

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 3.9 LCY Final Response

December 2022



Meeting on Outstanding Matters relating to the draft Scoping Opinion

Teams Meeting

2 November 2022

14:00-15:00

Attendees:

Newham

- Nick Marks – LB Newham
- James Bolt – LB Newham
- Duncan Ayles – LB Newham
- Liam McFadden - LB Newham
- Claire Holman – Ardent
- Keiran Laxman – Ardent

LCY

- Stephen Allen – LCY
- Steve Moorcroft – AQ Consultants
- Philippa Rapheal – Ramboll
- Ryngan Pyper – RPS
- Graham Earl - Ecolyse

Meeting Note:

Topic	Action
1. Introduction	
SA introduced the session, stating four key areas for discussion, being: <ul style="list-style-type: none">• AQ3 – provision of a UFP inventory in the AQ chapter• A10-12 – no development (without CADP) scenario in the ES.• CC9 – clarification on the approach to consumables.• EB1 – the need for a biodiversity net gain assessment and the lack of EA response.	

<p>No other items were raised as critical to the discussion, beyond points of clarification and agreement.</p>	
<p>2. AQ3 – UFP emission inventory in the AQ chapter.</p>	
<p>SM explained the complications around quantifying an emissions inventory for UFPs, primarily due to the lack of available data to quantify and the high degree of uncertainty around the information and results.</p> <p>CH said that she drew on previous comments from SM on the sulphur content in fuels. The fuel inventory was intended to be helpful. She said that any qualitative statement needs to speak to UFP coming down as fuels shift to SAFs.</p> <p>KL added that there is an opportunity for a narrative around the link to sulphur in the change in aircraft fuel use.</p> <p>SM said that it could be concluded that if sulphur content reduces then UFPs will come down, but this would be a discussion based on professional opinion.</p> <p>KL asked for a reasonable amount of evidence be provided to support any statement, such as an inventory. Discussion would be included around uncertainties and likely outcomes</p> <p>SA challenged what the assessment purpose of the discussion would be in the AQ chapter and offered UFP study as part of a condition or S106 obligation which would look at the matter in greater detail.</p> <p>CH asked Nick Marks about political position on UFPs.</p> <p>NM said that the issue needed to be addressed for political reasons and the ES can't be silent on it.</p> <p>SM/RP both explained that the ES wouldn't be silent on the issue.</p> <p>SM added that UFPs are scoped out of the assessment but discussed in the appendix to the AQ chapter. If any assessment of fuel use or UFP emissions were provided in the AQ chapter, it would not be possible to determine the likely significant effects of any changes – and not helpful to the ES process.</p>	

<p>KL asked if SM considered there to be no benefit to fuel analysis.</p> <p>SM responded that there are too many uncertainties such as to how the non-volatile UFP emissions have been derived, and the complete lack of information on volatile UFP emissions, and emissions from non-combustion sources (such as lube oil emissions).</p> <p>CH offered that fuel is a simplified approach, used as an indicator to show an element of UFPs that could be used.</p> <p>LM added that the condition for a future study could be agreed.</p> <p>Agreement on the approach was not reached. Newham still ask for an emission inventory but have agreed a future study would be useful. UFPs were reconfirmed as being on the political agenda and need to be discussed in the application.</p>	
<p>3. AQ10-12 no development scenario</p>	
<p>PR began by explaining the issues with the principal assessment years and why using the original CADP assessment wasn't appropriate.</p> <p>KL explained the idea was that if the proposed changes were considered against the original ES, then all would be able to understand if the proposed changes would alter the original outcome.</p> <p>PR confirmed that the ES will answering this, but it can't be done in a quantitative manner.</p> <p>CH asked why not and suggested the same assumptions could be used.</p> <p>SM explained that the fleet mix is completely different, so can't use the same assumptions. Also, the ES can't rely on 2015 because things have changed. 2019 is the baseline and it includes CADP. A qualitative assessment will be done.</p> <p>KL understood the argument and asked whether 2019 can be projected forward. The question is whether it will change the original decision. In the context of air quality, he asked how it will be dealt with.</p>	

<p>SM confirmed it will be discussed qualitatively.</p> <p>KL said that it will need to discuss the magnitude of change.</p> <p>SM agree that it would be discussed using an convincing narrative.</p> <p>KL confirmed that the key point to get across is that there are no changes to the original ES as a result of the proposed changes.</p> <p>Consensus was reached that the S73 changes will be discussed against the original ES in a qualitative way and will consider the magnitude of the change (bearing in mind the different assessment years of 2025 and 2031).</p>	
4. CC9 passenger consumption	
<p>GE described the issue concerning consumption and that it was unusual to assess and would only result in very minor carbon outputs. He queried the need for it, given that peoples need to eat and drink would be present whether they chose to fly or not.</p> <p>KL first qualified that the point was made by LUC and not Ardent, but he understood the background. In his view, people's behaviour would change in an airport and they would tend to eat and drink more. This may lead to higher carbon emissions in food production and waste and needed to be considered in the carbon chapter.</p> <p>GE indicated that the only real impact this would have would be if a higher proportion of meat products were consumed. However, it could be discussed in the Carbon Chapter but wouldn't form part of the central assessment.</p> <p>SA added that the Sustainability Roadmap also sets out the airport's strategy on retail and food waste. This can be referred to in the Carbon Chapter and Sustainability Statement.</p> <p>Consensus that this would be discussed in the Carbon Chapter in a qualitative way.</p>	
5. Other areas of discussion	

<p>SA confirmed that an HRA screening exercise would be undertaken and this would mean ecology would be scoped down.</p> <p>RP / KL and CH agreed on PHW3 that the ES health chapter would include WHO guidelines as part of the assessment. It was clarified that this would not be a separate assessment.</p> <p>For the Scoping Opinion, LCY request that the original recommendation wording ‘...should assess against...’ be amended to ‘...assessment should include a comparison against...’ to keep this a proportionate and planning policy aligned scoping opinion request.</p> <p>RP / KL and CH agreed that with regard to PHW5, the ES health chapter would include a qualitative assessment of air quality receptor locations within the site boundary.</p> <p>LCY request that the wording ‘...full consideration of all locations...’ be amended to ‘...consideration of all locations...’ to keep this a proportionate scoping opinion request.</p>	<p>Newham</p> <p>Newham</p>
6. Next steps	
<p>LCY to provide confirmation of its approach to UFPs in the Air Quality chapter to Newham for information. All other matters are confirmed as per this note.</p> <p>Newham will confirm internally that the remaining matters are agreed as per this note. Scoping Opinion can then be issued.</p>	<p>Newham</p>

From: Stephen Allen <Stephen.Allen@londoncityairport.com>
Sent: 07 November 2022 11:01
To: Liam Mcfadden <Liam.Mcfadden@newham.gov.uk>; James.Bolt@newham.gov.uk; Claire Holman <claireholman@airpollutionservices.co.uk>; kieranlaxen@airpollutionservices.co.uk
Cc: Steve Moorcroft <SteveMoorcroft@aqconsultants.co.uk>; Ryngan Pyper <Ryngan.Pyper@rpsgroup.com>; graham_earl <graham_earl@ecolyse.co.uk>; David Thomson <DThomson@pellfrischmann.com>; Philippa Raphael <philippa.raaphael@ramboll.com>; Tim Halley <Tim.Halley@londoncityairport.com>
Subject: LCY Scoping Opinion - meeting note and position on UFPs

Liam,

Please see attached our note of the scoping meeting on Wednesday 2 November. We feel it was a useful session that covered the key outstanding areas but it seems we haven't reached agreement on the approach to UFPs. In this respect and for your final consideration of the Scoping Opinion, our position on UFPs remains that it is not necessary or feasible to provide an estimate of total UFP emissions associated with fuel use at this time. Any such assessment within the Air Quality Chapter would require a consideration of the likely significant effects (as a fundamental part of the EIA process) and that would not be possible due to technical limitations and uncertainty.

Uncertainties

We acknowledge that it is possible to quantify fuel use in the LTO Cycle (or a part of it e.g. limited to ground operation such as taxiing and take-off). However, UFP emissions are unlikely to be directly related to fuel consumption, as different engines will have different particle number emissions per kg/fuel. While the ICAO databank includes an approach to estimate non-volatile particle numbers (nvPM#), these must be derived from a statistical relationship to smoke number and are not based on on-bench or on-wing measurements (and so subject to unknown uncertainty). In addition, the ICAO databank provides no approach to estimate volatile particle numbers (vPM#) or to estimate PM# associated with lube-oil, which may dominate total UFP emissions.

We also acknowledge that there is evidence from the measures introduced to limit the sulphur content of diesel fuel (i.e. introduction of Ultra Low Sulphur Diesel) that suggests that reducing the sulphur content of aviation fuel would be beneficial in both changing the size profile of aircraft engine UFP emissions and in reducing UFP emissions in general. A reduction in the sulphur content of aviation fuel will be driven by the introduction of SAFs, and by the introduction of hydrogen-fueled and hybrid/electric aircraft. However, at this time the delivery of these new fuel/engine types is not specific enough to be useful to a UFP assessment.

Approach

Given the uncertainties in assessing UFPs, any assessment of UFP emissions will be scoped out of the AQ Chapter but a detailed justification for this will be provided. Consideration to the public health effects of UFPs will be carried out in the Public Health and Wellbeing Chapter. Beyond the ES, we are willing to work with Newham to monitor UFPs and undertake a UFP study to determine the levels in future. This will be subject to an appropriately worded condition or S106 obligation, which will need to acknowledge the present technical limitations and uncertainty described above.

Precedents

When considering the Stansted and Bristol Airport appeal decisions, our approach is consistent and arguably better than what was consented in these precedents. In both cases, UFPs were raised as a concern by the respective local authorities. However, in both cases it was acknowledged that there is currently no methodological or policy basis for assessing UFPs and therefore was scoped out of both assessments. However, in both cases further monitoring was considered an appropriate outcome to be secured by condition. Our approach to the ES is no different to these, but goes further in offering monitoring and a UFP study which can be secured subject to agreeing an appropriately worded condition or S106 obligation.

Scoping Opinion

Given the uncertainties and precedents relating to UFP assessments at airports, I ask for your agreement to our approach and that this is reflected in your Scoping Opinion.

As mentioned, our discussions in narrowing the Scoping issues have been useful to date. However, I feel these discussions have reached their natural conclusion and I ask that you issue the Scoping Opinion once you have agreed the points in the attached meeting note and considered the UFP approach set out in this email.

Regards,

Stephen



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Senior Planning Manager

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