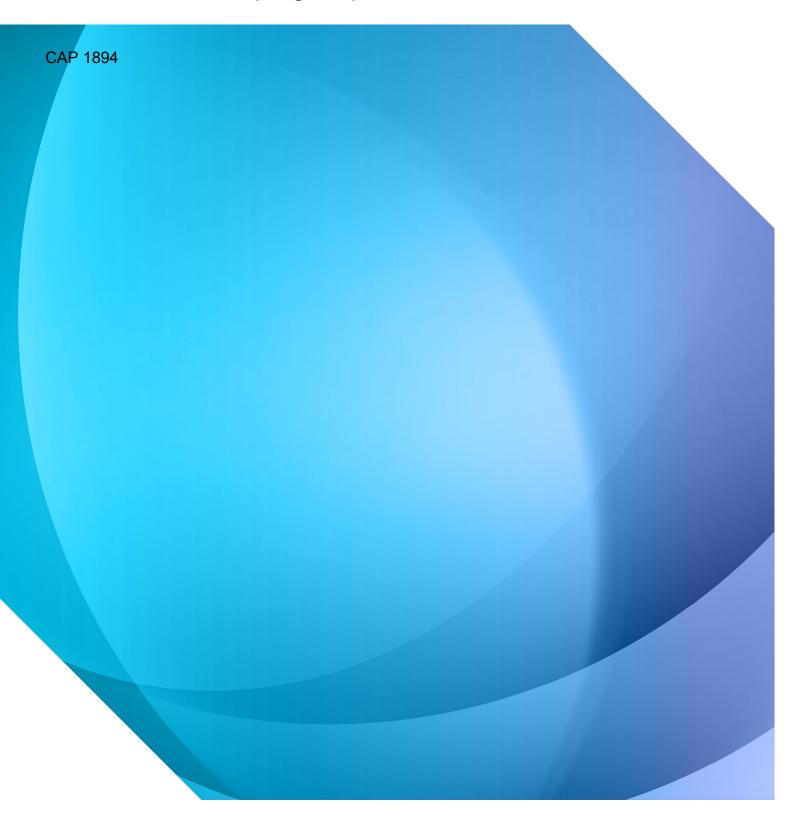


The Civil Aviation Authority's response to Arora Holdings Limited's Environmental Impact Assessment Scoping Report



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The CAA's response to Arora's Environmental Impact Assessment Scoping Report

Introduction

- 1. The CAA is the UK's specialist aviation regulator. We work so that:
 - the aviation industry meets the highest safety standards. We regulate the safety of airport design against UK, European and international safety criteria;
 - consumers have choice, value for money, are protected and treated fairly when they fly. We regulate the prices that Heathrow Airport Limited ("HAL") can charge for operating from Heathrow airport. This includes incentivising the efficiency of HAL's costs. Following the designation of the Airports National Policy Statement (ANPS) we have extended the scope of our approach to include the costs of expanding the airport;
 - airspace is well managed. We make decisions on proposals to change airspace design, which we do against the background of Directions and environmental guidance from the Secretary of State; and
 - the aviation industry manages security risks effectively.
- 2. We also provide environmental advice to the government, and, on a commercial basis, to third parties, including information about the noise effects of aviation operations.
- 3. It is for government to determine environmental policy and for the CAA, where required, to apply that policy when making its regulatory decisions.
- 4. We welcome the opportunity to respond to Arora Holdings Limited's (Arora) Environmental Impact Assessment (EIA) scoping report in our capacity as a prescribed statutory consultee in the planning process.
- 5. By way of general introductory comment, in paragraphs 7 to 26 we provide a high-level overview of our regulatory roles and how they relate to the Development Consent Order (DCO) process together with some background information on the CAA's engagement with Arora to date. In paragraphs 27 32 we explain how we approached our consideration of Arora's EIA scoping report. In paragraphs 33 61 we provide such comments as we have at this stage on those chapters of Arora's EIA scoping report that relate to the CAA's regulatory roles.
- 6. For further information about the CAA's responsibilities or on any of our comments in this paper, please contact us at DCO.Coordination@caa.co.uk.

The DCO and CAA's Regulatory Processes

7. In addition to obtaining DCO approval, the operation of a third runway will require a number of regulatory approvals from the CAA. The CAA's regulatory approval processes will continue throughout the planning and construction phases. The environmental statement that will form part of Arora's DCO application will contain topics which are relevant to the CAA's regulatory processes. Although we have not seen any detailed proposals made by Arora, their DCO application appears to rely on HAL submitting a DCO application and successfully obtaining development consent. Accordingly, we have commented on matters wider than terminal capacity, and this is due to the difficulty in dealing discretely with an application which has a significant number of critical dependencies with the application to be made by HAL on which Arora's application appears to be predicated. The three most significant regulatory areas are as follows.

Economic Regulation

- 8. The CAA is the economic regulator of Heathrow Airport Limited (HAL), in accordance with its duties as set out in the Civil Aviation Act 2012 ("CAA12"). The CAA's primary duty is to carry out its functions "in a manner which it considers will further the interests of users of air transport services regarding the range, availability, continuity, cost and quality of airport operation services". The other matters to which we must have regard are set out in s.1(3) of the Act.
- 9. The CAA considers that capacity expansion is important to further the interests of air transport users. In line with the ANPS requirements, user's interests will be best served if expansion is cost-efficient, and sustainable, and seeks to minimise costs to users over its lifetime.
- 10. Arora Group is not currently an airport operator, nor is it economically regulated by the CAA. If Arora's DCO application were to be successful, and were it likely that Arora would become an airport operator, the CAA would need to undertake significant work to identify whether a regulatory regime for Arora would be required and, if so, develop a regulatory regime accordingly.
- 11. As outlined above, we have reviewed Arora's EIA scoping report through the lens of our statutory consultee role under the planning process. As such, we have not commented on the credibility or maturity of Arora's proposals. For further information on our approach to engagement with Arora, please see our published economic regulation consultations, available online. We most recently set out our views in October 2018 and will update these in March 2019. The CAA

¹ https://www.caa.co.uk/Commercial-industry/Airports/Economic-regulation/Licensing-and-price-control/Heathrow-price-control-review-H7/

is currently engaging with Arora to understand its developing proposals, and we intend to assess the maturity of Arora's plans shortly. The CAA considers that it is not in the interests of consumers to undertake work to develop a possible regulatory framework for Arora in advance of a better understanding of its intended capacity expansion proposals.

- 12. In its scoping statement, Arora has set out "TIN Principles" which it considered that the CAA set out in its Technical Information Note² in August 2018 (the "Note"). On a point of detail, the CAA is very clear, and was clear in the Note, that the Note was not intended to set out any principles about how the CAA will undertake its work, but rather that it set out indicative and preliminary descriptions of the way the CAA12 regime operates and the sorts of arrangements that could be accommodated within it.
- 13. That Note also made clear that the comments made in it were subject to significant caveats. The scoping statement also states that the CAA had set out (in CAP1722³) how the "TIN Principles" would be accommodated in the regulatory regime. This was not the aim of the consultation referred to (CAP 1722). Rather, CAP 1722 discussed the issues surrounding how the CAA would decide whether to carry out significant work to consider the economic regulation of proposals brought forward by the Arora Group, should it be successful in obtaining a DCO. This should not be confused with carrying out substantive work to determine whether the regulatory regime would apply to Arora's proposals, or how the regulatory regime could be accommodated within the regime of regulation provided by CAA12. This work will only commence should Arora be able to demonstrate that its plans are credible in the light of the tests set out in CAP 1722.
- 14. If, at some future date, the CAA were to determine that Arora should be economically regulated by the CAA, pursuant to CAA12 (as outlined in the Note), we would be required to have regard to the need to secure that any company within the Arora Group of companies that would be licensed under CAA12 can take reasonable measures to reduce, control or mitigate the adverse environmental effects of the airport and associated facilities. In doing so, we would seek to make appropriate allowances for the efficient costs of environmental mitigations and seek to put in place incentives to minimise these costs, including so that capacity expansion does not become unaffordable for airport users.

²https://www.caa.co.uk/uploadedFiles/CAA/Content/Accordion/Standard_Content/Commercial/Airports/Files/TechnicalInformationNote-HeathrowCapacityExpansion.pdf

³http://publicapps.caa.co.uk/docs/33/CAP1722%20Economic%20regulation%20of%20capacity%20expansion %20at%20Heathrow%20policy%20update%20and%20consultation.pdf

15. Accordingly, any assessment that we might undertake on the cost efficiency of Arora's environmental mitigations would fall to be considered in the context of the CAA's primary duty to airport users as specified in s.1(1) of the Act.⁴

Safety Regulation

- 16. The CAA has a number of safety oversight responsibilities in the UK. The CAA oversees the safety of aircraft and air navigation, the control of air traffic, air traffic services personnel, the licensing of aerodromes and air crew. In recent years, the European Commission, the European Aviation Safety Agency (EASA) and International Civil Aviation Organisation have played an increasingly significant role.
- 17. The CAA is the national supervisory authority for the certification of air navigation services (ANS) providers covering the requirements of Regulation (EU) No. 1035/2011. Those requirements include technical and operational competence and capability, specific requirements for the provision of air traffic services, meteorological services, aeronautical information services and communication, navigation or surveillance services.
- 18. The CAA is also the designated competent authority for the licencing of aerodromes under Regulation (EU) No. 139/2014. The licensing process ensures continuous oversight of safety standards at civil aerodromes. Since this regulation came into force in 2014, Heathrow Airport's aerodrome licence has been converted to an EASA compliant licence.
- 19. Safety assurance of proposed changes can only be provided if the proposer submits to the approving authority a fully detailed concept of operations for how it intends to achieve an acceptable level of safety.
- 20. It might not be possible to issue some approvals without trialling the operation first. In such circumstances, permission to operate a trial may sometimes be given so that the operator can demonstrate that the concept works as intended (potentially with further mitigating action required to ensure the concept meets all requirements).
- 21. It is not clear what, if any, safety approvals Arora intends to seek from the CAA. If Arora applies to the CAA for any safety approvals it will need to demonstrate compliance with the applicable regulatory requirements.

⁴ In this context, we interpret cost efficiency broadly to include that there is a clear statutory driver on Arora to incur the costs, that Arora has identified the most efficient option and that its costs of delivering such options are efficient.

Airspace Change

- 22. The CAA is responsible for making decisions on proposals to change airspace design. As part of that decision-making role, we take into account a range of factors including safety, efficiency and guidance on environmental objectives from the Secretary of State. The evidence we use to consider those factors, and how it should be prepared, is set out in our regulatory process 'Airspace Design: Guidance on the regulatory process for changing airspace design including community engagement requirements' (CAP1616).
- As set out in the ANPS, we expect any airspace changes associated with the new runway proposals to follow the CAA's airspace change process as set out in our guidance in CAP1616. Our guidance specifies the evidence we need from the organisation sponsoring an airspace change, including the relevant environmental data and the methodologies for producing it. The process and evidence are iterative, and HAL is not yet at the stage of designing flightpaths to support their proposals. This means that some assumptions will need to be made in due course for the purposes of HAL's EIA.
- 24. It is not clear what, if any, airspace change proposals Arora is intending to make. If it does make an airspace change proposal it will need to do so in compliance with the detailed CAP 1616 process and associated guidance.
- 25. The Arora scoping report excludes methodologies related to the assessment of the North-West runway, indicating that these will remain as covered by HAL's EIA. Whilst the total number of ATMs and passengers are indicated to remain the same, the Arora scoping report does not confirm that the use of the runways will remain the same as for the HAL DCO proposal. The Arora proposal alters the layout of taxiways and aircraft parking stands, which may have an effect on the use of the runways that may have consequential effects on aircraft noise and emissions that are scoped out of Arora's EIA. It does not seem appropriate to entirely scope out the effects on aircraft noise and emissions of Arora's DCO application without further explanation and justification for doing so.
- The HAL DCO proposes that the landing thresholds for the two existing runways are displaced inward to mitigate landing noise. Landing thresholds require obstacle free protection areas around them for the glidepath antennae. It is not clear that Arora's proposed ground infrastructure will be compatible with HAL's proposed displaced landing thresholds and thus whether Arora can scope out aircraft noise and rely on the aircraft noise assessment in HAL's EIA. The CAA does not have sufficient information about Arora's proposals to determine whether it is reasonable for Arora to scope out aircraft noise in this way.

CAA's response to Arora's EIA Scoping Report

- 27. The CAA notes from Arora's scoping report that its proposed development "does not include works to construct the new Northwest Runway (or any air traffic associated with it)". It is not clear to the CAA the exact scope of Arora's proposed development, but it appears that it will be reliant on the successful development of a new Northwest Runway by HAL. Any proposal to operate a third runway will require a number of regulatory approvals from the CAA in order to become operational.
- The CAA's regulatory processes will, to a significant extent, run in parallel with HAL's DCO process but will not conclude until after HAL's DCO application has been submitted. We understand from the Planning Inspectorate's website that Arora has not yet provided a timetable for its proposed DCO application. The CAA may be asked by the Planning Inspectorate ("PINS") and the Secretary of State to provide an interim opinion regarding the viability of Arora's scheme. As the success of Arora's proposed development appears to be closely linked to HAL's scheme, the CAA would consider, in these circumstances, the progress of HAL's regulatory approval applications.
- 29. Where relevant, it would seem prudent for Arora's EIA scope and methodology to be consistent with the requirements of the CAA's regulatory processes in order to avoid duplication and aid clarity for stakeholders. Where this is not possible, we suggest that Arora explains its choice of methodology with great care and sets out the difference between the methodology used for EIA purposes and that to be used for the purposes of any submissions seeking CAA approval.
- 30. We have considered Arora's EIA scoping report on that basis, and we are using this response to inform PINS of the information we consider should be provided in Arora's environmental statement. We have in particular considered Arora's proposed scope and methodology to assess and mitigate the environmental effects of expansion. We have only commented on relevant chapters/EIA topics.
- 31. Our response below contains comments on those chapters of Arora's EIA Scoping Report that relate to our regulatory roles. In respect of airspace change, CAP 1616 and CAP 1616a⁵ provide the relevant methodologies for use in environmental assessments to assist those preparing airspace change proposals. To facilitate consistency between Arora's EIA and our approach to assessing the environmental impacts of airspace change proposals, we comment in detail on the relevant chapters of the EIA.

⁵ CAP 1616a is CAA publication 'Airspace Design: Environmental requirements technical annex'

32. Our economic regulation powers relate to furthering the interests of consumers in development of the airport infrastructure, as provided for in CAA12. Capacity expansion is a bespoke project which will have a range of environmental impacts and the scope of these will only become clear as Arora's plans crystallise through the planning process. In these circumstances, it is not practicable or appropriate for us to set out standard methods for the assessment of plans that remain under development and, rather than comment on the detail of Arora's EIA scope and methodology, we have set out our general approach above.

Chapter 7 – Carbon and Greenhouse Gases

- Regarding paragraph 7.4.7, We note that this item should refer to both sections 7.4.6 and 7.4.5 and include both direct and indirect emissions.
- 34. Regarding paragraph 7.7.8, this should clarify whether the operational use of terminal, taxiways and extra emissions from further flood defences and river diversions not present in the HAL EIA will be included in Arora's EIA.

Chapter 8 – Climate Change

- 35. Regarding Table 8.1 under "Airports National Policy Statement" (p.119) it is noted that any Airspace change proposal relating to Heathrow expansion should be consistent with the ANPS.
- 36. Regarding Table 8.1 under "Policy" (p.119/120) The Kyoto Protocol and Paris Agreements should be considered and, if appropriate, referenced alongside the other policy documents.
- 37. Regarding paragraph 8.3.2 (p. 121) other key stakeholders from an aviation perspective should include the Royal Borough of Richmond-upon Thames as they and other boroughs are very active in relation to the proposed expansion of Heathrow. Arora should also consider consulting with the members of the Major Airports (EGLL, EGKK etc) action/consultative committees.
- 38. Regarding paragraph 8.5.1 under "Baseline Conditions" (p.122) it is noted that the CAP1616 process requires local air quality assessment to be carried out for changes to routes. In the vicinity of AQMAs, Climate Change may result in increased incidence of Temperature Inversions and, as a result of the co-location of industrial areas and airports, it is likely that the incidence of Low Visibility Procedures will increase, as may the incidences of temperature inversions and Fog.
- 39. Regarding paragraph 8.5.4 (p.123) we note in relation to the statement "These could be exacerbated by climate change related effects" that low visibility operations that are triggered by fog events cause low visibility procedures to be enforced. Low visibility procedures require a reduced Flow Rate to be adopted for aircraft approaching the airport (known as Air Traffic Flow Measures (or

- ATFM). This is due to the fact that Heathrow is currently operating at 98% Capacity.
- 40. Regarding Table 8.2 (p.124) on line "Airport Operations and infrastructure" under "effects" heading: we note that reducing the number of days causing snow disruption would be a positive influence as a reduction in the number of snow events would similarly reduce the requirement for flow measures to be initiated by ATC, increasing airport capacity and thus reducing the likelihood of the airport influencing local air quality to the point of impacting on AQMAs. In the same box of table 8.2, in relation to the sentence "storms may increase in frequency and magnitude which could damage airport infrastructure" we note Storm cells and Cumulonimbus Clouds which cause the diversion of flights by ATC thus increased frequency of their occurrence are likely to increase the need for air traffic to be diverted. Diverted flights burn "extra" fuel and produce additional emissions.
- A1. Regarding paragraph 8.7 (p.125) "Approach to Assessment" we note that the CAP 1616 process requires climate change impacts to be carried out via assessment of changes to CO2 which should be completed as part of the Options appraisal process using WebTAG. CAP1616 requires impacts including climate change impacts such as changes to CO2 and fuel burn to be assessed as part of the options appraisal process using the WEBTAG tool, in line with the requirements of the Governments Green book. The relative priority of the impacts is dictated by the altitude-based priorities again as set out in CAP1616 and the Air Navigation Guidance 2017. Annual totals must be calculated in addition to changes on a per flight basis.
- 42. Regarding the "Additional baseline data collection" (p.125) we note that for air traffic assessment changes, as part of the CAP 1616 airspace change process, the baseline is required to consider a "do nothing scenario".
- 43. Regarding "Assessment Years" (p.126) we note that the CAP1616 process requires assessment of changes that impact on procedures at and above 7,000ft, changes must be calculated for the actual change on the date of the change on a per flight basis and as an annual total using WebTAG.
- 44. Regarding "Assessment methodology In-combination Climate Change Impact Assessment" (p.126) we note that the process for the assessment of environmental impacts in airspace change scenarios considers CO2 as an indicator of changes to climate changing gases.
- 45. Regarding "Stage I In combination Climate Change Impact Assessment" (p.126) we note that CAP1616 requires Air Quality to be assessed for changes that impact on AQMAs and there is likely to be a change in aviation emissions below 1,000ft. Operationally Air Traffic Flow Management (ATFM) will be employed by Air Navigation Service Providers as an automatic response to incidences of low

- visibility. Each individual airport has its own criteria as published in MATs Part 2 and ATFM pursuant to Commission Regulation 255/2010. A Reduced number of Slots are Co-ordinated by Airports Coordination Limited during periods of low visibility.
- 46. Regarding paragraph 8.7.10 (p.126) The Assessment will clearly define the 'emerging baseline' Changes are required to be assessed for Local air quality and Climate Change Emissions (As CO2) under CAP1616 against a "Do Nothing" baseline, for the situation pre and immediately Post the change.

 Assessments will be required to produce an annual average and a per movement change.
- 47. Regarding table 8.3 under "Fog" (p. 128) we note the initiation of low visibility procedures (and Air Traffic Flow Measures in the Air traffic scenario) is dictated by the requirements of MATS part 2 for individual airports.

Chapter 9 – Community

- 48. As a general observation this chapter uses the terms engagement and consultation interchangeably. It should be clear to communities when they will be consulted as consultation is a distinct form of engagement which raises specific expectations of those being consulted in relation to the methodology applied and of how the product of consultation will be conscientiously taken into account.
- 49. Further, we believe stakeholders would benefit from greater clarity around what engagement work has been done to date and what Arora's engagement plans are for the future in this section.

Chapter 10 - Economics and employment

- 50. Regarding paragraph 10.2.2 (p.154) in addition to the documents listed, the requirements of CAP1616 should be taken into account to form a framework for detailed assessment post-scoping. It is further recommended that CAP1616 should be read in conjunction with The Green Book: Appraisal and Evaluation in Central Government, and relevant sections of the Department of Transport's Transport analysis guidance: WebTAG. The Green Book and WebTAG are considered to be best practice in appraisals for economics and employment.
- 51. Regarding Table 10.4 under "Operation" (p.164) we note that if a Proposed Development/airspace change leads to changes in operational costs, these should be monetised.
- Regarding Table 10.4 under "Potential for wider economic effects" (p.164) we note the Applicant should provide a quantified assessment for potential economic effects if possible. It is not always possible or proportionate to quantify costs and benefits. The frameworks set out in CAP1616, the Green Book and

- WebTAG are designed to be applied flexibly to match the circumstances of the proposed Development.
- Regarding Table 10.4 under "Environmental change" (p.164) Arora should consider carrying out a qualitative assessment for the environmental change. CAA recognises that environmental assessment can be difficult to monetise without extensive modelling. However, more quantification and thus monetisation is expected for larger proposals where environmental change is a key concern. Additional guidance can be found in WebTAG A3.
- 54. Regarding paragraph 10.7.5 (p.166) we note that a high level of assessment of other costs and benefits associated with the Proposed Development should also be included.
- Regarding "Assessment methodology" (p.168) the assessment methodology should consider the requirements of CAP1616, The Green Book, and relevant sections of the Department for Transport's Transport analysis guidance: WebTAG.
- Regarding "cumulative effects" (p.171), we note that for clarity and in line with CAP 1616, the Applicant should consider assessing costs and benefits of the proposed development incrementally against the baseline. In other words, the Applicant should assess the additional benefit or cost of the option, not the absolute (total) benefit or cost. Table E2 of CAP1616 contains a list of potential costs/benefits that may arise in the assessment of airspace change. The applicant should endeavour to understand all of the potential cost and benefits that may be relevant for their proposed development.

Chapter 13 – Landscape and Visual Amenity

57. Regarding Table 13.5 under "Operational use – overhead aircraft" the CAA does not agree with the justification provided for scoping out the effects on residential visual amenity, particularly the reference to low flying rules. Further information should be provided by Arora to explain in detail why it considers its justification for scoping out this aspect is appropriate.

Chapter 16 – Noise and Vibration

- Regarding paragraph 16.4.6, this should confirm that Arora's EIA will consider the full range of noise sources, i.e. road, rail and aircraft ground operations where these are not covered in the HAL EIA.
- 59. Regarding paragraph 16.7.19, we would like further clarity on the source of the aircraft ground noise data indicated in 16.7.19.
- 60. Regarding paragraph 16.7.37, the proposed scope needs to go further than simply identifying likely significant adverse effects and consider the proposed

- mitigations as per the EIA regulations i.e. cross-reference to the mitigation principles set out in Chapter 4.
- Regarding paragraph 16.8, we note that the proposed mitigations should be specified in more details and be specific about if mitigation is for during daytime, night time or both. With respect to the elements proposed to be scoped out due to inclusion in the HAL EIA, e.g. aircraft noise, it is not clear if the Arora EIA proposes to accept all the mitigations that will be proposed by HAL, for example noise insulation, night-time restrictions etc.

Civil Aviation Authority

15 March 2019

