



***EASTERLY ALTERNATION
INFRASTRUCTURE PROJECT***

***Environmental Impact Assessment
Environmental Statement, Volume III
Chapter 13: Cumulative Effects***

Document Reference: 19309-XX-EC-XXX-000019

October 2024

Contents

13. Cumulative Effects	13.1
13.1 Introduction.....	13.1
13.2 Policy, legislation and guidance.....	13.1
13.3 Scope of the assessment.....	13.3
13.4 Intra-project effects.....	13.5
13.5 Inter-project effects.....	13.14
13.6 Assessment Summary.....	13.37

Tables

Table 13.1 Cumulative Effects Summary of key Policy, Legislation and Guidance	13.2
Table 13.2 Summary of the Applicant’s response to LBH’s comment	13.4
Table 13.3 Common receptors and the significance of identified effects during construction	13.6
Table 13.4 Common receptors and the significance of identified effects during operation	13.8
Table 13.5 Intra-related effects during construction phase screening exercise	13.11
Table 13.6 Intra-related effects during operational phase screening exercise	13.12
Table 13.7 Operational Airport Assumptions used for the purposes of the EIA	13.16
Table 13.8 Summary of notable planning applications at Heathrow Airport	13.18
Table 13.9 Screening of Other Notable Heathrow Development	13.21
Table 13.10 Zone of Influence for environmental topics	13.28
Table 13.11 Short list of other developments	13.30
Table 13.12 Inter-Project Effects Significance Criteria	13.34

Figures **Appendix 13.3 Cumulative Effects Figures**

Figure 13.1 Long list of other development

13. Cumulative Effects

13.1 Introduction

- 13.1.1 There is the potential for effects associated with the Proposed Development to interact, or to combine with the effects arising from other developments. This potential to interact with other aspects or combine with effects from other developments may result in a greater significance of effect than when considered in isolation. These are referred to as cumulative effects.
- 13.1.2 This chapter of the Environmental Statement (ES) considers the potential cumulative effects for the Proposed Development. There are two types of cumulative effects that are considered:
- **Intra-project combined effects:** The interaction and combination of different environmental effects of the Proposed Development affecting the same receptor; and
 - **Inter-project cumulative effects:** The combined environmental effects of the Proposed Development with other committed projects affecting the same receptor.
- 13.1.3 This Chapter is intended to be read as part of the wider ES.
- 13.1.4 This Chapter is supported by **Figure 13.1: Long list of other development** in **Appendix 13.3: Cumulative Effects Assessment Figures, Volume III** of the Environmental Statement. This Chapter is also supported by the following appendices in **Volume III** of the Environmental Statement:
- **Appendix 13.1: Long list of Committed Developments;** and
 - **Appendix 13.2: Shortlist of Committed Developments.**

13.2 Policy, legislation and guidance

- 13.2.1 The policy, legislation and guidance relevant to the cumulative effects for the Proposed Development is set out in **Table 13.1**.

Table 13.1 Cumulative Effects Summary of key Policy, Legislation and Guidance

Legislation, Policy or Guidance	Description
Legislation	
The Town and Country Planning (Environmental Impact Assessment) Regulations 2017¹	Schedule 4, paragraph 5(e) of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) states the ES must include a description of the likely significant effects of the development resulting from “the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources”. <i>Schedule 4 then goes on to state “the description of the likely significant effects on the factors specified in regulation 4(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development”.</i>
Policy	
National Planning Policy Framework (NPPF) 2023²	The NPPF sets out the Government’s planning policies for England and how these should be applied, with the following paragraphs relating to cumulative effects: Paragraph 191: <i>“Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development”.</i>
Airports National Policy Statement³	Paragraph 4.14 states ‘When considering significant cumulative effects, any environmental statement should provide information on how the effects of an applicant’s proposal would combine and interact with the effects of other development (including projects for which consent has been granted, as well as those already in existence if they are not part of the baseline)’.
Guidance	

¹ HM Government (2017) *The Town and Country Planning (Environmental Impact Assessment) Regulations 2017*. [Online] Available at: <https://www.legislation.gov.uk/ukxi/2017/571/contents> [Accessed: 18 October 2024].

² Department for Levelling Up, Housing and Communities, (2023). *National Planning Policy Framework*. [online] Available at: https://assets.publishing.service.gov.uk/media/669a25e9a3c2a28abb50d2b4/NPPF_December_2023.pdf [Accessed: 16 August 2024].

³ Department for Transport, (2018). *Airports National Policy Statement: New Runway Capacity and Infrastructure at Airports in the South East of England*.

Legislation, Policy or Guidance	Description
<p>Planning Inspectorate Advice Note 9: Rochdale Envelope⁴</p>	<p>This Advice Note, while specifically prepared for Nationally Significant Infrastructure Projects, provides helpful advice and affirms the established principle that:</p> <p><i>“The ES should not be a series of separate unrelated topic reports. The inter-relationship between aspects of the proposed development should be assessed and careful consideration should be given by the developer to explain how inter-relationships have been assessed in order to address the environmental impacts of the proposal as a whole. It need not necessarily follow that the maximum adverse impact in terms of any one topic impact would automatically result in the maximum potential impact when a number of topic impacts are considered collectively. In addition, individual impacts may not be significant but could become significant when their interrelationship is assessed. It will be for the developer to demonstrate that the likely significant impacts of the project have been properly assessed.”</i></p>
<p>Planning Inspectorate Advice Note: Advice on Cumulative Effects Assessment⁵</p>	<p>While the Advice Note is aimed at Nationally Significant Infrastructure Projects, it is a useful reference for Town and Country Planning Act applications of this nature. The Advice Note identifies the nature of projects (referred to as Other Developments) that should be considered in a cumulative assessment. It advises that a pragmatic approach should be used, in respect of what is feasible and reasonable, where there is a lack of information to identify impacts and assess effects.</p>

13.2.2 It is noted that there is no single agreed EIA methodology for assessing and quantifying effects on sensitive receptors or resources resulting from the interaction of different impacts from the same project. The intra-project effects assessment has therefore been based on professional judgement and previous experience.

13.3 Scope of the assessment

Response to the Scoping Opinion

13.3.1 An EIA Scoping Opinion (**Appendix 1.6: Scoping Opinion**) was received by the Applicant from the London Borough of Hillingdon (LBH) on 01 February 2024, including supporting responses from other organisations.

13.3.2 A list of the responses from the LBH in relation to the cumulative effects assessment and how these requirements have been addressed by the Applicant are set out in **Table 13.2**.

⁴ Planning Inspectorate, (2018). *Nationally Significant Infrastructure Projects - Advice Note Nine: Rochdale Envelope*. [online] Available at: <https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-nine-rochdale-envelope/nationally-significant-infrastructure-projects-advice-note-nine-rochdale-envelope> [Accessed: 26 August 2024].

⁵ Planning Inspectorate, (2024). *Nationally Significant Infrastructure Projects, Advice on Cumulative Effects Assessment*. Available at: [Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-on-cumulative-effects-assessment) [Accessed October 2024].

Table 13.2 Summary of the Applicant's response to LBH's comment

LBH Comment	Response
<p>It is noted from the Report that the construction activity is likely to be considered minimal and not within the scale that would cause likely significant environmental effects however, it is not clear how it relates to other planned activity at the airport. There is currently resurfacing works being undertaken at the airport with associated construction activity, and there is partial demolition planned for Terminal 1 along with proposals for a new Terminal 2 baggage handling facility. The ES must consider the cumulative impacts of development which in EIA terms is generally considered to be committed development i.e. development with the starting point of being at least 'approved and not yet commenced'.</p> <p>5 The ES should include a programme of planned activity in the context of these proposals to ensure overlaps with any other ongoing works are understood.</p>	<p>The Applicant has undertaken a cumulative effects assessment in line with the methodology set out in in Chapter 5: Approach to the EIA and Sections 13.4 and 13.5 of this Chapter.</p> <p>The assessment has considered the cumulative impact of the Proposed Development with other developments both at and surrounding the Airport. Those proposed developments within the Airport boundary are set out in Section 13.5.</p>
<p>The ES should also provide clarification on the proposed air space changes being advanced elsewhere and a commentary on how these overlap with these proposals. In particular, the ES should explain how and when these are being assessed cumulatively.</p> <p>6 The ES should include a programme of planned airspace changes and set out the assessment procedure for considering the cumulative changes.</p>	<p>The Applicant sets out the status of the Airspace Change Proposal which they are sponsoring in Chapter 4: Legislation, Policy Context and Planning History and Section 13.5 of this Chapter.</p> <p>Airport operational assumptions are set out in Section 13.5.</p>

Assumptions and limitations

13.3.3 Assumptions and limitations relevant to the cumulative effects assessments include:

- The inter-projects assessment utilises publicly available third-party information, available at the time of writing. It is assumed this data is accurate.
- It is anticipated, as for the Proposed Development, that other committed developments will implement appropriate embedded measures (such as implementation of a Construction Environmental Management Plan (CEMP) during their respective construction phases which will help to prevent/minimise adverse effects during construction and avoid potential cumulative effects should construction periods overlap with that of the Proposed Development.

13.4 Intra-project effects

Approach to the intra-project effects assessment

- 13.4.1 There is no standard approach to the assessment for assessing and quantifying effects on sensitive receptors or resources resulting from the interaction of different impacts from the same project. The assessment has therefore been based on experience and professional judgement.
- 13.4.2 The approach followed for the assessment follows a three-step receptor-based approach:
- Step A – Identification of sensitive receptors;
 - Step B – Determine the common receptors residual effects; and
 - Step C – Assessment of intra-project effects.
- 13.4.3 Further detail is provided in the following sections as part of the assessment.

Assessment of intra-project effects

Step A – Identification of sensitive receptors

- 13.4.4 This stage involves the determination of sensitive receptors which have the potential to be affected by more than one identified effect either during the construction or operational phases of the Proposed Development. These sensitive receptors are termed ‘Common Receptors’ and will be taken forward to Step B of the assessment. Where there is only one type of effect on a particular receptor, or only one aspect had identified effects on a receptor, it is considered there is no potential for an intra-project effect to occur and the receptor is not taken forward to the next step.
- 13.4.5 A review has been undertaken to identify the Common Receptors across all phases of the Proposed Development. This has been achieved by undertaking a review of **Chapters 6 to 12** of the ES and they are summarised in **Table 13.3** and **Table 13.4**.

Table 13.3 Common receptors and the significance of identified effects during construction

Receptor	Air Quality	Noise and Vibration	People and Communities	Public Health	Landscape and Visual Impact Assessment	Historic Environment	Biodiversity
Communities, commercial and residential receptors within North-West Quadrant (specifically Longford)	Negligible (Not Significant)	Significant to Not Significant	Minor Adverse (Not Significant)	Not Significant	Moderate adverse to No View (Not Significant)		
Statutory and Non-Statutory Designated Sites	Not Significant						Negligible (Not Significant)
Landscape character					Moderate adverse to No View (Not Significant)		
Archaeological remains						Minor Adverse (Not Significant)	
Longford conservation area						No effect	
Listed buildings						No effect	
Protected Species							Very Low negative to Negligible (Not Significant)

Receptor	Air Quality	Noise and Vibration	People and Communities	Public Health	Landscape and Visual Impact Assessment	Historic Environment	Biodiversity
Users of public rights of way, local walks, roads and open space			Minor Adverse (Not Significant)	Not Significant	Moderate adverse to No View (Not Significant)		

Based on the effects reported within **Chapters 6 to 12**.

Table 13.4 Common receptors and the significance of identified effects during operation

Receptor	Air Quality	Noise and Vibration	People and Communities	Public Health	Landscape and Visual Impact Assessment	Historic Environment	Biodiversity
Communities, commercial and residential receptors within North-West Quadrant (Poyle, Longford, Harmondsworth, North Longford and Sipson)	Slight Adverse to Negligible (Not Significant)	Significant to Not Significant (Beneficial)		Not Significant	Moderate adverse to No View (Not Significant)		
Communities, commercial and residential receptors within North-East Quadrant (Cranford, Harlington and Hounslow)	Negligible (Not Significant)	Significant to Not Significant (Adverse)		Not Significant			
Communities, commercial and residential receptors within South-West Quadrant (Stanwell and Stanwell Moor)	Negligible (Not Significant)	Significant to Not Significant (Adverse)		Not Significant			
Communities, commercial and residential receptors within South-East Quadrant (Hounslow and Feltham)	Negligible (Not Significant)	Significant to Not Significant (beneficial)		Not Significant			

Receptor	Air Quality	Noise and Vibration	People and Communities	Public Health	Landscape and Visual Impact Assessment	Historic Environment	Biodiversity
Statutory and Non-Statutory Designated Sites	Not Significant						Negligible (Not Significant)
Landscape character					Moderate/Minor adverse to No View (Not Significant)		
Archaeological remains						No effect	
Longford conservation area						No effect	
Listed buildings						No effect	
Protected Species							Negligible (Not Significant)
Users of public rights of way, local walks, roads and open space				Not Significant	Not Significant		

Based on the effects reported within **Chapters 6 to 12**.

Step B Determine common receptor's residual effects

- 13.4.6 Step B of the intra-project effects assessment comprises a review of the effects on the identified Common Receptors (outlined in Step A).
- 13.4.7 **Table 13.5** and **Table 13.6** below summarise the effects the assessment outcomes for the environmental aspects on Common Receptors. Where an environmental aspect or particular element relevant to that Common Receptors has been scoped out of the EIA (e.g. dust emissions from construction in the air quality assessment), it is expected that there would be no or negligible effects on a receptor and therefore not taken further in this intra-project effects assessment. In all cases, the effects take into consideration the application of environmental embedded measures where relevant.
- 13.4.8 Some of the aspect assessments inherently consider intra-project effects and is embedded within the assessments. For example, the biodiversity assessment considers the likely combined effects of air quality and noise on the local biodiversity receptors surrounding the Airport and considered in **Chapter 12: Biodiversity**, or the effects from noise and air quality on public health are considered in **Chapter 9: Public Health**. The results of these assessments are summarised within the chapters and therefore not repeated here.
- .

Table 13.5 Intra-related effects during construction phase screening exercise

Receptor	Relevant aspects	Effect and potential for Intra-Project Cumulative Effects
Communities, commercial and residential receptors within North West Quadrant (Poyle, Longford, Harmondsworth, North Longford and Sipson)	Air Quality, Noise and Vibration, People and Communities, Public Health, and Landscape and Visual Impact Assessment	<p>During construction, residents may experience impacts arising from changes to noise emissions, air quality and from changes in views. However, these impacts have been considered within the assessment in relation to amenities and disruption within Chapter 8: People and Communities and on public health within Chapter 9: Public Health.</p> <p>Effects on these Common Receptors has not been progressed for further assessment as the intra-project effects are considered within the assessments presented in Chapter 7: Noise and Vibration, Chapter 8: People and Communities and Chapter 9: Public Health.</p>
Statutory and Non-Statutory Designated Sites	Air Quality and Biodiversity	<p>Dust emissions from construction activities resulting in loss or damage to sensitive flora and the fauna it supports, and thus there is potential for air quality impacts on statutory and non- statutory designated sites.</p> <p>The effects on biodiversity receptors are reported in Chapter 12: Biodiversity and therefore are not taken further for assessment of intra-project effects in this chapter.</p>
Users of public rights of way, local walks, roads and open space	People and Communities, Public Health and Landscape and Visual Impact Assessment	<p>Potential changes to the experience people may have when using resources for recreational and amenity purposes as a result of heavy goods vehicle movements on the PRow between the concrete batching plant and Wright Way during construction of the noise barrier and emissions to air from construction activities.</p> <p>The impacts on users of public rights of way, local walks, roads and open space are considered within the assessments presented in Chapter 8: People and Communities and Chapter 9 Public Health.</p> <p>Effects on these Common Receptors has not been progressed for further assessment as the intra-project effects are considered within the assessments presented in Chapter 8: People and Communities and Chapter 9: Public Health.</p>

Table 13.6 Intra-related effects during operational phase screening exercise

Receptor	Relevant aspects	Effect and potential for Intra-Project Cumulative Effects
Communities, commercial and residential receptors within North-West Quadrant (Poyle, Longford, Harmondsworth, North Longford and Sipson)	Air Quality, Noise and Vibration, People and Communities, Public Health, and Landscape and Visual Impact Assessment	Residents may experience impacts arising from changes to noise and air quality following implementation of full runway alternation during easterlies, and visual impacts from the presence of the noise barrier. However, these impacts have been considered in relation to amenities and disruption within Chapter 8: People and Communities and on public health within Chapter 9: Public Health . Impacts to tranquility experienced by visitors and residents into open space and parks are assessed within Chapter 7: Noise and Vibration . Effects on these Common Receptors has not been progressed for further assessment as the intra-project effects are considered within the assessments presented in Chapter 7: Noise and Vibration , Chapter 8: People and Communities and Chapter 9: Public Health .
Communities, commercial and residential receptors within North-East Quadrant (Harlington and Hounslow)	Air Quality, Noise and Vibration, People and Communities, and Public Health.	Residents may experience effects arising from changes to noise emissions, air quality during easterly operations. However, these impacts on public health are considered within Chapter 9: Public Health . Impacts on tranquility experienced by visitors and residents into open space and parks are assessed within Chapter 7: Noise and Vibration . Effects on these Common Receptors has not been progressed for further assessment as the intra-project effects are considered within the assessments presented in Chapter 7: Noise and Vibration and Chapter 9: Public Health .
Communities, commercial and residential receptors within South-West Quadrant (Stanwell and Stanwell Moor)	Air Quality, Noise and Vibration, People and Communities, and Public Health.	Residents may experience effects arising from changes to noise and air quality following implementation of full runway alternation during easterlies. However, the impacts on public health are considered within Chapter 9: Public Health . Impacts to tranquility experienced by visitors and residents into open space and parks are assessed within Chapter 7: Noise and Vibration . Effects on these Common Receptors has not been progressed for further assessment as the intra-project effects are considered within the assessments presented in Chapter 7: Noise and Vibration and Chapter 9: Public Health .
Communities, commercial and residential receptors within South-East	Air Quality, Noise and Vibration,	Residents may experience effects arising from changes to noise emissions during easterly operations. However, the impacts on public health are considered within Chapter 9: Public Health .

Receptor	Relevant aspects	Effect and potential for Intra-Project Cumulative Effects
Quadrant (Hounslow and Feltham)	People and Communities, and Public Health.	Impacts to tranquility experienced by visitors and residents into open space and parks are assessed within Chapter 7: Noise and Vibration . Effects on these Common Receptors has not been progressed for further assessment as the intra-project effects are considered within the assessments presented in Chapter 7: Noise and Vibration and Chapter 9: Public Health .
Statutory and Non-Statutory Designated Sites	Air Quality and Biodiversity.	Impacts to air quality resulting from the Proposed Development leading to increased nitrogen deposition at ecological receptors and this impacts on statutory and non- statutory biodiversity sites. The effects on biodiversity receptors are assessed in Chapter 12: Biodiversity within the Environmental Statement, and therefore are not taken further for assessment of intra-project effects.
Users of public rights of way, local walks, roads and open space	Noise and Vibration, People and Communities, Public Health and Landscape and Visual Impact Assessment.	Operational noise emissions affecting the use of open spaces and parks and the experience of these for recreational and amenity purposes. Impacts to tranquility experienced by visitors and residents into open space and parks are assessed within Chapter 7: Noise and Vibration . In addition, impacts on users of PRow and open spaces resulting from the easterly operations and due to the presence of the noise barrier, these are considered within the assessments presented in Chapter 8: People and Communities and Chapter 9: Public Health . Effects on these Common Receptors has not been progressed for further assessment as the intra-project effects are considered within the assessments presented in Chapter 7: Noise and Vibration , Chapter 8: People and Communities and Chapter 9: Public Health .

Step C Assessment of intra-project effects

13.4.9 The steps above identified that there is no potential for significant intra-project effects arising from the Proposed Development that have not already been considered within the assessments presented in **Chapters 6 to 12** of the Environmental Statement. Therefore, no further assessment (i.e. within this step) of intra-project effects has been undertaken.

13.5 Inter-project effects

Scope of the assessment

13.5.1 The scope of the inter-project effects assessment considers the following types of development or operational changes and their potential to interact with the Proposed Development:

- Operational changes at the Airport (this includes airspace change and other operational assumptions);
- Other development within the Airport boundary; and
- Other development outside of the Airport boundary.

13.5.2 The approach taken for each of these types of development is explained in the following Sections.

Operational changes at the Airport

Airspace Change

UK's Airspace Modernisation Strategy

13.5.3 Separately from the Proposed Development, Heathrow is sponsoring an Airspace Change Proposal for the long-term modernisation of the airspace design at and around Heathrow Airport ("the Heathrow airspace modernisation ACP")⁶. This is being progressed under the separate regulatory process for approval of changes to the design of UK airspace administered by the Civil Aviation Authority (CAA). The CAA has the statutory function of deciding whether to approve changes to airspace design and has published guidance on this regulatory process in CAP 1616.⁷

13.5.4 The Heathrow airspace modernisation ACP was initiated in July 2021 and forms part of a wider programme to redesign and modernise airspace across the South East of England, called the Future Airspace Strategy Implementation (FASI). FASI is a subset of the wider Airspace Modernisation Strategy which is co-sponsored by the Department for Transport and the CAA. The Airspace Modernisation Strategy sets out a strategic plan for modernising UK airspace with the aim of delivering "*quicker, quieter and cleaner journeys and more*

⁶ Reference ACP-2021-056 – CAA, (2024)., 'Heathrow Airspace Modernisation (FASI South)', Available from <https://www.caa.co.uk/our-work/publications/documents/content/cap1616sup/> [Consulted on 17 July 2024]

⁷ Reference ACP-2021-056 – CAA, (2024)., 'Heathrow Airspace Modernisation (FASI South)', Available from <https://www.caa.co.uk/our-work/publications/documents/content/cap1616sup/> [Consulted on 17 July 2024]

capacity for the benefit of those who use and are affected by UK airspace.” A single coordinated masterplan for the interdependent Airspace Change Proposals is being created by the Airspace Change Organising Group (ACOG)⁸. The masterplan will identify where airspace changes are required to support the delivery of the Airspace Modernisation Strategy.

- 13.5.5 The Heathrow airspace modernisation ACP involves the redesign of the airspace around Heathrow based on a two runway operation, including the introduction of Performance Based Navigation. The Heathrow airspace modernisation ACP may incorporate changes to flight paths and procedures for Heathrow as a whole, including its operation during easterly operations.
- 13.5.6 The Heathrow airspace modernisation ACP is at an early stage of the CAP 1616 process with a multitude of early design options for individual components parts of the airspace system still under consideration. Those airspace design options have not yet have been assembled into system-wide options which will need to undergo further appraisal, environmental assessment and public consultation, and are dependent on what other airports and NATS propose as part of their ACPs. Consequently, the outcome of the Heathrow airspace modernisation ACP and the wider FASI modernisation will not be known during the consideration of the planning application for the Proposed Development. As the proposals for the Heathrow airspace modernisation ACP develop, they will be subject to their own process of consultation and environmental assessment as detailed in CAP 1616.
- 13.5.7 Therefore, whilst long term future airspace may change, recognising the significant uncertainties about what the future airspace design might be, the Environmental Impact Assessment is based on the existing airspace design which is already established for the purposes of easterly operations. The current airspace design provides a good representation of airspace for the purposes of assessing the effects of easterly alternation.
- 13.5.8 Heathrow will follow the necessary regulatory process to demonstrate the impact of increased use of Runway 09L (northern runway) for departures and Runway 09R (southern runway) for arrivals during easterly alternation within the current notified airspace. In other words, the existing flight paths would not change as a result of easterly alternation, and therefore provide a reliable basis for the environmental assessment which accompanies this planning application.

Airspace Change associated with full Easterly Operations

- 13.5.9 Heathrow Airport has in the past, including during the COVID-19 pandemic period when reduced operations occurred, used the northern runway for both arrivals and departures during both westerly and easterly operations. This allowed the southern runway to be closed completely so that it could be resurfaced. This meant that departures occurred in an easterly direction from the northern runway and demonstrates that the existing airspace is fully capable of supporting easterly operations.
- 13.5.10 Whilst the published flight paths already exist, the increased use of this runway configuration will result in a change to the distribution of aircraft over the ground compared

⁸ ACOG, (n.d.), ‘Airspace Masterplan’ Available at: <https://www.acog.aero/airspace-masterplan/masterplan/> (Accessed: 02 October 2024)

with existing operations (through increased easterly departures from 09L on the northern runway and easterly arrivals to 09R on the southern runway) and has potential to require modifications. As an example, the Applicant has identified that the 09R (southern runway) missed approach procedure⁹ may require adapting. Therefore, if an airspace change is required this will be managed through the CAA CAP processes. As with all such processes, any ACP will take some time and will follow its own separate process¹⁰.

13.5.11 Any airspace change necessarily follows a land use planning decision (rather than the other way around) and its outcome, therefore, cannot be known or used at this stage to inform the environmental assessment. This assessment, therefore, assumes the continued use of the existing airspace to provide the best assessment of the likely significant effects of easterly alternation. Any changes to the published airspace arrangements necessitated by easterly alternation would be determined and assessed through the CAA’s Airspace Change process.

Operational Airport Assumptions

13.5.12 As set out in **Chapter 5: Approach to the EIA**, there are a number of key Airport operational assumptions. This Section considers potential changes to the operational airport assumptions and summarised in **Table 13.7**.

Table 13.7 Operational Airport Assumptions used for the purposes of the EIA

Detail of Operational Airport Assumptions	
Westerly preference	<p>The EIA assumes that westerly preference will continue to form part of standard operating procedures.</p> <p>When winds are light (below 5 knots) the rules set by UK Government determine the direction of operations. This is called a "directional preference". At Heathrow, when winds are light a ‘westerly preference’ is operated. This means that even during periods of light easterly winds aircraft will continue to land in a westerly direction, making their final approach over London.</p> <p>This was introduced in the 1960s to reduce the number of aircraft taking off in an easterly direction over west London, the most heavily populated area surrounding the Airport. No changes to the westerly preference are anticipated and therefore they are not considered further in this assessment.</p>
Airport - Collaborative Decision Making (CDM)	<p>This proposal has already been implemented at Heathrow Airport since 2013. It allows better collaboration between all airport stakeholders and has resulted in no changes to routing i.e. aircraft flying, aircraft taxing or ATM and PAX numbers. Therefore, it forms part of the baseline and is not considered further in this assessment.</p>

⁹ A missed approach is a procedure followed by a pilot when the approach cannot be completed to a full-stop landing. For example, a sudden gust of wind affecting the speed of the aircraft or another aircraft has been unable to vacate the runway in a timely manner. On average there are 2 missed approaches per day at Heathrow.

¹⁰ Any ACP for Easterly Alternation is not as complex as the ACP for Airspace Modernisation as the flight paths already exist and there are not expected to be any dependencies with neighbouring Airports.

Detail of Operational Airport Assumptions	
Landing out of Alternation	Any changes to Landing out of Alternation, or Tactically Enhanced Arrivals Mode (TEAM), would require the necessary UK Government approvals prior to implementation. Therefore, the current procedures form part of the baseline and have been modelled for future operations.
Segregated mode	The EIA assumes that the Airport operates in 'segregated mode' where one runway is designated for arrivals and the other designated for departures

13.5.13 For the reasons set out above, no further assessment is required of other operational effects as no changes are proposed in Heathrow's current airport operations.

Other development within the Airport boundary

Scope

13.5.14 In order to continue to operate, works within the Heathrow airfield are often required, for example for maintenance purposes. Consideration has therefore been paid to the potential for cumulative effects of planned works with the Proposed Development.

Methodology

13.5.15 A search of planning applications that have been made within the Study Area was undertaken. Consideration was given to those 'notable' applications which have the potential to interact with the Proposed Development in terms of temporal or spatial overlap. This also included consideration of formal permitted development consultation undertaken with LBH and an EIA Screening was submitted (as recorded on the planning portal).

13.5.16 Smaller applications such as applications relating to recladding, installation of partitions and security doors, installation of lighting etc, or covid related have not been considered.

Assessment

13.5.17 Consideration has been given for the potential to interact with other ongoing development within the Airport boundary.

13.5.18 **Appendix 4.1** provides a summary of notable development at the Airport (since 2001). **Table 13.8** below provides an extract from that appendix and provides a summary of those notable planning applications in the last 5 years and has been expanded to include notable permitted development ongoing at the Airport.

Table 13.8 Summary of notable planning applications at Heathrow Airport

Application reference and location	Development as described on the London Borough of Hillingdon's planning portal	Status and date
<p>78614/APP/2024/1834 and 78614/APP/2024/499, Croydon Road, Heathrow Airport</p>	<p>Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) for the construction of a new baggage system in Terminal 2 and associated enabling works.</p> <p>and</p> <p>Request for a Screening Opinion under The Town and Country Planning (Environmental Impact Assessment Regulations) for the construction of a new baggage system and link bridge in Terminal 2 and associated enabling works.</p>	<p>No objection, August 2024.</p>
<p>60891/APP/2024/343 and 60891/APP/2023/1780 Eastern Business Park</p>	<p>Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) to redevelop the Eastern Business Park to provide new industrial and logistics facilities.</p> <p>and</p> <p>Request for Screening Opinion under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 for redevelopment of the Eastern Business Park and redevelopment for new industrial and logistics facilities.</p>	<p>No objection, April 2024.</p>
<p>62360/APP/2024/265 Starlight Point Heathrow Airport</p>	<p>A Prior Notification Application submitted under Schedule 2, Part 11, Class B of the Town and Country Planning (General Permitted Development) (England) Order (2015) (as amended) for the demolition of 2no. buildings. Approved</p>	<p>Approved, March 2024</p>

Application reference and location	Development as described on the London Borough of Hillingdon's planning portal	Status and date
<p><u>62906/APP/2023/1679</u>, West operations base, Heathrow Airport.</p>	<p>Relocation of an existing Fuel Depot and associated works at the BA West Operations Base at London Heathrow Airport.</p>	<p>Approved, August 2023</p>
<p><u>54182/APP/2023/3638</u>, Aircraft stands, Eastern Perimeter Road, Heathrow Airport.</p>	<p>Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) to install PCA units at aircraft stands at London Heathrow Airport.</p>	<p>No objection, 19 December 2023</p>
<p>78087/APP/2023/1650 – Installation of two catering units and a prayer room at Authorised Vehicles Area (mini-cab and taxi car parking facility)</p>	<p>Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) in respect of the installation of two catering units and a prayer room at London Heathrow Airport. Installation of two catering units and a prayer room at Authorised Vehicles Area (mini-cab and taxi car parking facility).</p>	<p>June 2023</p>
<p>77230/APP/2023/798 – Control Post 10A redevelopment (to build the new next generation scanning facility)</p>	<p>Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) in respect of proposed alterations to the security arrangements at Control Point 10A at London Heathrow Airport.</p>	<p>March 2023</p>
<p>77952/APP/2023/1004 – Control Post 12 redevelopment (to build the new next generation scanning facility)</p>	<p>Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) in respect of proposed alterations to the security arrangements at Control Point 12 at London Heathrow Airport.</p>	<p>April 2023</p>
<p>67148/APP/2023/953 – Control Post 18 redevelopment (to build the new next generation scanning facility)</p>	<p>Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) in respect of proposed alterations to the security</p>	<p>April 2023</p>

Application reference and location	Development as described on the London Borough of Hillingdon's planning portal	Status and date
	arrangements at Control Post 18 at London Heathrow Airport.	
77944/APP/2023/952 – Control Post 19 redevelopment (to build the new next generation scanning facility)	Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) in respect of proposed alterations to the security arrangements at Control Post 19 at London Heathrow Airport.	March 2023
77978/APP/2023/1134 – Control Post 20 redevelopment (to build the new next generation scanning facility)	Decommissioning of the existing Control Post 20 and alterations to the security arrangements to create a new Control Post 20 at London Heathrow Airport, under Class F of Part 8 of Schedule 2 of the General Permitted Development Order.	April 2023
77230/APP/2022/2166 – Control Post 24A redevelopment (to build the new next generation scanning facility)	Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) in respect of Control Point 24A at London Heathrow Airport.	June 2022
77928/APP/2023/872 – Control Post 25 redevelopment (to build the new next generation scanning facility)	Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) in respect of proposed alterations to the security arrangements at Control Post 25 at London Heathrow Airport.	March 2023
77976/APP/2023/1122 – Control Post Central redevelopment (to build the new next generation scanning facility)	Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) in respect of proposed demolition of some of the disused Terminal 1 infrastructure and alterations to the security arrangements to create a Control Post Central at London Heathrow Airport.	April 2023

Application reference and location	Development as described on the London Borough of Hillingdon’s planning portal	Status and date
51743/APP/2022/1969 , Building 1071 Southampton Road, Heathrow Airport.	A Prior Notification Application submitted under Schedule 2, Part 11, Class B of the Town and Country Planning (General Permitted Development) (England) Order (2015) (as amended) for the full demolition of the main building and the associated structures within 1071 Southampton Road East.	Approved, June 2022

13.5.19 **Table 13.9** provides a screening of the development within the Airport boundary and the potential to interact spatially or temporally with the Proposed Development to create a greater effect and determine what requires further assessment.

Table 13.9 Screening of Other Notable Heathrow Development

Reference	Spatial or temporal overlap with the Proposed Development	Progress to Stage 3
78614/APP/2024/1834 and 78614/APP/2024/499 , Croydon Road, Heathrow Airport	<p>No EIA required as no significant effects anticipated (confirmed by LBG through EIA Screening).</p> <p>Then progressed under Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) for the construction of a new baggage system in Terminal 2 and associated enabling works undertaken – no objection from LBH.</p> <p>There is a potential temporal overlap as works would take up to 4 years to complete, however as noted in the officer’s report, “...it will be constructed within the operation boundary of the airport on operational land; the development is for the provision of facilities at a relevant airport; and the development is to be carried out by HAL, which is the relevant airport operator.”</p> <p>The other airfield areas surrounding the site would remain unchanged following the Proposed Development and continue operating normally.</p> <p>The works would be programmed to avoid conflicting with the Proposed Development.</p> <p>As with the Proposed Development, the site is within an active airfield, and there are no routes on or around the site that the public uses for access to recreation or other facilities that could be</p>	No

Reference	Spatial or temporal overlap with the Proposed Development	Progress to Stage 3
	<p>adversely affected by its construction or operation. In addition, due to the airfield's operational constraints, the demolition and construction programme is expected to last for over four years. This means that any traffic associated with the Proposed Development would be highly infrequent and would not significantly increase the number of heavy goods vehicles (HGVs) or other internal combustion engine vehicles on-site at any one time and will be managed in accordance with its CEMP. Due to the location of both this development and Proposed Development, in combination with the implementation of best practice measures during construction (as set out both developments CEMP), it is considered unlikely that effects from noise and emissions to air from the Proposed Development would combine to create a greater effect on receptors outside of the Airport if both were constructed at the same time.</p>	
<p>60891/APP/2024/343 and 60891/APP/2023/1780 Eastern Business Park</p>	<p>No EIA required as no significant effects anticipated (confirmed through EIA Screening).</p> <p>Then progressed under Consultation under Class F of Part 8 of Schedule 2 of the General Permitted Development Order 2015 (Class F of the GPDO 2015) to redevelop the Eastern Business Park to provide new industrial and logistics facilities – no objection from LBH.</p> <p>The development would comprise the demolition of the existing buildings on the site and the redevelopment to provide a logistics park comprising four larger commercial buildings). Three of the buildings would have a gross external area of circa 1,500sqm each, whilst a fourth building would be slightly larger with a gross external area of 1,725sqm. The total gross internal area of the buildings (which includes mezzanines) would be circa 8,800sqm. Whilst there is a potential temporal overlap, this development site is accessed from the Enfield Road Roundabout to the west of the site, with egress to the Eastern Perimeter Road to the east. This is a different construction access route to the Proposed Development and therefore construction traffic is unlikely to overlap. Due to the location of both this development and Proposed Development, in combination with the implementation of best practice measures during construction (as set out both developments CEMP), it is considered unlikely that effects from noise and emissions to air from the Proposed Development would combine to create a greater effect on receptors outside of the Airport if both were being implemented at the same time.</p>	<p>No</p>
<p>62360/APP/2024/265 Starlight Point Heathrow Airport</p>	<p>Demolition of 2 buildings at Starlight Point, Heathrow Airport. It is anticipated the building dismantling (phase 3) will commence in the first quarter of 2024 and be completed by July 2024. No temporal overlap with the Proposed Development anticipated.</p>	<p>No</p>

Reference	Spatial or temporal overlap with the Proposed Development	Progress to Stage 3
<p><u>62906/APP/2023/1679</u> West operations base, Heathrow Airport.</p>	<p>The application proposal is by British Airways (BA) seeking consent to decommission an existing fuel depot facility and create a replacement depot nearby, at their West Operations Base at Heathrow Airport. The relocated fuel depot will be able to accommodate two tankers at any one time. The depot itself will be 3 metres by 5 metres in size. A gantry with access and lighting are all proposed to enable maintenance and operation outside of daylight hours. Application noted works would be approximately 6 months.</p> <p>Decided August 2023. No temporal overlap with the Proposed Development anticipated.</p>	No
<p><u>54182/APP/2023/3638</u> Aircraft stands, Eastern Perimeter Road, Heathrow Airport.</p>	<p>No EIA required as no significant effects anticipated.</p> <p>The proposal is to install Pre-Conditioned Air (PCA) units at aircraft stands. The PCA units would provide conditioned air into the aircraft when it is parked at a stand (e.g. during disembarking and boarding) so that the aircraft's Auxiliary Power Unit (APU) does not need to be in use to provide conditioned air. The PCA installation would ultimately result in environmental benefits by reducing the APU usage whilst the aircraft is on the ground which would lead to an overall decrease in emissions.</p> <p>The proposals are targeted to upgrading essential facilities. Given the location and characteristics of the proposals, it is considered unlikely that effects from Proposed Development would combine to create a greater effect on receptors outside of the Airport if both were being implemented at the same time.</p>	No
<p><u>51743/APP/2022/1969</u> Building 1071 Southampton Road, Heathrow Airport.</p>	<p>Demolition of 1071 Southampton Road East, Hounslow, TW6 3AQ. 18 weeks duration. Approved August 2022 and expected to be complete.</p> <p>No temporal overlap with the Proposed Development anticipated.</p>	No
<p>78087/APP/2023/1650 – Installation of two catering units and a prayer room at Authorised Vehicles Area (mini-cab and taxi car parking facility)</p>	<p>Permitted development consultation relates to two related catering units and a prayer room in an authorised vehicle area (AVA), which provides parking space for private hire vehicles (PHVs) waiting to collect passengers from the airport.</p> <p>The site is located within the operational area of the airport, being situated between Northern Perimeter Road West to its south, Nene Road to its east, Newport Road to its west, and the East Ramp and West Ramp to its north.</p> <p>The proposed development is intended to provide a comprehensive range of essential facilities for waiting drivers, thereby further encouraging usage of the AVA car park instead of residential areas surrounding the Airport.</p>	No

Reference	Spatial or temporal overlap with the Proposed Development	Progress to Stage 3
	<p>Due to the limited nature of the works, and location, it is considered unlikely that effects from Proposed Development would combine to create a greater effect on receptors outside of the Airport if both were being implemented at the same time. If operational whilst the Proposed Development is under construction, this should not interfere with the development's operation.</p>	
<p>77230/APP/2023/798 – Control Post 10A redevelopment (to build the new next generation scanning facility)</p>	<p>Permitted development consultation to a security transformation programme, which includes the upgrading of the equipment used to scan vehicles, baggage and items coming airside. Relevant airport operators have permitted development rights to provide facilities or services on operational and at a relevant airport. The Control Post 10A is located within the operation area of the airport near the southern perimeter, on Southampton Road. It provides an airport campus security checkpoint that predominantly serves for the scanning of vehicles entering the airport.</p> <p>The proposed development will include various alterations to the existing Control Post arrangement to accommodate additional equipment and machinery needed as well as enhanced vehicle search lanes.</p> <p>Given the location and characteristics of the proposal to upgrade the existing Control Post, it is considered unlikely that effects from Proposed Development would combine to create a greater effect on receptors outside of the Airport if both were being implemented at the same time.</p>	No
<p>77952/APP/2023/1004 – Control Post 12 redevelopment (to build the new next generation scanning facility)</p>	<p>Permitted development consultation to a security transformation programme, which includes the upgrading of the equipment used to scan vehicles, baggage and items coming airside. Relevant airport operators have permitted development rights to provide facilities or services on operational and at a relevant airport. Control Post 12 is located within the operation area of the airport near the eastern perimeter, on Eastchurch Road. It provides an airport campus security checkpoint that predominantly serves for the scanning of vehicles entering the airport.</p> <p>The proposed development will include various alterations to the existing Control Post arrangement to accommodate additional equipment and machinery needed as well as enhanced vehicle search lanes.</p> <p>Given the location and characteristics of the proposal to upgrade the existing Control Post, it is considered unlikely that effects from Proposed Development would combine to create a greater effect on receptors outside of the Airport if both were being implemented at the same time.</p>	No
<p>67148/APP/2023/953 – Control Post 18</p>	<p>Permitted development consultation to a security transformation programme, which includes the upgrading of the equipment used</p>	No

Reference	Spatial or temporal overlap with the Proposed Development	Progress to Stage 3
<p>redevelopment (to build the new next generation scanning facility)</p>	<p>to scan vehicles, baggage and items coming airside. Relevant airport operators have permitted development rights to provide facilities or services on operational and at a relevant airport. The Control Post 18 is located within the operation area of the airport near the western perimeter, off Wallis Road. It provides an airport campus security checkpoint that predominantly serves for the scanning of vehicles entering the airport. The proposed development will include various alterations to the existing Control Post arrangement to accommodate additional equipment and machinery needed as well as enhanced vehicle search lanes.</p> <p>Given the location and characteristics of the proposal to upgrade the existing Control Post, it is considered unlikely that effects from Proposed Development would combine to create a greater effect on receptors outside of the Airport if both were being implemented at the same time.</p>	
<p>77944/APP/2023/952 – Control Post 19 redevelopment (to build the new next generation scanning facility)</p>	<p>Permitted development consultation to a security transformation programme, which includes the upgrading of the equipment used to scan vehicles, baggage and items coming airside. Relevant airport operators have permitted development rights to provide facilities or services on operational and at a relevant airport. The Control Post 19 is located within the operation area of the airport near the western perimeter, on Woodcock Close. It provides an airport campus security checkpoint that predominantly serves for the scanning of vehicles entering the airport. The proposed development will include various alterations to the existing Control Post arrangement to accommodate additional equipment and machinery needed as well as enhanced vehicle search lanes.</p> <p>This is in the process of being delivered and is expected to be complete in advance of the Proposed Development. Therefore, there is no temporal overlap with the Proposed Development.</p>	No
<p>77978/APP/2023/1134 – Control Post 20 redevelopment (to build the new next generation scanning facility)</p>	<p>Permitted development consultation to a security transformation programme, which includes the upgrading of the equipment used to scan vehicles, baggage and items coming airside. Relevant airport operators have permitted development rights to provide facilities or services on operational and at a relevant airport. The proposed Control Post 20 will be located within the operation area of the airport near the Southern Perimeter Road. It will provide an airport campus security checkpoint that predominantly serves for the scanning of vehicles entering the airport. The existing Control Post 20, which is located directly to the south of the Control Post 19 at Woodcock Close near the Western Perimeter Road, will be decommissioned.</p>	No

Reference	Spatial or temporal overlap with the Proposed Development	Progress to Stage 3
	<p>There is the potential for temporal overlap with the Proposed Development, however, there are no overlaps of site boundaries. Impacts would primarily relate to increased traffic, noise and air quality. Due to the nature of the works proposed, in combination with the implementation of best practice measures during construction (as set out both developments CEMP), it is considered unlikely that effects from noise and emissions to air from the Proposed Development would to combine to create a greater effect on receptors outside of the Airport if both were constructed at the same time.</p> <p>As with the Proposed Development, the site is within an active airfield, there are no routes on or around the site that the public uses for access to recreation or other facilities that could be adversely affected by its construction or operation. Traffic associated with this development would not significantly increase the number of heavy goods vehicles (HGVs) and will be managed in accordance with a CEMP.</p>	
<p>77230/APP/2022/2166 – Control Post 24A redevelopment (to build the new next generation scanning facility)</p>	<p>Permitted development consultation to a security transformation programme, which includes the upgrading of the equipment used to scan vehicles, baggage and items coming airside. Relevant airport operators have permitted development rights to provide facilities or services on operational and at a relevant airport. The site is located within the operational area of the airport, towards the centre of the Southern Perimeter Road, adjacent to the roundabout connecting with Beacon Road. The site is accessed from this roundabout and provides an airport campus security checkpoint that predominantly serves for the scanning of vehicles entering the site, known as CP24A (Control Point 24 alpha). CP24A has seven lanes, with the consultation relating specifically to 'Lane 6' and 'Lane 7', which are the north-eastern-most lanes at the site, being directly adjacent to the curtilage of the airport campus and Tunnel Link Road.</p> <p>This is in the process of being delivered and is expected to be complete in advance of the Proposed Development. Therefore, there is no temporal overlap with the Proposed Development</p>	<p>No</p>
<p>77928/APP/2023/872 – Control Post 25 redevelopment (to build the new next generation scanning facility)</p>	<p>Permitted development consultation to a security transformation programme, which includes the upgrading of the equipment used to scan vehicles, baggage and items coming airside. Relevant airport operators have permitted development rights to provide facilities or services on operational and at a relevant airport. The Control Post 25 is located within the operation area of the airport near the southern perimeter, off Southampton Road East. It provides an airport campus security checkpoint that predominantly serves for the scanning of vehicles entering the airport. The development includes various alterations to the</p>	<p>No</p>

Reference	Spatial or temporal overlap with the Proposed Development	Progress to Stage 3
	<p>existing Control Post arrangement to accommodate additional equipment and machinery needed as well as enhanced vehicle search lanes.</p> <p>Given the location and characteristics of the proposals, it is considered unlikely that effects from Proposed Development would combine to create a greater effect on receptors outside of the Airport if both were being implemented at the same time.</p>	
<p>77976/APP/2023/1122 – Control Post Central redevelopment (to build the new next generation scanning facility)</p>	<p>Permitted development consultation to a security transformation programme, which includes the upgrading of the equipment used to scan vehicles, baggage and items coming airside. Relevant airport operators have permitted development rights to provide facilities or services on operational and at a relevant airport. The proposed Control Post Central will be located within the operation area of the airport in the Central Terminal Area, accessed from Cromer Road.</p> <p>In order to clear the site area needed for the proposed Control Post Central, some of the disused Terminal 1 infrastructure will be demolished including the Pier 4A, Aer Lingus Lounge, D’Albiac House Bays and the Building 1253.</p> <p>There is considered to be no spatial overlap of site boundaries with the Proposed Development; the works may be implemented at the same time.</p> <p>However, as the works proposed to be within the central area of the airport reducing traffic movements on the same perimeter roads if undertaken at the same time.</p> <p>Due to the location of both this development and Proposed Development, in combination with the implementation of best practice measures during construction (as set out both developments CEMP), it is considered unlikely that effects from noise and emissions to air from the Proposed Development would to combine to create a greater effect on receptors outside of the Airport if both were constructed at the same time. The Proposed Development should not interfere with the development’s operation.</p>	<p>No</p>

13.5.20 As set out in **Table 13.9**, no development within the Airport boundary was considered to require further assessment.

Other development outside of the Airport boundary

Study Area

13.5.21 For the purposes of the inter-project effects assessment, the Study Area for the assessment has been determined following consideration of the likely effects that could reasonably arise (the Zol) for each aspect (see further detail in methodology section below). These Zol's are summarised in **Table 13.10**.

Table 13.10 Zone of Influence for environmental topics

Aspect	Zone of Influence
Air Quality	<p>Construction: within 50m of the public highway along routes used by construction vehicles that are within 200m of the construction site access as illustrated in Figure 6.1.6 (Appendix 6.3: Air Quality Figures).</p> <p>Operation: based on areas where a change in annual mean NO₂ concentrations were identified, as illustrated in Figure 6.17 (Appendix 6.3: Air Quality Figures).</p>
Noise and Vibration	<p>Construction: Approximately 1 km from the airfield, however, in practice, the worst-affected receptors will be those which are closest to the construction activities.</p> <p>Operation: Air noise affected areas as illustrated in Figure 7.5.4 (Volume IV of the ES).</p>
People and Communities	<p>Construction: the Zol has been defined as follows:</p> <ul style="list-style-type: none"> • Those areas that will be directly affected by the enabling works; and • areas affected by visual amenity and noise and air quality. <p>Operation:</p> <ul style="list-style-type: none"> • Those areas affected by air noise and air quality effects.
Public Health	<p>Construction: the Zol has been defined as follows:</p> <ul style="list-style-type: none"> • Those areas that will be directly affected by the enabling works; and • areas affected by visual amenity and noise and air quality. <p>Operation:</p> <ul style="list-style-type: none"> • Those areas affected by air noise and air quality effects.
Landscape and Visual Impact Assessment	<p>Construction and Operation: extends to a radius of 2km surrounding the noise barrier component of the Proposed Development.</p>
Historic Environment	<p>Construction and Operation: 500m from the Proposed Development site has been adopted to consider likely effects arising from the construction of the infrastructure, either from direct disturbance or from a change in setting.</p>
Biodiversity	<p>Construction: the Zol has been defined as follows:</p> <ul style="list-style-type: none"> • Those areas that will be directly affected by the enabling works; and • The land surrounding the Proposed Development to a radius of 2km so that biodiversity receptors that could be affected by construction activities can be considered (this being a precautionary distance for which it is considered that such activities could result in changes to the baseline biodiversity environment). <p>Operation: the Zol has been defined as follows:</p> <ul style="list-style-type: none"> • For protected species and habitats not associated with European Sites, a Zol of 2km (from the Survey area shown in Figure 12.1), as used for the construction phase has been applied.

Methodology

13.5.22 Inter-project effects are the combined effects of the Proposed Development on a common receptor together with other developments. The assessment of inter-project effects broadly follows the Planning Inspectorate's Cumulative Effects Assessment Advice Note⁵ which follows a systematic approach to undertaking a cumulative effects assessment. The assessment of inter-project effects is split into four distinct phases. These are:

- Stage 1: Establish the Zone of Influence (Zol) of the scheme and identify long list of 'other developments';
- Stage 2: Identify short list of 'other developments';
- Stage 3: Information gathering; and
- Stage 4: Assessment.

13.5.23 Further detail is provided in the following sections as part of the assessment.

Assessment

Stage 1 – Establish the Zone of Influence (Zol) of the scheme and identify long list of 'other developments'

13.5.24 The first step in identifying the long list of other developments which have the potential to interact with the Proposed Development was to establish the Zol (as set out above for the Study Area and **Table 13.10**). Once the Zol has been established, an initial long list of other development's was prepared which included a search of developments:

- Under construction;
- Permitted application(s), but not yet implemented;
- Submitted application(s) not yet determined;
- Developments where EIA Screening and/or Scoping has been undertaken but a full planning application has not yet been submitted;
- On the National Infrastructure Planning Programme of Projects; and
- Identified in the local plan/development plans.

13.5.25 There are a number of development types that were identified, which, due to their nature and scale, are not considered to have the potential to result in cumulative effects and were therefore screened out of the assessment. Those included in the long list:

- Comprise more than 10,000m² and/or 10 or more residential units and/or are of a particularly sensitive nature (such as new schools, care homes or hospitals); and
- Developments that have planning permission or a 'resolution to grant' planning permission, within the previous five years from the date of the submission of Easterly Alternation Infrastructure Project's Scoping Report (01 November 2023), or sites

that have been allocated in the Hillingdon Local Plan 2012-2026¹¹, along with the local plans of LPAs which lie within Zol of the Proposed Development.

13.5.26 A long list of committed developments register is provided in **Appendix 13.1: Long list of Committed Developments** and locations shown on **Figure 13.1 (Appendix 13.3)**.

Stage 2 – Identifying the “short list” of committed developments

13.5.27 Professional judgement, using the assessment of effects reported in **Chapters 6 to 12** of the ES, was then used to identify those developments from the long list which should be scoped into the assessment owing to their potential to give rise to significant cumulative effects with the Proposed Development. This exercise produced a ‘shortlist’ (**Appendix 13.2: Shortlist of Committed Developments**) of developments which have been scoped into the assessment.

13.5.28 Where developments were not taken forward to the short list, a justification for this has been provided within the long list. Reasons for exclusion include:

- The size of the development and its distance from the Proposed Development;
- The likely environmental effects of the development including the spatial overlap of potential effects with the Proposed Development;
- Amount of information available to undertake an assessment; and
- If the development has been considered to be part of the baseline of the Environmental Statement, i.e. it is currently being built and will be operational before the Proposed Development becomes operational.

13.5.29 Those developments which have been progressed to Stage 3 are set out in **Table 13.11**.

Table 13.11 Short list of other developments

ID	Reference	Description	Reason for inclusion and progressed to Stages 3 and 4
68	P/2020/3898 or 00315/B/P67	Hybrid planning application for the demolition of all existing buildings and the redevelopment of the site to provide a first-team training and academy facility for Queen's Park Rangers Football Club including a full application for a club building, maintenance building, football pitches, artificial football pitch, access roads, parking, service areas, flood-lighting, boundary treatments, hard and soft landscaping and engineering works to playing surfaces, and an outline planning application for a full-sized indoor hall.	Within an area where effects were reported for air noise.

¹¹ London Borough of Hillingdon, (2012). *Local Plan 2012 – 2026*. [Online] Available at: <https://www.hillingdon.gov.uk/local-plan-and-review> [Accessed 25 September 2024].

ID	Reference	Description	Reason for inclusion and progressed to Stages 3 and 4
73 and 74	PAC/2021/2802 or 00083/F/PA1 (updated by P/2023/1053 or 00083/F/PA3)	Change of use from offices to residential to provide 169 dwellings with associated landscaping, car parking, cycle parking and bin storage.	Within an area where effects were reported for air noise.
77	P/2021/1258 or 00793/L/P3	Clearance of all existing structures on site and construction of two residential blocks (11 and 14 storeys in height) to provide 176 residential units, associated car and cycle parking, access layout and hard and soft landscaping.	Within an area where effects were reported for air noise.
78	P/2020/0469 or 00439/E/P8	Redevelopment of site to provide 43 apartments 100% affordable dwellings (LAR) with associated access, hardstanding, landscaping and parking.	Within an area where effects were reported for air noise.
79	P/2019/2688 or 00439/61/P2	Comprehensive redevelopment of site to provide 71 apartments with associated access, parking, cycle parking, refuse storage, hardstanding and landscaping.	Within an area where effects were reported for air noise.
80	P/2020/1508 or 00483/A/P4	Demolition of existing garages and the erection of five blocks ranging between three and nine storeys (Block A - part four, five, eight and nine storeys, Block B - part four, eight and nine storeys, Block C - four storeys, Block D - three storeys and Block E & F - three storeys) to provide 102 new homes (Class C3); associated access and other works including new pedestrian footpaths, provision of car and cycle parking, refuse storage and landscaping including amenity space and play area.	Within an area where effects were reported for air noise.
81	P/2020/1190 or 00631/M/P3	Erection of 51 self contained residential units within two blocks of up to 3 storeys, and part 4-storeys in height with associated car parking and amenity space (Amended description).	Within an area where effects were reported for air noise.
82	P/2019/3801 or 00115/E/S1	Erection of fourth floor to five existing three-storey residential blocks to accommodate 19 new apartments; demolition of existing garages and addition of hardstand car parking; associated cycle and waste storage; hard and soft	Within an area where effects were reported for air noise.

ID	Reference	Description	Reason for inclusion and progressed to Stages 3 and 4
		landscaping, boundary treatment and reconfiguration of pedestrian and vehicle access.	
83	P/2019/3977 or 00174/B/P1	Demolition of existing buildings and the erection of three blocks of part two, part three and four storeys to provide 61 x Class C3 units; associated access and other works including amenity space, landscaping, car and cycle parking and refuse storage.	Within an area where effects were reported for air noise.
85	P/2021/1758 or 00987/OPP5/P1	Demolition of the existing garages and erection of a part two- part three-storey building comprising three flats and five houses including associated cycle storage, landscaping, refuse and recycling storage.	Within an area where effects were reported for air noise.
86	P/2019/3912 or 01660/B/P9	Demolition of existing buildings and construction of a new warehouse (B1(c)/B2/B8 uses) with ancillary offices, car parking, cycle parking, drainage, landscaping, plant and associated ancillary works including access alterations.	Within an area where effects were reported for air noise.
88	P/2018/2426 or 00609/21/P9 or APP/F5540/W/19/3227226	Construction of 6 storey building with a setback 7th floor to provide 121 co-living units, co working space, bike workshop and retail, and associated and ancillary facilities, plant, refuse, cycle storage and landscaping.	Within an area where effects were reported for air noise.
90	P/2019/4367 or 00553/E/P5	Refurbishment and conversion of main Magistrates Court building to residential use, demolition of all ancillary buildings to the rear and the erection of a three storey building fronting Hanworth Road and a two storey building fronting Cromwell Road to provide a total of 28 residential units together with associated car and cycle parking, landscaping, a new vehicular and pedestrian access from Cromwell Road and the formation of loading bay and alterations to the footway on Hanworth Road.	Within an area where effects were reported for air noise.
102	P/2017/4600 or 00631/86-88/P1	Demolition of existing garage and erection of replacement structure comprising a relocated hotel access, creation of a basement extension to rear comprising thirty hotel rooms served by two lightwells and one stairwell with hard and soft landscaping measures and provision of car and cycle parking spaces.	Within an area where effects were reported for air noise.

ID	Reference	Description	Reason for inclusion and progressed to Stages 3 and 4
152	22/01354/OUT	Outline application for access only to be considered at this stage with all other matters to be reserved for the construction of up to x320 new homes, land for a Special Educational Needs (SEN) school, a multi-functional community building alongside an area of strategic open space including play spaces and orchard planting together with associated landscaping, car parking, footpath/cycle connections and vehicular access on to Dedworth Road, following demolition of existing structures.	Within an area where effects were reported for air noise.
153	23/01090/FULL	Redevelopment of the site including the demolition of existing buildings, erection of x 413 dwellings (Use Class C3), community space (Use Class F2), cycle hub (Use Class F2), formation of new access from Smiths Lane, comprehensive hard and soft landscaping, car parking; drainage and flooding mitigation works, and associated infrastructure.	Within an area where effects were reported for air noise.
154	171562VAR Extant permission New application 234110OUT	Outline planning permission for the demolition of existing buildings and structures on the site, comprehensive phased redevelopment to provide new buildings to accommodate new homes (Use Class C3), flexible commercial uses (Use Classes E and F1 and Sui Generis drinking establishment), education uses (Use Class F1(a), new sports hall (Class E), basement, energy centre, associated cycle and vehicle parking, landscaping, public realm open space and children's play space and site preparation works.	Within an area where effects were reported for air noise

Stage 3 – Information Gathering

13.5.30 This stage involved collating and reviewing the available information relating to the 'other developments' on the short list in order to inform the Stage 4 assessment. This included location, design information, programme for construction, operation and decommissioning (if relevant) and likely environmental effects and was based on readily available information available from the planning portal.

Stage 4 – Assessment of potential cumulative effects and mitigation required to reduce the significance of effect.

- 13.5.31 The assessment of the inter-project cumulative effects was based upon the residual effects identified in the technical assessments of the Environmental Statement as well as available information for the committed developments on the short list.
- 13.5.32 The determination of significance for the purposes of this assessment is made on a receptor basis. The duration of effect (temporary or permanent);
- The extent of effect, (the geographical area and aspect of an effect);
 - The type of effect, (synergistic, antagonistic or additive);
 - The frequency of the effect;
 - The resilience of the receptor affected; and
 - The likely impact/success of mitigation proposed.
- 13.5.33 In determining the significance of a cumulative effect each aspect makes reference to topic specific standards and guidance as outlined in each of the technical chapters (**Chapters 6 to 12**). Professional judgement has then been applied in determining whether the combination of effects from two developments could result in a significant effect overall. As a guide to aid consistency of how this has been applied, **Table 13.12** sets out the principles for defining the effect. Where appropriate, developments may have been grouped together based on their spatial extent and the nature of the effects experienced.

Table 13.12 Inter-Project Effects Significance Criteria

Effect Category	Definition of Effect
Major	Adverse or beneficial cumulative effects are significant on receptors or the way a resource is currently used which have very limited ability to respond to the change. Effects at this level are likely to be material in the decision-making process; and likely to require additional mitigation over and above the major effect of each development alone.
Moderate	Adverse or beneficial cumulative effects on receptors influence the way a receptor is able to respond or how a resource is currently used, however there is some ability to respond to the change. Effects at this level can be considered to be material decision-making factors, and additional mitigation may be required.
Minor	Adverse or beneficial cumulative effects are limited on receptors or how a resource is currently used, with those affected particularly responsive to change.
Negligible	No potential for cumulative effects.

Development ID: 68

- 13.5.34 Development '68' comprises a hybrid planning application for the demolition of all existing buildings and the redevelopment of the site to provide a first-team training and academy facility for Queen's Park Rangers (QPR) Football Club including a full application for a club

building, maintenance building, football pitches, artificial football pitch, access roads, parking, service areas, flood-lighting, boundary treatments, hard and soft landscaping and engineering works to playing surfaces, and an outline planning application for a full-sized indoor hall.

- 13.5.35 The application was submitted in 2020 and granted approval in 2021. The use at the time of the application comprised the Heston Sports Ground. QPR occupies part of the site for use as a training and sports ground for its Football Academy. Therefore, the use of the site will remain the same as per existing.
- 13.5.36 **Chapter 7: Noise and Vibration** reported effects during operation over the area in which this development is located due to changes in aircraft movements during full alternation of the runways during easterlies. The use of the development is comparable to its existing use as a football training facility and would not introduce any new residential receptors. The current and proposed use does not fall under the category of non-residential use either and is not specifically assessed within **Chapter 7: Noise and Vibration** as the facility is not considered to be a noise-sensitive building¹².
- 13.5.37 However, to understand the change in levels of noise this development may expect, a comparison is made to the levels observed at Cranford Community College which is situated close to this development site. Cranford Community College expected to see an approximate increase of 3.5dB during the daytime from 51.6dB_{LAeq,16h} to 54.7 dB_{LAeq,16h}. Whilst these levels are above the Lowest Observed Adverse Effect Level (LOAEL) for residential development, due to the use of the site as a football training ground, it is not anticipated to be particularly sensitive to changes in noise levels, and these changes are likely to have minimal impact on its use as outdoor sporting activity.

Development ID: 73 and 74

- 13.5.38 Development 73 which was updated by development 74 (variation application), comprises a change of use from offices to residential to provide 169 dwellings. The application was submitted with a noise assessment which accounted noise impacts associated with the operation of Heathrow Airport.
- 13.5.39 The assessment was supported by an environmental survey to determine the existing noise environmental at the site and to confirm what mitigation measures are required for the new residences. The assessment was confirmed to be satisfactory by the Council's noise consultants subject to adherence with the recommended mitigations measures prescribed within the Environmental Noise Survey.
- 13.5.40 These were conditioned as follows:

“Condition 3: All recommended mitigation measures prescribed within the Noise Assessment consented under prior approval 00083/F/PA1 (report no. P21-239-R01v2, dated November 2021) are to be implemented and retained at all times thereafter. Reason: In order to ensure that the future residents of the development will not be exposed to a high levels of noise.”

¹² CAP1616i advises that effects and impacts of aircraft noise should be reported for “noise-sensitive buildings (for example, hospitals, places of worship, schools)” CAA, CAP1616 i Paragraph 5.24

Condition 4 Prior to occupation, compliance with the criteria set out below shall be demonstrated through internal sound insulation testing and a report submitted to the Local Planning Authority and approved in writing. Maximum noise levels permitted within the dwellings will not exceed those that are specified in Table 4 of British Standard 8233:2014 [Living Rooms = 35 dB LAeq, 16 hours; Dining room/area = 40 dB LAeq, 16 hours; Bedroom = 35 dB LAeq, 16 hours during day-time (07:00 - 23:00) and Bedroom = 30 dB LAeq, 8 hours during night-time (23:00 - 07:00), nighttime (23:00 – 07:00) LAmax noise levels within bedrooms do not exceed 45 dB LAmax more than 10 to 15 times per night. Reason: In order to ensure that the future residents of the development will not be exposed to a high levels of noise.”

- 13.5.41 **Chapter 7: Noise and Vibration** identified potential effects for operation over this area, where during operation of the Proposed Development, when the Airport is able to operate full alternation of the runways during easterlies, the development is located within an area anticipated to experience a small increase in noise levels, due to the redistribution of aircraft movements. However, considered in conjunction with comparable receptors considered in the noise assessment, effects on future occupiers are likely to experience minor adverse effects and not significant, particularly with secondary glazing as required in the development's its planning consent. Due to the type of effect which may impact this development (air noise), it is unlikely any noise impacts will combine to generate a greater noise effect on nearby receptors.
- 13.5.42 The people and communities and the public health assessments consider effects on an area level rather than individual developments. As the effect is likely to be Not Significant, there are unlikely to be any new effects for the area from those already reported within **Chapter 8: People and Communities** and **Chapter 9: Public Health**, so no inter-project effects on people and communities or health are anticipated.

Development ID: 77, 78, 79, 80, 81, 82, 83, 85, 86, 88, 90, 102

- 13.5.43 These developments have been grouped together based on their proximity and potential to experience similar inter-project effects (air noise). All these developments comprise redevelopment of the existing sites to introduce new residential receptors all located to the south-east of the Airport boundary.
- 13.5.44 Only **Chapter 7: Noise and Vibration** identified potential effects for operation over this area during operation of the Proposed Development, when the Airport is able to operate full alternation of the runways during easterlies, the development is located within an area anticipated to experience an overall reduction in noise levels, due to the redistribution of aircraft movements. Considered in conjunction with comparable receptors considered in the noise assessment, effects on these receptors are likely to experience minor beneficial effects and not significant.
- 13.5.45 The people and communities and the health assessments consider effects on an area level rather than individual developments. As the outcome of the noise assessment demonstrates there is unlikely to be any new effects for the area from those already reported within **Chapter 7: Noise and Vibration**, no inter-project effects on people and communities or health are anticipated.

Development ID: 152 and 153

- 13.5.46 These developments comprise redevelopment of the existing sites to introduce new residential receptors. Only **Chapter 7: Noise and Vibration** identified potential effects for operation only over this area during operation of the Proposed Development, when the Airport is able to operate full alternation of the runways during easterlies, the development is located within an area anticipated to experience an overall reduction in noise levels, due to the redistribution of aircraft movements. Considered in conjunction with comparable receptors considered in the noise assessment, effects on these receptors are likely to experience minor beneficial effects and not significant.
- 13.5.47 The people and communities and the health assessments consider effects on an area level rather than individual developments. As the outcome of the noise assessment demonstrates there is unlikely to be any new effects for the area from those already reported within **Chapter 7: Noise and Vibration**, no inter-project effects on people and communities or health are anticipated.

Development ID: 154

- 13.5.48 This development represents the latest phases (4-9) of a large redevelopment (the Green Quarter). Phase 1 is already completed, whereas Phases 2 and 3 are under construction with a phased occupation.
- 13.5.49 The Green Quarter development is predominantly mixed-use and would include residential, education, and commercial uses. There is an extant permission for the Site, however, amendments are proposed which required a new application.

Chapter 7: Noise and Vibration identified that this development site is outside of the daytime LOAEL (51dB_{L_{Aeq,16h}}), and therefore outside of those areas likely to experience significant noise effects. The people and communities and the health assessments consider effects on an area level rather than individual developments. As the outcome of the noise assessment demonstrates there is unlikely to be any new effects for the area from those already reported within **Chapter 7: Noise and Vibration**, no inter-project effects on people and communities or health are anticipated.

13.6 Assessment Summary

Intra-project effects

- 13.6.1 The assessment has explored whether there are any intra-project effects during construction and operation of the Proposed Development.
- 13.6.2 No additional intra-project effects were identified beyond those already considered within **Chapter 7: Noise and Vibration**, **Chapter 8: People and Communities**, **Chapter 9: Public Health** and **Chapter 12: Biodiversity**. The results of these assessments are summarised within the chapters and therefore not repeated here.

Inter-project effects

- 13.6.3 Consideration was also given to the effects which could be created as a result of the Proposed Development cumulatively with other projects proposed within the Airport boundary and surroundings, where potential cumulative effects could occur.
- 13.6.4 No significant effects in-combination with other projects are identified under any other environmental aspect chapters.