual impacts, ecology, residential amenity, water quality, vibration, land quality and the historic environment. Landscape and visual impacts and ecology are dealt with in more detail below. However, Mr Melling’s

⁸⁹ Mr Gurtler, cross-examination, Day 31 am session.

⁹⁰ Mr Gurtler, cross-examination, Day 31 am session. This is expressly subject to the caveats identified by Mr Colles.

⁹¹ Mr Gurtler, cross-examination, Day 31 am session. This is subject to the issue of whether they go far enough.

⁹² Mr Gurtler, cross-examination, Day 31 am session. This is expressly subject to the caveats identified by Mr Colles.

⁹³ Mr Gurtler, cross-examination, Day 31 am session. In Mr Gurtler’s own words.

⁹⁴ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 143, para 8.2.19.

⁹⁵ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 143, para 8.2.20.

conclusion is that none of these issues give rise to a conflict with the development plan or amount to a proper basis on which to refuse planning permission for the proposed development.

789. On the basis of the reasoning already set out, Mr Melling concludes that the proposed development accords with the development plan taken as a whole.⁹⁶ The proposed development should therefore be approved unless material considerations indicate otherwise.⁹⁷

Other material considerations

790. Having reached a conclusion on the consistency of the proposed development with the development plan, Mr Melling considers other material considerations.⁹⁸

NPPF

791. It is agreed that the relevant policies in the development plan are ‘up to date’, meaning that they are consistent with the NPPF. As such, through Mr Melling’s consideration of the main issues raised by the reasons for refusal and compliance with the policies of the development plan, Mr Melling concludes that the proposed development does not conflict with any of the policies in the NPPF.⁹⁹
792. Paragraph 10 of the NPPF (2021) defines the presumption in favour of sustainable development. This means that where a development proposal accords with an up to date development plan, planning permission should be granted without delay.¹⁰⁰
793. The NPPF provides that “*sustainable development*” has three dimensions, namely an economic objective, a social objective and an environmental objective.¹⁰¹ As explained by Mr Melling, the proposed development will deliver substantial economic benefits, which should be given significant weight in the planning balance in accordance with paragraph 81 of the NPPF.¹⁰² The delivery of enhanced connectivity, jobs and regeneration will deliver real ‘quality of life’ social benefits for local people. The environmental impacts of the proposed development are limited, and the proposed mitigation will address the impacts in a proportionate manner. Furthermore,

⁹⁶ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 143, para 8.2.23.

⁹⁷ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 143, para 8.2.23.

⁹⁸ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 144, section 8.3.

⁹⁹ Mr Melling, Proof of Evidence (**BAL/W7/2**), page 144, para 8.3.1.

¹⁰⁰ (**CD5.8.1.**), page 6, para 11.

¹⁰¹ (**CD5.8.1.**), page 5, para 8.

¹⁰² Mr Melling, Proof of Evidence (**BAL/W7/2**), page 144, para 8.3.4, para 8.3.6 and 8.3.8.

several aspects of the proposed development seek to deliver environmental improvements, in terms of ecology, transport, ground noise and the facilitation of the transition of the Airport to net zero.¹⁰³

794. In this regard, the proposed development meets the economic, social and environmental objectives of the NPPF.¹⁰⁴

National aviation policy

795. The relevant principles and policies contained in national aviation policy, and the extent to which the proposed development is consistent with and supportive of those, have been set out in detail already in this closing.

796. The APF and MBU are clear in their support for airports outside Heathrow making best use of their existing capacity. The proposed development will allow Bristol Airport to do just this and, in so doing, it will deliver economic and social benefits that support the Government's levelling up agenda and ambitions for a 'global Britain'. Mr Melling gives this significant weight in the planning balance.¹⁰⁵

Need for, and benefits of, the proposed development

797. It is agreed that passenger demand at Bristol Airport will reach 12 mppa and, further, that it will do so broadly within the timeframe of 2027 to 2034. The expansion of the Airport will accommodate this forecast growth, consistently with national policy that supports demand being met where it arises. The expansion will also assist in clawing back historic leakage of passengers from London's Airport.¹⁰⁶ This will help meet the UK Government's ambitions for increased connectivity following the UK's exit from the EU.
798. There is no dispute that the proposed development will deliver economic benefits.¹⁰⁷ Whilst the precise scale of some of the benefits remains in dispute, there is broad agreement about the direct, indirect, and induced employment and GVA figures, including those that arises from

¹⁰³ Mr Melling, Proof of Evidence (BAL/W7/2), page 145, para 8.3.8.

¹⁰⁴ Mr Melling, Proof of Evidence (BAL/W7/2), page 145, para 8.3.9.

¹⁰⁵ Mr Melling, Proof of Evidence (BAL/W7/2), page 147, para 8.4.1.

¹⁰⁶ Mr Melling, Proof of Evidence (BAL/W7/2), page 146, para 8.3.12.

¹⁰⁷ Mr Gurtler, cross-examination, Day 30 pm session. With regards to the extent to which employment and GVA figures are agreed, see the Socio-Economics Chapter.

inbound tourism.¹⁰⁸ It is also agreed that there are social benefits associated with the outbound tourism enabled by the proposed development.¹⁰⁹

799. The delivery of growth at the Airport, and the associated economic and social benefits, will support economic growth and recovery from the COVID-19 pandemic, supporting the objectives in the West of England Industrial Strategy and North Somerset Economic Plan.¹¹⁰ For this reason, and in accordance with the NPPF, Mr Melling affords these benefits significant weight in the planning balance.¹¹¹

800. In light of these factors, there is an established need for the proposed development, which Government policy says should be met, provided environmental issues have been satisfactorily resolved.

Residual environmental impacts

801. The assessment in the ES and ESA show that there are no residual significant adverse environmental effects of the proposed development. Nevertheless, these residual environmental effects must be taken into account in the planning balance. Due to the limited scale of the effects and the effectiveness of the proposed mitigation measures, Mr Melling ascribes them limited effect in the planning balance¹¹².

Conclusions

802. As Mr Melling explains, the proposed development complies with the development plan, national aviation policy and the NPPF. There are no material considerations that indicate that permission should be refused.¹¹³

803. The adverse environmental effects are modest and BAL has proposed a substantial package of mitigation measures, which exceeds that required by policy. In light of the limited degree of harm, any residual adverse effects should be ascribed limited weight. Balanced against this are the substantial socio-economic benefits that would be delivered by increasing the capacity of the Airport to accommodate 12mppa. These translate into real world benefits for real people; opportunities for skills training, jobs, the chance to travel, improved public transport provision,

¹⁰⁸ See Socio-Economics Chapter for scope of agreed matters.

¹⁰⁹ Mr Gurtler, cross-examination, Day 31 am session. Mr Gurtler confirmed that there would be benefits for “people who enjoy going on holiday”.

¹¹⁰ Mr Melling, Proof of Evidence (BAL/W7/2), page 146, para 8.3.12.

¹¹¹ Mr Melling, Proof of Evidence (BAL/W7/2), page 147, para 8.4.2.

¹¹² Mr Melling, Proof of Evidence (BAL/W7/2), page 147, para 8.4.3.

¹¹³ Mr Melling, Proof of Evidence (BAL/W7/2), page 146, para 8.5.1.

increased economic activity in their local area, and further investment in the place that they live and work.

804. These benefits reflect key Government objectives for ‘levelling up’ the regions, ‘building back better’, strengthening the vital connectivity provided by airports and supporting the role of airports as engines of economic growth. The Government’s position remains that it supports the ‘making best use’ of existing airport capacity; the proposed development does just this.
805. On balance, therefore, it is BAL’s case that this appeal should be allowed and planning permission granted for the proposed development.

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8 October 2021

APPENDIX 1

APPENDIX 1

BAL's RESPONSE TO LEGAL SUBMISSIONS RAISED BY OTHER PARTIES

Introduction

1. Since the close of evidence, NSC, the PCAA and BAAN CC have made legal submissions to the Inquiry:
 - a. On 1 October 2021, the PCAA submitted legal submissions on the compliance of the proposed development with the Conservation of Habitats and Species Regulations 2017/1012 ('the Habitats Regs');
 - b. On 4 October 2021, BAAN CC submitted legal submissions concerning the approach to be adopted to assessing the impact of the proposed development on climate change; and
 - c. Within NSC's closing submissions which were given on 6 October 2021, five legal points were raised to which BAL respond in this Appendix, including on matters such as climate change, Green Belt, the detailed design of the A38 works and matters of fairness.
2. This Appendix sets out BAL's response to those submissions on a thematic basis. The response is structured thematically as follows:
 - a. Ecology and the application of the Habitats Regs;
 - b. Matters relating to the impact of the proposed development on climate change;
 - c. The approach to assessing harm to the Green Belt;
 - d. The detailed design of the proposed A38 highway improvements; and
 - e. Matters of fairness.
3. These issues are responded to in turn.

Ecology

Introduction

4. As explained above, the proposed development includes the provision of replacement foraging land for SAC bats, in order to avoid any impact on the integrity of the Mendips Bats Special Area of Conservation ('SAC').

5. The point raised by the PCAA in its legal submissions is a simple one, namely, that the proposed provision of replacement foraging land is not ‘mitigation’, but ‘compensation’. The basis for this is that the replacement land is not, in the PCAA’s view, intended to avoid or limit harm to an acceptable level, it is intended to replace elsewhere ‘significant’ bat habitat, which will be destroyed by the proposed development.¹ On this basis, it is argued, planning permission cannot be granted in the absence of meeting the test set out in regulation 64 of the Habitats Regs.²
6. There is no dispute that under regulation 63(5), a competent authority may only agree to a plan or project after having ascertained that it will not adversely affect the integrity of the European site. By contrast, where a development proposal does give rise to such an effect, an applicant must demonstrate that the test in regulation 64 is met. That test requires that there are no alternative solutions and that the plan or project must be carried out for “*imperative reasons of overriding public interest*” (‘IROPI’).³
7. BAL is, and has always been, aware of the requirements of the Habitats Regs and the relevant case law decided in relation to it. As explained above, BAL’s original application was accompanied by Chapter 11 of the ES, which contained an assessment of the likely significant effects of the proposed development on biodiversity.⁴ This was supplemented by responses to regulation 25 requests from NSC in April 2019⁵ and October 2019.⁶ In determining the original planning application, NSC, as ‘competent authority’ conducted an appropriate assessment on the basis of a shadow HRA submitted by BAL.
8. The case law cited by the PCAA, namely Briels and Others (C-521/12, EU:C:2014:330) and Grace and Sweetman v An Bord Pleanala (C-164/17), concerned factually different circumstances to those that arise in the context of this appeal. Both Grace and Briels concerned development proposals on land within European sites. The European sites concerned were, therefore, directly affected by the physical development and the measures proposed were intended to replace the habitat that would be lost within the European site and were, therefore, ‘compensation’.

¹ PCAA’s Legal Submissions, para 9.

² PCAA’s Legal Submissions, para 18.

³ Regulation 64(1), Habitats Regs.

⁴ (CD2.5.27).

⁵ (CD3.4.13).

⁶ (CD3.6.4 – 6).

9. The approach to ‘mitigation’ and ‘compensation’ set out by the Court of Appeal in Smyth is not disputed; the measures proposed by BAL fall clearly within the category described as ‘mitigation’ measures, namely a *“preventive safeguarding measure of the kind I have describe... which eliminates or reduces the harmful effects which a plan or project would have upon the protected site in question so that those harmful effects either never arise or never arise to a significant degree”*.⁷
10. Whilst Smyth concerned a development proposal that was not within the European site (unlike Grace and Briels), in that instance the Court dismissed the challenge and upheld the Inspector’s finding (supported by the opinion of the expert ecologist and Natural England), that the proposed measures were ‘mitigation’ and not ‘compensation’.⁸
11. What BAL proposes in respect of replacement foraging land is explained in Appendix B to Mr Melling’s Proof of Evidence. As explained in section 6.4 of Mr Melling’s Proof, the foraging land will be provided prior to the commencement of the works on the Cogloop 2 land, as secured by the Biodiversity Construction Management Plan included in the proposed conditions. The provision of the replacement land is clearly designed to eliminate or reduce the effect on the SAC bats and thus avoid any impact on the integrity on the SAC. In accordance with case law, the replacement land is, therefore, ‘mitigation’.
12. In this regard, the PCAA are quite correct to point out that BAL has not advanced an IROPI case. This is not, as the PCAA suggests, because BAL considers it outside the requirements of best practice because it is a commercial planning application, but because the conclusion reached by BAL’s ecologist is clear; the replacement foraging land is ‘mitigation’. That land can be (and was) taken into account by BAL, in accordance with CJEU case law, in assessing whether or not there would be an adverse effect on the integrity of the SAC through the appropriate assessment. The conclusion reached was that there would be no adverse effect on the integrity of the SAC. This conclusion was reached by BAL’s professional ecologist and is supported by both Natural England and NSC. NSC did not consider that it gave rise to a reason for refusal.
13. There has been no expert evidence called before the Inquiry to contradict this conclusion, which is based on professional judgment and is wholly consistent with CJEU case law. For these reasons, the PCAA legal submissions are completely misconceived.

⁷ Smyth v Secretary of State for Communities [2015] EWCA Civ 174, at [66].

⁸ Smyth v Secretary of State for Communities [2015] EWCA Civ 174, at [77].

Climate Change

14. The following two legal submissions have been made in respect of climate change:
- a. That the presumption in paragraph 188 of the NPPF⁹ cannot be made in the circumstances of the appeal; and
 - b. That the Paris Agreement is a source of a freestanding climate change obligation directly enforceable in domestic law, which includes within its scope the impact of emissions from all sectors of the economy.
15. These are considered in turn.

Paragraph 188

16. In its legal submissions, BAAN CC argues that although the presumption in paragraph 188 of the NPPF applies to the UK ETS, this does not mean that *“it will solve all the problems that it is seeking to solve”*.¹⁰ The submissions contain an explanation as to why the UK ETS will not be effective in controlling emissions from international aviation, based upon the fact that it ceases to operate in 2030¹¹ and that it does not apply to all flights into and out of Bristol¹². Furthermore, BAAN CC argues, the ‘assumption’ created by paragraph 188 that pollution regimes will operate effectively is not a ‘presumption’, i.e. a decision maker cannot rely on paragraph 188 to *“abdicate responsibility”* for decision-making.¹³ On the evidence, BAAN CC submit, there can be no such assumption made in this case.
17. It is important at the outset to clarify the nature of BAL’s case, which is mischaracterised in BAAN CC’s legal submissions (as it was in BAAN CC’s witness evidence). BAL’s case does not ask the Inspectors to *“speculate as to the future development of the UK ETS”* beyond 2030.¹⁴ It is, in fact, BAAN CC that has invited speculation as to what will happen to the UK ETS beyond 2030. BAL’s position is as follows.
18. As explained in the Climate Change chapter of BAL’s closing submissions, the UK ETS was established by the Greenhouse Gas Emissions Trading Scheme Order 2020¹⁵ under section 44

⁹ (CD5.8.1).

¹⁰ Legal submissions on behalf of BAAN CC, page 2, para 3.

¹¹ Legal submissions on behalf of BAAN CC, page 2, para 4.

¹² Legal submissions on behalf of BAAN CC, page 3, para 4.

¹³ Legal submissions on behalf of BAAN CC, page 3, para 6 and page 4, para 8.

¹⁴ Legal submissions on behalf of BAAN CC, page 5, para 11.

¹⁵ (CD9.36).

of the CCA 2008¹⁶. Schedule 2 para 2 of the CCA 2008 requires any trading scheme to specify the ‘period’ to which it relates and the 2020 Order relates to the period to 2030.¹⁷ The context for understanding the operation of the UK ETS is the legal duties on the Secretary of State under section 4 of the CCA 2008 to set and meet the carbon budgets. In order to meet this obligation, the Secretary of State may (as anticipated in the CCA 2008) make further orders extending the operation of the UK ETS beyond 2030. The test of significance relied upon by BAL (and, indeed, agreed as appropriate between all parties to the appeal) is whether the emissions from this proposed development are ‘so significant’ that they would have a ‘material impact’ on the Government’s “*ability*” to meet its climate change targets. When looking at the Government’s “*ability*”, it matters not whether the legal mechanism for doing so is currently in place all the way up to 2050; what matters is that the Government has the power to cap emissions and the legal duty under sections 1 / 4 to meet its carbon budgets and ‘net zero’ target. The significance attached by BAAN CC to the ‘expiry’ of the UK ETS is of little importance, therefore, in circumstances where there is no obstacle whatsoever to its continued operation beyond 2030 and the Government has stated its intention to consult on an appropriate trajectory for the UK ETS cap following the Sixth Carbon Budget with the aim of aligning the cap with the net zero trajectory by January 2023¹⁸.

19. Against this background, when considering paragraph 188, it is right that the inspectors should assume that international aviation emissions will be controlled, as they are intended to be, by a separate legal and policy control regime. This comprises the CCA, carbon budgets, the UK ETS and CORSIA. Paragraph 188 means that the Inspectors should assume that those regimes operate effectively. Whilst this assumption could, logically, be ‘rebutted’, BAAN CC identify no proper basis for doing so and the inspectors should, therefore, apply the assumption in paragraph 188 as the NPPF intends.
20. BAAN CC’s second argument, concerning the scope of the UK ETS, similarly fails. The UK ETS was only ever intended to include within its scope flights to destinations within the EEA; this is not an indication that it is failing to operate effectively, but simply part of its design. As explained above, the Government has consulted on the interaction between the UK ETS and the UN’s CORSIA, which would cover flights beyond the EEA. The final decision on that interaction is yet to be confirmed.

¹⁶ (CD9.2).

¹⁷ (CD9.36), art 20.

¹⁸ Explanatory Memorandum to the Greenhouse Gas Emissions Trading Scheme Order 2020 (CD9.45)

21. What this demonstrates, however, is the quite separate regime under which international aviation emissions are controlled. There are quite sensible reasons why the NPPF would not invite planning Inspectors to begin to assess the success or otherwise of such international regimes.

Paris Agreement

22. The second submission made on behalf of BAAN CC appears to allege that the Paris Agreement somehow gives rise to rights that are directly enforceable in domestic law.¹⁹
23. As explained in the Climate Change chapter of this closing, this is wrong. The Paris Agreement is an unincorporate international treaty. It is well established in case law that international treaties have no effect in UK domestic law unless and until they have been incorporated by domestic legislation²⁰. This is because the English legal system is a ‘dualist’ system (as opposed to a monist system like many European jurisdictions). An example of an international treaty that has been incorporated wholesale into domestic law is the European Convention of Human Rights that is incorporated by Schedule 1 of the Human Rights Act 1998.
24. The ambitions set out in the Paris Agreement are delivered through each country publishing and accounting for its own NDCs, as set out in Articles 4(2) and 4(13). The Court has made clear that *“Notwithstanding the common objectives set out in articles 2 and 4(1), the Paris Agreement did not impose an obligation on any state to adopt a binding domestic target to ensure that those objectives were met. The specific legal obligation imposed in that regard was to meet any NDC applicable to the state in question.”* It is therefore clear that the ‘common objectives’ in the Paris Agreement are to be achieved through NDCs.
25. Within domestic law, the UK’s commitment to deliver its NDCs is secured by the CCA 2008. This piece of domestic legislation is the origin of the ‘net zero’ target and the source of the legal obligations on the Government. The Paris Agreement does not, however, give rise to any additional freestanding domestic obligations, either in terms of complying with temperature goals²¹ or *“equity principles”*²².

¹⁹ Legal submissions on behalf of BAAN CC, pages 5 to 7, paras 13 to 20.

²⁰ Dr O’Sund-Ireland, Proof of Evidence (**BAL/W6/2**) para 6.2.4 and fn67 reference to *J. H. Rayner (Mincing Lane) Ltd. v Department of Trade and Industry* [1990] 2 A.C. 418, at p.500 per Lord Oliver of Aylmerton, and *R. v Secretary of State for the Home Department, ex p. Brind* 1 A.C. 696, at p.747F-H per Lord Bridge of Harwich.

²¹ Legal submissions on behalf of BAAN CC, page 7, para 21.2.

²² Legal submissions on behalf of BAAN CC, page 7, para 21.2.

A38 Derby Decision

26. NSC seeks to draw parallels between the circumstances of the current appeal and those that pertained when Inspectors considered the A38 Derby Junctions road scheme DCO.²³ This comparison is misplaced.
27. The Inspectors conducting the examination into the A38 Derby road scheme concluded that there was “*not enough robust evidence*” presented to the examination for them to reach a conclusion as to whether the Proposed Development, or the RIS1 or RIS2 programmes of which it is a part, would be consistent with the Paris Agreement 2015.²⁴ This was a finding on the evidence before them. In so doing, they deferred reaching a conclusion to the Secretary of State, noting that such a conclusion must be reached if development consent was to be granted. Despite the finding of the Inspectors, the Secretary of State concluded that the cumulative impact of the RIS programme was a matter for national consideration and that appropriate consideration was given to this during the development of the RIS programme. On this basis, the Secretary of State concluded that the scheme would not have a material impact on the ability of the Government to meet its carbon reduction targets.²⁵
28. The Secretary of State consented to the quashing of the decision.
29. As Mr Melling explained in his examination in chief, this decision does not assist the Inspectors in relation to the approach to be adopted in the present case. The decision concerns a decision made in a different sector of the economy. Significantly, whereas the emissions from international aviation are included within the UK ETS, under which they are subject to a cap, the emissions arising from highway schemes are not. As such, the consideration of the extent to which a particular scheme will impact the ability of the Secretary of State to meet its climate change obligations takes place in a different legal context.
30. As explained in the Climate Change chapter of this closing, in applying the correct test of significance to the particular emissions from the proposed development, within the particular legal and policy context applicable to those emissions, BAL’s assessment concludes that the emissions are not so significant that they impact the ability of the Secretary of State to meet its climate change obligations.

²³ NSC Closing Submissions, page 40, para 168.

²⁴ (CD9.139), para 4.15.110.

²⁵ (CD9.138), para 72.

31. The position of NSC is based on the fallacy that the Inspectors cannot grant consent for any airport development until the Government has carried out an assessment of the carbon impact of all UK airport projects and determined whether any airport expansion is compatible with net zero and if so, which. BAL's response to this fallacy is set out in detail in the Climate Change chapter of this closing.

Detailed design

32. In its closing submission, NSC raises a concern regarding the ability of BAL to refine the design of the A38 improvement works at the detailed design stage.²⁶ NSC's submission is that the delivery of the A38 works must be precisely in accordance with the plans produced by BAL in connection with its application for planning permission. On this basis, NSC argue, there is no scope for making detailed refinements at a later date.
33. The cases cited by NSC relate to very different factual scenarios to those that pertain in relation to the design of the A38 highway works.
34. *Singh v Secretary of State for Communities and Local Government* [2010] EWHC 1621 (Admin) concerns the interaction between multiple planning permissions. In that case, a dwelling was constructed under one planning permission, following which the owner wished to construct an extension under a previous planning permission. In order to establish the lawfulness of doing so, the applicant applied for a certificate of lawfulness. The certificate was refused on the basis that it was impossible to complete the extension in accordance with the previous permission. The full quotation from Hickinbottom J at [20] is as follows:
- "... reflecting the holistic structure of the planning regime, for a development to be lawful it must be carried out fully in accordance with any final permission under which it is done, failing which the whole development is unlawful (Sage per Lord Hobhouse, giving the only substantive speech, at [23]-[25]). Taken with my second observation, that means that if a development for which permission has been granted cannot be completed because of the impact of other operations under another permission, that subsequent development as a whole will be unlawful."*
35. *Sage v Secretary of State for the Environment* [2003] UKHL 22 concerned a dwelling house that was only partially constructed. It was in this context that the Court held that *"if a building*

²⁶ NSC Closing Submission, pages 117 and 118, paras 490 to 493.

operation is not carried out, both externally and internally, fully in accordance with the permission, the whole operation is unlawful.”

36. *Hillside Parks Limited v Snowdonia National Park Authority* [2020] EWCA Civ 1440 too concerned development that was only partially completed, in that case a consented development of 401 dwellings, only 41 of which were completed. The Court held that the completion of the development, some 50 years after planning permission was granted, would be unlawful. In this context, Singh LJ endorsed the dicta in *Sage and Singh*.
37. These cases do not concern the development of detailed design proposals for a highways scheme following the grant of planning permission. BAL’s primary position is that it is possible, and indeed common, to refine the detailed specification for such highway works following the grant of planning permission. As explained by Mr Witchalls, the design that has been presented in his evidence (and indeed was agreed with NSC officers) is not yet at a detailed stage. As part of drawing up the detailed designs for the works, it is to be expected that minor design issues will be identified and resolved. This can be done quite consistently with the grant of planning permission for the works, on the basis of the high level design drawings presented. Indeed, this is reflected in Schedule 3 of the section 106 agreement, which provides that NSC and BAL “*shall use reasonable endeavours to agree the A38 Highways Scheme*”.
38. In any event, if the Inspectors consider it necessary, BAL would be quite content for a condition to be imposed on the grant of planning permission, in the following terms:

“Prior to the commencement of development, the detailed design for the construction of the highway improvements shown on plan C1124-SK-A38-010 Rev11.0 must be submitted to and approved in writing by the local planning authority.

Reason: To ensure that the public highway is not adversely affected by the traffic generated from the proposed development.”

39. As such, the points raised by NSC can be overcome, and do not present a basis for refusing the appeal.

Green Belt

40. At paragraph 503 of its closing submissions, NSC refer to two cases in support of its position that inappropriate development is, by definition, harmful to the Green Belt notwithstanding that it may be difficult to establish that it would cause “*demonstrable harm*”. The two cases relied upon are *Heath and Hampstead Society v Camden LBC* [2007] EWHC 977 (Admin) and

Turner v Secretary of State for Communities and Local Government [2016] EWCA Civ 466. There are four points to make in response to this:

- a. There is no dispute that development that is ‘inappropriate’ development in the Green Belt is by definition harmful. That is the clear effect of paragraph 147 of the NPPF.
 - b. The cases cited by NSC simply explain why it was that this strong policy position was introduced; it, in effect, ensures that there is always some ‘harm’ arising from inappropriate development in the Green Belt that weighs against it, even where demonstrable harm to openness cannot be established;
 - c. These cases do not impose any additional test or criterion to be applied when considering the extent of harm to the Green Belt. Indeed, it was agreed with Mr Gurtler that the relevance of existing development in the Green Belt is as part of the baseline for the assessment.²⁷ The correct approach is to take into account the harm by virtue of inappropriateness and harm arising from visual or spatial openness (as well as “*any other harm*”) whenever there is a proposal for inappropriate development in the Green Belt; and
 - d. This is precisely the approach adopted by Mr Melling. Appendix B to Mr Melling’s Proof of Evidence, which contains BAL’s Green Belt assessment, makes clear that “*there would be harm to the Green Belt resulting from the development by virtue of its inappropriateness*” in respect of both Cogloop 1 and Cogloop 2.²⁸ The assessment then proceeds to consider what additional harm arises by virtue of harm to openness.
41. NSC refers to a number of cases in relation to the definition of “*openness*”.²⁹ It is acknowledged that openness has both a physical / spatial and visual dimension; this is reflected in the Green Belt assessment carried out by BAL, which assesses the impact on both bases. The principles drawn from the cases cited by NSC are not in dispute.

Fairness

42. NSC relies upon the case of *R (oao Holborn Studios) v LBC* [2021] JPL 17 in order to support its submission that various pieces of material and information should have been disclosed by BAL and its consultants during the course of the Inquiry in order for it to be scrutinised.

²⁷ Mr Gurtler, cross examination, Day 28 am session.

²⁸ Mr Melling, Proof of Evidence (**BAL/W7/2**), pages 27 to 28.

²⁹ See NSC’s Closing Submissions, pages 122 to 124.

43. This point was first raised by NSC in its Statement of Case in respect of information gained by York Aviation's from its discussions with airlines about route development.³⁰ This information was used by York Aviation to inform the development of short-term forecasts (notably not those from which the inputs to the ES were derived). NSC highlighted the need for the information provided by airlines in order to allow those forecasts to be "*properly interrogated or scrutinised*"³¹. It was explained by Mr Brass in cross-examination that (i) the discussions with airlines were commercially confidential, (ii) Jacobs had the same access to airlines as York Aviation, such that they too could hold the same conversations if they wished to, and (iii) in any event, the discussions on short-term route development did not impact the long-term detailed forecasts that provided an input to the ES.
44. Subsequently, in a note dated 2 September 2021³², NSC referred again to *Holborn Studios* to support its position that it required York Aviation to provide the 'lambda value', a co-efficient used in the passenger allocation (logit) model. Once again, NSC sought to draw a broad principle from the case, submitting that "*The Courts have emphasised the importance of public participation in the planning process requiring the disclosure of sufficient information to make engagement meaningful*". No particular paragraph in the judgment of Dove J was cited in support of this proposition. BAL's response to this is explained in detail in the Socio-Economic Chapter of this closing.
45. Finally, in its closing submissions, NSC refers to *Holborn Studios* to argue that Dove J's judgment contains a "*clear statement that decision-makers must not be deprived of the access to information that the need to evaluate the evidence before them even if it is commercially confidential.*"³³ The passage cited as authority for this principle is the following one: "*the inputs and findings of a viability assessment should be set out 'in a way that aids clear interpretation and interrogation by decision-makers' and be made publicly available save in exceptional circumstances.*"³⁴
46. BAL's position is that NSC's reliance on *Holborn Studios* is simply misconceived. *Holborn Studios* concerned a local plan policy that required a 'viability assessment' for certain mixed-use development proposals. The applicant therefore submitted a viability assessment in accordance with its application, but this was only posted on the local planning authority's

³⁰ NSC Statement of Case (CD21.2), page 10, para 32.

³¹ NSC Statement of Case (CD21.2), page 10, para 32.

³² (INQ/058), page 3, para 15.

³³ NSC's Closing Submissions, page 159, para 644.

³⁴ *Holborn Studios*, at [63]. Quoted by NSC at paragraph 644 of its Closing Submissions.

website in a 'redacted' form. Nor were the background papers made available for public inspection. The question that arose for the Court was whether these documents were 'exempt' from the obligation on local authorities to disclose information under section 100D (Inspection and publication of background papers) of the Local Government Act 1972. The Court held that these documents were not exempt and that they should have been disclosed by the local planning authority.

47. The facts of that case differ from those of the present in three important respects:
- a. There is no requirement to produce a viability assessment in respect of the proposed development. This is despite suggestions to this effect in relation to the provision of MSCP and low cost car parking. As pointed out by Mr Melling, there is a policy requirement contained in NSC's Core Strategy to carry out a viability assessment, but this relates specifically to the provision of 'affordable housing'³⁵. That requirement is clearly not applicable to the proposed development;
 - b. No viability assessment has been produced as none is required or appropriate in the circumstances of the present application. Quite simply, therefore, there is nothing to be disclosed under the principle in *Holborn Studios*; and
 - c. The section 100D duty on the local authority to allow inspection of background papers is simply not engaged in relation to a private sector developer.
48. Indeed, it is quite apparent from the passage quoted by NSC that the case is not authority for the broad proposition that it seeks to derive from it. NSC's reliance on *Holborn Studios* in this way is simply wrong and does not support its position.
49. Mr Brass (in respect of forecasting and socio-economics) and Mr Witchalls (in respect of surface access and car parking) have presented BAL's evidence. The outputs of the models used have been provided in detail in BAL's evidence and both Mr Brass and Mr Witchells have responded in writing to the claims that they have failed to supply information reasonably required by NSC³⁶.
50. More important, however, is the point that it is the output of those models that should be considered by the inspectors. If NSC, or any other party, did not agree with that output, they

³⁵ (CD5.6), page 74, policy CS16: "The capacity of a site to deliver a level of affordable housing that can be supported financially will be determined by individual site viability analysis."

³⁶ See INQ-083 and INQ-099

were quite entitled to bring evidence to demonstrate that some other output is correct. Indeed, NSC are well equipped to do so; they are advised by large firms of expert consultants with access to the same resources as those advising BAL. To the extent that NSC continue to rely on the absence of certain data these points are without merit and, in any event, NSC has simply failed to advance an alternative case.

APPENDIX 2

APPENDIX 2 – UNILATERAL UNDERTAKING ACCOMPANYING THE BRISTOL AIRPORT 12MPPA APPEAL

Introduction

1. The proposed development for the expansion of Bristol Airport to 12mppa, currently under appeal, is proposed to be subject to a number of planning conditions and planning obligations. A Section 106 Agreement has been the subject of negotiations with NSC during the Inquiry and an agreed final version will be submitted prior to the close of the Inquiry, together with a Unilateral Undertaking ('UU') containing obligations not agreed with NSC. The Inspectors have kindly permitted an extension of time to enable BAL to obtain signatures on the Section 106 Agreement and UU following the end of the Inquiry.
2. The existing 2011 planning permission is regulated by planning conditions and planning obligations. The planning obligations are contained in a Section 106 Agreement dated 16 February 2011 as varied by an agreement dated 11 November 2016 ('the Existing Section 106 Agreement').
3. This Appendix outlines details of the Section 106 Agreement ('the Final Section 106 Agreement') to come into force upon grant of planning permission. More specifically, it details the parties bound by the Final Section 106 Agreement and their associated land interests; it sets out how the Final Section 106 Agreement works with the Existing Section 106 Agreement; and summarises how the main elements of the UU have been drafted.

Parties Bound by the Final Section 106 Agreement

4. The parties to the Final Section 106 Agreement are as follows:
 - a. North Somerset Council (as the local planning authority) (not in respect of the UU);
 - b. Bristol Airport Limited (as the applicant and land owner);
 - c. Bristol Airport Developments Limited (as land owner);
 - d. South West Airports Limited (as land owner); and
 - e. Credit Agricole Corporate & Investment Bank (as mortgagee of part of the relevant land).
5. NSC is a unitary authority and is the local planning, highway and education authority for the area in which the proposed development is situated.

6. BAL is the freehold owner of the land registered at HM Land Registry pursuant to title numbers ST180919, ST241061, ST256857 and ST337957.
7. Bristol Airport Developments Limited is the freehold owner of the land registered at HM Land Registry pursuant to title number ST343009.
8. South West Airports Limited is the freehold owner of the land registered at HM Land Registry pursuant to title numbers ST331855; ST283749 and ST346326.
9. Credit Agricole Corporate & Investment Bank is mortgagee of that part of the Airport registered under title numbers ST180919; ST343009 and ST346326 under the terms of the relevant charges.
10. Obligations relating to the A38 Works contained within the Final Section 106 Agreement require the compulsory purchase of land. The compulsory purchase order ('CPO') Inquiry is conjoined with the Inquiry into BAL's section 78 appeal.

How the Final Section 106 Agreement works with the Existing Section 106 Agreement

11. The 10mppa planning permission has been partially implemented. In order to provide for the concurrent and cumulative implementation of the existing planning permissions and the proposed development, the Final Section 106 Agreement replaces the Existing Section 106 Agreement (relating to the 10mppa planning permission) with planning obligations that accomplish the objectives of restricting and regulating both the existing permissions and the proposed development.
12. BAL recognises the importance of making clear that where two planning permissions are capable of being implemented simultaneously and concurrently, the appropriate conditions and planning obligations regulating the relevant aspects of the development are clear and enforceable. BAL has taken care to ensure that the planning obligations and planning conditions are consistent.
13. The Final Section 106 Agreement includes all of the undischarged planning obligations that currently restrict and regulate the planning permission, revised and updated as appropriate to include the additional planning obligations that will restrict and regulate the proposed development. It contains appropriate provisions to ensure that the discharge of planning obligations is monitored as the development progresses.
14. The Final Section 106 Agreement also contains a trigger mechanism at the point when all appropriate obligations and planning conditions have been discharged by the relevant authority and a transition from the cumulative or concurrent implementation of the existing planning

permissions and the proposed development to the exclusive implementation of the 12mppa permission.

15. The strategy for the Final Section 106 Agreement is to provide a clear and transparent mechanism to record and regulate the ongoing development of the Airport in accordance with the relevant planning permissions, subject to the relevant existing and proposed planning conditions and planning obligations within the legal framework.

Unilateral Undertaking

16. During negotiations with NSC on the Final Section 106 Agreement it became clear that there were certain areas of disagreement between BAL and NSC that were not likely to be resolved. NSC proposed that a Section 106 Agreement be drafted to contain what is referred to as a 'blue pencil' approach. Such an approach would have resulted in the need to read and interpret the agreement alongside the Inspector's decision notice. This option was suggested by NSC as a timesaving measure. BAL were reluctant to use this option due to a concern that it would make the agreement extremely difficult to follow and monitor post-consent. In particular BAL were mindful that third parties would need to trawl through long documents alongside each other (the Section 106 agreements and the Inspectors decision notice) in order to understand which elements of the agreement were extant and in force. BAL are grateful that the Inspectors have confirmed that as a matter of principle, they are content with this approach.
17. Therefore, in the alternative, BAL wish to submit a separate UU for those obligations which cannot be agreed with NSC. Rather than prepare a UU which covers all of the obligations, BAL have still endeavoured to seek agreement on obligations where possible and have retained such obligations within the Final Section 106 Agreement. Only obligations which cannot be agreed due to fundamental differences between the parties' positions have been moved into the UU. Although there is no requirement to do so, in the interests of openness and transparency, BAL shared a first draft version of the UU with NSC on 28 September 2021 subsequent to which BAL engaged in discussions with NSC regarding the form and content of the UU on 30 September 2021. Where appropriate and reasonable, BAL have taken on board NSC comments and updated the UU accordingly.
18. The obligations contained within the UU are in line with, or improve upon, the obligations upon which Officers based their recommendation for approval. A Schedule showing how the obligations within the UU are in compliance with regulation 22 of the CIL Regulations has been submitted to

the Inquiry. Necessary mitigation is fully secured through the UU and a summary of how the evidence presented through the Inquiry has demonstrated this is provided below.

Justification for the Replacement Airport Surface Access Strategy ('ASAS') and associated public transport modal share obligation

19. The only element of the above obligation that remains in disagreement is the Public Transport Modal Share ('PTMS') target and associated Key Performance Indicators ('KPIs'). The approach and methodology associated with the Replacement ASAS is agreed with NSC. As stated in the evidence of Mr Witchalls, the proposed target is an ambitious stretch target that is in accordance with Development Plan Policies CS1 and CS10, as well as Policy DM50, relating to the promotion of sustainable travel.¹ It is in accordance with policy contained in the Aviation Policy Framework relating to surface access and the National Planning Policy Framework on sustainable travel.²

Airport Surface Access Strategy

20. NSC officers had initially agreed to the proposed draft ASAS measures as part of the Draft S106 Heads of Terms ('HoTs') leading up to the planning committee and these were included in the first draft Statement of Common Ground dated 10 September 2020. This included agreement with regards to the increase in passenger travel by public transport from 15% at 10mppa to 17.5% by 12mppa, and the use of a KPI of achieving an average increase of 0.5% improvement in public transport use per annum.
21. The incremental target of 2.5% above the rebased baseline is supported by evidence included in Section 6 of the Proof of Evidence of Scott Witchalls.
22. This shows that the PTMS at Bristol Airport has increased by over 10% in the 9-year period between 2003 and 2012 (from 8% to 18.1%), whilst the increase in the 7-year period between 2012 and 2019 was only 3.2%, (from 18.1% to 22.3%). There has, in fact, been a slight reduction in the PTMS between 2015 and 2019. The levelling off in growth is a clear reflection of the challenge of achieving further marginal increases in PTMS.
23. Analysis of the potential new services and improvements to public transport that could be implemented by BAL to achieve a further increase in PTMS was undertaken as part of the Transport Assessment³ and Transport Assessment Addendum⁴ and set out in those documents.

¹ (CD5.4).

² APF (CD6.1); NPPF (CD5.8.1).

³ TA (CD2.9.1).

⁴ TAA (CD2.20.01).

These measures were targeted at geographic areas with the greatest potential to achieve an increase and were used to inform the draft section 106 agreement (and now UU, schedule 1).

24. A more detailed analysis of the likely effects of these potential transport improvements on PTMS is set out in Section 6.5 of Mr Witchalls Proof of Evidence based on the detail of the revised passenger forecasts including geographic distribution, rather than a simple arbitrary % increase (as proposed by NSC).
25. This analysis, based on CAA postcode data and founded on bus and coach industry typical elasticities (from Transport Research Laboratory guidance on the likely effects of different initiatives on public transport demand), showed that the proposed bus and rail improvements would result in approximately up to 357,000 additional passengers travelling by public transport to the airport, which equates to a 2.9% increase.
26. This would only be realised if all of the measures considered were actually implemented and were as successful as assumed. Therefore, it is considered that the increase in PTMS to 26.8% suggested by NSC, is a totally unrealistic and unachievable target whereas the BAL proposed target is robust, evidence-based and challenging.
27. It is also more appropriate to set a PTMS increase (of 2.5%) as a target, rather than an absolute number, since it is proposed (and agreed with NSC) to rebase the mode share target from CAA data and methodology.
28. Neither BAL (nor the Inspectors) have seen any data, methodology or calculation supposedly used by NSC to determine their proposed targets and therefore cannot agree to their proposed mode share targets.

Justification for Flyer Shuttle funding obligation

29. NSC Officers had initially agreed to the proposed mechanism for funding the Flyer Shuttle as part of the HoTs leading up to the planning committee and these were included in the first draft Section 106 Agreement. On 18 June 2021, NSC changed their position to request an uncapped and unconditional funding of the Flyer Shuttle beyond the 24-month trial period. There remains agreement that the trial itself should be funded via the Public Transport Fund or Public Transport Improvement Fund, as appropriate and this was commented by NSC on the draft UU submitted to the Inspectors on 29 September 2021.⁵

⁵ (INQ/088), pdf page 16, Schedule 1, para 3.1.

30. The intention, as with any new bus service, was for the service to achieve commercial viability and not require ongoing subsidy. Indeed, BAL agreed to extending the trial to 24 months in dialogue with NSC officers to give this the best chance of happening. At the end of the trial, it was previously agreed, that the service would be reviewed by the Surface Access Steering Group, and if further financial support was required, this would come from the Public Transport Fund or Public Transport Improvement Fund, as appropriate.
31. As NSC's closing submissions confirm, BAL has consistently supported the 24 month Flyer Shuttle trial and aim to support this as providing an accessible public transport route for staff and passengers to key communities in corridors, interchanges and stations other than Bristol Temple Meads (such as Yatton and Nailsea).⁶
32. NSC has presented high level, coarse calculations in an attempt to show that a larger scale of funding is required to make the Flyer Shuttle viable.⁷ This costing has not been validated and BAL has only very recently received the justification for this increase (on 30 September 2021). Notwithstanding the limited time BAL has been able to understand these figures, BAL notes that this calculation does not reflect the way in which tendered services are actually let (since it includes gross vehicle purchase costs when a leased arrangement is the norm) or include any provision for paying customers on the Flyer Shuttle, which would be expected, otherwise there would be no benefit in providing it.
33. An uncapped funding commitment, on the basis of an unvalidated and evidently not fully considered costing calculation, without consideration also that NSC is now operating a competing service on part of the proposed route, would be unfair and unreasonable and would not satisfy the CIL Regulation 122 tests. Therefore, BAL has reinstated the wording as agreed with Officers in the HoTs so that they will be held to a CIL compliant obligation.

Justification for the Parking Phasing obligation

34. This obligation would tie BAL to the phasing it has presented in the evidence of Mr Witchalls and Mr Melling.⁸ It also links with the Monitor and Manage Condition 6, which the Inspectors have expressed support for. The evidence of Mr Witchalls⁹ has demonstrated the need for surface level parking as well as multi-storey parking, phasing proposals and an outline of the monitor and

⁶ NSC Closing submission, Appendix B, para 14(a).

⁷ NSC Closing submission, Appendix B, para 14(c).

⁸ Mr Witchalls Proof of Evidence (**BAL/W4/2**); Mr Melling's Proof of Evidence (**BAL/W7/2**).

⁹ Mr Witchalls Proof of Evidence (**BAL/W4/2**), paragraphs 7.1.8-7.3.3 and 8.1.1-8.3.4.

manage approach. The evidence of Mr Melling¹⁰ has demonstrated the very special circumstances, which outweigh any harm to the Green Belt caused by the development of car parking in the Green Belt, and any other harm.

35. These very special circumstances are:

- a. the need for additional car parking in the Green Belt to meet demand associated with an additional 2 mppa;
- b. the lack of alternative, available and suitable sites for parking outside the Green Belt; and
- c. the need for, and benefits of, the growth of Bristol Airport.

36. Overall, in accordance with national planning policy contained in the NPPF and Policy DM12 and Policy DM50 of the Development Plan, BAL has clearly demonstrated the very special circumstances that outweigh the harm to the Green Belt and any other harm caused by the development of additional car parking.

37. Mr Melling sets out at paragraphs 5.4.44 to 5.4.49 of his evidence that the proposed phasing set out in the UU represents a balanced and controlled approach to the delivery of additional car parking capacity at the Airport. Mr Melling cites three reasons which underpin his conclusion which are summarised below:

- a. the proposed phasing is consistent with the Parking Demand Study, further demonstrates BAL's commitment to maximising development in the Green Belt inset, would see BAL bringing forward early investment in public transport measures and would secure delivery of a public transport interchange facility, in-turn encouraging sustainable travel;
- b. the adoption of a monitor and manage approach to the delivery of car parking in Phase 2 will ensure that provision is fully aligned with demand and that it does not undermine the achievement of BAL's public transport mode share target and wider ASAS objectives;
- c. the delivery of the Silver Zone Car Park extension in the second phase prior to MSCP3 will better meet the demand for low-cost, long-stay car parking, ensuring that BAL is better positioned to offer an attractive, alternative, low-cost product to unauthorised off-site providers. In any case, both components of Phase 2 (the extension to the Silver Zone Car Park and MSCP3) will ultimately be required to accommodate a passenger throughout of

¹⁰ Mr Melling's Proof of Evidence (BAL/W7/2), section 5.4.

12 mppa. From a Green Belt perspective, therefore, when in Phase 2 each facility is brought forward is irrelevant as the same limited harm to the Green Belt will still occur ultimately.

38. In this context, it is appropriate that appropriate car parking provision has been made in accordance with Policy CS11 of the Development Plan.

Justification for the Noise Mitigation Scheme obligation

39. NSC's position is that the Noise Mitigation Scheme does not go far enough to adequately mitigate the impacts of BAL's 12mppa development proposal.¹¹ The areas of disagreement are as follows:

- a. NSC believes that all costs for treatments to residential properties should be met in totality as part of the scheme. The reasons for this are, having grant values as provided by BAL, may not cover all replacement windows and/or ventilation for some properties; and
- b. NSC consider that the contour level for the Noise Mitigation Scheme needs to be based at a level to 54dB for daytime and 45dB for night time. The justification given by NSC for the daytime level of 54 dB is that this is the level now considered by the UK Government to be the onset of significant community annoyance, which was previously 57 dB. The justification given for the night time level of 45 dB is that this is defined as the LOAEL in BAL's Noise Assessment and NSC's position is that all adverse effects should be fully mitigated.

All Costs for treatments to be covered by BAL

40. Paragraph 4.2.44 of Mr Williams's Proof of Evidence confirms¹² that the Aviation Policy Framework 2013 ('APF') specifically states that Government:

*"would expect **airport operators to offer financial assistance towards acoustic insulation to residential properties** which experience an increase in noise of 3dB or more which leaves them exposed to levels of noise of 63 dB LAeq,16h or more."*¹³ (emphasis added)

41. Here the APF clearly states Airport Operators are expected to offer financial assistance towards treatments to residential properties rather than cover full costs as requested by NSC.

¹¹ NSC Closing submission, Appendix B, para 18.

¹² (BAL/W3/2), page 42.

¹³ APF (CD6.1) paragraph 3.39.

42. NSC Officers previously agreed with this interpretation of policy, stating the following in the Officer's Report:

*"The APF, which is the policy basis for acoustic mitigation, however only expects airport operators to consider "financial assistance towards acoustic insulation for households". It does not say that they must meet the full costs of mitigation."*¹⁴

43. Furthermore, the recent decision with regards to Stansted Airports planning application to 35+ million passengers per annum also aligns to this policy.
44. In reference NSC's position regarding the NPSE and NPPG as the basis of policy regarding the Noise Mitigation Scheme; as stated in paragraph 203 of this closing submission above, consideration should be given to not only mitigating but also employ means to minimise those effects. BAL believes it is meeting this through the adoption of the Noise Control Scheme which includes agreed tighter Quota Count requirements for night for example. Furthermore, the economic and wider social benefits need to be considered as stated.
45. The NPPG references how the APF, in detail, covers the development of airports and airfields, stating *"the management of environmental effects associated with the development of airports and airfields is considered in detail in the Aviation Policy Framework"*.¹⁵ BAL has already demonstrated this Noise Mitigation Scheme is bettering by offering mitigation to 57dB daytime and 55dB night time.
46. In relation to NPSE, under para 2.24 it states:
- "The second aim of the NPSE refers to the situation where the impact lies somewhere between LOAEL and SOAEL. It requires that all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development (paragraph 1.8). **This does not mean that such adverse effects cannot occur.**"*¹⁶ (emphasis added)
47. Therefore the policy requirement is to mitigate at the SOAEL, i.e. avoid the significant effects. Between the LOAEL and SOAEL effects should be mitigated and minimised as far as reasonably practicable. The Noise Mitigation Scheme goes beyond the policy. It is therefore what BAL consider to be reasonable and practicable in terms of mitigating effects between the LOAEL and

¹⁴ (CD4.11), pdf page 69.

¹⁵ (CD10.40), para 013.

¹⁶ (CD10.4), para 2.24.

SOAEL, noting that noise levels produced by aircraft are already minimised as far as is reasonably practicable via the Noise Control Scheme.

48. Under the Noise Mitigation Scheme secured through the UU, BAL have bettered the current offering by:
- a. Removing the need for match funding at all levels, in particular, for those properties which reside in lower noise contours.
 - b. Increased the funding across all noise contour bands making it a leading Airport scheme.
 - c. Introducing a night noise category with the same level of funding at 63dB(A) during the day (allowing for the fact that only bedrooms would need to be treated).
49. How this applies to actual costs of providing mitigation broadly equals to £500 per vent and £1000 per “standard” window, assumed to be 2m².
50. For the 63dB and 60dB day contours, £8000 would be expected to cover 5 rooms with standard windows and vents.
51. For the 55db night, £5,500 for 3 bedrooms is higher on an equivalent basis (bedrooms normally have the same or smaller windows than living rooms so would expected to be the same or lower cost, and pro-rata reducing from 5 rooms to 3 would be £4,500).
52. For 57dB day, £5,000 would be expected to cover vents in all habitable rooms and a significant contribution towards windows at the homeowners’ discretion.
53. The ESA assessment shows there are only 10 properties which reside in the 63dB(A) day contour.¹⁷ Under the proposed scheme they would be eligible for a grant of £8,000 compared to £5,000 under the existing scheme.
54. The ESA assessment shows there are 150 properties within the 60dB(A) contour at 12mppa.¹⁸ Under the proposed scheme they would be eligible for a grant of £8,000 compared to under the existing scheme to £2,500 and be required to match this contribution themselves.

¹⁷ ESA (CD2.20.1), page 72, Table 6.8.

¹⁸ Page 89, Table 6.42.

55. The 55dB night contour includes 100 properties. These properties would be eligible for £5,500 under the proposed scheme. This level of mitigation doesn't exist under the existing scheme.
56. Finally, the 57dB(A) contour at 12mppa includes 200 properties. These properties would be eligible for £5,000 under the proposed scheme. Under the existing scheme these properties would be eligible for £2,500 and be required to match this contribution themselves.
57. Following the recent decision in respect of Stansted Airport,¹⁹ BAL considered the noise insulation grant scheme that was proposed by the applicant as part of its planning application to grow beyond 35mppa. This process enabled BAL to ensure that the grant levels proposed within its appeal were fair and reasonable. The scheme proposed through the Stansted Airport planning application details grants up to £10,000 for dwellings in the 66 and 69dB $L_{Aeq,16hr}$ day contour, £8,000 for 60 and 63dB and at £5,000 for 57dB. Nothing is specifically offered on the basis of $L_{Aeq,8h}$ night noise levels, dwellings inside the 55 dB $L_{Aeq,8h}$ contour would most likely qualify for either the £5,000 (57-60 dB day) or £8,000 (60-66 dB day) grants. Other UK airport schemes are typically less generous. Many do not offer mitigation below the minimum policy expectation of 63 dB $L_{Aeq,16h}$, and where they do, the grant amount is often limited to £3,000 per dwelling.

The size of eligibility contour set at 54dB(A) for daytime and 45(dB)A for night time

58. NSC's position is the 54dB(A) day time and 45dB(A) should be the criterion of eligibility of properties to be treated as part of the Noise Mitigation Scheme.²⁰ This contention is not backed by current policy and goes beyond what is in place at other UK schemes (including Stansted's most recent proposed scheme).
59. In paragraph 3.39 of the APF (2013) it states "*...which experience an increase in noise of 3dB or more which leaves them exposed to levels of noise of 63 dB $L_{Aeq,16h}$ or more.*"²¹ Thereby BAL is already exceeding policy expectations by offering financial support for noise insulation treatments at the 57dB $L_{Aeq,16h}$ day.
60. Overall the $L_{Aeq,16h}$ is widely used as criterion. Bristol Airport, London City Airport, Stansted go down to 57 dB(A) and no Airport offers lower than 57dB(A) currently.

¹⁹ Uttlesford District Council v SSHCLG and Ors (INQ/094).

²⁰ NSC Closing submission, Appendix B, para 18(e).

²¹ APF (CD6.1), para 3.39.

61. NSC's position is based on the SONA report and subsequent government confirmation that is now considered the onset of significant community annoyance to occur at 54 dB $L_{Aeq,16h}$ rather than 57 dB previously.²² As stated in evidence, the APF requires assistance towards mitigation at 63dB (para 3.39) for daytime and the emerging Aviation 2050 (3.1.22) proposes to extend the policy threshold in the APF to 60dB for daytime. Thereby, BAL has in fact gone beyond current policy and emerging policy with the proposed Noise Mitigation Scheme.
62. For night noise, there is nothing specific in the APF or other policy. There is a general approach to mitigate significant effects in the PPGNN which is met by offering mitigation at 55dB at night.
63. When comparing UK airports most offer nothing in terms of specific noise insulation grants based on night contours. Airport's which do offer this are largely as a result of recent planning applications. Luton, East Midlands, Doncaster Sheffield all offer 55 dB & 90 SEL as parameters for noise insulation treatments or grants. Stansted offer 90 SEL only. Thereby BAL's position of £5,500 for properties which reside within the 55dB(A) 8 hour, L_{Aeq} night contour goes beyond policy and is comparable to what is offered by other UK airports at night.

²² NSC Closing submission, Appendix B, para 18(f).