

Bristol Airport Limited

Development of Bristol Airport to Accommodate 12 Million Passengers Per Annum

Volume 1: Environmental
Statement



Report for

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This Environmental Statement, and the Environmental Impact Assessment (EIA) work that was carried out to identify the significant environmental effects of the proposed development, was undertaken in line with the EIA Quality Mark Commitments. The EIA Quality Mark is a voluntary scheme, operated by IEMA, through which EIA activity is independently reviewed, on an annual basis, to ensure it delivers excellence in the following areas: EIA management; EIA team capabilities; EIA regulatory compliance; EIA context and influence; EIA content; EIA presentation; and improving EIA practice. To find out more about the EIA Quality Mark please visit:

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Document revisions

No.	Details	Date

Contents

1.	Introduction	1-1
2.	Description of the Proposed Development	2-1
3.	Scheme need and alternatives	3-1
4.	Approach to preparing the Environmental Statement	4-1
5.	Legislative and policy overview	5-1
6.	Traffic and Transport	6-1
7.	Noise and Vibration	7-1
8.	Air Quality	8-1
9.	Landscape and Visual	9-1
10.	Land Quality	10-1
11.	Biodiversity	11-1
12.	Surface Water and Flood Risk	12-1
13.	Groundwater	13-1
14.	Historic Environment	14-1
15.	Socio-Economics	15-1
16.	Human Health	16-1
17.	Carbon and Other Greenhouse Gas Emissions	17-1

18.	Cumulative Effects assessment	18-1
19.	Summary of significant effects and mitigation	19-1

1. Introduction

- 1.1.1 This Environmental Statement (ES) has been prepared in support of a planning application by Bristol Airport Limited (BAL) to North Somerset Council (NSC). The planning application seeks permission to expand Bristol Airport (the 'application site') beyond the permitted passenger cap of 10 million passengers per annum (mppa) to 12 mppa (the 'Proposed Development') and to provide the associated infrastructure necessary to accommodate this growth, whilst making best and most efficient use of the existing airport site.

1.2 Overview of the proposed development

- 1.2.1 Bristol Airport is located on the A38, approximately 11km south-west of Bristol city centre (**Figure 1.1**) and within the local authority administrative area of NSC. Operated by BAL, it is the principal airport and main international gateway for the South West of England and South Wales¹.
- 1.2.2 In 2017, Bristol Airport handled over 8.2 million passengers making it the ninth busiest UK airport and the third largest regional airport in England². Leading low cost, charter and full-service airlines currently fly from Bristol Airport to over 120 destinations across 34 countries³.
- 1.2.3 BAL was granted outline planning permission by NSC on 16 February 2011 for the expansion of Bristol Airport to handle 10 mppa⁴. Between 2010 and 2017, investment totalling over £160 million has been made in a significant upgrade of facilities and infrastructure at Bristol Airport and passenger numbers have grown by over 40%, from 5.8 mppa to 8.2 mppa. BAL currently forecasts that passenger demand will reach 10 mppa by 2021, beyond which passenger traffic is projected to rise further to 15 mppa by the mid-2030s and 20 mppa by the mid-2040s.
- 1.2.4 To meet passenger demand, both now and in the future, BAL is currently preparing a new Master Plan. The Master Plan will set out a strategy for phased growth to meet the forecast level of passenger demand by the mid-2040s; in doing so, it will ensure that Bristol Airport contributes fully to enhancing national airport capacity, delivers increased connectivity and supports economic prosperity in the South West and South Wales regions.
- 1.1.1 The challenges Bristol Airport currently faces and BAL's broad approach to addressing these through the masterplanning process were set out in an initial discussion document, 'Your Airport, your views'³, which was subject to public consultation between November 2017 and January 2018. A further public consultation on the emerging Master Plan was undertaken between May and July 2018 and it is currently anticipated that a Draft Master Plan will be published for consultation in winter 2018/19.
- 1.1.2 As part of the approach, set out in the emerging Master Plan, BAL is seeking planning consent for an initial phase of growth beyond the current cap of 10 mppa to 12 mppa. This will allow for growth in passenger numbers up to at least the mid-2020s.

¹ York Aviation (2018). Bristol Airport Limited, Part 1 (Strategic) Economic Impact Assessment of Bristol Airport. Final Report.

² Civil Aviation Authority (2017). Size of Reporting Airport January 2017 – December 2017. Comparison with previous year, [online]. Available at: https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Airport_stats/Airport-data-2017-12/Table_01_Size_of_UK_Airports.pdf [Checked 01/03/2018].

³ Bristol Airport (2017). Your airport: your views. A world of opportunities. Preparing a new Master Plan: Public consultation, [online]. Available at: <https://www.bristolairportfuture.com/consultation> [Checked 01/08/2018].

⁴ Application reference 09/P/1020/OT2.

- 1.2.5 Full details of the proposals for the expansion of Bristol Airport to accommodate 12 mppa are provided in **Chapter 2: Description of the Proposed Development**.

1.3 Environmental Impact Assessment

- 1.3.1 Environmental Impact Assessment (EIA) is a process required by European and UK law, which brings together information about any likely significant environmental effects of a proposed development. It provides decision-makers, stakeholders and the public with the environmental information needed to make decisions when determining applications for certain developments.
- 1.3.2 The legal basis for EIA is European Community (EC) *Directive 85/337/EEC*⁵ (as amended by *Directives 97/11/EC*⁶, *2003/35/EC*⁷, *2011/92/EU*⁸, and *2014/52/EU*⁹) which is transposed into UK legislation. The regulations specific to applications made under the *Town and Country Planning Act (1990)*¹⁰ (TCPA) are the *Town and Country Planning (Environmental Impact Assessment) Regulations 2017*¹¹ (hereafter referred to as the 'EIA Regulations').
- 1.3.3 For the applicant, the EIA process follows three stages: screening; scoping; and preparation of the ES. These stages are described in-turn below, in the context of the EIA of the Proposed Development.

Screening

- 1.3.4 The first stage of the EIA process is to screen whether a proposed development triggers the need for full EIA, screening against the descriptions given in Schedule I¹² and II¹³ of the EIA Regulations. For developments listed under Schedule I of the EIA Regulations, EIA is mandatory. If a project is listed in Schedule II, EIA is required where it is likely to have significant effects on the environment, by virtue of factors such as its nature, size or location.
- 1.3.5 The Proposed Development has been considered against the criteria set out in Schedule II of the EIA Regulations. The applicable thresholds associated with the Proposed Development, as set out in Schedule II, are reproduced in **Table 1.1**.

⁵ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

⁶ Council Directive 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment

⁷ Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/E

⁸ Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (codification)

⁹ Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment

¹⁰ The Town and Country Planning Act 1990, [online]. Available at: <https://www.legislation.gov.uk/ukpga/1990/8/contents> [Checked 21/09/2018]

¹¹ The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017/571), [online]. Available at: <http://www.legislation.gov.uk/uksi/2017/571/contents/made> [Checked 16/03/2018]

¹² Schedule I - descriptions of development for the purposes of the definition of "schedule I development"

¹³ Schedule II - descriptions of development and applicable thresholds and criteria for the purposes of the definition of "schedule II development"

Table 1.1 Schedule II thresholds and criteria

Column 1: Description of development	Column 2: Applicable thresholds and criteria
10. Infrastructure projects	
(e) Construction of airfields (unless included in Schedule I)	(i) The development involves an extension to a runway; or (ii) The area of the works exceeds 1ha.
13. Changes and extensions	
(b) Any change to or extension of development of a description listed in paragraphs 1 to 12 of column 1 of this table, where that development is already authorised, executed or in the process of being executed	Either: (i) The development as changed or extended may have significant adverse effects on the environment; or (ii) In relation to development of a description mentioned in column 1 of this table, the thresholds and criteria in the corresponding part of column 2 of this table applied to the change or extension are met or exceeded.

1.3.6 The Proposed Development meets threshold (ii) of paragraph 10(e) (**Table 1.1**) and has the potential to have significant effects on the environment, due to the characteristics, location and potential impact of developing and operating Bristol Airport to serve 12 mppa. In consequence, BAL has determined to undertake an EIA in support of the planning application.

1.3.7 By following the full EIA process, BAL will ensure that any potentially significant effects on the environment, resulting from the expansion of Bristol Airport to accommodate 12 mppa, are considered and, where appropriate, mitigated.

Scoping

1.3.8 In accordance with good practice, a Scoping Report (**Appendix 1A**) was prepared to identify the potential likely significant environmental effects of the Proposed Development. Of these effects, those that were identified as being likely to be significant were proposed for further assessment in the ES. This reflects the requirement of the EIA Regulations, for the ES to only discuss in depth, those effects that are likely to be significant.

1.3.9 The Scoping Report was issued to NSC in June 2018, together with a request for a Scoping Opinion (**Appendix 1B**) under Regulation 15 of the EIA Regulations; this formed the second stage of the EIA process. Under these regulations the Council is required to consult with the 'consultation bodies' (as defined in the regulations) before adopting the Scoping Opinion.

1.3.10 Further information relating to the scoping stage is presented in **Chapter 4: Approach to Preparing the Environmental Statement**.

Preparation of the Environmental Statement

1.3.11 The third stage of the EIA process involves the preparation of an ES. The ES provides information relating to the likely significant environmental effects of the Proposed Development; it is intended for use by NSC and others, to inform the process of determining the application for planning permission.

1.4 Purpose of this Environmental Statement

- 1.4.1 This ES has been prepared for the purpose of meeting the requirements of the EIA Regulations relating to the preparation of ESs. Drawing upon the Scoping Opinion (**Appendix 1B**) and subsequent assessment work, this ES includes an assessment of the likely significant environmental effects of the Proposed Development, leading to a conclusion as to which effects are assessed as being significant. The overall approach that has been taken to define significance, as well as further information about the approach to preparing the ES, including the scoping stage, are outlined in **Chapter 4: Approach to Preparing the Environmental Statement**.
- 1.4.2 As set out in Schedule IV of the EIA Regulations, the following information should be included in an ES:
- A description of the development, inclusive of:
 - ▶ The location of the development;
 - ▶ The characteristics and land-use requirements of the Proposed Development, considering construction and operation (including requisite demolition works where relevant);
 - ▶ Operational processes such as energy, materials and natural resources used;
 - ▶ Any residues and emissions by type and quantity (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases);
 - The reasonable alternatives that the developer has studied, alongside justification of the chosen option, with a comparison of their environmental effects;
 - The baseline environment and its evolution in the absence of the Proposed Development;
 - A description of the likely significant effects of the Proposed Development on environmental factors (population, human health, biodiversity, land, soil, water, air, climate, material assets, cultural heritage and landscape);
 - A description of likely significant effects of the Proposed Development on the environment as a result of factors including:
 - ▶ Construction and demolition works;
 - ▶ Use of natural resources (land, soil, water etc.) and consideration of their availability;
 - ▶ Emission of pollutants (noise, air, light, radiation etc) and creation of nuisances;
 - ▶ Risk posed to health and the natural environment;
 - ▶ Cumulative effects, accounting resource use and any existing environmental issues present in environmentally important areas;
 - ▶ Vulnerability of the Proposed Development to climate change, including its contribution to climate change; and
 - ▶ Technologies and substances used.
 - A description of the methods, inclusive of uncertainties, used in the assessment to determine whether significant effects are likely to occur;
 - A description of measures and monitoring that have been identified to address likely significant effects;

- A description of the development's vulnerability to major accidents and disasters;
- A Non-Technical Summary (NTS); and
- A list of references.

1.4.3 Regulation 4 and Schedule IV of the EIA Regulations require that the environmental topics listed in column 1 of **Table 1.2** need to be considered when preparing an ES. Column 2 identifies where these topics are included in this ES, with reference to the relevant chapter numbers.

Table 1.2 Environmental topics addressed in the ES and chapter references

Topics ¹⁴ that need to be assessed under the EIA Regulations	ES chapter
Population	Landscape and Visual [Chapter 9]; Traffic and Transport [Chapter 6]; Noise and Vibration [Chapter 7]; Socio-economics [Chapter 15]
Human health	Human Health [Chapter 16]
Biodiversity	Biodiversity [Chapter 11]
Land	Land Quality [Chapter 10]
Soil	Land Quality [Chapter 10]
Water	Surface Water and Flood Risk [Chapter 12] and Groundwater [Chapter 13]
Air	Air Quality [Chapter 8]
Greenhouse gases	Carbon and Other Greenhouse Gas Emissions [Chapter 17]
Climate	Considered within the relevant technical chapters
Material assets and waste	Description of the Proposed Development [Chapter 2] and Construction Environmental Management Plan [Appendix 2B]
Cultural heritage	Historic Environment [Chapter 14]
Landscape	Landscape and Visual [Chapter 9]
The inter-relationship between the above factors	These are discussed within each chapter as relevant
Vulnerability to major accidents or disasters	Scoped out of the assessment

1.5 The applicant and the project team

1.5.1 This ES has been prepared on behalf of the applicant, BAL, by Wood Environment and Infrastructure Solutions (hereafter referred to as 'Wood'), with the support from a wider team of specialists. The details of the EIA project team are provided in **Table 1.3**.

¹⁴ In this ES, the word 'topic' is used when referring to the environment that could be affected by the Proposed Development. Other words with the same general meaning are used in the EIA Regulations, notably 'factor' and 'aspect', but these are not used in the same context within this ES.

Table 1.3 EIA Project team

Role	Project Team
Developer / Applicant	Bristol Airport Limited
Legal Advisors	Womble Bond Dickinson
EIA consultant team	Wood (lead and all disciplines not listed below) Johns Associates (ecology) Ben Cave Associates (human health) Bickerdike Allen Partners LLP (noise and vibration) Peter Brett Associates LLP (transport)
Architects	TODD Architects C-TAS

1.5.2 Wood is registered with the Institute of Environmental Management and Assessment (IEMA)'s EIA Quality Mark scheme. The scheme allows organisations that lead the co-ordination of EIAs in the UK to make a commitment to excellence in their EIA activities and have this commitment independently reviewed.

1.5.3 A statement outlining the relevant experience and qualifications of the competent experts who have prepared this ES is provided in **Appendix 1C**. A statement from the applicant that confirms that it considers the experts to be competent is included in **Appendix 1D**.

1.6 Structure of this Environmental Statement

1.6.1 The ES comprises four volumes:

- Volume 1 is a NTS, which is also available as a standalone document;
- Volume 2 (i.e. this volume) is sub-divided into the following chapters;
 - ▶ **Chapter 2** provides a detailed description of the Proposed Development;
 - ▶ **Chapter 3** explains the need for the Proposed Development, outlines the main alternatives considered for meeting this need and indicates the main reasons for the selection of the scheme as proposed;
 - ▶ **Chapter 4** details the approach that has been adopted in preparing the ES;
 - ▶ **Chapter 5** provides an overview of the legislation and policies that are relevant to the Proposed Development and ES;
 - ▶ **Chapters 6 to 17** set out the technical assessments for the environmental topics that need to be considered in the ES;
 - ▶ **Chapter 18** deals with the cumulative effects of the Proposed Development, both alone and in-combination with other developments;
- Volume 3 contains the appendices referred to in the ES; and
- Volume 4 contains the figures referred to in the aforementioned volumes.

1.6.2 A glossary of technical terms is provided as **Appendix 1E** and a list of abbreviations is provided in **Appendix 1F** of the ES in Volume 3.

1.7 Other documents

1.7.1 The planning application for the Proposed Development is supported by this ES alongside a number of other documents, at least some of which have contents relevant to the findings presented in this document. The additional supporting documents are either appended to this ES or submitted alongside the planning application and include:

- Planning Statement;
- Section 106 Agreement Draft Heads of Terms;
- Design and Access Statement;
- BREEAM Pre-assessment;
- Transport Assessment;
- Parking Demand Study;
- Parking Strategy;
- Draft Workplace Travel Plan;
- Flood Risk Assessment;
- Drainage Strategy;
- Lighting Impact Assessment;
- Economic Impact Assessment;
- Report to Inform Appropriate Assessment;
- Consultation Report; and
- Outline Construction Environmental Management Plan.

1.8 Access to the Environmental Statement

1.8.1 The ES is available via NSC's online planning portal. Hard copies can be requested, for a fee, via future@bristolairport.com. CD's will also be made available free of charge.

1.8.2 A hard copy of all application documents will be available to view, upon request, at the Hampton by Hilton Hotel at Bristol Airport and within the Town Hall main reception at NSC's offices in Weston-super-Mare.