

## **Application by Highways England for an Order Granting Development Consent for the M42 Junction 6 Improvement**

### **The Examining Authority's written questions and requests for information (ExQ2)**

**Issued on 5 August 2019**

The following table sets out the Examining Authority's (ExA's) written questions and requests for information – ExQ2. If necessary, the examination timetable enables the ExA to issue a further round of written questions in due course. If this is done, the further round of questions will be referred to as ExQ3.

Questions are set out using an issues-based framework derived principally from the Application documents.

Column 2 of the table indicates which Interested Parties (IPs) and other persons each question is directed to. The ExA would be grateful if all persons named could answer all questions directed to them, providing a substantive response, or indicating that the question is not relevant to them for a reason. This does not prevent an answer being provided to a question by a person to whom it is not directed, should the question be relevant to their interests.

Each question has a unique reference number which starts with 2 (indicating that it is from ExQ2) and then has an issue number and a question number. For example, the first question on legal matters is identified as Q2.1.1. When you are answering a question, please start your answer by quoting the unique reference number.

If you are responding to a small number of questions, answers in a letter will suffice. If you are answering a larger number of questions, it will assist the ExA if you use a table based on this one to set out your responses. An editable version of this table in Microsoft Word is available on request from the case team: please contact [M42Junction6@planninginspectorate.gov.uk](mailto:M42Junction6@planninginspectorate.gov.uk).

Responses are due by **Deadline 4: 2 September 2019**.

## Abbreviations used

<b>PA2008</b>	The Planning Act 2008	<b>LIR</b>	Local Impact Report
<b>Art</b>	Article	<b>LPA</b>	Local planning authority
<b>ALA 1981</b>	Acquisition of Land Act 1981	<b>MP</b>	Model Provision (in the MP Order)
<b>BoR</b>	Book of Reference	<b>MP Order</b>	The Infrastructure Planning (Model Provisions) Order 2009
<b>CA</b>	Compulsory Acquisition	<b>NPS</b>	National Policy Statement
<b>CPO</b>	Compulsory purchase order	<b>NSIP</b>	Nationally Significant Infrastructure Project
<b>dDCO</b>	Draft DCO	<b>R</b>	Requirement
<b>EM</b>	Explanatory Memorandum	<b>SI</b>	Statutory Instrument
<b>ES</b>	Environmental Statement	<b>SoS</b>	Secretary of State
<b>ExA</b>	Examining authority	<b>TP</b>	Temporary Possession

## The Examination Library

References in these questions set out in square brackets (eg [APP-010]) are to documents catalogued in the Examination Library. The Examination Library can be obtained from the following link:

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010027/TR010027-000278-M42%20J6%20Examination%20Library%20PDF%20Version.pdf>

It will be updated as the examination progresses.

## Citation of Questions

Questions in this table should be cited as follows:

Question reference: issue reference: question number, eg ExQ2.1.1 – refers to question 1 in this table.

ExQ2	Question to:	Question:
2.1.	<b>General and Cross-topic Questions</b>	
2.1.1.	Applicant, CPRE	<p><b>Legal</b>  <u>The status of the link road</u>  <i>The construction of the new dual-carriageway link road which forms part of this Scheme appears to fall within sections 22(1)(a) and 22(2) of the 2008 Act because:</i>  <i>22.2.a it will (when constructed) be wholly in England;</i>  <i>22.2.b Highways England, as a strategic highway company appointed by the Secretary of State under Part 1 of the Infrastructure Act 2015, will be the highway authority in respect of the link road; and</i>  <i>22.2.c the area of the development in respect of the link road is approximately 20ha and is therefore greater than the relevant limit set out in section 22(4) of the 2008 Act, which, for the construction of a highway other than a motorway where the speed limit for any class of vehicle is expected to be 50mph or greater, is 12.5ha.</i>            In those circumstances, please explain why this project should not be regarded as part of the 'national system of routes for through traffic in England' and how that might have a bearing on the status of the link road as part of this NSIP.</p>

ExQ2	Question to:	Question:
2.1.2.	Applicant, CPRE, Open Space Society	<p><b>Legal</b></p> <p><u>Alternatives to stopped-up rights of way</u></p> <p><i>Section 136 of the Act deals with public rights of way. It requires that:</i></p> <p><i>(1) An order granting development consent may extinguish a public right of way over land only if the Secretary of State is satisfied that:</i></p> <p><i>(a) an alternative right of way has been or will be provided, or</i></p> <p><i>(b) the provision of an alternative right of way is not required.</i></p> <p>There is no obvious statutory test or legal requirement in the Act for an alternative right of way to be 'reasonably convenient'. Nevertheless, the Panel expect to report on the convenience of alternative routes, particularly in relation to severance and the future provision of footpaths and cycleways, in considering the impact of the scheme and to ensure compliance with the NPSNN to make reasonable efforts to foster non-motorised and sustainable travel. Hence, please explain on what grounds (if any) a legal requirement to apply a test of 'reasonable convenience' might exist. And, whether or not such a test might be warranted, please submit any further relevant evidence necessary to address the 'reasonable convenience' of the PROW provision proposed here.</p>

ExQ2	Question to:	Question:
2.1.3.	Applicant, CPRE	<p><b>Legal</b>  <u>Alternative schemes</u>  <i>Section 104 of the Act requires that, where a relevant NPS has effect, regard must be given to it in making a decision. The NPSNN indicates (at paragraph 4.27) that 'Where projects have been subject to full options appraisal in achieving their status within Road or Rail Investment Strategies ... option testing need not be considered by the ExA or the decision maker. For national road and rail schemes, proportionate option consideration of alternatives will have been undertaken as part of the investment decision making process. It is not necessary for the Examining Authority and the decision maker to reconsider this process.</i>            As that is the case here, please identify on what basis the Panel might be required to consider alternative road schemes put forward by interested parties, having regard especially to section 104 of the Act, the NPSNN or any relevant caselaw.</p>
2.1.4.	The Applicant, SMBC, WCC, Extra MSA Solihull Ltd and Applegreen plc	<p><b>MSA and junction 5a</b>            It is evident from DMRB TD 22/06 figure 5/2 that the dumb-bell arrangement proposed would normally offer connections to 2-directional slip roads (in this case, N and S facing slips). How many junctions on English motorways are laid out in a dumb-bell arrangement but only with uni-directional slip roads?</p>

ExQ2	Question to:	Question:
2.1.5.	The Applicant, SMBC, WCC, Extra MSA Solihull Ltd and Applegreen plc	<p><b>MSA and junction 5a</b>            Please revisit and reassess the advantages claimed for the proposed dumb-bell design for junction 5a in the answer to ExQ1.0.10 in relation to the free-flow design suggested by Applegreen in their Technical Note appended to REP3-024. Since a consequence of the proposed design necessitates the widening of the western roundabout and a section of the link road in order to accommodate MSA traffic, please include all those alterations in the reassessment (particularly, the additional lanes and the additional span of Solihull Road Bridge required). In the light of that reassessment, does the published layout in the dDCO provide the optimum junction arrangement and meet the scheme objectives as defined in the Planning Statement?</p>
2.1.6.	Applegreen plc	<p><b>MSA and junction 5a</b>            Unless otherwise confidential, please name the consultant responsible for the free-flow design set out in the Technical Note appended to REP3-024</p>
2.1.7.	The Applicant, SMBC, WCC, Extra MSA Solihull Ltd and Applegreen plc	<p><b>MSA and junction 5a</b>            In answer to ExQ1.0.4, it is indicated that an agreed mitigation measure to off-set the operational impacts of north facing slip roads at the proposed junction 5a is the upgrade of the M42 'smart motorway' to an 'all lanes running' regime from the 'dynamic hard shoulder running regime' currently in place. Can this agreement be confirmed? Who will finance that work? And, will it be implemented only if the MSA materialises or is it anticipated as part of a planned programme to accommodate other elements of future growth?</p>

<b>Environmental Statement [APP-046 to APP-164]</b>		
<b>2.2.</b>	<b>Cultural Heritage ES Chapter 7</b>	
2.2.1.	Applicant, SMBC, WCC	<p><b>Archaeology</b></p> <p>It is understood that the trial trenching has now been completed and that a period of about 4 weeks should see the completion of the written report. Please submit this report by Deadline 4 (2 September 2019). That will help to define the extent and importance of any archaeological remains present and provide information essential for avoiding damage or devising appropriate mitigation measures when there is still time to discuss such matters in the course of the Examination. If that Deadline cannot be met, please indicate when the written report of the archaeological investigation will be available.</p>
2.2.2.	Applicant, SMBC and English Heritage	<p><b>Methodology: Conservation Areas</b></p> <p>Are the 2 'levels of value' assigned to Conservation Areas and referred to in answer to ExQ1.5.6 derived from Table 6.1 in DMRB Volume 11 Section 3 Part 2? If so, the Panel are concerned that the apparent methodology may not properly reflect that guidance. Although 'high value' Conservation Areas may be associated with a high number of highly graded Listed Buildings, which also have a group value, those are not requirements necessitated by the guidance. Indeed, it would be unrealistic if it were so, as less than 3% of Listed Buildings are Grade I and less than 6% are Grade II*. Please reconsider the assessment and, in doing so, please address the relevant matters raised by SMBC (REP2-034).</p> <p>Also, please explain the reasoning leading to the assertion that the Listed Buildings in the Bickenhill and Hampton in Arden Conservation Areas do not define the special interest of the designated areas and thus do not raise the value of those Conservation Areas. Again, please also address the relevant matters raised by SMBC (REP2-034).</p>

2.2.3.	Applicant, SMBC and English Heritage	<p><b>Bickenhill Conservation Area</b>          In spite of the linear features referred to in answer to ExQ1.5.9, the landscape around Bickenhall is surprisingly 'intimate'; it also exhibits evident remnants of an historical pattern. As the scheme would be in scale with those 'large' 'linear features', please explain why it would not encroach further into the intimate landscape remaining instead of being 'absorbed' by it? Please expand on the reasoning advanced in the answer to ExQ1.5.9 with reference to the relevant matters raised by SMBC (REP2-034).</p>
<b>2.3. Biodiversity – ES Chapter 9 and HRA</b>		
2.3.1.	Applicant, Natural England, SMBC and Warwickshire Wildlife Trust	<p><b>Mitigation and monitoring: Bickenhill Meadows SSSI (SE unit)</b>          The answer to ExQ1.7.10 is welcome. Please submit an agreed position on V.9 of the Technical Note by Deadline 4 (2 September 2019). Please indicate whether the consequent controls necessitated should be contained within the DCO or accommodated in a separate Section 106 Agreement.</p>
2.3.2.	Applicant, Natural England, SMBC and Warwickshire Wildlife Trust	<p><b>Mitigation and monitoring: Bickenhill Meadows SSSI (SE unit)</b>          The Panel welcome the consideration being given to the possibility of a new Requirement to deliver the monitoring necessary to mitigate the effects of the scheme on the Bickenhill Meadows SSSI (SE unit). Please submit the necessary documentation by Deadline 4.</p>
2.3.3.	Applicant, Natural England, SMBC and Warwickshire Wildlife Trust	<p><b>Mitigation and monitoring: Ancient Woodland</b>          It is understood that the woodland soil survey was completed in June 2019. Please submit the results of that survey by Deadline 4 (2 September 2019). Do the results support the translocation of ancient woodland from Aspbury's Copse? And, if not, where should such translocation take place?</p>



2.4.	<b>Geology and Soils - ES Chapter 10</b>	
2.4.1.	Applicant	<p><b>Agricultural land</b>            The NPSNN makes no distinction between agricultural land of Grades 1, 2 and 3a; all are classified as best and most versatile agricultural land (BMV). Can the Applicant explain the basis for attributing a medium importance or sensitivity to the agricultural soil resource of Grade 2 and 3a agricultural land, rather than high, as for Grade 1 (Table 10.1)? Can the Applicant also clarify whether there is any inconsistency with attributing a medium importance or sensitivity to Grade 2 agricultural land in Table 10.1 and the high sensitivity attributed to the same in Table 13.1?</p>
2.4.2.	Applicant	<p><b>Agricultural land</b>            ES Table 10.2 attributes a high magnitude of impact for the loss of over 50ha of BMV agricultural land, whereas Table 13.4 sets the threshold at 20ha. Can the Applicant explain whether there is any inconsistency in this approach?</p>
2.4.3.	Applicant	<p><b>Agricultural land</b>            ES paragraph 10.4.11 states that the agricultural land which has not been surveyed has been conservatively assumed as Grade 3a for the purpose of the assessment. However, ES paragraph 10.9.19 states that the construction of the Proposed Development would result in the loss of approximately 21.4ha of Grade 3a agricultural land, which only corresponds to that found in the surveyed area. Can the Applicant explain why the 21.7ha of agricultural land which was not surveyed was not subsequently included and what the effects would be if it were?</p>
2.4.4.	Applicant	<p><b>Sensitivity and Areas of Nature Conservation</b>            Can the Applicant provide any further explanation for the River Blythe, Bickenhill Meadow, Coleshill and Bannerly Pools SSSIs and the ancient woodland being assessed as medium sensitive receptors, as set out in in ES paragraph 10.6.66? Is there a contradiction with the criteria for sensitivity set out in Table 10.1?</p>

2.4.5.	Applicant	<b>Sensitivity</b> Is there a contradiction between Table 10.1 and the sensitivity attributed to receptors in Table 10.13, particularly in terms of human health?
2.4.6.	Applicant	<b>Soil Investigation and Contamination</b> Can the Applicant explain how the recommendations set out in ES paragraphs 10.6.74 and 10.6.75 would be secured?
2.4.7.	Applicant	<b>Conclusions</b> Paragraph 10.10.1 refers to the assessment of effects summarised in Table 10.18. However, the latter does not appear to have been provided. Can the Applicant address this or highlight where it can be located?
2.4.8.	SMBC and the Environment Agency	<b>Conclusions</b> Can SMBC and the Environment Agency confirm their position on the conclusions reached in the geology and soils assessment, as reported in ES Chapter 10.
2.5.	<b>Materials and Waste – ES Chapter 11</b>	
2.5.1.	Applicant	<b>Material resources</b> ES paragraphs 11.9.7 – 11.9.24 set out the targets for materials resources, excavated materials and waste against which the magnitude of impacts are to be assessed. It is explained at Paragraph 11.9.13 that excavated material would be used in accordance with a Materials Management Plan, a framework for which is presented within the OEMP. Can the Applicant explain what approach would be applied to ensuring that the targets for material resources, recycling and recovery rates for waste arisings would be achieved and how the magnitude of impacts would be assessed?
2.5.2.	Applicant	<b>Surplus excavated material</b> ES paragraph 11.9.17 states that off-site management routes for surplus excavated materials are currently unknown and will be the responsibility of the contractor. Can the Applicant explain what options, if any, are available to ensure the quantity of surplus excavated materials requiring disposal in landfill is minimised?

2.5.3.	Applicant	<p><b>Monitoring</b>          ES paragraph 11.10.1 states that as the assessment has recorded that no significant effects would arise from construction of the Proposed Development in relation to material assets and waste. Accordingly, there would be no requirement to monitor the effects of the Proposed Development during this phase. Can the Applicant explain how the targets for excavated material, materials resources and waste would be monitored to ensure that they are achieved and potentially enforced if necessary?</p>
<b>2.6. Noise and Vibration – ES Chapter 12</b>		
2.6.1.	Applicant and SMBC	<p><b>Noise policy and significant adverse effects</b>  <i>The Government’s policy [on noise] is set out in the Noise Policy Statement for England. It promotes good health and a good quality of life through effective noise management.</i></p> <p>In the light of that policy and the criteria that the Secretary of State should take into account, as set out in paragraph 5.195 of the NPSNN, please explain why the daytime SOAEL is set at 68dB LA10,18h (façade). While that might reflect the ‘daytime trigger level’ imposed by the Noise Insulation Regulations, those Regulations (now somewhat long in the tooth) do not obviously relate to the aims of current Government policy on noise.</p>
2.6.2.	Applicant and SMBC	<p><b>Noise policy and significant adverse effects</b>          In the light of Government policy and the criteria set out in paragraph 5.195 of the NPSNN, an appropriate daytime SOAEL might be set at 60dB LA10,18h (façade), since that would roughly correspond to the level at which the onset of serious community annoyance would occur in the WHO guidance (namely, 55dB LAeq,16h (façade)). Please re-assess the significance of the operational traffic noise effects against a daytime SOAEL set at 60dB LA10,18h (façade).</p>

2.6.3.	Applicant and SMBC	<p><b>Noise policy and significant adverse effects</b></p> <p>In the light of Government policy and the criteria set out in paragraph 5.195 of the NPSNN, please explain why the night-time SOAEL is set at 55dB <math>L_{Aeq,8h}</math> (façade) (paragraph 12.3.49, APP-057). As the Night Noise Guidelines (NNG) for Europe (referred to) explain that the 'interim target' of 55 dB <math>L_{night,outside}</math> is recommended in situations where the achievement of NNG is not feasible in the short run, is not a health-based limit and should be considered only as a feasibility-based intermediate target which can be temporarily considered by policy-makers for exceptional local situations, what are the exceptional local situations of relevance here?</p>
2.6.4.	Applicant and SMBC	<p><b>Noise policy and significant adverse effects</b></p> <p>In the light of Government policy and the criteria set out in paragraph 5.195 of the NPSNN, an appropriate night-time SOAEL might be set at 45dB <math>L_{Aeq,8h}</math> (façade), since that would roughly correspond to the noise level outside a partially open window at which the onset of sleep disturbance would occur inside bedrooms, as set out in the WHO guidance (namely, 30dB <math>L_{Aeq,8h}</math> (inside)). Please re-assess the significance of the operational traffic noise effects against a night-time SOAEL set at 45dB <math>L_{Aeq,8h}</math> (façade).</p>

2.6.5.	Applicant and SMBC	<p><b>Accuracy of modelled noise changes</b></p> <p>The noise monitoring results provided in Table 12.11 [APP-057] do not always accurately reflect the predicted <math>L_{A10,18h}</math> traffic noise levels derived from the modelled annual average weekday traffic flow. In relation to the DMRB classification of noise impact (Table 12.6, APP-057) a 'difference' in one location (ML7a) would be large enough to constitute a 'major' 'short term' change, while the 'differences' in 5 locations (ML2, ML5, ML6, ML7b and ML8) would amount to 'moderate' 'short term' changes. Although physical screens may account for some of those differences (perhaps at ML5 and ML7b), systematic influences may also operate, so that the identified 'changes in traffic noise levels' (eg Table 12.12, APP-057) may be significantly underestimated. Please explain why that may or may not be so and reassess any currently estimated changes in traffic noise that might need to be altered.</p>
2.6.6.	Applicant	<p><b>Noise from the WGAA</b></p> <p>In relation to the latest reconfiguration of the WGAA pitches (8.21, REP2-019), please set out how the average (<math>L_{Aeq}</math>) noise level from the 3 combined WGAA pitches at relevant NSRs was derived from Sport England's guidance that 58dB <math>L_{Aeq,1hr}</math> is a 'typical' noise from a sports pitch at 10m from the half-way line. (Alternatively, please submit the document containing that information.)</p>

2.6.7.	Applicant and SMBC	<p><b>Noise from the WGAA</b>          Sport England’s guidance that 58dB <math>L_{Aeq,1hr}</math> is a ‘typical’ noise from a sports pitch, explicitly assumes that the impact noises associated with hockey can be mitigated by incorporating shock absorbing noise reduction measures. Such measures are unlikely to be installed at the WGAA and may even be inappropriate for ‘hurling’. It is thus necessary to incorporate the percussive sounds inevitably associated with hurling into the noise assessment. One possibility would be to add a correction factor to reflect the distinctive percussive characteristic of the estimated noise, analogous to the mechanism adopted in BS 4142, but there may be others. Please address the percussive nature of the noise from the WGAA pitches in assessing the impact on relevant NSRs.</p>
2.6.8.	Applicant	<p><b>Noise from the WGAA</b>          In relation to the latest reconfiguration of the WGAA pitches (8.21, REP2-019), please set out how the <math>L_{Amax}</math> noise levels have been calculated at the relevant NSRs from the assumptions made at the hurling wall (Table 1.9, REP2-019) and in the car park (Table 1.10, REP2-019).</p>
2.6.9.	Applicant and SMBC	<p><b><math>L_{Amax}</math> events</b>          The WHO guidelines indicate that the disturbance or annoyance due to an <math>L_{Amax}</math> noise level event can depend on the incidence and frequency of the event. The noise assessment [APP-057] does not appear to address either. Please explain how the incidence and frequency of <math>L_{Amax}</math> events might be considered and assess those impacts on NSRs.</p>

2.6.10.	Applicant	<p><b>L<sub>Amax</sub> events</b>          As stated at paragraph 12.2.5 [REP2-019], the WHO guidelines only use L<sub>Amax</sub> indicators in relation to sleep disturbance in bedrooms at night. An analogous day-time indicator might thus relate to living rooms during the day and evening. It is not clear how the suggested day-time outdoor threshold of 65dB L<sub>Amax</sub> has been derived (paragraph 12.2.5, REP2-019). However, it does not appear to be used in the assessment. Is that correct? If not, please explain how this indicator has been derived.</p>
2.7.	<b>Population and Health – ES Chapter 13</b>	
2.7.1.	Applicant	<p><b>Agricultural land</b>          Please see ExQ2.4.1, the same point applies in ES Table 13.1. Given the approach in the NPSNN, could the Applicant explain the basis for assessing Grade 3a agricultural land as having a medium sensitivity, as opposed to a high sensitivity for Grades 1 and 2 (Table 13.1)?</p>
2.7.2.	Applicant	<p><b>Sensitivity</b>          Can the Applicant please provide further explanation as to the differing sensitivity applied to residential buildings and gardens in ES Table 13.3?</p>
2.7.3.	Applicant	<p><b>WGAA</b>          Having regard to the Applicant’s Deadline 2 submission document ‘Proposed Proportionate Reconfiguration of the Warwickshire Gaelic Athletic Association Facility’ [REP2-019], can Options 1-5, illustrated in Figure 3.5A-E in Volume 2 of the ES [APP-069], now be discounted? Whether or not that is the case, please update the conclusions reported in the ES to include the scheme shown in Figure 8.21 [REP2-019].</p>

2.7.4.	Applicant	<p><b>Impact</b>                  ES paragraph 13.4.12 sets out a number of assumptions, including that land returned to agriculture following construction would be restored to its pre-construction condition. Can the Applicant explain what mechanisms would secure the pre-construction condition of the land, particularly that land to the south of the A45 corridor which would be used for the main site compound (Work No. 69)?</p>
2.7.5.	Applicant and SMBC	<p><b>Safeguarded gypsy site</b>                  ES paragraph 13.6.54 refers to a safeguarded site for gypsies and travellers located on Catherine-de-Barnes Lane to the north of Bickenhill, which is within the Order Limits of the Proposed Development. Can the Applicant and SMBC please confirm whether this is the Avon Caravan Park or an additional site? If the latter could SMBC provide details?</p>
2.7.6.	Applicant	<p><b>Assessment</b>                  Please see ExQ2.4.3, which deals with the same point. ES Paragraph 13.9.2 states that a maximum area of 21.4ha of Grade 3a agricultural land would be lost as a result of the construction of the Proposed Development. However, paragraph 13.6.11 acknowledges that the classification of 21.7ha of agricultural land that was not surveyed is unknown. Can the Applicant therefore confirm whether it is possible that the area of Grade 3a agricultural land could be significantly greater than 21.4ha, particularly because the approach taken at paragraph 10.4.11 is to assume that unrecorded areas are Grade 3a?</p>
2.7.7.	Applicant	<p><b>Assessment</b>                  Having regard to ExQ2.4.3 and ExQ2.7.1, if the sensitivity of Grade 3a agricultural land is high, has the moderate-substantial adverse significance of effects set out in ES paragraph 13.9.3 been understated?</p>



2.7.8.	Applicant	<p><b>Assessment</b>          Can the Applicant explain why the first holding name in Table 13.19 is blanked out? If this is not intentional, can the Applicant confirm whether it is the Hampton Estate?</p>
2.7.9.	Applicant	<p><b>Assessment</b>          ES paragraph 13.9.9(?) explains that the scale of effects on agricultural holdings is based on the proportion of land required from the holding. However, Table 13.19 lists two holdings west of Catherine-de-Barnes Lane where 100% of the land is required but the scale of effect is described as moderate adverse, the same as that for Woodhouse Farm where the land-take would be just 34.1%. The Applicant is therefore asked to provide an explanation of this apparent inconsistency.</p>
2.7.10.	Applicant, SMBC and Open Space Society	<p><b>Assessment: footpaths</b>          PRoW M112 connects Damson Parkway in the west to St Peters Lane, Bickenhill. The PRoW would be severed by the mainline link road and would be redirected around 2 sides of a triangle over the proposed 'Catherine-de-Barnes north overbridge' near St Peters Lane. However, paragraph 13.9.20 estimates that there would be a 50m reduction in journey lengths. Can the Applicant provide further explanation as to how this would be achieved?</p>

2.7.11.	Applicant, SMBC and Open Space Society	<p><b>Assessment; footpaths</b>          Paragraphs 3.15-3.17 of the NPSNN commits the Government to investing in <i>'high-quality cycling and walking environment to bring about a step change in cycling and walking across the country.'</i> The Panel appreciate the work undertaken in assessing alternative routes between the proposed A45 overbridge and Birmingham International Railway Station [REP3-018], but they consider that the assessment gives insufficient weight to the policies set out in the NPSNN. Please reconsider that assessment in the light of those policies and indicate whether the possibility of implementing 'route A' (Table 5.1, REP-018) would require alterations to the DCO or whether other mechanisms (including funding and suitable forms of agreement with the relevant bodies – SMBC, Network Rail etc) would suffice.</p>
2.7.12.	Applicant	<p><b>Assessment; drivers</b>          ES paragraph 13.9.44 refers to residents of Bickenhill travelling to Catherine-de-Barnes Lane to access community facilities in Solihull, Catherine-de-Barnes and Hampton in Arden. However, no reference is made to the shopping and leisure offer to the north of the A45. Can the Applicant confirm whether this has been considered and if not, how would this affect the conclusions reached in paragraph 13.9.45?</p> <p>Can the Applicant also explain what consideration has been given to the effect on the B&amp;B business on Church Lane.</p>

2.7.13.	Applicant and IPs	<p><b>Assessment; property</b>          ES paragraph 13.9.47 states that as less than five residential properties would be impacted by the proposed new mainline link road between the M42 Junction 5A and Clock Interchange during construction, the impact on residential properties has not been assessed. That may be correct if 'impact' is intended only to apply to demolition or the physical loss of land, but it cannot be correct if it also entails environmental elements. Can the Applicant identify which properties it considers would be 'impacted' and explain the basis for discounting others?</p> <p>Can the Applicant also explain whether the construction effects on private assets has considered those arising from the positioning of a site compound between Clock Interchange and Bickenhill (Work No. 69)?</p>
2.7.14.	Applicant and IPs	<p><b>Assessment; property</b>          Can the Applicant provide further justification for the assertion in ES paragraph 13.9.48 that the potential impacts on private assets during operation of the scheme are not considered significant? Can the Applicant also clarify whether there is any missing text from the first sentence of this paragraph?</p>
2.7.15.	SMBC	<p><b>Assessment; property</b>          Can SMBC confirm its position with regards to the conclusion in paragraph 13.9.52 that the proposal would have a slight adverse effect on development land?</p>
2.7.16.	Applicant and SMBC	<p><b>Assessment; property</b>          Can the Applicant clarify the assertion in ES paragraph 13.9.54 that there are no planning applications or permissions affected by land required for the operation of the Proposed Development, having regard to the MSA proposals at junction 5a?</p> <p>Can SMBC also confirm whether there are any other applications and permissions that the ExA should be made aware of?</p>

2.7.17.	Applicant and SMBC	<p><b>Assessment; environmental effects</b>          Can the Applicant provide further justification for the conclusion set out in ES paragraph 13.9.63 that the effect of the Proposed Development on air quality, noise and neighbourhood amenity as a determinant of human health during construction would be neutral.</p> <p>What are the views of SMBC?</p>
2.7.18.	Applicant and SMBC	<p><b>Assessment; environmental effects</b>          Can the Applicant provide further explanation for the conclusion set out in ES paragraph 13.9.75 that the Proposed Development would have a positive effect on access to open and natural space as a determinant of human health during operation, given the scale and nature of the proposed Junction 5a and new mainline link road in a largely rural landscape.</p> <p>What are the views of SMBC?</p>
2.8.	<b>Assessment of Cumulative Effects – ES Chapter 16</b>	
2.8.1.	SMBC and WCC	Does the Short List of Developments in Appendix 16.3 [APP-16.3] contain all that it should?
2.8.2.	Applicant	ES paragraph 16.3.4 [APP-161] states that the SMBC planning portal, the Planning Inspectorate’s website and the Highways England Improvements and major road projects website were last checked for new developments to add to the Long List of Developments on 26 November 2018. Can the Applicant confirm whether or not this has recently been reviewed?

<b>Transport Assessment Report [APP-174]</b>		
2.9.	<b>The relationship to other projects and the robustness of the traffic modelling</b>	
2.9.1.	The Applicant, SMBC and WCC	<p><b>The growth gap</b></p> <p>The Panel welcome the promise to explain the relationship between the LAM, OM, PRISM and NTEM at Deadline 4 (2 September 2019). However, whatever the nature of those relationships, the Panel need to know how the growth anticipated by 2041 is to be accommodated on the road network because all the evidence currently available suggests that the current scheme will be insufficient on its own. We understand that discussions between SMBC and the Applicants held on 16 July 2019 have addressed that conundrum. In the light of those discussions, please explain what new roads, road schemes or road improvements are envisaged to accommodate the growth anticipated up to 2041 and indicate how the current scheme might integrate with those further developments. Please take account of the works to accommodate HS2, the 'people mover' to Birmingham International Airport and the extension of the Midlands Metro to both the Airport and the HS2 interchange station all anticipated by 2026.</p>
2.9.2.	Applicant and SMBC	<p><b>The growth gap</b></p> <p>It is clear that SMBC envisage a 'phase 3', accommodating improvements around the HS2 Interchange Station and along the A45 and A452 corridors and a 'phase 4' addressing the needs of the Hub and its connections with both the M6 and the M42 motorways beyond 2026 and up to 2041. This raises 2 issues:</p> <ol style="list-style-type: none"> <li>1. As 'phase 3' is due to be completed barely 6 years after a decision has been made on the current scheme, is it necessary to extend the limits of this DCO in preparation for those imminent proposals?</li> <li>2. How does this scheme relate physically to the transport proposals required to accommodate the growth envisaged in phases 3 &amp; 4? (Essentially, the same question as ExQ2.9.1)</li> </ol>

2.9.3.	The Applicant, Arden Hotel, Applegreen PLC, Birmingham International Airport, The Motorcycle Museum, Extra MSA Solihull Limited, Genting Solihull Limited, NEC Limited, SMBC and WCC	<p><b>Traffic variability</b></p> <p>It may well be that the promised explanation of how the various traffic models relate to each other will also provide the answer to this question. However, at first glance from the answer given to ExQ1.11.8, it would appear that the OM accommodates much of the traffic at the upper limit of the variations envisaged in the LAM, the flows in South Way being some 19% higher in the OM than those in the LAM during the AM peak and some 54% higher in the OM than those in the LAM during the PM peak. Please explain how the situations being modelled can be taken to be comparable.</p> <p>Moreover, if the absence of queues in the OM at 2041 (as shown in Figure 7.8, APP-174) encompasses the variation evident in the LAM, how does the OM address the inherent variability of the traffic at junction 6 on the M42?</p>
2.9.4.	The Applicant, NEC Limited, SMBC and WCC	<p><b>Effects of the 'high growth' scenario</b></p> <p>From the answers given to ExQ1.11.8 and ExQ1.11.11, the traffic accommodated by the OM appears to encompass the 'high growth' scenario set out in the LAM. Does it follow that, although several links at junction 6 and the Clock Interchange have <math>V/C &gt; 1</math> (up to about 1.6 sometimes) (Appendix B and Figures 2A-3B [REP2-007]) additional road works will not be required because the OM generally accommodates the flows predicted? Or, is it the case that the reference to the restriction of 'any increase in user benefits when compared with the core scenario' (answer to ExQ1.11.11) implies the existence of 'hidden' queues throughout the network?</p>

2.10.	<b>The effectiveness of the scheme</b>	
2.10.1.	The Applicant	<p><b>The operation of the signalised gyratory</b></p> <p>The Panel welcome the further information submitted in REP3-019. There are a few instances where the results set out in Table 1.1 appear counter-intuitive and further explanation would be very helpful:</p> <p>Table 1.1</p> <p>2041 <u>Do-minimum</u></p> <p>1A Although the average AM Qs are less than the average PM Qs, the Max Qs are the same. The nearside lane of the A45 would contain a long line of queuing traffic that would sometimes stretch back beyond the joining slip road at the Clock Interchange. Why is an LoS=C appropriate?</p> <p>1G Although the average AM Qs are less than the average PM Qs, the Max Qs are the same. Moreover, all AM Qs are greater than the current situation (2016 Base). Why is the LoS=B rather than C or D?</p> <p>3A The PM Max Q extends on to the M42 mainline, indicating that on occasions queuing traffic must impede through traffic on the M42. Why is this a stable flow (LoS=C)? Please compare this with flows at 6A.</p> <p>2041 <u>Do-something</u></p> <p>1A All the AM Qs are higher than all the PM Qs. Why does the AM LoS=B rather than C, which is the PM LoS?</p> <p>5A All the AM Qs are lower than all the PM Qs. Why does the AM LoS=C rather than B, which is the PM LoS?</p>