

CITY AIRPORT DEVELOPMENT PROGRAMME
(CADP1) S73 APPLICATION

ENVIRONMENTAL STATEMENT

VOLUME 2: APPENDICES

DECEMBER 2022



Pell Frischmann

City Airport Development
Programme (CADP1) S73
Application

Volume 2: Appendices
Appendix 3.10 Formal Scoping Opinion

December 2022



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Date: 24th November 2022

Dear Sir/Madam,

Application No: 22/01859/SCOPE
Location: London City Airport Hartmann Road Silvertown London E16 2PX
Proposal: Request for formal Scoping Opinion in accordance with Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) for the variation (Section 73) of 13/01228/FUL dated 26 July 2016. Variations to increase number of passengers per annum, extension to operating hours and other ancillary alterations.

This Scoping Opinion is issued pursuant to Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, in response to your request for a Scoping Opinion dated 03 August 2022.

The Local Planning Authority (LPA) instructed Land Use Consultants (LUC) to prepare a response on its behalf to the request for a Scoping Opinion; and has itself also taken a considered review of the EIA Scoping Report dated November 2022, prepared by LUC.

The attached Report dated November 2022 prepared by LUC in association with Ardent Consulting Engineers and Yellow Sub Geo (entitled "London City Airport – Review of EIA Scoping Report") constitutes the Scoping Opinion of the LPA, and its contents should be fully addressed in an Environmental Statement accompanying the application.

Yours faithfully,

A handwritten signature in blue ink, appearing to read "JBolt".

James Bolt
For and on behalf of Jane Custance, Director of Planning and Development

London Borough of Newham

London City Airport **Review of EIA Scoping** **Report**

Final report

Prepared by LUC in association with Ardent Consulting Engineering and
Yellow Sub Geo
November 2022



London Borough of Newham

London City Airport Review of EIA Scoping Report

Version	Status	Prepared	Checked	Approved	Date
1.	Draft Report	LUC in association with Ardent Consulting Engineering (including APS) and Yellow Sub Geo Ltd.	H. Kent	H. Kent	29.09.2022
2.	Final Report	LUC in association with Ardent Consulting Engineering (including APS) and Yellow Sub Geo Ltd.	L. McGowan	H. Kent	23.11.2022

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Chapter 1

Introduction

Purpose of the EIA Scoping Report Review

1.1 LUC was appointed in May 2022 by the London Borough of Newham (LBN) to review the Environmental Impact Assessment (EIA) Scoping Report for the London City Airport (hereinafter referred to as 'the Proposed Development') located between the Royal Albert Dock and King George V (KGV) Dock, adjacent to the Woolwich Reach and Gallions Reach of the River Thames. The Scoping Report (SR) was prepared by RPS on behalf of London City Airport (hereafter referred to as 'the Applicant'). The SR was submitted to LBN as a formal request for a Scoping Opinion (SO) under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (hereafter referred to as 'the EIA Regulations'), in July 2022.

1.2 The purpose of this review is to provide independent advice to LBN regarding the SR which has been submitted. LBN should also take into account the responses received from statutory consultees which have also been received during this process. LBN remains the determining authority for the SO and any direction provided to the Applicant.

1.3 The comments provided in this review report have also been informed by:

- Draft Scoping Report version 8.0 dated 13th May 2022;
- Applicant presentation/Meeting on 15th June 2022 focusing on the topics of noise and climate change;
- Jet Centre information provided by the Applicant via email dated 22nd June 2022;
- Applicant presentation/Meeting on 29th June 2022 focusing on the topics of Air Quality and surface access; and London City Airport Transport Scoping Note dated 26th May 2022 and associated ATZ Route Plan as provided by the Applicant on 29th June 2022.
- Further meeting focusing on Air Quality and Public Health on 14th September.

The Proposed Development and Background

1.4 The Proposed Development is located between the Royal Albert Dock and King George V (KGV) Dock, adjacent to the Woolwich Reach and Gallions Reach of the River Thames and

within the administrative area of the London Borough of Newham.

1.5 The surrounding area comprises of a mix of residential, industrial and commercial uses within clearly defined zones located on the northern and southern banks of the River Thames at Silvertown and North Greenwich. A significant amount of planned development and regeneration is located in the vicinity of the Proposed Development.

1.6 A previous planning application – The City Airport Development Programme (CADP1) (Ref: 13/01228/FUL) was granted in July 2016 following an appeal and public inquiry which was held in March 2016. Planning permission was granted for the following:

- a. “Demolition of existing buildings and structures;
- b. Works to provide 4 no. upgraded aircraft stands and 7 new aircraft parking stands;
- c. The extension and modification of the existing airfield to include the creation of a taxi lane running parallel to the eastern part of the runway and connecting with the existing holding point;
- d. The creation of a vehicle access point over King George V dock for emergency vehicle access;
- e. Laying out of replacement landside Forecourt area to include vehicle circulation, pick up and drop off areas and hard and soft landscaping;
- f. The Eastern Extension to the existing Terminal building (including alteration works to the existing Terminal Building) to provide reconfigured and additional passenger facilities and circulation areas, landside and airside offices, immigration areas, security areas, landside and airside retail and catering areas, baggage handling facilities, storage and ancillary accommodation;
- g. The construction of a 3 storey Passenger Pier to the east of the existing Terminal building to serve the proposed passenger parking stands;
- h. Erection of a noise barrier at the eastern end of the proposed Pier;
- i. Erection of a temporary noise barrier along part the southern boundary of the Application Site to the north of Woodman Street;
- j. Western Extension and alterations to the existing Terminal to provide reconfigured additional passenger facilities and circulation areas, security areas, landside and airside offices, landside retail and catering areas and ancillary storage and accommodation;

- k. Western Energy Centre, storage, ancillary accommodation and landscaping to the west of the existing Terminal;
- l. Temporary Facilitation works including erection of a noise reduction wall to the south of 3 aircraft stand, a Coaching Facility and the extension to the outbound baggage area;
- m. Works to upgrade Hartmann Road;
- n. Landside passenger and staff parking, car hire parking and associated facilities, taxi feeder park and ancillary and related work;
- o. Eastern Energy Centre;
- p. Dock Source Heat Exchange System and Fish Refugia within King George V Dock; and
- q. Ancillary and related works”.

1.7 Some of these aspects have since been built (specifically elements in items a-d). However, due to the Covid-19 pandemic, works were put on hold in early 2020.

1.8 It is now anticipated that the remaining CADP1 works will be built over a longer period of time (2024 – 2031), subject to further revision to the Construction Phasing Plan.

1.9 The Applicant is seeking approval to revise planning conditions attached to the CADP1 planning permission pursuant to Section 73 (S73) of the Town and Country Planning Act 1990 (as amended).

1.10 The application will comprise:

- *“Application to vary conditions attached to planning permission 13/01228/FUL dated 26 July 2016 (as varied) to allow up to 9 million passengers per annum (currently 6.5 million), flights to take place on Saturday PM, modifications to daily and other limits and changes to temporary facilitating works”*

1.11 The number of flights and number of aircraft stands will remain the same, however the disposition and layout of stands to the west airfield will be modified to allow parking of larger Code C aircrafts, and increased flexibility is requested to allow more flights than currently permitted within the first and last half hours of the operational day.

1.12 Where appropriate all relevant existing environmental and operational controls, strategies and systems approved under the other conditions attached to the CADP1 planning permission and Section 106 planning agreement will continue to apply and/or be re-imposed under a new agreement with LBN.

Structure of the Review

1.13 This report comprises the following sections:

- Chapter 2 reviews the requirement for EIA for the Proposed Development and the general approach to the EIA as set out in the introductory text of the SR;
- Chapters 3 - 8 reviews the information provided on the proposed topics for detailed assessment in the EIA. Each chapter provides commentary in relation to the SR;
- Chapters 9 - 15 reviews the information provided on the topics proposed to be scoped out of detailed assessment in the EIA. Each chapter provides commentary in relation to the SR; and
- Chapter 16 provides the conclusions of this review and a summary table setting out the recommendations made. This table should be read alongside the rest of the review and not in isolation to ensure the context of recommendations is understood.

Chapter 2

Review of Approach to EIA

Requirement for EIA

2.1 Under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, “EIA Development” is defined as “development which is either:

- *Schedule 1 development; or*
- *Schedule 2 development likely to have significant effects on the environment by virtue of factors such as its nature, size or location.”*

2.2 Schedules 1 and 2 of the EIA Regulations detail projects that may require EIA. Schedule 1 projects, for which EIA is mandatory, are generally large-scale industry and infrastructure projects while Schedule 2 developments are required to be screened for EIA where certain thresholds are exceeded.

2.3 The Proposed Development falls under Schedule 2 13(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) with the requirement for EIA being determined on the following thresholds:

- *“The development as changed or extended may have significant adverse effects on the environment; or*
- *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.”*

2.4 As the Proposed Development has the potential to give rise to significant environmental effects, the Applicant decided to undertake an EIA without requesting a Screening Opinion from LBN.

Approach to EIA Scoping

Regulatory Requirements

2.5 Where an EIA Scoping Opinion is sought, the EIA Regulations set out that this should include the following information (Regulation 15):

1. *“A person who is minded to make an EIA application may ask the relevant planning authority to state in writing*

their opinion as to the information to be provided in the environmental statement (a “scoping opinion”).

2. A request under paragraph (1) shall include—
- a. in relation to an application for planning permission
 - a plan sufficient to identify the land;
 - a brief description of the nature and purpose of the development and of its possible effects on the environment; and
 - such other information or representations as the person making the request may wish to provide or make”

2.6 The EIA Regulations are considered in **Chapter 1: Introduction**, of the SR. Section 1.3 summarises the need for an EIA and why the Proposed Development constitutes as a Schedule 2 EIA development.

2.7 The introductory chapter of the SR sets out the purpose and process of the EIA, including the scoping stage. The approach to EIA is set out in Chapter 5 of the SR and states that the ES will include a full statement of competency for the whole EIA team in accordance with Regulation 18(5) and Schedule 4 of the EIA Regulations.

The Site and Surrounding Area

2.8 Chapter 1 of the SR introduces the Site and its surroundings. The Site Location and Existing Layout is shown in Figure 1.1.

2.9 Section 1.2: Site Location and Context, goes into details providing an exact location of the Proposed Development and a description of its immediate surroundings including existing and proposed developments in the area.

Description of the Proposed Development

2.10 The SR provides a summary of the nature and purpose of the Proposed Development.

2.11 Sections 1.1 and 2.2 of the SR provide details of what the development will comprise. This includes the ‘*Application to vary conditions attached to planning permission 13/01228/FUL dated 26 July 2016 (as varied) to allow up to 9 million passengers per annum (currently 6.5 million), flights to take place on Saturday PM, modifications to daily and other limits and changes to temporary facilitating works*’.

2.12 The number of flights and number of aircraft stands will remain the same, however increased flexibility is requested to allow more flights than currently permitted within the first and last half hours of the operational day.

2.13 The disposition and layout of stands to the west of the airfield would be altered to allow parking of larger Code C

aircraft to facilitate greater resilience of the airport and accommodate new generation aircraft. It may also necessitate the removal of the existing Corporate Aviation Facility, known as the ‘Jet Centre’. It is proposed that the following aspects of the CADP1 approval will remain unchanged:

- 111,000 airport transport movements (ATMs) per annum with a maximum of 45 ATS per hour;
- 8 hour night time curfew; and
- no changes to the number of aircraft stands, runway or other infrastructure/buildings.

2.14 It would be helpful to include the information at 1.1.3 and 1.1.4 of the SR (proposed variations to conditions and consequential modifications) in Section 2.2 (Proposed Amendments to Conditions), to avoid the need to check back to understand the details of the proposed changes.

Assessment Methodology and Significance Criteria

2.15 Section 5.1 provides a Summary of the EIA Process. This notes at 5.1.5 ‘With respect to identifying the likely significant environmental effects associated with the proposal, the ES will give due consideration to a range of potential effects associated with the amended CADP1 development’. This is a key principle, as the requirement is to assess the overall development, as amended by the S73 application (not simply the change proposed). This will enable the impacts of the development incorporating the variation to be assessed. It will also ensure that consideration can be given to the mitigation of any identified significant impacts.

2.16 The SR outlines the methodology for the assessment of the significance of environmental effects in Chapter 5, Section 5.2 ‘EIA Approach’. It applies a common EIA approach of classifying effects based on nature (beneficial / adverse / direct / indirect / cumulative) and duration (temporary / permanent) and provides a definition of each. This section also references the EIA Regulations for consideration of alternatives.

2.17 Consideration will be given to the combined impacts of the consented development and the s73 proposals. This will enable the impacts of the variation to be assessed to demonstrate that it causes no material change to the conclusions of the consented scheme and also ensure that consideration can be given to the mitigation of any identified significant impacts.

Cumulative Effects

2.18 The SR identifies two types of cumulative effects to be considered. These include cumulative schemes which define the effects of the Proposed Development in combination with other existing and/or approved developments. The

assessment of intra-cumulative effects on the other hand will assess the combined effects resulting from the development, for example an individual receptor close to the site boundary may be affected by noise and visual effects.

2.19 The SR proposes in Appendix B a 'long list' of cumulative schemes which will be considered during further discussions with LBN. The Applicant however notes that most of the developments identified using the criteria will have been built and operational by 2024 and will form a baseline for the EIA. The difference between the baseline schemes and cumulative schemes will be described in the ES.

2.20 LBN should satisfy themselves that the list of cumulative developments when provided is appropriate and acceptable.

Mitigation and Residual Effects

2.21 'Incorporated mitigation' will be provided before the impact assessment section to account for 'designed in' mitigation and will form part of the future baseline. Further mitigation measures and residual effects will be addressed within each technical chapter.

Alternatives

2.22 The SR indicates that the ES will include consideration of reasonable alternatives for the Development as required by Schedule 4 of the EIA Regulations and National Planning Practice Guidance.

2.23 A 'do-minimum' scenario will be considered to describe the environmental and socio-economic conditions at the site were the Proposed Development not to occur. The SR states that no other alternatives are considered relevant in this instance. This is a reasonable approach.

Non-Technical Summary

2.24 It is noted that the concepts of the Proposed Development can be complex and that there is a lot of aviation language which may not be easily understood by members of the public. To ensure that the Proposed Development is easy to understand, the Non-Technical Summary (NTS) should ensure that all terminology is clearly defined and illustrated to provide greater clarity where relevant.

Terminology

2.25 The SR proposes that the ES will include a chapter on 'Non-Significant Topics' to provide additional information and explanation for those topics where additional significant effects or impacts are not predicted to arise from the s73 application. This will be helpful to readers.

Chapter 3

Socio-economics – Scoped In

3.1 The Proposed Development is expected to have social and economic effects, particularly effects arising from the construction and operation. As a result, a detailed socio-economic assessment will be scoped into the ES; we agree with the decision to scope in this topic.

3.2 Section 7.1 outlines the approach to the assessment. It outlines the policy context, baseline assessment and data sources that will be used to establish the baseline. These are considered acceptable.

3.3 The proposed impact area is the local area (LBN) and other adjoining boroughs. It is based on historical socio-economic benefits including the existing comprehensive community programme by the Applicant and will take into consideration matters raised through the consultation on the previous CADP1 application.

3.4 Baseline assessment years have been set out in Section 3.2 of the SR and will use 2019 (pre-pandemic) as the baseline year and 2025, 2027 and 2031 as the assessment years. This will be done in context of both with and without the Proposed Development. This approach is considered acceptable.

3.5 The assessment of the sensitive receptors, potential effects and sources are outlined in this section. Effects will be evaluated on a net additional basis considering baseline conditions in London City Airport (LCY), the local economy and the wider London economy. In the absence of formal guidance that influences socio-economic assessment methodology, the significance criteria for this topic should be clearly presented in the methodology section of this chapter topic in the ES (**SE1**).

3.6 Mitigation measures are not outlined in this section beyond the proposal to integrate existing community benefit programmes to the Proposed Development. These should be identified and outlined in the ES (**SE2**). The combined socio-economic benefits of the Proposed Development and cumulative schemes should also be considered in the assessment (**SE3**).

3.7 The SR references new Government Guidance on the designation of Public Safety Zones (PSZ). The 2015 Updated Environmental Statement considered the impacts of changes to the PSZ on the development of sites around the airport.

However, the new guidance makes a similar assessment unnecessary as the extent of PSZs is fixed by reference to the physical distances rather than the number or type of aircraft movements. This means the extent of the PSZ is the same with or without the development.

3.8 Overall, the approach to assessment is considered appropriate.

Table 3-1: Summary of SR Socio-Economics Comments

Scoping Report Socio-Economics (Scoping In is agreed – refer to recommendations in this review)	
■	In the absence of formal guidance that influences socio-economic assessment methodology, the significance criteria for this topic should be clearly presented in the methodology section of this chapter topic in the ES (SE1).
■	Mitigation measures are not outlined in this section beyond the proposal to integrate existing community benefit programmes to the Proposed Development. These should be identified and outlined in the ES (SE2).
■	The combined socio-economic benefits of the Proposed Development and cumulative schemes should also be considered in the assessment (SE3).

Chapter 4

Surface Access & Transport – Scoped In

4.1 It is considered appropriate to scope Transport into the Environmental Impact Assessment (EIA).

4.2 The EIA will address the following likely transport and access related effects during demolition and construction and once the Development is complete and operational:

- Effects upon traffic flow on local road network (severance, driver delay and accidents);
- Effects upon pedestrian and cyclist access (delay, amenity and fear and intimidation);
- Effects on pedestrian and cycling facilities and permeability through the site with improved pedestrian / cycle access through the site;
- Effect of additional vehicle trips; and
- Effect upon public transport access (delay and amenity)

4.3 The above is considered reasonable.

4.4 The ES should clearly set out likely receptors.

4.5 As set out in the SR, a Transport Assessment (TA) will be produced to accompany the application. It is considered appropriate that the TA will follow Transport for London's (TfL) Healthy Streets guidance. The list of key routes was detailed in a scoping note submitted to TfL. Notwithstanding TfL/LBN's advice, the list of key routes appears reasonable.

4.6 The TA will include multi modal trip generation predictions focussing on peak hour passenger demand on the DLR, Elizabeth Line, taxis and buses. Detailed methodology for how trip generation will be calculated is not provided however it is noted that forecast numbers of passengers up to 2031 will be included in the assessment. It is stated that the key peak hours of 0800-0900 and 1700-1800 will be assessed, however it is suggested that these peak hours are confirmed with LBN/TfL to ensure they are the appropriate network peak hours that need to be considered, as it may be worth assessing the extended peak hours of 0700-1000 and 1600-1900 as well as weekend peaks, given the unique travel characteristics of an airport land use. Further assessment may also be required when the peak hours of arrivals/departures associated with the airport itself are known, if these do not coincide with the above. The justification for the majority of impact being outside of the peak hours appears sound

however detailed justification would be included, especially with regards to impact on the PM peak where evening flights could cause impact on the transport network during this time and passenger arrival/departure profiles are established. Detailed methodology for calculating trip generation and arrival/departure profiles is to be agreed with TfL/LBN.

4.7 The TA will use the above multi modal trip generation predictions to inform junction modelling and impact on the local bus and rail networks. The extent of this modelling is to be agreed with LBN and TfL. The need for modelling of

crowding on the platforms on the DLR and potentially interchange spaces at Canning Town will be reviewed once the change in DLR loadings resulting from the proposals have been established.

4.8 The use of 2019 and pre-COVID baseline data is considered appropriate subject to agreement from TfL / LBN.

Table 4-1: Summary of DSR Surface Access and Transport Comments

Scoping Report Surface Access (Scoping In agreed – refer to recommendations in this review)	
■	The SR is considered acceptable in terms of Access and Transport.

Chapter 5

Noise – Scoped In

5.1 The noise scoping report addresses the assessment approach to be undertaken towards potential impacts from the proposals namely: noise from airborne aircraft, noise from aircraft on the ground, noise from surface access to and from the airport, and noise from construction of the remaining elements from the CADP1 permission plus any additional construction necessitated by the proposed development.

5.2 The use of 2019 as a baseline is considered appropriate.

5.3 Most significant proposals in terms of potential noise impact are considered to be additional flights in the 0630-0700 period where currently there is a two-movement limit in the 0630-0645 period and a maximum number of six-movements in the period 0630-0700; and the introduction of flights and operations on Saturday afternoons, where there currently are none.

5.4 The scoping report notes that aircraft movements are currently assessed against the LAeq,16h index including the period 0630-0700. The period 0630-0700 would ordinarily be considered as night-time, however in the CADP1 ES the 0630-0700 period has been included in the daytime contours. The proposals suggest that future operations in this (0630-0700) period would be considered using the LAeq,8h index. This change may be appropriate however a number of factors should be considered, and discussion included in the ES.

5.5 BS8233 (Note 2 under Table 4) suggests that where the pattern of operation results in high levels of noise at a certain time in the period an alternative period may be appropriate. As the only night-time operations are proposed to take place in the 0630-0700 period, it may be appropriate to consider an alternative LAeq,T index to avoid averaging over the whole night period. However, the SR notes that this will be supplemented by consideration of single aircraft operations which will provide further context to the assessment. The justification to assess the early morning <0700 movements within a night-time assessment is understood and the precedent at Heathrow is useful to understand the way the metrics are applied in relation to the LOAEL. The SR notes that the night averaging period will also be supplemented by consideration of single aircraft operations. It is expected that this will include both average (LAeq) and short duration (LAmx) noise levels to assist with the discussion and that this should be considered in the context of the ambient acoustic

environment (**NV1**). Operations (air and ground) are proposed to take place on Saturday afternoon. Separate consideration of weekend daytime noise is suggested and seems appropriate.

5.6 Surface access noise is proposed to be assessed by reference to a change in associated noise level, this is

appropriate. Surface access assessment during the proposed changes to the Saturday operations is also proposed to be included in the assessment.

5.7 Construction noise will be considered in the EIA, and the scope and approach appear suitable.

Table 5-1: Summary of SR Noise Comments

Scoping Report Noise Recommendations (Scoping In is agreed – refer to recommendations in this review)	
■	Where individual aircraft movements in the <0700 period are considered this should include discussion on the average (LAeq), and short duration (LAmax) noise levels in the context of the existing ambient acoustic environment at sensitive receptors (NV1).

Chapter 6

Air Quality – Scoped In

Scope of assessment

6.1 This section summarises the review of the proposed approach to the assessment of air quality. Since the issue of the Scoping Report a meeting between LBN and the Applicant was held on 14th September 2022 which confirmed some amendments to the scope.

6.2 The Scoping Report states that the assessment will consider the impacts of both the construction and operational phases. This is considered appropriate.

6.3 The approach to cumulative assessment of the air quality impacts of traffic has not been clearly described. Paragraphs 5.2.14 to 5.2.16 of the Scoping Report describe generic criteria for inclusion of other developments in the cumulative impact assessments. The air quality chapter of the Scoping Report provides no specific information on what will be included in the assessment of cumulative impacts of traffic on air quality (**AQ1**).

6.4 The Scoping Report states the assessment will include the impact on ambient NO₂, PM₁₀ and PM_{2.5} concentrations. This is an incomplete list of the pollutants that need to be considered. Any assessment of the road traffic impacts on air quality within ecological sites will also need to consider ammonia (NH₃) (**AQ2**).

6.5 The Scoping Report (paragraphs 7.4.19 and 7.4.20) states the assessment will not consider ultrafine particles (UFP) on the grounds that there is *“no robust manner in which to quantify UFP emissions from aircraft or other combustion sources, and it is not possible to quantify the impacts of these sources using traditional modelling approaches”*. Although UFP have been scoped out of the air quality assessment it is stated this pollutant will be considered in the Public Health and Wellbeing impact assessment (HIA) (Table 7.4).

6.6 Whilst it is accepted that traditional modelling approaches are not appropriate for assessing UFP it seems odd that the air quality specialists are not intending to provide any qualitative or semi-quantitative assessment of the potential impacts to inform the HIA. Without this it is difficult to understand how the HIA will assess the health effects of this pollutant.

6.7 The Applicant has issued a 15-page document, written by its consultants titled ‘Issues related to UFPs’, dated 20 July 2022. During the meeting between the Applicant and LBN on

14th September 2022, it was agreed that UFP would be included in the Air Quality Chapter. Much of the July document would be useful to include in the y chapter, with supplementary information in an appendix. Additional information should be provided. This could include a quantification, with justification, as to whether UFP due to aircraft emissions, are likely to decline or increase in the future, with a particular focus on sulphur content of fuel. The approach should be agreed with LBN (AQ3). The ES would be incomplete without further consideration of this issue within the air quality chapter.

6.8 There is no commitment to understand the baseline UFP conditions, which would give an indication as to whether there is likely to be a significant impact where there is exposure.

6.9 Despite the quote from the Stansted Airport appeal in the Scoping Report (paragraph 7.4.19), there is no clear relationship between PM_{2.5} concentrations, which are based on the mass of the particles, and the number of UFP (the normal metric used to quantify UFP), which are extremely small and contribute little to the PM_{2.5} mass. The Applicant's own document on UFPs states *"UFP forms an extremely small fraction of suspended particular mater (such as PM₁₀ or PM_{2.5})"*, which suggests the applicant's consultants agree that there is no clear relationship between PM mass and number of UFP. The World Health Organization (WHO) has stated that *"Clinical and toxicological studies have shown that ultrafine particles (in part) act through mechanisms not shared with larger particles that dominate mass-based metrics, such as PM_{2.5} or PM₁₀."*

6.10 Paragraph 7.4.19 of the Scoping Report states there are no guidelines or standards against which to compare UFP concentrations. It is accepted that there are currently no air quality guidelines (AQG) or legislative standards for UFP.

6.11 The 2021 WHO Air Quality Guidelines state that studies have demonstrated *"...short-term effects of exposure to UFP, including mortality, emergency department visits, hospital admissions, respiratory symptoms, and effects on pulmonary/systemic inflammation, heart rate variability and blood pressure; and long-term effects on mortality (all-cause, cardiovascular, IHD and pulmonary) and several types of morbidity. However, various UFP size ranges and exposure metrics were used, preventing a thorough comparison of results across studies (US EPA, 2019a) Therefore, there was a consensus in the GDG [i.e. Guidance Development Group] that the body of epidemiologic evidence was not yet sufficient to formulate an AQG level. At the same time, however, there is a large body of evidence from exposure science that is sufficient to formulate good practice advice."*

6.12 The 2021 WHO guidelines include a good practice statement on UFP which distinguishes between low and high particle number counts (PNC). Low PNC can be considered <

1,000 particles/cm³ (24-hour mean). High PNC can be considered > 10,000 particles/cm³ (24-hour mean) or 20,000 particles/cm³ (1-hour mean). These values, together with other information in the UFP good practice statement can be used to assess the baseline conditions to indicate whether or not the s73 application, together with the consented scheme, is likely to exceed these values.

6.13 It is important that the assessment of the s73 proposals does not repeat the approach used in the ES for the Stansted Airport expansion (planning ref UTT/18/0460/FUL) of assuming that PM_{2.5} can be used as a surrogate for UFP.

6.14 The two most recent airport planning decisions in relation to UFP are not directly relevant to this s.73 application as the context of both sites is different to that of London City Airport.

Methodology

6.15 The Scoping Report states that the review of the baseline conditions will draw on existing monitoring and modelled data provided by the Airport, local authorities and Defra. This is appropriate for the traditional pollutants.

6.16 There is no baseline UFP monitoring data for LCY airport. It would be useful to undertake this monitoring given that there is residential exposure closer at this airport than other UK airports. Given the timescales it may not be practicable to undertake this for the s73 application.

6.17 The assessment of the dust and PM₁₀ impacts due to construction activities will be undertaken using updated Institute of Air Quality Management (IAQM) guidance to identify the risk of adverse impacts, if available in time. (AQ4).

6.18 It is important that the construction traffic is not considered in isolation from the construction non-road mobile machinery (NRMM) and development traffic, and that the combined traffic levels/NRMM are considered together on a year-by-year basis to ensure that the worst-case years are included in the assessment (AQ5).

6.19 The Scoping Report states that the operational impacts will be predicted using ADMS. This suite of dispersion models are considered to be fit for this purpose providing the inputs and setup are suitable and the application is in a manner which has been validated by the software developer. Where it is being applied in a novel way, justification is required and comparison with monitoring may be needed. When the ES is submitted all model files should be provided to the local planning authority to enable a full audit of the modelling to be carried out (AQ6).

6.20 No information is provided regarding the receptors to be included in the ADMS models (AQ7).

6.21 The scope of the revised emission inventory for the airport appears adequate.

6.22 The Scoping Report states that the assessment will follow, as far as is possible, the “*sophisticated approach*” defined in the ICAO Airport Air Quality Guidance Manual. This is considered suitable for airport operations.

6.23 The Scoping Report states that the assessment of the operational impacts will use 2019 as the base year which is appropriate given the impact of the pandemic on travel patterns.

6.24 The future assessment years of 2025, 2027 and 2031 also seem appropriate, however an addition ‘worst case’ year may be required following the analysis of construction traffic/NRMM/ development traffic movements (**AQ8**).

6.25 The Scoping Report describes the study area for the air quality assessment as including a 1km radius around the airport boundary; it will also include all road links where incremental changes to traffic flows exceed established screening criteria. The traffic screening criteria is considered appropriate for human receptors, but for impacts on ecological receptors the criteria is different. If, effects on nature conservation sites are scoped in, these should be defined (**AQ9**).

6.26 The Scoping Report states that the operational impacts will be considered against the assessment of the 2016 consented development in the Updated Environmental Statement (UES) published in 2015. It is not clear if the comparison is with the baseline scenarios set out in the UES or the proposed development scenarios in the UES. Either way, it is not appropriate to use the modelled air quality data reported in the 2015 ES as Defra’s and the local authority’s data, the LAQM tools and guidance, and the ADMS model used have all been updated since 2015. It will be necessary to repeat the modelling using the most recent data and assessment tools and guidance (**AQ10**).

6.27 The assessment should not look solely at the impact of the s73 proposals because that assessment is unlikely to be a true assessment of whether the proposals are acceptable. An incremental change to the planning application, such as this s73 application, could change a previously judged air quality impact from ‘minor’ (and hence not significant) into moderate (and therefore significant) when considered in relation to the original baseline. Whereas considering only the incremental change of the s73 application relative to the extant scheme the change would be negligible.

6.28 In this case, the s73 application on its own is unlikely to be significant because the change compared to the extant scheme is likely to be small, but the original application plus s73 application could together be significant. If it is not assessed together (the cumulative impact as required by the EIA regulations) in relation to the original baseline an opportunity to mitigate a significant impact could be lost. This

is particularly important because although the consent has been implemented, little has been built out. The assessment should consider the combined impacts of the consented development and the s73 proposals. This will enable the impacts of the variation to be assessed to demonstrate that it causes no material change to the conclusions of the consented scheme. It will also ensure that consideration can be given to the mitigation of any identified significant impacts (**AQ11**).

6.29 The ADMS model will be verified for the base year (2019), presumably following the Mayor of London’s LLAQM.TG19 methodology, although this is not stated and, if appropriate, accounting for the LAQM.TG22 approaches. The model verification should include all available monitoring data and if any monitoring sites are excluded, full justification for their exclusion should be provided (**AQ12**). The model verification should aim for an adjustment factor of 2 or less with all predicted concentrations within 10% of the measured concentrations (**AQ13**). This is particularly important for a review of the road emissions model performance but ideally carried out for all modelled emissions. If these model uncertainty criteria are not achieved, the assessment may need to consider whether the assessment criteria needs to be more precautionary to account for the uncertainty in the modelling process.

6.30 In addition, future assessment years should consider the variation in annual meteorological datasets within the assessment process (**AQ14**).

6.31 The Scoping Report states (paragraph 7.4.7) that “*The assessment will consider the relevant objectives for the pollutants of concern. The assessment will also have regard to the 2005 WHO guideline for PM_{2.5} (10 µg/m³ as an annual mean) in accordance with Policy SI 1 of the London Plan*”. Later it states (paragraph 7.4.17) “*The outputs of the model will be used to determine compliance with the objectives and the WHO guidelines at each receptor location*”. No reference has been made regarding assessing compliance with the mandatory limit values (including with the PM_{2.5} limit value adopted in 2020) which is required by planning guidance. The objectives and limit values apply at different locations. This assessment of compliance with the limit values should be included in the ES (**AQ15**). If information is available, even in draft form, on the 2021 Environment Act PM_{2.5} targets, the ES should include an assessment against these targets (**AQ16**).

6.32 Comparison of the predicted concentrations to the 2021 WHO guidelines and interim targets should be provided for all relevant pollutants (**AQ17**). Compliance with the WHO guidelines is not mandatory but a commentary on the levels the local community will be exposed to with the s73 proposals, and the consented development should be provided in the Air Quality chapter which can then be assessed in the HIA in

terms of the significance of effect on human health. The WHO guidelines are solely based on the medical evidence, while the objectives and limit values are based on out-of-date medical evidence and several non-medical factors such as technical and economic feasibility of achieving them.

6.33 The Scoping Report (paragraph 7.4.17) states that the magnitude of the impacts will be based on professional judgement following relevant professional guidance. This is considered appropriate providing robust evidence to support the judgement is presented.

6.34 The Scoping Report (paragraph 7.4.12) states that consideration will also be given to the potential impacts of airport odours. However, no information has been provided regarding how the odours would be assessed other than stating the impacts will be modelled using ADMS-Airport, nor what assessment criteria would be used. No reference has been made to the IAQM odour guidance which recommends that several different assessment methods should be used to assess odour for planning purposes. Further details should be submitted to the local planning authority (**AQ18**).

The air quality assessment should provide a commentary on how climate change will impact on air quality in the future (**AQ19**).

Surveys

6.35 The Scoping Report states that the baseline assessment will draw on existing air quality monitoring and modelling data from the airport, local authorities and Defra. No additional monitoring is to be undertaken. For the traditional pollutants this is an appropriate approach.

6.36 It is recommended that baseline UFP monitoring is undertaken close to the receptors most likely to be affected (i.e., those closest to the runway and downwind most frequently) to assess whether there is potential for UFP to be a significant issue at relevant locations (**AQ20**). This may show that receptors are too far from the runway for UFP exposure to be an issue and will help inform an assessment of the impacts of the s73 proposals. This would be consistent with the 2021 WHO Air Quality Guidelines good practice statement on UFP which recommends integrating UFP monitoring into existing air quality monitoring.

Reference to best practice guidance

6.37 The guidance documents referred to in the air quality section of the Scoping Report are listed below:

- Professional guidance produced by the IAQM on the assessment of the construction and demolition impacts
- Greater London Authority's SPG on the Control of Dust and Emissions during Construction and Demolition

- Professional guidance produced by Environmental Protection UK (EPUK) and IAQM on assessing operational impacts for planning
- Statutory guidance from Defra - LAQM Technical Guidance TG16. This document is not applicable to London although may contain useful information. However, it has been updated and the current version should be used (LAQM.TG22).
- Statutory guidance for London – London LAQM Technical Guidance, LLAQM.TG19
- ICAO Airport Air Quality Guidance Manual
- WHO 2005 Air Quality Guidelines. This has been replaced by the 2021 Air Quality Guidelines
- Guidance on Buildings Emission Benchmarks and Transport Emissions Benchmarks for air quality neutral assessments produced on behalf of the GLA.
- Mayor of London Guidance on Air Quality Positive

6.38 The air quality section of the Scoping Report also mentions the 2021 Environment Act, and its requirement to set a new PM_{2.5} target.

6.39 The above noted guidance should be referenced in the ES (**AQ21**).

6.40 The following guidance documents, of possible relevance to the assessment of the s73 Proposals, have not been referred to:

- Professional guidance published by IAQM on the assessment of odour for planning
- Professional guidance published by IAQM on the assessment of air quality impacts on designated nature conservation sites.

6.41 Consideration should be given to the relevance of the above noted guidance documents (**AQ22**).

6.42 Furthermore, it is recommended that any draft IAQM guidance is taken into consideration (**AQ23**).

Receptors identified

6.43 The Scoping Report refers to the receptors in general terms but does not identify where they will be or how many will be included. It states that the baseline study will determine the existing and new receptors introduced by committed / proposed development, likely to be affected by the s73 Proposals. These should be confirmed with the local planning authority prior to assessment of impacts (**AQ24**).

Consultees

6.44 There are no statutory consultees explicitly on air quality in the planning system. The Environment Agency would not normally comment on the air quality impacts of development it does not regulate. Natural England would consider the air quality impacts on Sites of Special Scientific Interest (SSSIs), National Network Sites and Ramsar but at this stage it is unclear whether this will be included in the assessment or not.

6.45 It is considered good practice to consult the local authority's air quality specialist to agree the methodology in detail (i.e., greater detail than is normal in a Scoping Report). This has not been mentioned in the Scoping Report. The Applicant should confirm any proposed consultation (**AQ25**).

6.47 The Greater London Authority's SPG on the Control of Dust and Emissions during Construction and Demolition is also referred to.

6.48 The 2007 UK Air Quality Strategy is mentioned, but there is no reference to Defra currently updating it.

6.49 No other national, regional or local air quality policy documents are referred to, such as the 2019 Clean Air Strategy, the Mayor of London's Environment Strategy and the 2019 London Borough of Newham's Air Quality Action Plan 2019-2024. The Applicant should confirm if these documents will be referred to in the assessment (**AQ26**).

Policy documents referenced

6.46 The London Plan is mentioned in the context of the Mayor's PM_{2.5} target of 10 µg/m³ (as an annual mean).

Table 6-1: Summary of SR Air Quality Comments

Summary of Final Scoping Report Air Quality recommendations
<ul style="list-style-type: none"> The Applicant is requested to provide clarity on what information will be included in the assessment of cumulative impacts on traffic (AQ1).
<ul style="list-style-type: none"> Any assessment of the road traffic impacts on air quality within ecological sites will also need to consider ammonia (NH₃) (AQ2).
<ul style="list-style-type: none"> Additional information should be provided which should include a quantification, with justification, as to whether UFP due to aircraft emissions, are likely to decline or increase in the future, with a particular focus on sulphur content of fuel. The approach should be agreed with LBN (AQ3).
<ul style="list-style-type: none"> It is understood that IAQM is updating its guidance and it is important that the most recent guidance is used if available in time (AQ4).
<ul style="list-style-type: none"> It is also important that the construction traffic is not considered in isolation from the development traffic, and that the combined traffic levels are considered together on a year-by-year basis to ensure that the worst-case years are included in the assessment (AQ5).
<ul style="list-style-type: none"> When the ES is submitted all model files should be provided to the local planning authority to enable a full audit of the modelling to be carried out (AQ6).
<ul style="list-style-type: none"> Information should be provided on the receptors to be included in the ADMS models (AQ7).
<ul style="list-style-type: none"> The future assessment years of 2025, 2027 and 2031 also seem appropriate, however an addition 'worst case' year may be required following the analysis of construction traffic/NRMM/ development traffic movements (AQ8).
<ul style="list-style-type: none"> The traffic screening criteria is considered appropriate for human receptors, but for impacts on ecological receptors the criteria is different. If, effects on nature conservation sites are scoped in, these should be defined (AQ9).
<ul style="list-style-type: none"> It is not appropriate to use the modelled air quality data reported in the 2015 ES as Defra's and the local authority's data, the LAQM tools and guidance, and the ADMS model used have all been updated since 2015. It will be necessary to repeat the modelling using the most recent data and assessment tools and guidance (AQ10).
<ul style="list-style-type: none"> The assessment should not look solely at the impact of the s73 proposals; the assessment should consider the combined impacts of the consented development and the s73 proposals. This will enable the impacts of the variation to

Summary of Final Scoping Report Air Quality recommendations	
	be assessed to demonstrate that it causes no material change to the conclusions of the consented scheme. It will also ensure that consideration can be given to the mitigation of any identified significant impacts (AQ11) .
■	The ADMS model will be verified for the base year (2019), presumably following the Mayor of London's LLAQM.TG19 methodology, although this is not stated. The model verification should include all available monitoring data and if any monitoring sites are excluded, full justification for their exclusion should be provided (AQ12) . The model verification should aim for an adjustment factor of 2 or less with all predicted concentrations within 10% of the measured concentrations (AQ13) . In addition, future assessment years should consider the variation in annual meteorological datasets with the assessment process (AQ14) .
■	No reference has been made regarding assessing compliance with the mandatory limit values (including with the PM _{2.5} limit value adopted in 2020), and if information is available, even in draft form, on the 2021 Environment Act PM _{2.5} target. The objectives and limit values apply at different locations and should be included in the ES (AQ15) .
■	If information is available, even in draft form, on the 2021 Environment Act PM _{2.5} targets, the ES should include an assessment against these targets (AQ16) .
■	Comparison of the predicted concentrations to the 2021 WHO guidelines and interim targets should be provided for all relevant pollutants (AQ17) .
■	No reference has been made to the IAQM odour guidance which recommends that several different assessment methods should be used to assess odour for planning purposes. Further details should be submitted to the local planning authority (AQ18) .
■	The air quality assessment should provide a commentary on how climate change will impact on air quality in the future (AQ19) .
■	It is recommended that baseline UFP monitoring is undertaken close to the receptors most likely to be affected (i.e. those closest to the runway and downwind most frequently) to assess whether there is potential for UFP to be a significant issue at relevant locations (AQ20) .
■	All guidance noted in the commentary should be referenced in the ES (AQ21) .
■	Consideration should be given to the relevance of the following guidance documents (AQ22) :
■	Professional guidance published by IAQM on the assessment of odour for planning
■	Professional guidance published by IAQM on the assessment of air quality impacts on designated nature conservation sites.
■	It is recommended that any draft IAQM guidance is taken into consideration (AQ23) .
■	The Scoping Report refers to the receptors in general terms but does not identify where they will be or how many will be included. It states that the baseline study will determine the existing and new receptors introduced by committed / proposed development, likely to be affected by the s73 Proposals. These should be confirmed with the local planning authority prior to assessment of impacts (AQ24) .
■	It is considered good practice to consult the local authority's air quality specialist to agree the methodology in detail (i.e. greater detail than is normal in a Scoping Report). This has not been mentioned in the Scoping Report. The Applicant should confirm any proposed consultation (AQ25) .
■	The Applicant should confirm if the following documents will be used in the assessment (AQ26) :
■	2019 Clean Air Strategy;
■	the Mayor of London's Environment Strategy;
■	2019 London Borough of Newham's Air Quality Action Plan 2019-2024.

Chapter 7

Climate Change – Scoped In

7.1 The following commentary is provided by LUC.

7.2 Overall, the methodology and activities scoped into the study is broadly correct and consistent with guidance and is therefore considered acceptable.

7.3 Overall, the assessment method chosen for Climate Change is appropriate. However, more detail is needed regarding climate resilience. It is not sufficient to state that the assessment will follow IEMA guidance. Please see 7.18-7.20 for more detail.

7.4 We agree with the scoped in and scoped out activities that could give rise to changes in GHG emissions from the operation of the airport. This should capture any overall changes in emissions.

7.5 In 7.5.1 The SR correctly refers to the updated IEMA GHG guidance (2022) but should explicitly acknowledge the following *“the crux of significance is not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050” (CC1)*

7.6 In 7.5.13 consideration should be made towards the electrification of surface transport and the impacts this will have on the energy consumption and emissions in both modelled scenarios.

7.7 In 7.5.19 clarification is needed on what scenario from the “Jet zero: further technical consultation” will be used to inform the assumptions used in modelling both scenarios. Scenario 1: Continuation of Current trends would be the likely worst-case scenario. It should be noted that even this scenario involves optimistic assumptions, particularly surrounding carbon pricing. Sensitivity testing could include modelling the three other more optimistic scenarios set out by the Jet Zero technical consultation **(CC2)**.

7.8 7.5.20 states “The approach to classifying and defining likely significant effects will rely on:

- IEMA (2022) guidance (see Section 6 of the IEMA guidance) applying expert judgment on the significance of the Airport’s lifecycle **ground-based** GHG emissions”

7.9 Therefore, does the applicant intend to only assess the significance of the ground-based activities of the proposed changes in operations? In 7.5.6, climb out, cruise and descent (CCD) departures are scoped in **(CC3)**.

7.10 In 7.5.20 please ensure that the choice of carbon budget is justified. In section 6.2 of IEMA's Assessing Greenhouse Gas Emissions and their Significance states "Generating a project's carbon contribution, will enable the impact of your project, to be contextualised against sectoral, local or national carbon budgets". If, for example, national carbon budgets are chosen rather than sectoral, this will need to be justified **(CC4)**.

7.11 In the Climate Change resilience assessment, IEMA Environmental Impact Assessment Guide to: Climate Change Resilience & Adaption (2020) suggests that the following information should be outlined during the scoping stage of the EIA:

- Identify the scale and scope of the project, including design life
- Identify the climate change projections for use in the assessment
- Identify key climatic variables relevant to the project
- Identify likely effects

7.12 The applicant has not provided these, only shown an indication that the assessment will follow the guidance from IEMA (2020). More detail is needed and should be provided in the ES **(CC5)**.

7.13 The applicant has also not indicated the method they will use to assess significance in regard to climate resilience. With respect to climate change adaptation and effect significance, section 7 of the IEMA Guidance (IEMA, 2020) explains that in determining significance, account should be taken of the susceptibility of the receptor (e.g., ability to be affected by a change and the opposite of climate resilience) and the vulnerability of the receptor (e.g., potential exposure to a change).

7.14 In 7.5.29 a reference should be provided for this quote **(CC6)**.

7.15 In 7.5.31 a specific page reference should be provided to the location of the approach set out in the Airports National Policy Statement **(CC7)**.

7.16 In 7.5.30 – the Bristol expansion inquiry is relevant as provides an indication of government policy. However, the applicant should note Figure 4 of the IEMA (2020) guidance that states: *"For clarity, Module D in Figure 4 (Benefits and Loads Beyond the System Boundary) refers to wider impacts that may not be appropriate to attribute (in part or whole) to the project when calculating net impacts within the study boundary but are nevertheless relevant context to consider. Examples include the benefits of a project sending waste materials for recycling rather than disposal (which is properly attributed to the user of recycled products, but still relevant to acknowledge) or where a major project such as an airport or rail line might affect regional or national travel patterns and emissions (properly attributable to a wider group of transport users, but relevant to acknowledge in the project context)."* Therefore, acknowledging the wider context surrounding air travel, climate change and the UK's climate targets is necessary in relation to the project.

Air Quality Considerations

7.17 The following comment is provided by Ardent/Air Pollution Services.

7.18 The SR in paragraph 7.5.2 states *"will account for the seven GHG's included in the UNFCCC/Kyoto Protocol"*. This covers only direct GHG's. The assessment should also account for 'indirect GHG's' in line with IPCC GWP evidence **(CC8)**.

7.19 SR table 7.3 states: *"Passengers passing through the terminal consume food, drinks and other products however there is limited data on the types and amounts as retail activities are carried out by 3rd parties. GHG emissions associated with the delivery of materials to the airport and the treatment of any waste however is included in the assessment and the overall effect of excluding the GHG emissions from the manufacture of consumables (a material proportion of which would occur outside of the UK) is considered to be small and less than the 1% threshold identified by IEMA"*. It is assumed that data on the stock supplies for the retail units will be available or at the very least estimates produced. Evidence should be provided to demonstrate that the emissions will be less than the 1% threshold. Often consumables account for very high quantities of emissions, especially for retail units with high footfall. The fact that a material proportion of consumables are manufactured outside the UK will further contribute emissions through additional transport **(CC9)**.

Table 7-1: Summary of FSR Climate Change Recommendations

Summary of Final Scoping Report Climate Change recommendations	
■	The applicant will need to acknowledge the wider context surrounding air travel, climate change and national climate targets in relation to the project (CC1).
■	Clarification is sought on which scenario from the “Jet zero: further technical consultation” will be used to inform the modelling of both scenarios proposed (CC2).
■	Clarification is sought on whether the climate change assessment will only include ground operations (CC3).
■	Please ensure that the most appropriate carbon budget is used to assess significance and its use is justified (CC4).
■	
■	The applicant will need to provide more detail in regard to the following aspects of the climate resilience assessment (CC5): <ul style="list-style-type: none"> – Identify the scale and scope of the project, including design life – Identify the climate change projections for use in the assessment – Identify key climatic variables relevant to the project – Identify likely effects – Provide an outline of the method to be used to determine significance in regard to climate change adaptation and effect significance
■	In 7.5.29 a reference should be provided for this quote (CC6).
■	In 7.5.31 a specific page reference should be provided to the location of the approach set out in the Airports National Policy Statement (CC7).
■	The assessment should also account for ‘indirect GHGs’ in line with IPCC GWP evidence (CC8).
■	It is assumed that data on the stock supplies for the retail units will be available or at the very least estimates produced. Evidence should be provided to demonstrate that the emissions will be less than the 1% threshold as consumables often account for very high quantities of emissions (CC9).

Chapter 8

Public Health and Wellbeing – Scoped In

8.1 It is considered appropriate to scope Public Health and Wellbeing into the EIA as set out in the SR. Table 7.4 of the SR sets out the scope of the assessment based on tools used by the Institute of Public Health (IPH, 2021) and uses strategic determinants of health set out in Health Impact Assessment (HIA) guidance that span environmental, social, behavioural, economic and institutional factors to assess potential effects. This approach is considered acceptable.

8.2 A population health approach will be taken, informed by discussion of receptors in conjunction with other technical chapters of the ES. This approach is in line with guidance and good practice and is considered acceptable.

8.3 The approach for setting out baseline conditions considers a wide range of data sources including local, regional and national sources. The Applicant notes that the east-west alignment of the airport means that populations in Newham, Greenwich and Tower Hamlets are of particular interest to the health assessment. The baseline data will be acquired from the Office for Health Improvement and Disparities (OHID) Fingertips Local Authority Health Profiles using the most recent profiles (2019-2020). This should provide a high-level summary of some of the key health issues in the three local authorities. Small area data for a larger range of indicators will be collected and presented as part of the ES using the OHID local data tool and deprivation mapping. This approach is considered acceptable.

8.4 The Potential Sensitive Receptors identified in section 6.6.31 of the SR are considered acceptable for inclusion within the HIA. However, if when gathering the baseline conditions any further sensitive human receptors are identified, these should also be considered within the HIA (**PHW1**).

8.5 Further in the HIA scope of works it states that while there is a lack of specific guidance in determining significance for health in EIA, the UK guidance (IPH, 2021), and International Association for Impact Assessment (IAIA) and European Public Health Association (EUPHA) (IAIA/EUPHA 2020) can be applied consistently to all determinants of health and will therefore be used provided an agreement with public health stakeholders is secured. This agreement should be reflected in the ES and is considered acceptable.

8.6 The SR notes that the following will be scoped into the public health and wellbeing assessment:

- Operational air noise;
- Ground noise;
- Daytime and night time effects;
- Air quality including ultra-fine particulate matter (UFPs); and
- Climate change.

8.7 Issues relating to water and soil quality and electro-magnetic fields (EMF) are scoped out of the public health and wellbeing assessment.

8.8 With regards to the scoped in considerations of the public health and wellbeing assessment it is noted that with regards to operational and ground noise, that these will be assessed in the noise assessment and that the health assessment will consider the public health, population level and implication of such changes, where the noise assessment will consider changes in the aircraft and the increase in passenger surface access requirements.

8.9 The Applicant proposes to undertake a qualitative assessment in line with IPH 2021 guidance as opposed to the WHO guidelines proposed in the review of the DSR. The FSR also highlights that IEMA in collaboration with OHID, are in the process of producing further guidance on health in EIA, and that regard will be given to this which may include updates to the final methodology used. This is considered generally appropriate, but reference should also be made to the 2021 WHO Air Quality Guidelines (see further detailed comments below).

8.10 The applicant's intention to continue dialogue with LBN's Director of Public Health is welcomed.

8.11 Insufficient information is provided on the approach to assessing the impacts on health due to air pollution.

8.12 The Applicant should consider how the impacts change due to the variation (i.e., the consented development + variation) compared to the impacts set out for the consented scheme. These changes should be used to evidence whether there is a beneficial or adverse effect of the proposed variation compared to the consented scheme.

8.13 The health assessment criteria for air quality are unclear. Paragraph 7.6.6 states that the assessment will include "...consideration of small changes below health protection standards". Presumably this is referring to the objectives and limit values, but Table 7.4 states that it will consider the non-threshold effects of NO₂ and PM_{2.5} on population health (the standards are thresholds). Clarity is required regarding how the health effects of air pollution will be assessed (**PHW 2**).

8.14 It also states that "WHO air quality guideline values will also be referenced as an aspirational target, for example the Mayor's aspiration to meet the 2005 WHO guideline for PM_{2.5}". It should be noted that this is no longer a WHO air quality guideline. Furthermore, whether a target is aspiration or not is not relevant for health impacts; it is relevant for policy development which this s.73 does not address.

8.15 Table 7.4 states the assessment will have "regard to WHO guide values and how the air quality chapter modelling results compare to them; but the health assessment will not hold the project to WHO guide values where they are more stringent than UK statutory standards".

8.16 The Air Quality chapter should assess compliance against regulatory standards, while the Public Health and Well Being chapter should consider the health impacts of air pollution as part of a wider health impact assessment which includes both the benefits and disbenefits to health of the proposals. The health assessment will not "*hold the project to WHO guide values*" and this statement suggest a misunderstanding of the role of this assessment which is to robustly and appropriately identify the health effects.

8.17 The Public Health and Well Being chapter should assess against the 2021 WHO Air Quality Guidelines which are based on the most recent synthesis of the medical evidence (**PHW3**).

8.18 The current air quality objectives and limit values are not suitable for assessing the impact of exposure to air pollution on health. They are based on the technical and economic feasibility combined with as the medical evidence. Furthermore, they were adopted nearly 25 years ago, since when there has been a very significant body of research which show health effects at considerably lower levels as reflected in the 2021 WHO air quality guidelines. For example, the WHO guidelines, not the limit values or objectives, were relied upon by the 2020 Coroner's conclusions into the causes of the death of Ella Kissi Debrah.

8.19 The HIA appears rather narrow in its approach to the consideration of air quality. For example, there is no mention of the impact of exposure to air pollution as a direct result of the airport operations, such as exposure airside and in airport buildings nor does it appear to include the impacts of exposure to odours. The applicant should consider the full range of risks to health including exposure of the future users within the airport boundary (**PHW4**).

8.20 The air quality objectives and limit values apply at different locations. For the HIA, full considerations of all locations where people may be exposed to air pollution over different averaging periods should be considered (**PHW5**). The Applicant should provide quantitative information on air pollution in relation to WHO guidelines in the Air Quality

Assessment to allow the HIA to fully assess the health effects (PHW6).

8.21 HIA guidance suggests a population-based approach. It should be noted that air quality assessments assess impacts using individual receptors which typically represent worst-case impacts. There is no information on the methodology for going from the air quality impact at individual receptors to the impact on populations. This needs to be provided (PHW7).

8.22 The Applicant should provide an assessment of UFP in the Air Quality Assessment to allow the health assessment to fully assess the health effects of this pollutant (PHW8).

8.23 The determination of significance in relation to air quality should be related to the health outcomes rather than a breach of statutory standards (PHW9).

8.24 The Applicant has stated that the health chapter conclusions will be presented in both EIA categories of significance, such as major, moderate, minor or negligible; and a narrative explaining this 'score' with reference to evidence, local context and any inequalities. The details of the 'score' methodology should be clearly outlined in the ES (PHW10).

Table 8-1 – Summary of FSR Public Health and Wellbeing Comments

Summary of Final Public Health and Wellbeing recommendations
<ul style="list-style-type: none"> When gathering the baseline conditions, if any further sensitive human receptors are identified, these should also be considered within the HIA (PHW1)
<ul style="list-style-type: none"> Clarity is required regarding how the health effects of air pollution will be assessed (PHW 2).
<ul style="list-style-type: none"> The Public Health and Well Being chapter should assess against the 2021 WHO Air Quality Guidelines which are based on the most recent synthesis of the medical evidence (PHW3).
<ul style="list-style-type: none"> The HIA is narrow in its approach to consideration of Air Quality. The Applicant should consider the full range of risks to health including exposure of the future users within the airport boundary (PHW4).
<ul style="list-style-type: none"> For the HIA, full considerations of all locations where people may be exposed to air pollution over different averaging periods should be considered (PHW5).
<ul style="list-style-type: none"> The Applicant should provide quantitative information on air pollution in relation to WHO guidelines in the Air Quality Assessment to allow the HIA to fully assess the health effects (PHW6).
<ul style="list-style-type: none"> There is no information on the methodology for going from the air quality impact at individual receptors to the impact on populations. This needs to be provided (PHW7).
<ul style="list-style-type: none"> The Applicant should provide an assessment of UFP in the Air Quality Assessment to allow the health assessment to fully assess the health effects of this pollutant (PHW8).
<ul style="list-style-type: none"> The determination of significance in relation to air quality should be related to the health outcomes rather than a breach of statutory standards (PHW9).
<ul style="list-style-type: none"> The Applicant has stated that the health chapter conclusions will be presented in both EIA categories of significance, such as major, moderate, minor or negligible; and a narrative explaining this 'score' with reference to evidence, local context and any inequalities. The details of the 'score' methodology should be clearly outlined in the ES (PHW10).

Chapter 9

Water Resources and Flood Risk – Scoped Out

9.1 It is considered appropriate for Water Resources and Flood Risk to be **scoped out** of the EIA, on the basis that the modifications to the planning conditions sought through the current S73 application will not introduce further significant environmental impacts, but some updated information will need to be provided.

9.2 The SR identifies the need to consider the updated Thames Tidal Downriver Breach Inundation Modelling study (2018), which was not available at the time the previous Flood Risk Assessment for the CADP1 was undertaken, and which shows the site to be partly within the breach extents. The Applicant will consider any implications of this change within an updated Flood Risk Assessment (FRA) which is to accompany the S73 application. This is deemed appropriate.

9.3 The updated FRA will identify any required updates to the surface water drainage strategy with consideration to current policy requirements. Revisions or upgrades to the proposed mitigation measures will be specified within the ES. Any new findings of the updated FRA will be detailed in the ES Chapter, with due consideration to the Environment Agency's latest modelled breach extents.

9.4 The FSR states that no new or materially different effects on water quality are expected following the proposed changes to the scheme, in view that the approved Construction and Environmental Management Plan (CEMP) will continue to be adhered to throughout the construction process. This assessment is supported.

9.5 The Applicant has stated that the impact that the increase in passenger traffic may have on potable water infrastructure capacity will be assessed in consultation with Thames Water. The assessment and consultation will also consider any increase in wastewater capacity. This information will be covered as part of the ES.

Table 9-1 – Summary of FSR Water Resources and Flood Risk Commentary

Water Resources and Flood Risk (Scoping Out is acceptable – refer to recommendations in this review)	
■	As proposed in the Scoping Report it is considered appropriate to Scope Out Water Resources.

Chapter 10

Townscape and Visual Effects – Scoped Out

10.1 The SR outlines the proposed structure, content and scope of the Environmental Statement (ES) to be submitted with a forthcoming Section 73 (S73) planning application, which will comprise amendments to the City Airport Development Programme 1 (CADP1) Planning Permission, 13/01228/FUL, granted in July 2016.

10.2 The SR (para 6.2) proposes that the Townscape and Visual Impact Assessment (TVIA) is **scoped out** of the EIA. This is on the basis that it is highly unlikely that this topic will exhibit any new, or materially different, likely significant environmental effects as a result of the proposed changes. It is noted that this is especially because there are no physical changes to the approved CADP1 infrastructure.

10.3 The following section considers whether the Scoping Report clearly justifies exclusion of the TVIA on the basis that proposed changes will not give rise to any new or materially different significant townscape and visual effects. It looks at:

- The effects reported by the 2015 TVIA produced by RPS (submitted for the CADP1 planning permission);
- The proposed amendments to the CADP1 (forthcoming S73 planning application);
- Whether the amendments as part of the forthcoming S73 planning application change the effects reported by the 2015 TVIA; and
- Whether it is justified to scope out the TVIA from the S73 application and whether the Scoping Report clearly justifies its exclusion.

The effects reported by the 2015 TVIA

10.4 The 2015 TVIA assessed the likely significant effects of the development of the proposed CADP1 on townscape character and visual receptors. The likely effects were assessed for both daytime and night-time during the construction and operation of the proposed CADP1.

10.5 The 2015 TVIA was carried out in accordance with the Guidelines for Landscape and Visual Impact Assessment, 3rd edition (GLVIA), 2013 produced by the Landscape Institute and Institute of Environmental Management and Assessment.

10.6 In its conclusions the 2015 TVIA stated (para 10.216) that *'the proposed CADP will give rise to some likely significant effects on views during both the construction and operational phases. However, negative impacts will be restricted to only a few local views of the Airport. No likely significant effects on townscape character have been identified.'*

10.7 A Digital ATC Tower Visual Impact Assessment (VIA) was also produced in 2016 by RPS. This was an assessment of the potential visual effects that would result from the proposed Digital ATC Tower at the Airport (50m height above existing ground level). In its conclusions the 2016 TVIA stated (para 7.1) *'For each of the existing baseline views included in the assessment, it is concluded that the proposed development would not result in any effects which are significant in visual terms. Whilst the proposed development would form an immediately noticeable new element within each of the views included in this assessment, it would result in very little visual obstruction to these existing views which include tall buildings.'*

10.8 Because the 2016 VIA focussed solely on the Digital ATS Tower it is not necessary to review this assessment in relation to the proposed S73 amendments.

Proposed amendments to CADP1 (forthcoming S73 planning application)

10.9 The Scoping Report (para 1.1.3) states that the 'minor-material' planning application will seek to vary conditions attached to the CADP1 planning permission. Consequential modifications (Scoping Report, para 1.14) which are relevant to the TVIA are:

- **An increase in the number of flights** - permitted between 06:30 and 06:59, from 6 flights to 12 flights and more flexibility for arrivals that have suffered unavoidable delays in the last half hour of operations;
- **Greater flexibility in the location of aircraft stands** - given the increased dimensions of new generation aircraft compared to current variants; and
- **Retention of temporary facilities required to maintain levels of service and safe operations** until they are required to be removed in accordance with the details approved in the Construction Phasing Plan (CPP).

10.10 The DSR (para 2.2.2) states that there will be no changes to the number of aircraft stands, the runway, other infrastructure or the design and layout of the buildings as approved under the CADP1 permission and subsequently varied by several non-material amendment applications (as listed in Annex 2 of the DSR).

10.11 However, the disposition and layout of stands to the west of the airfield will be altered to allow parking of larger Code C (new generation) aircraft. This may also necessitate the removal of the existing Corporate Aviation Facility, known as the 'Jet Centre' (Scoping Report, para 2.2.3)

10.12 To expand on information provided in the DSR the following information has been obtained as part of this review in order to further understand the proposed changes:

- It is understood, from the Applicant, that the approved CADP1 building heights, massing and design (assessed in the 2015 TVIA) will not be materially altered by the S73 application.
- The Applicant has confirmed that any new stands in the Jet Centre would not involve additional infrastructure but at most would be new paint markings on concrete. They are not seeking additional stands to the 25 that are conditioned, only that they have flexibility to alter the stand layout to include the Jet Centre. This is because the new generation of aircraft that will use the airport have a wider wingspan than the current fleet and require slightly larger stand dimensions, so the flexibility to park aircraft in the Jet Centre will help accommodate all 25 stands across the airport.
- Plan P4 (part of CADP1) shows the location of stands for scheduled aircraft movements. It is understood that Plan P4 will be updated for the S73 application to identify the Jet Centre as a parking location for scheduled aircraft.

Do amendments as part of the S73 planning application change effects reported by the 2015 TVIA

10.13 The greater flexibility in location of airport stands (understood to be new paint markings on concrete) would mean extending parking of scheduled aircraft into the western edge of the site (the Jet Centre). The western edge of the site is currently used for corporate jet parking and is comprised of concrete hardstanding and infrastructure.

10.14 The western extent of the airport is located in Townscape Character Area 4 Royal Docks which is fast changing with much modern development and characterised by the open areas of water of Royal Docks, road infrastructure, open vacant land awaiting development, industrial sites and airport associated infrastructure (briefly summarised from Table 10.9, TVIA 2015).

10.15 The 2015 TVIA (para 10.190) states that the Royal Docks Character Area would experience Moderate Adverse daytime and Minor Adverse night-time effects during both the construction and operational phases. The proposed CADP1 would be located within this CA and therefore it would experience permanent direct effects.

10.16 It is not considered, by this review, that the proposed S73 amendments would change effects identified by the 2015 TVIA for the Royal Docks Character Area.

10.17 The TVIA 2015 (para 10.192) states visual effects on some parts of this CA, in close proximity to the CADP1, would be Moderate to Substantial Adverse and therefore sufficient to result in a localised significant visual effect. However, most of these effects have been identified from a relatively small number of private residential receptors in localised areas and the only significant visual effect identified from a publicly accessible location would be from part of the dockside on the north side of the Royal Albert Dock. This would be insufficient to result in a significant adverse effect on the inherent character of the area as a whole.

10.18 Of the 12 representative viewpoints selected in TVIA 2015 there are none which have direct views onto the western edge of the site including the Jet Centre. Viewpoint 1 omits this area from view and in Viewpoint 10 this area is screened by existing road infrastructure.

10.19 It is not considered, by this review, that the proposed S73 amendments would change effects identified from viewpoints and visual receptors within the Royal Docks Character Area reported in the 2015 TVIA. However, given the western part of the site is not covered by the 2015 TVIA Viewpoints, acknowledgement of visual change in this area could be provided (see para 4.2.3).

10.20 Given the nature of the proposed amendments (additional flights/ aircraft movements on Saturday afternoons / evenings and at the start / end of each day, and flexibility to park scheduled aircraft in the western extent which already provides parking for corporate aircraft) with no material

Table 10-1 – Summary of SR Townscape and Visual Comments

changes to building, heights, massing and design, it is not anticipated that there will be any implications for additional effects over those reported in the 2015 and 2016 TVIA chapters.

10.21 It should be noted that parts of the CADP1 work have already been carried out/ built. The baseline conditions for any assessment are now different to those reported in 2015.

Whether it is justified to scope out the TVIA from the S73 application and whether the Scoping Report clearly justifies its exclusion

10.22 This review confirms that the proposed changes to the CADP1 application and the subject of the S73 application are not anticipated to give rise to any new or materially different likely significant townscape and visual effects. As such an updated standalone TVIA chapter is not needed as part of the new EIA. It is considered that the justification, in the SR, for scoping out the TVIA is clear and robust. However, clarity is needed on the following:

10.23 When considering the new airport stands (comprising surface level painted markings), their visual screening and visual effect on receptors, it is not clear whether their use for larger Code C aircraft is taken into account. The visual effect of **larger** parked aircraft will be much greater than the surface level stands which accommodate them alone. This should be clarified in relation to the townscape and visual effects identified in the 2015 UES to confirm the S73 application brings no additional townscape and visual effects to those previously reported (**TVIA1**).

Scoping Report Townscape and Visual Effects Recommendations (**Scoping Out is acceptable** – refer to recommendations in this review)

- Clarification is required in relation to townscape and visual effects identified in the 2015 UES to confirm the S73 application brings no additional townscape and visual effects to those previously reported (**TVIA1**).

Chapter 11

Ecology and Biodiversity – Scoped Out

11.1 It is stated in the SR that the ecological value of the airport is generally considered to be low with limited potential to increase biodiversity due to the need to discourage birds. It considers that opportunities will be present that would ensure an increase in biodiversity that also make provision for the need to discourage birds.

11.2 The airport has developed and implemented a Sustainability and Biodiversity Strategy which is reviewed every 3 years. The targets, actions and initiatives of the strategy to enhance biodiversity off-site and promote access to biodiversity and how the project will align with these are not detailed.

11.3 While it is acknowledged that a landscaping scheme will be implemented at the airport, it does not appear that an assessment of biodiversity using the DEFRA Metric 3.0 or current 3.1 has been undertaken to inform the proposals and long-term management. It is not clear what agreements have been concluded in relation to biodiversity net gain.

11.4 It is noted that a Preliminary Ecological Appraisal (PEA) will be undertaken, however there is no mention of undertaking BNG condition assessments or metric calculations at this point. Further consideration and clarification as to how BNG will be recorded and achieved is required.

11.5 It is stated the updated PEA report is anticipated to confirm that the airport has no intrinsic habitat value and that the proposed works will have a negligible effect on terrestrial ecology and biodiversity, however the original report findings have not been provided for review. It is also anticipated that through the collection of habitat condition data using the DEFRA condition sheets, that a more detailed and accurate picture of the habitat value of the airport will be provided.

11.6 While it is stated that habitat and species variation is low, the justification surrounding the potential to increase the sites' biodiversity value is limited to restrictions around birds. It is not clear as to the level of habitat connectivity to the wider landscape or the baseline biodiversity value, including condition as per the DEFRA metric and associated condition sheets.

11.7 Once the updated PEA has been undertaken, including an assessment of biodiversity, it will then be possible to

assess the full impact of the proposed works upon terrestrial ecology and biodiversity.

11.8 The scoping report does not make reference to consultee comments. It would be recommended to provide relevant comments or agreements reached with consultees, in particular the Local Planning Authority, with regard to biodiversity and on or offsite enhancement or habitat creation.

11.9 The report references relevant best practice guidance for Preliminary Ecological Appraisal but does not reference DEFRA guidance and its application to the proposed works.

11.10 Given the applicant has undertaken an updated desk study and Phase 1 (including search of protected species records) this should suffice as evidence that appropriate surveys have been undertaken by suitably qualified ecologists and therefore the scoping out can be deemed to be appropriate given the potential impacts have been assessed.

Notably the ES still proposes to include a section on ecology and biodiversity.

11.11 Given that the updated PEA concludes that the airport has no intrinsic habitat value and that the proposed Section 73 amendments will have a negligible effect on terrestrial biodiversity, the Biodiversity Strategy is expected to adequately mitigate the impacts of the proposed works.

11.12 The applicant has stated that a meeting with the Environment Agency was scheduled for 16th August 2022 which would confirm their position regarding the inclusion of Ecology and Biodiversity in the EIA. This position should be confirmed (**EB1**).

Table 11-1: Summary of SR Ecology and Biodiversity Comments

Summary of Scoping Report Ecology and Biodiversity recommendations	
■	Confirmation from the Environment Agency with regard to the scope of the EIA should be provided by way of written recommendation that Ecology and Biodiversity either be scoped in or out (EB1).

Chapter 12

Archaeology and Built Heritage – Scoped Out

12.1 Archaeology and built heritage are discussed at paragraphs 8.5.1 to 8.5.5 of the SR. The Applicant sets out that the Site is located in a Tier 3 Archaeological Priority Area relating to the Royal Docks, of which the Site historically forms part. Other heritage assets within 1km of the Site include eight listed buildings and the non-designated above ground remains of the Royal docks (e.g., pontoons, dock walls, railway tracks).

12.2 The Applicant is seeking to amend conditions to an existing planning permission (13/01228/FUL). The effects to archaeology and built heritage arising from this existing permission are subject to conditions that have, according to the Applicant, been discharged. The amendments sought are to facilitate an increase in passengers and flexibility in flight times, which will necessitate some re-arrangement of aircraft stands and, potentially, the removal of the ‘Jet Centre’ but no physical changes to the consented buildings and infrastructure.

12.3 The Applicant proposes scoping out the topic of archaeology and built heritage on the basis that there “*would be no changes to infrastructure or new areas of hardstanding at the airport*” (paragraph 7.5.5). The Applicant confirms that these amendments entail no ground intrusive activity (i.e., no potential for effects to buried archaeological remains) or meaningful modification to the appearance of the development (i.e., the change in the setting of any assets affected would remain as per that assessed in earlier applications). The proposed scoping out is acceptable.

Table 12-1: Summary of SR Archaeology and Built Heritage Comments

Scoping Report Archaeology and Built Heritage Recommendations (Scoping Out is acceptable – refer to recommendations in this review)	
■	No recommendations required.

Chapter 13

Ground Conditions and Contamination – Scoped Out

13.1 The SR provides a good overview of the site, inherent ground conditions and requirements for the wider redevelopment as a condition of planning.

13.2 The SR confirms that the partially complete CADP1 development includes a suitable condition of planning (Condition 39) pertaining to contamination, remediation and validation of this which have already been partially discharged.

13.3 The SR goes on to confirm that this variation does not include any additional physical works and that the data provided as part of the CADP1 application remains valid. However, it is welcomed that the ES shall be updated to account for the latest works and findings on Site which have been undertaken pursuant to the discharge of Condition 39.

13.4 Based on the review of the information provided by the Applicant, scoping out of the Ground Conditions and Contamination element is considered suitable.

Table 13-1 – Summary of SR Ground Conditions and Contamination Comments

Scoping Report Ground Conditions and Contamination Recommendations (Scoping Out is acceptable – refer to recommendations in this review)	
■	No recommendations required.

Chapter 14

Waste – Scoped Out

14.1 The SR provides reasonable assumptions regarding the ongoing waste generation from the proposed extensions and the resultant passenger number increases.

14.2 These assumptions are that the waste generated from the additional throughput of passengers will be an expansion of the existing waste streams, rather than new streams requiring separate controls. Furthermore, the expansion of the existing waste streams can be suitably controlled and properly recycled or disposed of within the existing systems utilised.

14.3 The existing waste generators (airlines, tenants and retail concessions) will continue to commercially control their waste via the existing recycling systems and via the airport 'waste hub' with all parties expecting to experience a similar increase of waste generation proportional to the passenger volume increase.

14.4 Initiatives to increase the volume of recycled material have also been outlined including the use of training of staff and adoptions of new equipment and storage. These initiatives are welcomed and should assist in greater volumes of recycled material and a reduction in overall waste in accordance with the waste hierarchy.

14.5 Whilst the assumptions are generally suitable, the SR does not indicate what the expected volumetric increases of waste may be and other factors which may be increased due to this. For instance, additional waste haulage is likely to be required and this could be considered in greater detail.

14.6 It is acknowledged that any increase in waste removal/haulage will be negligible compared to the overall increases in traffic the site will see based on the proposed expansion and these numbers may be accounted for elsewhere. Clarification on this point may be prudent to ensure noise and traffic measures are not affected (**W1**).

14.7 In addition to ongoing waste generation the construction elements are considered. The SR outlines the completed elements of construction from the 2019 submission. This includes the extension of the apron and parallel taxiway. These items are known to have generated significant waste but do not require further consideration at this stage as they are now complete.

14.8 The remainder of the structural developments from 2019 submission (Terminal Forecourt, New East Pier, East Terminal Extension and West Terminal Extension) are understood to have suitable controls as part of the Waste Management Strategy (WMS) already submitted as part of planning.

14.9 As the earlier, more intensive waste producing elements of the construction project have been completed (as outlined above), it is assumed the measures in the WMS are suitable for the remaining works to ensure waste is properly handled

and recycled/ disposed of in accordance with waste hierarchy, legislation and regulations.

14.10 Based on the review of the information provided by the Applicant, scoping out of the Waste element is considered suitable.

Table 14-1 – Summary of SR Waste Comments

Scoping Report Waste Recommendations (Scoping Out is acceptable – refer to recommendations in this review)	
■	It is acknowledged that any increase in waste removal/ haulage will be negligible compared to the overall increases in traffic the site will see based on the proposed expansion and these numbers may be accounted for elsewhere. Clarification on this point may be prudent to ensure noise and traffic measures are not affected (W1).

Chapter 15

Major Accidents and Disasters – Scoped Out

15.1 The SR uses EIA Regulations and sets out report specific descriptions to determine the project's vulnerability.

15.2 The Applicant states *“a major accident is defined for the purposes of this report as an occurrence resulting from an uncontrolled event caused by a man-made activity or asset leading to serious damage or destruction of receptors. The term ‘disaster’ is used to describe a natural occurrence leading to serious damage or destruction of receptors. In both cases, the occurrence could be either immediate or delayed.”*

15.3 The Applicant has also highlighted that the topic can be captured under the heading of ‘third party risk’ which includes:

- The fatality risk to people on the ground from the effects of aircraft accidents;
- Birdstrike risk, i.e., risk of collisions occurring between aircraft and large birds; and
- The risk of wake vortex damage generated by aircraft in flight to properties.

15.4 The Proposed Development does not pose significant risks to society and the environment in the event of a major accident.

15.5 The Government has established Public Safety Zones (PSZs) to reduce risk when dealing with proximity to the end of airport runways. Government Policy defines a Public Safety Restricted Zone (PSRZ) closest to the runway, and a Public Safety Controlled Zone (PSCZ) extending to 1,500 metres from the landing threshold (140 metres from the runway centre line), where development is restricted. The DSR notes that under government policy, there would be no change to the PSRZ or PSCZ because of the project. The highest risk areas remain within these zones and there would continue to be a presumption against development within them.

15.6 Against these PSZ policy criteria, the Applicant considers the estimated changes to fatality risk derived from the Proposed Development to be negligible and not significant. It is noted that the applicant will provide more detail on fatality risk with the proposed use of larger aircrafts, and how this does not increase risk factor, compared to older aircrafts..

15.7 The Applicant states that the Proposed Development will not alter the existing natural features in or around the airport,

and that there is therefore no likelihood that it will have any significant effect on the existing number, type or movement patterns of birds in the area. This should also be addressed in detail in the ecology section as proposed by the Applicant.

15.8 The Applicant states that effects associated with flood risk will be considered in an updated Flood Risk Assessment (FRA) submitted with the planning application, whilst climate change impacts will be considered in a dedicated chapter of the ES. This approach is considered acceptable. The DSR concludes that the airport suffers no exceptional climatic conditions or significant flood risk that regularly affect its operations.

15.9 Whilst it should be considered that there is potential for surrounding building users and construction workers to be exposed to risks from traffic movements, demolition and waste, it is considered that none of these are at a scale or complexity that are beyond the management of a proficient contractor to adequately control and mitigate. These would be managed under the Health and Safety at Work Act and are not generally recognised as a major accident. The DSR states that they will also be managed by the Applicant under the

Management of Health and Safety at Work (MHSW) regulations implying that there is a current system in place.

15.10 The SR also states that the Applicant will implement a CEMP to manage the risks of all construction works. It should be noted that a fire statement is required to accompany all major applications in London (London Plan Policy D12B). The Applicant proposes to discuss with LBN if a fire statement will be produced, as required by the London Plan Policy D12B).

15.11 The risk(s) to the development arising from major accidents and/or disasters is considered unlikely following mitigation measures put in place.

15.12 As such, it is acceptable to scope out major accidents and disasters from the ES.

Table 15-1: Summary of DSR MAD Comments

Draft Scoping Report - Major Accidents and/or Natural Disasters (**Scoping Out is acceptable** – refer to recommendations in this review)

- No recommendations provided, however LBN should note proposals made by the Applicant and see that they are satisfied with this approach.

Chapter 16

Conclusions

16.1 The ES will need to record all consultation undertaken and the decisions made during its preparation.

16.2 Overall, the SR meets the statutory requirements for scoping set out in Section 13(a) of the EIA Regulations and includes sufficient detail on the approach to the identification of the baseline environment, receptors and study area.

16.3 There are, however, a number of recommendations made in this review in relation to topics proposed to be scoped in/out where insufficient information has been provided to justify the approach, or where the principle of scoping out is supported, but additional information / justification is required to support this approach in the ES. Recommendations are also made in relation to guidance, methodology and content of the ES which should be addressed during the EIA and in the ES.

16.4 Tables 5.1 – 5.3 below contains a summary of these recommendations. This should be read in conjunction with the rest of the review report so the context of each point can be understood.

Table 5.1 Recommendations of the Review

Recommendations of this Review
Regulatory Requirements
<ul style="list-style-type: none"> ■ N/A. The recommendation to use 'scoped out' in place of 'scoped down' has been taken and so all requirements have been met.
Description of the Development
<ul style="list-style-type: none"> ■ This is acceptable.
Assessment Methodologies and Significance Criteria
<ul style="list-style-type: none"> ■ See comments under topics.

Table 5.2 Topics Scoped into the ES

Topics Scoped Into the ES
Socio-Economics (Scoping In is agreed – refer to recommendations in this review)
<ul style="list-style-type: none"> In the absence of formal guidance that influences socio-economic assessment methodology, the significance criteria for this topic should be clearly presented in the methodology section of this chapter topic in the ES (SE1).
<ul style="list-style-type: none"> Mitigation measures are not outlined in this section beyond the proposal to integrate existing community benefit programmes to the Proposed Development. These should be identified and outlined in the ES (SE2).
<ul style="list-style-type: none"> The combined socio-economic benefits of the Proposed Development and cumulative schemes should also be considered in the assessment (SE3).
Surface Access (Scoping In agreed – refer to recommendations in this review)
<ul style="list-style-type: none"> The Final Scoping Report is considered acceptable in terms of Access and Transport.
Noise (Scoping In is agreed – refer to recommendations in this review)
<ul style="list-style-type: none"> NV1 Where individual aircraft movements in the <0700 period are considered this should include discussion on the average (LAeq), and short duration (LAMax) noise levels in the context of the existing ambient acoustic environment at sensitive receptors.
Air Quality (Scoping In is agreed – refer to recommendations in this review)
<ul style="list-style-type: none"> The Applicant is requested to provide clarity on what information will be included in the assessment of cumulative impacts on traffic (AQ1).
<ul style="list-style-type: none"> Any assessment of the road traffic impacts on air quality within ecological sites will also need to consider ammonia (NH₃) (AQ2).
<ul style="list-style-type: none"> Additional information should be provided which should include a quantification, with justification, as to whether UFP due to aircraft emissions, are likely to decline or increase in the future, with a particular focus on sulphur content of fuel. The approach should be agreed with LBN (AQ3).
<ul style="list-style-type: none"> It is understood that IAQM is updating its guidance and it is important that the most recent guidance is used if available in time (AQ4).
<ul style="list-style-type: none"> It is also important that the construction traffic is not considered in isolation from the development traffic, and that the combined traffic levels are considered together on a year-by-year basis to ensure that the worst-case years are included in the assessment (AQ5).
<ul style="list-style-type: none"> When the ES is submitted all model files should be provided to the local planning authority to enable a full audit of the modelling to be carried out (AQ6).
<ul style="list-style-type: none"> Information should be provided on the receptors to be included in the ADMS models (AQ7).
<ul style="list-style-type: none"> The future assessment years of 2025, 2027 and 2031 also seem appropriate, however an addition 'worst case' year may be required following the analysis of construction traffic/NRMM/ development traffic movements (AQ8).
<ul style="list-style-type: none"> The traffic screening criteria is considered appropriate for human receptors, but for impacts on ecological receptors the criteria is different. If, effects on nature conservation sites are scoped in, these should be defined (AQ9).
<ul style="list-style-type: none"> It is not appropriate to use the modelled air quality data reported in the 2015 ES as Defra's and the local authority's data, the LAQM tools and guidance, and the ADMS model used have all been updated since 2015. It will be necessary to repeat the modelling using the most recent data and assessment tools and guidance (AQ10).
<ul style="list-style-type: none"> The assessment should not look solely at the impact of the s73 proposals; the assessment should consider the combined impacts of the consented development and the s73 proposals. This will enable the impacts of the variation to

Topics Scoped Into the ES
<p>be assessed to demonstrate that it causes no material change to the conclusions of the consented scheme. It will also ensure that consideration can be given to the mitigation of any identified significant impacts (AQ11).</p>
<ul style="list-style-type: none"> ■ The ADMS model will be verified for the base year (2019), presumably following the Mayor of London's LLAQM.TG19 methodology, although this is not stated. The model verification should include all available monitoring data and if any monitoring sites are excluded, full justification for their exclusion should be provided (AQ12). The model verification should aim for an adjustment factor of 2 or less with all predicted concentrations within 10% of the measured concentrations (AQ13). In addition, future assessment years should consider the variation in annual meteorological datasets with the assessment process (AQ14).
<ul style="list-style-type: none"> ■ No reference has been made regarding assessing compliance with the mandatory limit values (including with the PM_{2.5} limit value adopted in 2020), and if information is available, even in draft form, on the 2021 Environment Act PM_{2.5} target. The objectives and limit values apply at different locations and should be included in the ES (AQ15). ■ If information is available, even in draft form, on the 2021 Environment Act PM_{2.5} targets, the ES should include an assessment against these targets (AQ16).
<ul style="list-style-type: none"> ■ Comparison of the predicted concentrations to the 2021 WHO guidelines and interim targets should be provided for all relevant pollutants (AQ17).
<ul style="list-style-type: none"> ■ No reference has been made to the IAQM odour guidance which recommends that several different assessment methods should be used to assess odour for planning purposes. Further details should be submitted to the local planning authority (AQ18).
<ul style="list-style-type: none"> ■ The air quality assessment should provide a commentary on how climate change will impact on air quality in the future (AQ19).
<ul style="list-style-type: none"> ■ It is recommended that baseline UFP monitoring is undertaken close to the receptors most likely to be affected (i.e. those closest to the runway and downwind most frequently) to assess whether there is potential for UFP to be a significant issue at relevant locations (AQ20).
<ul style="list-style-type: none"> ■ All guidance noted in the commentary should be referenced in the ES (AQ21).
<ul style="list-style-type: none"> ■ Consideration should be given to the relevance of the following guidance documents (AQ22): ■ Professional guidance published by IAQM on the assessment of odour for planning ■ Professional guidance published by IAQM on the assessment of air quality impacts on designated nature conservation sites.
<ul style="list-style-type: none"> ■ It is recommended that any draft IAQM guidance is taken into consideration (AQ23).
<ul style="list-style-type: none"> ■ The Scoping Report refers to the receptors in general terms but does not identify where they will be or how many will be included. It states that the baseline study will determine the existing and new receptors introduced by committed / proposed development, likely to be affected by the s73 Proposals. These should be confirmed with the local planning authority prior to assessment of impacts (AQ24).
<ul style="list-style-type: none"> ■ It is considered good practice to consult the local authority's air quality specialist to agree the methodology in detail (i.e. greater detail than is normal in a Scoping Report). This has not been mentioned in the Scoping Report. The Applicant should confirm any proposed consultation (AQ25).
<ul style="list-style-type: none"> ■ The Applicant should confirm if the following documents will be used in the assessment (AQ26): ■ 2019 Clean Air Strategy; ■ the Mayor of London's Environment Strategy; ■ 2019 London Borough of Newham's Air Quality Action Plan 2019-2024.

Topics Scoped Into the ES
Climate Change (Scoping In is agreed – refer to recommendations in this review)
<ul style="list-style-type: none"> ■ The applicant will need to acknowledge the wider context surrounding air travel, climate change and national climate targets in relation to the project (CC1).
<ul style="list-style-type: none"> ■ Clarification is sought on which scenario from the “Jet zero: further technical consultation” will be used to inform the modelling of both scenarios proposed (CC2).
<ul style="list-style-type: none"> ■ Clarification is sought on whether the climate change assessment will only include ground operations (CC3).
<ul style="list-style-type: none"> ■ Please ensure that the most appropriate carbon budget is used to assess significance and its use is justified (CC4).
<ul style="list-style-type: none"> ■ The applicant will need to provide more detail in regard to the following aspects of the climate resilience assessment (CC5): <ul style="list-style-type: none"> – Identify the scale and scope of the project, including design life – Identify the climate change projections for use in the assessment – Identify key climatic variables relevant to the project – Identify likely effects ■ Provide an outline of the method to be used to determine significance in regard to climate change adaptation and effect significance
<ul style="list-style-type: none"> ■ In 7.5.29 a reference should be provided for this quote (CC6).
<ul style="list-style-type: none"> ■ In 7.5.31 a specific page reference should be provided to the location of the approach set out in the Airports National Policy Statement (CC7).
<ul style="list-style-type: none"> ■ The assessment should also account for ‘indirect GHG’s’ in line with IPCC GWP evidence (CC8).
<ul style="list-style-type: none"> ■ It is assumed that data on the stock supplies for the retail units will be available or at the very least estimates produced. Evidence should be provided to demonstrate that the emissions will be less than the 1%^ threshold as consumables often account for very high quantities of emissions (CC9).
Public Health and Wellbeing (Scoping In is agreed – refer to recommendations in this review)
<ul style="list-style-type: none"> ■ When gathering the baseline conditions, if any further sensitive human receptors are identified, these should also be considered within the HIA (PHW1)
<ul style="list-style-type: none"> ■ Clarity is required regarding how the health effects of air pollution will be assessed (PHW2).
<ul style="list-style-type: none"> ■ The Public Health and Well Being chapter should assess against the 2021 WHO Air Quality Guidelines which are based on the most recent synthesis of the medical evidence (PHW3)
<ul style="list-style-type: none"> ■ The HIA is narrow in its approach to consideration of Air Quality. The Applicant should consider the full range of risks to health including exposure of the future users within the airport boundary (PHW4)
<ul style="list-style-type: none"> ■ For the HIA, full considerations of all locations where people may be exposed to air pollution over different averaging periods should be considered (PHW5).
<ul style="list-style-type: none"> ■ The Applicant should provide quantitative information on air pollution in relation to WHO guidelines in the Air Quality Assessment to allow the HIA to fully assess the health effects (PHW6).
<ul style="list-style-type: none"> ■ There is no information on the methodology for going from the air quality impact at individual receptors to the impact on populations. This needs to be provided (PHW7).

Topics Scoped Into the ES
<ul style="list-style-type: none"> ■ The Applicant should provide an assessment of UFP in the Air Quality Assessment to allow the health assessment to fully assess the health effects of this pollutant (PHW8).
<ul style="list-style-type: none"> ■ The determination of significance in relation to air quality should be related to the health outcomes rather than a breach of statutory standards (PHW9).
<ul style="list-style-type: none"> ■ The Applicant has stated that the health chapter conclusions will be presented in both EIA categories of significance, such as major, moderate, minor or negligible; and a narrative explaining this 'score' with reference to evidence, local context and any inequalities. The details of the 'score' methodology should be clearly outlined in the ES (PHW10).

Table 5.3 Topics Scoped Out of the ES

Topics Scoped Out of the ES
Water Resources and Flood Risk (Scoping Out is acceptable – refer to recommendations in this review)
<ul style="list-style-type: none"> ■ As proposed in the Final Scoping Report it is considered appropriate to Scope Out Water Resources.
Townscape and Visual Effects (Scoping Out is acceptable – refer to recommendations in this review)
<ul style="list-style-type: none"> ■ Clarification is required in relation to townscape and visual effects identified in the 2015 UES to confirm the S73 application brings no additional townscape and visual effects to those previously reported (TVIA1).
Ecology and Biodiversity (refer to recommendations in this review)
<ul style="list-style-type: none"> ■ Confirmation from the Environment Agency with regard to the scope of the EIA should be provided by way of written recommendation that Ecology and Biodiversity either be scoped in or out (EB1).
Archaeology and Built Heritage (Scoping Out is acceptable)
<ul style="list-style-type: none"> ■ No recommendations required.
Ground Conditions and Contamination (Scoping Out is acceptable)
<ul style="list-style-type: none"> ■ No recommendations required.
Waste (Scoping Out is acceptable – refer to recommendations in this review)
<ul style="list-style-type: none"> ■ It is acknowledged that any increase in waste removal/ haulage will be negligible compared to the overall increases in traffic the site will see based on the proposed expansion and these numbers may be accounted for elsewhere. Clarification on this point may be prudent to ensure noise and traffic measures are not affected (W1).
Major Accidents and/or Natural Disasters (Scoping Out is acceptable – refer to recommendations in this review)
<ul style="list-style-type: none"> ■ No recommendations provided, however LBN should note proposals made by the Applicant and see that they are satisfied with this approach.