

SILVERTOWN TUNNEL

Volume 8

Development Consent Order Application

Response to ExA's Second Written Questions:

8.95 Principal Issue: Air Quality

The Infrastructure Planning (Examination Procedure)

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Silvertown Tunnel

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Development Consent Order Application Response to ExA's Second Written Questions: Air Quality

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Silvertown Tunnel

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AQ AIR QUALITY

AQ2.1 Question

The Panel notes the Applicant's commitment to merge the Mitigation Strategy and the Traffic Impacts Mitigation Strategy (TIMS) documents for D4. The Panel urges the Applicant to ensure that the triggers for mitigation in the TIMS document must reflect the levels of traffic that have been assessed in the ES chapters for noise and air quality, and clear environmental triggers (for air quality and noise) which indicate the point at which mitigation has to be implemented, must also be included in this document, and agree these with the host LPAs prior to D4.

The Applicant's written summary of Oral Case for the ISH on 17 January 2017, stated that "consideration will be given to setting separate triggers for the Blackwall and Silvertown Tunnel", however the Panel considers that this is essential, so that effective and timely mitigation can be implemented should the traffic levels using the Silvertown Tunnel vary significantly from those assessed. In addition, the Panel urges the Applicant to review and remove the hurdles that are proposed in TIMS, so that there is certainty that essential mitigation would be implemented if the assessed traffic levels are exceeded. Also see question DC2.7.

Response

AQ2.1.1 A combined Monitoring and Mitigation Strategy (M&MS) has been submitted for DL4. This document explains the monitoring programme and the process by which mitigation will be implemented both pre- and post-opening of the Scheme, and supersedes the Monitoring Strategy [REP1-121] and Traffic Impacts Mitigation Strategy (TIMS) [REP2-031] documents.

AQ2.1.2 The traffic-related mitigation triggers will form part of the annual monitoring reports that will be presented to STIG for consideration. The triggers have been set to reflect the forecast Scheme impacts (i.e. the level of change between the Reference and Assessed Cases attributable to the Scheme, as set out in the Environmental Statement) rather than absolute levels of traffic. This is to ensure that the triggers remain applicable if background conditions across the network (for example

levels of growth) were different from those currently forecast. Setting the triggers to reflect absolute levels of traffic is not appropriate because, if background growth was materially different from that forecast, this could result in the triggers not being activated (if growth was lower than forecast) or the triggers being activated (if growth was higher than forecast) irrespective of the impacts of the Scheme. A worked example of the different approaches to setting triggers is outlined at the foot of this answer.

- AQ2.1.3 Separate traffic-related triggers have been set for the Blackwall and Silvertown tunnels, as requested. These triggers are based on the proportion of traffic forecast to use each tunnel, so if the proportion of traffic using either tunnel was materially different from that forecast a trigger would be activated and mitigation can be implemented. An additional combined trigger for both tunnels will consider overall levels of traffic at the crossing.
- AQ2.1.4 The M&MS also includes a commitment to commission an annual independent review of the air quality monitoring data to consider whether, in the opinion of a firm of experts, there has been a material change in air quality as a result of the Scheme. If it is concluded that there has been a material worsening, TfL will prepare a detailed scheme of mitigation in consultation with the relevant local authorities and subsequently submit this to the Mayor of London for approval.
- AQ2.1.5 Further information has been provided within the M&MS on the process by which mitigation will be identified and implemented. Furthermore, the key commitments have now been expressly set out in requirement 7 to ensure that they are clearly 'visible' of the face of the DCO and are easily understood as enforceable terms of the consent. The Applicant does not consider that the process for identifying and implementing mitigation contains 'hurdles'. Whilst the process involves a number of considerations that apply when determining the need for mitigation, these considerations are required to ensure that only adverse impacts caused by the Scheme are mitigated and the mitigation is appropriate to the impact, in accordance with normal planning procedures.
- AQ2.1.6 The text explaining these considerations has been updated in the M&MS to make it clearer how the need for mitigation will be identified and agreed. The express commitments now set out in Requirement 7 provide greater clarity as to the procedures that will be followed and additional assurance that the necessary measures will be implemented. One of the considerations previously set out in TIMS which is not included in the

M&MS is whether a mitigation measure represents a cost-effective solution; this has been removed in case it was the cause of concern, notwithstanding that its inclusion within TIMS was intended to ensure proportionate mitigation to Scheme impacts.

AQ2.1.7 The Applicant has engaged with the boroughs of Greenwich, Hackney, Lewisham, Newham, Southwark and Tower Hamlets on the Monitoring and Mitigation Strategy, including the triggers, and has taken their views into account in preparing that document.

Worked example of approaches to setting triggers

AQ2.1.8 The Applicant's approach to setting the mitigation triggers is intended to ensure that the effects of the Scheme can be isolated from other factors that could influence traffic flow (for example population growth, levels of car ownership, fuel costs etc).

AQ2.1.9 The traffic flow and vehicle composition triggers are set with regard to forecast changes caused by the Scheme in the Assessed Case, as it is these changes which give rise to the likely significant effects of the Scheme. The Applicant considers that these triggers must be applied in the context of observed conditions pre- and post-scheme opening.

AQ2.1.10 For example, if the Assessed Case forecast for a given river crossing was a reduction in traffic flow of 5%, the trigger for that crossing would be based on this anticipated 5% reduction. Therefore if the difference between *observed* conditions pre- and post-opening was higher or lower than this forecast reduction, the trigger would be activated.

AQ2.1.11 Taking this approach will ensure that the triggers will remain applicable if background conditions across the network differ from those currently forecast.

AQ2.1.12 An alternative approach is the setting the triggers to reflect absolute levels of traffic forecast in the Assessed Case. However, this is not considered appropriate or in the best interests of any stakeholder as it could lead to a scenario where triggers are activated as a result of non-Scheme impacts (for example higher than expected background growth). Perhaps more significantly, it could also lead to a situation in which triggers are not activated despite greater than anticipated scheme impacts, if background growth is less than forecast.

AQ2.1.13 A worked example of the two approaches, based on example data, is shown below.

<p>Example</p> <p>Daily traffic at a given river crossing in 2012 is 24,000 (A).</p> <p>Between 2012 and 2021 there is forecast to be an approximately 4% increase in traffic at the crossing as a result of background growth, such that forecast daily traffic flow is 25,000 vehicles in the 2021 Reference Case (B).</p> <p>The Applicant's forecast is that in the Assessed Case with the Scheme, there will be 25,500 vehicles on the crossing (C), a 500 vehicle increase over the Reference Case.</p> <p>This 500 vehicle increase equates to a change on Reference Case levels of 2% (D).</p>	
<p>Approach based on the forecast Scheme impact (as proposed)</p> <p>The observed traffic flow in 2021 (E) is not considered, only the difference caused between the observed conditions before and after the implementation of the Scheme (F).</p> <p>A trigger would be activated if the increase between observed conditions pre- and post-opening (F) was materially greater than or less than 2% (the change forecast in the Assessed Case, (D)).</p>	<p>Approach based on actual traffic levels</p> <p>A trigger would be activated if observed traffic flows in 2021 (E) exceeded 25,500 vehicles (the absolute level forecast in the Assessed Case, (C)).</p> <p>In this instance, the trigger could be activated even if the impact of the scheme itself was well within the level forecast (for instance because of a substantial increase in the Congestion Charge leading to diversion of traffic to this crossing).</p> <p>Similarly, if there was less growth between now and Scheme opening than currently forecast, underlying traffic levels at the time of opening might be sufficiently below the Reference Case forecast level (B) such that the actual level of traffic (E) is below 25,500 despite the actual change (F) being a greater increase than was originally forecast.</p>

AQ2.2 Question

The Panel notes the Applicant's intention to review the terms of reference and chairing of STIG. However, it wishes to make clear that if the Applicant remains the decision maker and STIG's role is only advisory, the Panel has no comfort that, should the Order be made, essential mitigation would be implemented in the manner assessed in the ES, or in a timely manner. Therefore, in this scenario a Requirement along the lines of R26 of the M4 DCO would be necessary on air quality matters, although the Panel also recognises that the application proposals, as currently drafted would include more monitoring locations than if the R26 M4 wording was to be used here. However, the Panel, in drawing attention to R26 of the M4 DCO, did not imply that any Silvertown Tunnel requirement for air quality would replicate the M4 requirement, merely that something "along the lines of" that requirement should be considered. It is not advocating less monitoring than that proposed in the ES.

The Applicant does not appear to have accepted this in the D3 DCO; the Panel now urges the Applicant and host authorities to consider drafting such a requirement, otherwise it is likely that the Panel will do so in its draft recommended DCO at D5, unless all matters related to STIG and TIMS are resolved to the satisfaction of the Panel and the host authorities. In any event the Panel reserves its right to propose modifications and additions to the Applicant's dDCO at D5. See also question DC2.9.

Response

- AQ2.2.1 The omission of an air quality requirement from the dDCO at Deadline 3 did not indicate that the Applicant does not accept the proposal for an air quality monitoring and mitigation commitment along the lines of the M4 example. The Applicant's Update Note (REP3-014) submitted at that Deadline expressly states that "an air quality mitigation trigger will be included in the combined [monitoring and mitigation] document, the details of which will be developed having regard to the M4 example provided by the ExA." The Update Note explains that the revised document will be submitted at Deadline 4.
- AQ2.2.2 The Applicant and local authorities recognise that the specific terms of the M4 requirement may not be appropriate in the context of the Silvertown Scheme, particularly the overall monitoring and mitigation framework that has been developed. Consequently, since Deadline 3, the Applicant has

developed an air quality monitoring and mitigation requirement which is based on the M4 example but which reflects both the specific circumstances of the Scheme and the way in which the application documents have been put together to reflect the scheme. The Applicant has consulted the Host and Neighbouring Boroughs on the terms of this requirement and has taken account of their views in preparing the drafting.

- AQ2.2.3 In recognition of the significance of this issue to all interested parties, the Applicant has included the key commitments in the form of Requirement 7 in Schedule 2 to the dDCO submitted at Deadline 4. Further details relating to the Requirement are set out in the Monitoring and Mitigation Strategy (also submitted at Deadline 4) compliance with which is also secured by Requirement 7.
- AQ2.2.4 The requirement provides for a comprehensive range of air quality monitoring to ensure impacts of the Scheme are properly understood. The monitoring covers locations (a) where the authorised development is predicted to bring about a change in air quality in excess of 0.4 µg/m³ where annual mean concentrations are above the national air quality objective value; and (b) where the authorised development could lead to traffic diverting to alternative routes. It also stipulates (c) that monitors must be sited at locations which are representative of relevant exposure at sensitive receptors.
- AQ2.2.5 The extent of air quality monitoring required under the Monitoring and Mitigation Strategy exceeds that proposed in the original Monitoring Strategy (APP-098).
- AQ2.2.6 Like the M4 requirement, the proposal requires an annual review of monitoring data to be undertaken by a firm of air quality experts to be appointed by TfL in consultation with STIG. If the expert review concludes that the authorised development has materially worsened air quality as a result of the authorised development beyond the impacts reported within the environmental statement at locations where there are exceedances of national air quality objectives, TfL is required to prepare a scheme of mitigation in consultation with the relevant air quality authorities which must be submitted to the Mayor of London for approval. The approved scheme of mitigation must then be implemented.
- AQ2.2.7 The Applicant considers that the dual requirement for the annual review of monitoring data to be undertaken by a firm of air quality experts, and for the scheme of mitigation to require approval of the Mayor of London in

consultation with the relevant air quality authorities, addresses the ExA's concerns regarding the Applicant's role as decision-maker in the identification and implementation of mitigation.

AQ2.2.8 The Mayor's approval role is appropriate and is consistent with the statutory duties which the Mayor has in relation to air quality in Greater London. These duties include:

- to prepare and to keep under review an Air Quality Strategy for Greater London;
- to include in that Strategy policies and proposals:
 - for the implementation in Greater London of the policies contained in the National Air Quality Strategy prepared by the Secretary of State in accordance with section 80 of the Environment Act 1995, and
 - for the achievement in Greater London of the air quality standards and objectives prescribed in the Air Quality (England) Regulations 2000.

AQ2.2.9 The Applicant also draws the ExA's attention to the list of indicative mitigation measures that are included in Appendix F of the Monitoring and Mitigation Strategy submitted at Deadline 4. The list shows that there is a range of potential measures which would be available to the Applicant in the event that a scheme of mitigation needed to be prepared. The list is not intended to be comprehensive as mitigation would need to be developed in response to specific impacts should they arise, and acknowledges the possibility that new technologies may be available at the time the tunnel opens.

AQ2.2.10 Critically, the list includes revisions to the user charge, which could include forms of emissions-based charging to encourage cleaner vehicles and discourage dirtier vehicles. The user charging mechanism is a potentially powerful mitigation measure which would be available to the Applicant and this can be contrasted to other highway schemes where the range of potential air quality mitigation measures is more limited.

AQ2.3 Question

Please can the Applicant and the host authorities provide an update in relation to discussions regarding the assessed case, and whether there is likely to be agreement on these matters before the close of the Examination?

If not, what matters are likely to remain unresolved and how would the host authorities suggest that these should be addressed?

Response

AQ2.3.1 The Applicant and host authorities have discussed a position in relation to the Assessed Case, and there appears to be a consensus on the principles of this position. RB Greenwich and LB Newham have indicated general agreement with the following form of words (no comment had been received from LB Tower Hamlets at the time of finalising this response):

- It is unlikely to be possible to agree the specific forecasts reported for the Assessed Case scenario. In the context of uncertainty over the Assessed Case forecasts, the most important step is to reach an agreed position in relation to the control mechanisms set out in the M&MS and CPAP. There remains scope to reach such agreement.

AQ2.4 Question not for the Applicant

AQ2.5 Question

Please can the Applicant and LBH provide an update at D4 regarding whether there is agreement over the addition of the proposed monitoring sites in LBH's D3 representation [REP3-038], including Wick Road, Kenworthy Road, Cassland Road and Victoria Park Road in the monitoring strategy for air quality? How would this be secured?

Response

- AQ2.5.1 The geographic scope of the air quality monitoring is set out in Appendix B of the Monitoring and Mitigation Strategy [REF-XXX]. This has been informed by the likely air quality impacts of the Scheme as reported in the Environmental Statement [AS-022] and the updated Air Quality assessment [REP2-041].
- AQ2.5.2 The Applicant does not consider that air quality monitoring is required at Wick Road, Kenworthy Road, Cassland Road and Victoria Park Road because adverse air quality effects (or indeed any other adverse Scheme effects) are not expected in the vicinity of these sites. The principal highway route between these sites and the Scheme is the A12. It is planned that air quality will be measured on the A12 (including the stretch of the A12 within LB Hackney), and this will enable a view to be formed about the Scheme's likely impact on air quality at the sites in question.
- AQ2.5.3 The Applicant has met with representatives from LB Hackney to discuss this request for additional monitoring, amongst other issues. The Applicant understands that LB Hackney is proposing that, as well as air quality monitoring, the monitoring of traffic, vehicle composition, road safety, delay and journey time reliability is also undertaken at the sites in question. Whilst the Applicant's position remains that monitoring at these sites is not required, the Applicant has agreed to undertake an annual traffic count on each of the four sites and report the findings in the annual monitoring reports. These sites have been included in the initial traffic monitoring plan (Appendix A) in the Monitoring and Mitigation Strategy.
- AQ2.5.4 It should be noted that, as set out in the Monitoring and Mitigation Strategy, the list of monitoring locations will be reviewed and if necessary updated in consultation with STIG as part of the refreshed assessment undertaken prior to Scheme opening. Should this refreshed assessment

indicate a potential impact at the sites in question these sites would be added to the monitoring programme.

AQ2.6 Question not for the Applicant

AQ2.7 Question not for the Applicant