## **Tritax Symmetry (Hinckley) Limited**

## HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

# The Hinckley National Rail Freight Interchange Development Consent Order Project reference TR050007

## Applicant's response to Deadline 6 Submissions [part 10 - Residents Businesses]

**Document reference: 18.20** 

**Revision: 01** 

## **27 February 2024**

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(q)

Comments Applicant's Comment

### **Dr David Moore**

Comments on the Applicant's Written Statement of Oral Case at ISH6 Deadline for receipt of Comments on Oral Case at ISH6: Tuesday 20th February 2024 Unique Reference Number: 20040614 I here make Comments in turn, as follows:

### Agenda Item 6a – Noise Baseline Conditions (Page 33)

In response to the Examining Authority's ISH6 Hearing Action Point 141: "The Applicant to set out the distance of NMP4 from the railway track in precise terms"

Tritax have responded: "The Applicant can confirm that ML4 was located at approximately 13m from the west bound track"

For clarity, I would explain here that ML4 is the name that was given to NMP4 in Tritax's ES Appendix 10.5 Noise Survey Method Statement of November 2022. So NMP4 and ML4 are actually one and the same!

To date, I have described in detail in three different submissions to the Examining Authority that in Tritax's Noise and vibration report there is no indication of the distance of the Noise Monitoring Positions NMPs from the specific sound source (be it rail or road) that the NMP was measuring, that there is strong evidence that NMP4 was placed too close to the rail track, and that as a result its measured Ambient Noise levels will be 3.2dB too high.

At last, some five months into the Examination Period, and only as a direct result of an Action Point from the Examining Authority specifically in relation to NMP4, we now find that this is in fact the case.

The immediate implications of this are that the Baseline Ambient Noise levels indicated in Tritax's Noise and vibration report that relate to NMP4 should be reduced by 3.2dB. This includes Tritax's Tables 10.43 and 10.44, and Tables 10.58 and 10.59 which consider their Unmitigated and Mitigated cases respectively. Corresponding increases to the Rating Penalties applied to the "Completed Development Noise" may also be required.

This matter is discussed in much more detail in Section 1 of my "Written Representation to the Examining Authority (ExA) regarding the Environmental Statement submitted by Tritax Symmetry (Hinckley) Ltd in respect of their proposed Hinckley National Rail Freight Interchange and with particular reference to Chapter 10: Noise and vibration." document of the 10th October 2023.

### Agenda Item 6a - Noise Baseline Conditions (Page 39)

In the Issue Specific Hearing (ISH6) on Traffic and Transport, and Noise on Wednesday the 24th January 2024 (at Recording Time Reference 26 minutes 49 seconds), the Examining Authority asked Tritax: "Doctor Moore has produced a Table in response to our Written Questions for noise levels at NSRs in the absence of train movements. That is Table 1a in Document REP4-195.

The Applicant has reviewed all comments made in this submission fully. It is also acknowledged that there are ongoing differences and disagreements between the Applicant and Dr & Mr Moore, and we continue to disagree with the points made in their D6 submissions.

Given this, where previous submissions by Dr & Mr Moore cover points that reiterate earlier comments they have already made at Deadline 6 or earlier, the Applicant has signposted the associated response, rather than repeat our previous submissions. For many of the points this is the case, however, where there are new points to address or comment on, the Applicant has provided further responses and clarification points.

The comments refer to the location of the monitoring location and its suitability, and there are no new points to address. The matter remains a point of disagreement. The Applicant has previously to comments regarding applying a distance correct to noise levels measured at NMP4 at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025)

The comments refer to the attenuation of the measured noise levels. This remains a point of disagreement. There are no new points made here and the Applicant has previously responded to this matter at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore

It is stated that this constitutes 96% of the total time. It is therefore stated that these are the noise levels presently ruling at the NSRs for 96% of the time, and it is against these levels that noise from the proposed development should be judged. Can I have the applicant's thoughts on that please?"  Tritax's Verbal Response to the Examining Authority's Question was as follows:  "Yes, it's again, go back to the to the point of how noise is measured. And it's measured as an equivalent noise level over a set period of time. You know, if we were working on a basis that there were no train Pass Bys 96% of the time, that would have been picked up in the noise survey, and that would be reported in the levels. As it is, it hasn't. And it's to do with how noise is measured and how it's reported."  Now, I have already Commented upon Tritax's Verbal Response in my "Comments on the Applicant's Responses to the Examining Authority's Written Questions" document of the 9th February.  But seeing here the "Applicant's Written Statement of Oral Case ISH6" document, gives me the unexpected opportunity to make the following additional Comment:
presently ruling at the NSRs for 96% of the time, and it is against these levels that noise from the proposed development should be judged. Can I have the applicant's thoughts on that please?"  Tritax's Verbal Response to the Examining Authority's Question was as follows:  "Yes, it's again, go back to the to the point of how noise is measured. And it's measured as an equivalent noise level over a set period of time. You know, if we were working on a basis that there were no train Pass Bys 96% of the time, that would have been picked up in the noise survey, and that would be reported in the levels. As it is, it hasn't. And it's to do with how noise is measured and how it's reported."  Now, I have already Commented upon Tritax's Verbal Response in my "Comments on the Applicant's Responses to the Examining Authority's Written Questions" document of the 9th February.  But seeing here the "Applicant's Written Statement of Oral Case ISH6" document, gives me the
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noise level over a set period of time. You know, if we were working on a basis that there were no train Pass Bys 96% of the time, that would have been picked up in the noise survey, and that would be reported in the levels. As it is, it hasn't. And it's to do with how noise is measured and how it's reported."  Now, I have already Commented upon Tritax's Verbal Response in my "Comments on the Applicant's Responses to the Examining Authority's Written Questions" document of the 9th February.  But seeing here the "Applicant's Written Statement of Oral Case ISH6" document, gives me the
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I think that the Examining Authority's Question to Tritax was about the response and judgement of the Residents living at the NSRs.  The Examining Authority's question was answered at Issue Specific Hearing 6 and summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, PERS 0.25). It is not appropriate.
Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). It is not appropriate to imply the meaning of questions asked by others.
Residents will in fact know nothing, and care even less, about the measurement of acoustic noise. But they will unerringly make their own judgement about the noise they hear around them.
And it is inevitable that they would compare the additional continuous noise from the Proposed Development with the noise levels that now rule for 96% of the time at the NSRs.
Tritax's line of response was essentially a red herring. And Tritax simply avoided answering the Examining Authority's Question.
Dr David Moore MA (Cantab) PhD David Moore is a Chartered Engineer, and a Fellow of the Institution of Mechanical Engineers. He has some 25 years experience in Industrial Design Consultancy. Clients have included 3M, Procter & Gamble, GSK, London Underground, Johnson & Johnson, Ricardo, Monsanto, DePuy, AstraZeneca, BAE Systems, Unilever, Reckitt, Sanofi and Alstom. Now retired, his technical interests include Mechanical Design, Mathematical Modelling, Computational Fluid Dynamics and Digital Signal Processing.
Comments on the Applicant's Responses to Deadline 4 Submissions [part 11 – Response to Mr Moore and Dr Moore]
Deadline for receipt of Comments to Responses: Tuesday 20th February 2024

Comments	Applicant's Comment
Unique Reference Number: 20040614	
Tritax's "Applicant's Responses to Deadline 4 Submissions [part 11 – Response to Mr Moore and Dr	
Moore]" consists of three Sections which Tritax have labelled as follows:	
Section 1 – "David Moore" (Pages 1 to 8)	
Section 2 – "David Moore" (Pages 8 to 23)	
Section 3 - "Response to the Examining Authority's Written Question (Pages 23 to 42) ExQ 1.8.18 by	
William David Moore"	
It appears that Tritax have become confused here, because they ascribe both their Section 1 and their	
Section 2 to me. But their Section 1 does not in fact relate to me, because it was written by another Interested Party.	
In their Section 2, which actually does relate to me, Tritax have responded to my document "Response to	
the Examining Authority's Written Questions and Request for Information ExQ1 Question 1.8.18 regarding the Applicant's methodology for noise assessment in the proposed Hinckley National Rail	
freight Interchange." of the 9th January 2024 (Deadline 4).	
For clarity, I mention here that, following on from my Response document of the 9th January 2024	
(Deadline 4) described above, I subsequently submitted a "Comments on the Applicant's Responses to the Examining Authority's Written Questions." document of the 9th February 2024 (Deadline 5). This runs	
to some 23 pages and covers some of the matters below in much greater detail.	
You will see that in their Section 2, Tritax refer several times to the Statement of Common Ground, which	We do not agree with this statement. The SoCG is not a procedural document but is a means for the relevant parties to record their agreement, noting that both LPAs have agreed with the noise and
you will understand is a purely procedural matter and does not bestow any technical justification.	vibration methodologies. This has included technical input from the Councils' own technical team and an
Within Section 2, Tritax have followed the same Section Headings that I used in my original document, to	external noise expert, all of whom are suitably qualified and experienced to practice in the field of
which I here make Comments in turn, as follows:	acoustics.
Introduction (Pages 8 to 10)	We do not agree with this statement. The Applicant has provided responses to numerous written
	comments throughout the examination process and have attended two oral hearings, one of which Dr.
"The Applicant has provided response to the Written Representations at Deadline 2, 24th October	Moore attended and was able to ask questions of the Applicant, and which the Applicant answered as fully as possible
(document reference: 18.3, REP2-066) (Applicant's Comments on Written Representations)."	Tany as possible
In fact, Tritax failed to provide any meaningful response to my Written Representation of the 10th	
October 2023, and still have not done so. Tritax's behaviour in this regard has caused omission, delay and	
confusion in the Examination Process.	
This is described in much more detail in the Introduction Section of my "Comments on the Applicant's Responses to the Examining Authority's Written Questions" of the 9th February 2024.	
Overview (Pages 10 to 13)	
Overview (1 ages 10 to 13)	

Comments	Applicant's Comment
"The Applicant maintains that there is sufficient information within the ES Chapter to understand contributions from different noise sources at NSRs, and that cumulative impacts have been assessed.	
"This is incorrect. In several of their Responses, Tritax have made reference to Paragraphs from their Noise and vibration report that they consider illustrative or relevant. But they make reference to no such Paragraphs here.  Tritax's Section on the Cumulative Effects of the Completed Development consists of just two Paragraphs 10.351 and 10.352, which together total 9 lines in length.	The comments refer to the cumulative assessment This remains a point of disagreement. There are no new points here and the Applicant has previously responded to comments regarding the Cumulative assessment at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), Technical Note (Noise and Vibration Scot Schedule) (document reference: 19.1B, REP4-134) accompanying the SoCG (V09) a and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference:
"The example given regarding ground absorption coefficient, the Applicant maintains that appropriate settings have been adopted for the noise model"	18.15, REP5-025)
This is incorrect. By their own admission, Tritax have used some "averaged" ground coefficient value rather than the <b>correct</b> ground coefficient values in the <b>correct</b> places.	The comments refer to the ground absorption settings. This remains a point of disagreement. There are no new points to address and the Applicant has previously responded to comments the ground absorption settings within the noise model at Deadline 5 - Applicant's Response to Deadline 4
This is described in much more detail in the Acoustic Absorption - 1.8.11 & 1.8.12 Sections of my "Comments on the Applicant's Responses to the Examining Authority's Written Questions" of the 9th February 2024.	Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025)
"As stated within Chapter 10 Noise and Vibration (document reference: 6.1.10A, REP4-039) and confirmed by Network Rail, there is capacity on the existing line to run the additional trains. These routes could be used by Network Rail at any time regardless of whether HNRFI comes forward. Notwithstanding this, the assessment shows that the effect of additional trains using the existing line is likely to be permanent, negligible adverse and therefore not significant. However, there is no requirement for noise and/or vibration from off-site rail movements to be a material consideration of this development, and an assessment has been provided within Chapter 10 (document reference: 6.1.10A, REP4-039) for completeness."	The Applicant maintains that the assessment of noise as a result of additional trains is outside of the scope of the Noise and Vibration Chapter and has only been provided for completeness. However, the results are not a material consideration of the application.
To date, I have described in detail in three different submissions to the Examining Authority that the Off- Site Rail Noise assessment that Tritax provided in their Noise and Vibration report is deeply flawed, and gravely underestimates the additional Off-Site Rail Noise that will be caused by their Proposed Development.	As stated above, the Applicant maintains that the assessment of noise as a result of additional trains is outside of the scope of the Noise and Vibration Chapter and has only been provided for completeness. The assessment is correct and does not mislead.
Any assessment that Tritax provides in their Noise and vibration report should be correct and should not mislead.	
Baseline Conditions (Pages 13 to 17)	
"The reasoning for disregarding the noise levels measured on the Saturday night-time are provided in Paragraphs 10.106 and 10.108 of Chapter 10 Noise and Vibration (document reference 6.1.10A, REP4-039).	

Comments	Applicant's Comment
To date, I have described in detail in three different submissions to the Examining Authority that the Off- Site Rail Noise assessment that Tritax provided in their Noise and Vibration report is deeply flawed, and gravely underestimates the additional Off-Site Rail Noise that will be caused by their Proposed Development.	
By way of example, in my "Written Representation to the Examining Authority (ExA) regarding the Environmental Statement submitted by Tritax Symmetry (Hinckley) Ltd in respect of their proposed Hinckley National Rail Freight Interchange and with particular reference to Chapter 10: Noise and vibration" on the 10th October 2023, I discussed in detail the mistakes that Tritax had made in their Noise and vibration report, with specific reference to, and quoting from, those same two Paragraphs 10.106 and 10.108 that Tritax now refer to above.	The comments refer to the ground absorption settings. This remains a point of disagreement. There are no new points made here and the Applicant has previously responded to comments regarding the ground absorption settings within the noise model at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025)
"This is incorrect. The noise level meters were set-up by competent persons as defined by the Institute of Acoustics, which the Applicant's Noise Consultants are members, and in line with relevant standards and guidance."	
Tritax's statement is incorrect. It is an indisputable fact that in Tritax's Noise and vibration report there is no indication of the distance of the Noise Monitoring Positions NMPs from the specific sound source (be it rail or road) that the NMP was measuring. BS4142:2014+A1:2019, Section 12(e) states that when noise measurements are made the position of the measurement locations and their distance from the specific sound source should be indicated.	The specific sound source relates to the 'sound being assessed' as detailed in 3.12 of BS4142:2014+A1:2019. In relation to the guidance, which is specific for rating and assessing industrial and commercial sound, the specific sound source relates to an industrial/commercial source i.e not the
And given that the Examining Authority asked for the distance of NMP4 from the specific sound source in their Hearing Action Point 141, and received the requested information from Tritax on the 9th February 2024, this is an extraordinary and confused Response for Tritax to make.	ambient or background sound. Therefore, the statement is correct.
"As stated above, it is not appropriate to simply apply a distance correction to noise from the rail line in isolation as this does not take into account the contribution of road traffic noise at distances further away from the rail line"	
All of the calculations were performed in accordance with BS4142:2014+A1:2019, the "Calculation of Railway Noise" (CRN), and the "Additional railway noise source terms for 'Calculation of Railway Noise 1995' ".	
"Further analysis has shown that the ambient noise levels adopted within the context assessment are representative and therefore the results and conclusions of the Noise and Vibration assessment remain valid."	
Tritax's statement above is too vague to Comment on in a meaningful way.	The comments refer to the analysis of ambient noise levels, and the Applicant has already responded on that matter. This remains a point of disagreement. The analysis is detailed in 18.7.6 Written Statement of Oral Case ISH3 [Appendix F - Noise Assessment Update Note] submitted at Deadline 3 (document
"This is incorrect. If this was the case, and there were no train passbys 96% of the time, then this would have been picked up in the baseline poice survey, which was undertaken over a 7 day period."	reference: 18.7.6, REP3-061).

have been picked up in the baseline noise survey, which was undertaken over a 7-day period."

Comments	Applicant's Comment
Tritax's statement is both incorrect and absurd. The number of train passbys is indicated on the Real Time Trains website every day and can be read by all. Each train passby takes only a short time. I have spent many hours observing the passage of trains on that railway line, and the train passby are exactly as I have described.	The Applicant has previously responded to comments on this point through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). This remains a point of disagreement. There are no new points to address.
What on earth does Tritax imagine could be happening instead?	
Moreover, the noise levels Tritax measured at the trackside and indicated in graphical form in Tritax's ES Appendix 10.10 "Summary Results" are entirely in line with the train passby characteristics that I have indicated.	
This is described and discussed in much greater detail in the Baseline Noise Conditions – 1.8.18 - Tabular Comparison for Noise Effects Section of my "Comments on the Applicant's Responses to the Examining Authority's Written Questions" of the 9th February 2024.	
"Furthermore, the measured noise levels show good correlation with the DEFRA noise maps for the railway line, which show the annualised noise levels in the vicinity of the railway line."	The comments refer to the baseline noise conditions. This remains a point of disagreement. There are no new points to address, and the Applicant has previously responded to comments regarding the baseline
Tritax's statement is incorrect, as I shall explain. The noise levels measured at the trackside over the 7-day period are continuous along the length of the line that is considered here, <b>and no rail noise maps are required.</b> Further, the DEFRA rail noise maps that Tritax have sought to introduce are intended for use only at a strategic level and are very much higher (12dB to 15dB) than the noise levels that Tritax measured at the trackside at NMP3 and NMP4 over the 7-day period and then used as a foundation of their Noise and vibration report.	noise conditions and existing train movements at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025)
Moreover, the DEFRA rail noise maps give no indication of the noise levels at Weekend daytimes or Weekend night-times, and indeed are so broad-brush that they indicate a <b>higher</b> rail noise level at night-time than daytime. In contrast, the noise levels Tritax measured at the trackside over the 7-day period give detailed information for both Weekends and Weekdays, and both daytime and nighttime.	
Overall, Tritax have attempted to use the DEFRA strategic noise maps for a purpose for which they were never intended. All of this, and more, is described in much greater detail in the Baseline Noise Conditions – 1.8.2 Ambient Noise Levels – Rail Noise Data Section of my "Comments on the Applicant's Responses to the Examining Authority's Written Questions" of the 9th February 2024.	
All of this, and more, is described in much greater detail in the Baseline Noise Conditions – 1.8.2 Ambient Noise Levels – Rail Noise Data Section of my "Comments on the Applicant's Responses to the Examining Authority's Written Questions" of the 9th February 2024.	
2. Off-Site Train Noise (Pages 17 to 20)	
"As stated within Chapter 10 Noise and Vibration (document reference: 6.1.10A, REP4-039) and confirmed by Network Rail, there is capacity on the existing line to run the additional trains. These routes	

Comments	Applicant's Comment
could be used by Network Rail at any time regardless of whether HNRFI comes forward. Notwithstanding this, the assessment shows that the effect of additional trains using the existing line is likely to be permanent, negligible adverse and therefore not significant. However, there is no requirement for noise and/or vibration from off-site rail movements to be a material consideration of this development, and an assessment has been provided within Chapter 10 (document reference: 6.1.10A, REP4-039) for completeness."	As stated above, the Applicant maintains that the assessment of noise as a result of additional trains is outside of the scope of the Noise and Vibration Chapter and has only been provided for completeness. The assessment is correct and does not mislead.
Tritax have here simply repeated the same Response that they made in their Overview Section, and I repeat my same Comment:	The comments refer to off-site train noise. This remains a point of disagreement. There are no new points to address and the Applicant has previously responded to comments regarding off-site train noise at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the
I have described many times in my various submissions that the assessment that Tritax provided in their Noise and Vibration report is deeply flawed, and very seriously underestimates the additional Off-Site Rail Noise that will be caused by their Proposed Development.	Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025).
Any assessment that Tritax provides should be correct and should not mislead.	
"This is not in dispute. However, if there are trains running 6 nights out of 7, then the 'typical conditions' are that trains run during the night-time. The one night that trains do not run is atypical and not representative of the prevailing conditions."	
The typical (and prevailing) conditions are that no trains run on Saturday nights and very few trains run on Sunday nights. And the noise levels measured at the NMPs properly reflect this.	
Tritax are obviously still trying very hard to expunge the fact that that no trains presently run on Saturday nights. The original justification Tritax gave for doing so was by reference to measurements by Hydrock in 2018. Their above attempt is the weakest that I have seen to date.	
This subject is described and discussed in much greater depth in Section 2 – Off-Site Train Noise of my "Response to the Examining Authority's Written Questions and Request for Information ExQ1 Question 1.8.18 regarding the Applicant's methodology for noise assessment in the proposed Hinckley National Rail Freight Interchange." document of the 9th January 2024. Continuing analysis of Real Time Trains data subsequent to the 9th January 2024 further confirms those findings.	
3. Accumulated Additional Noise Sources (Pages 20 to 23)	The Applicant maintains that all points have been addressed.
"Content noted. All points are considered addressed."	
Well, in view of the above, I don't think they have been	
Dr David Moore MA (Cantab) PhD David Moore is a Chartered Engineer, and a Fellow of the Institution of Mechanical Engineers. He has some 25 years experience in Industrial Design Consultancy. Clients have included 3M, Procter & Gamble, GSK, London Underground, Johnson & Johnson, Ricardo, Monsanto,	

Comments	Applicant's Comment
DePuy, AstraZeneca, BAE Systems, Unilever, Reckitt, Sanofi and Alstom. Now retired, his technical interests include Mechanical Design, Mathematical Modelling, Computational Fluid Dynamics and Digital Signal Processing	
Comments on the Applicant's Response to Deadline 4 Submissions [part 11] by William David Moore	
The applicant has misstated my name and jumbled up separate submissions by two interested parties. This	is is not the first time the applicant has done this, please do better.
I have included the words submitted by the applicant at Deadline 5 in red.	
I have included the words I submitted at Deadline 4 in italics.	T
The ambient sound of the distant road noise has been measured by NMP4 & NMP3. The ambient sound of train pass bys have been measured by NMP4 & NMP3. Those ambient sound levels have then been copied to the NSRs associated with NMP4 & NMP3.	The comments refer to ambient noise levels. This remains a point of disagreement. There are no new points to address and the Applicant has previously responded to comments regarding ambient noise levels at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025).
But the NSRs aren't in extremely close proximity to the railway line, so attenuation corrections need to be applied to the sound of the train pass bys measured by NMP4 & NMP3.	
The applicant has refused to do this.	
Instead, the applicant is attempting to rely on the applicant's road noise contour map and DEFRA strategic rail noise contours, neither of which are levels measured at the site by NMPs.	
The applicant is attempting to use those contours to make claims about ambient sound levels at some NSRs. The applicant's own report acknowledges the applicant's road noise contours overstate ambient sound levels versus those measured by NMPs. The strategic rail noise contours introduced by the applicant also overstate ambient sound levels versus those measured by NMPs.	
This is why the applicant should be using the measurements made by NMD4. 9. NMD2 during different	

This is why the applicant should be using the measurements made by NMP4 & NMP3 during different time periods, and attenuating the sound of the rail noise measured by NMP4 & NMP3.

Instead, the applicant is making claims using contours which are known to overstate ambient sound levels

I explained why the contours introduced by the applicant shouldn't be used in lieu of measurements by NMPs. The applicant has responded to those points.

I have included the words submitted by the applicant at Deadline 5 in red.

I have included the words I submitted at Deadline 4 in italics

The long-term noise levels measured at NMP1 and NMP2 are within 3 dB of the noise levels predicted by the 2019 baseline road traffic noise model. This is within accepted tolerances and shows good correlation

Comments	Applicant's Comment
between the measured and predicted noise levels. For reasons set out within paragraph 10.226, noise levels measured at NMP5 and NMP6 are less reliable.	
The applicant is attempting to make definitive claims about ambient sound levels by using a road noise model which their own report acknowledges overstates sound levels. The applicant should not be doing that. The applicant is knowingly using overstated numbers.	
This has led to the applicant claiming NSRs associated with NMP4 experience 55 dB of daytime road noise. This is <b>higher</b> than the weekday ambient sound levels measured by NMP1, located ~300 metres from the M69, and applied to NSRs 9-11 as shown in the report's Table 10.43. The applicant's road noise model predicted levels 5.4 dB higher than the levels measured and used in Table 10.43.	
This has also led to the applicant claiming NSRs associated with NMP4 experience 53 dB of night-time road noise. This is <b>higher</b> than the night-time ambient sound levels measured by NMP1, located ~300 metres from the M69, and applied to NSRs 9-11 as shown in the report's Table 10.44. The applicant's road noise model predicted levels 6.4 dB higher than the levels measured by NMP1 and used in Table 10.44.	
When the applicant deployed NMP5 to calibrate the road noise model, the measured levels were 7dB below those predicted. This shows the danger of trying to pick a given location and declare road noise ambient sound levels based on the applicant's road noise model	
I wrote: "2. NMP4's Saturday night-time measurements (which the applicant wrongly expunged) had ambient sound levels due to all sources of sound of 44 dB, as shown in the report's Table 10.23. This is 9 dB below the night- time ambient sound level which the applicant is now attempting to ascribe to NSRs 1-8 & 24-26 purely due to road noise during night-time periods."	The Applicant has no further comments to add, the response previously provided remains valid.
The analysis undertaken following ISH3 and detailed in Appendix F – Update to Noise Assessment Note (document reference: 18.7.6, REP3-061) provides an indication of the likely ambient noise levels in the vicinity of NSRs on Billington Road drawing on long-term data for the rail line and road traffic. This analysis shows that the noise levels measured at NMP4 are representative of the ambient noise levels at receptors and therefore the results and conclusions of the Noise and Vibration assessment remain valid.	
This is not a meaningful response to point 2.	
I wrote: "3. The applicant is attempting to claim that daytime ambient levels due to road noise are 16 dB above the weekday background sound levels, as shown in Table 10.55. As explained at the beginning of this document, the distant road noise generates a very small gap between the background sound level and the ambient sound level."	The Applicant has previously responded to this comment through the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). This remains a point of disagreement.
Notwithstanding the above, it is also worth noting that ambient noise levels used within the noise assessment are the lowest reported representative level over the assessment periods.	

Applicant's Comment  The Applicant has previously responded to this comment through the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). This remains a point of disagreement.
The Applicant has previously responded to this comment through the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). This remains a point of disagreement.
The Applicant has previously responded to this comment through the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). This remains a point of disagreement.
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Comments	Applicant's Comment
Noise levels measured adjacent to the railway line are lower over a weekend period, and this has been accounted for when selecting representative noise levels for these periods.	
The applicant's rail noise contours don't distinguish between different days of the week. The applicant is attempting to attribute 50 dB of rail noise to NSRs associated with NMP4 during all time periods, even though all the NSRs in Table 5 are outside the contours.	
Noise levels due to train pass bys were lower over the Sunday periods used in the applicant's report, but the applicant hasn't attenuated the measured sound of the train pass bys to the NSRs, which returns us to the original problem.	
I wrote: "As an aside, the applicant has made a mess of Table 5 in their update note. NSRs 2, 3 & 4 aren't on Billington Road East but have been included in the table. It's disturbing but unsurprising that we are two months away from the end of the examination period and the applicant still isn't familiar with the basic matters at hand. There are other problems with the applicant's document but I have to draw the line somewhere. I'll await answers to the Examining Authority's questions."	The Applicant has provided a further response to the Rule 17 Letter received 20 <sup>th</sup> February in the Hinckley NRFI Noise Note Response to ExA Rule 17 letter (document reference: 22.3) submitted as part of Deadline 7.
This is incorrect, those receptors located north of the rail line where the noise levels measured at NMP4 have been used are included within Table 5.	
The first sentence of the applicant's response is confused.	
The applicant's noise assessment update note has misstated the locations of NSRs 2, 3 & 4. They have been included in Table 5 of the applicant's update note, but that they shouldn't have been, because they aren't on Billington Road East and the applicant's claims relate to Billington Road East.	
This is with the exception of NSRs 1 and 24, where the methodology is not being questioned.	
The second sentence of the applicant's response is completely untrue.	The reasoning already provided for the use of ambient noise levels measured at NMP4 is also applicable to NSRs 1 and 24.
It is a false claim which has been invented by the applicant. <b>The applicant must immediately withdraw</b> this false claim	
Section 3	
I interpreted The Examining Authority's ExQ 1.8.18 as effectively a request that I attempt to correct all the deficiencies identified in the applicant's report. My reply to that request was submitted at Deadline 4. The applicant has now responded.	
I have included the words submitted by the applicant at Deadline 5 in red.	
I have included the words I submitted at Deadline 4 in italics.	

Comments	Applicant's Comment
Operational noise assessment - Weekend, night-time (2300-0700)	The comments refer to the application of acoustic penalties. This remains a point of disagreement. There
It is not appropriate to take the lowest measured level from a long-term data set. If there are trains running 6 nights out of 7, then the 'typical conditions' are that trains run during the night-time. The one night that trains do not run is atypical and not representative of the prevailing conditions.	are no new points to address and the Applicant has previously responded to comments regarding the application of acoustic penalties at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025).
The applicant's BS 4142 assessment includes four time periods: weekday daytimes, weekday night-times, weekend daytimes and weekend night-times. It's appropriate that assessments are conducted for different time periods, because sound levels can vary significantly during different time periods.	
The applicant wrongly expunged the Saturday night-time noise levels measured by NMP4. This has been repeatedly explained to the applicant since Deadline 1 and accompanying evidence has been provided.	
In response to the Examining Authority's request, I have reinstated the Saturday night-time noise levels measured by NMP4, as listed in the applicant's report.	
Based on the above, the analysis for the ambient sound levels and predicted LAFmax levels is not correct and does not take into account the typical ambient and LAF max levels in the area.	
I have applied the method disclosed and used in The West Midlands Rail Freight Interchange Environmental Statement On Noise and Vibration. The applicant has not claimed that I have failed to follow the method. The applicant has not disclosed any method whatsoever.	
Using instead the Sunday night-time ambient sound levels measured by NMP4 of 50.1 dB, which the applicant used for the weekend night-time BS 4142 assessment, would still lead to +9 dB impulsive rating penalties at numerous NSRs, leaving the highest predicted rating levels unchanged.	
Impulsive Penalty Allocation - Weekend, night-time (2300-0700)	The comments refer to the application of acoustic penalties. This remains a point of disagreement. There are no new points to address and the Applicant has previously responded to comments regarding the
The table is based on the incorrectly applied penalty which has been applied without taking account of any factors such as distance and screening.	application of acoustic penalties at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference:
The applicant's claim that penalties have been applied "without taking account of any factors such as distance and screening" is completely untrue. I have applied the method used in West Midlands Rail Freight Interchange as it is written, using the applicant's own projected operational sound levels which have been attenuated to each NSR, accounting for both distance and topography. They are the applicant's own projected sound levels at NSRs, as listed in the applicant's Table 10.47. This has been repeatedly explained to the applicant since Deadline 1.	18.15, REP5-025).
For example, the dwelling associated with NSR1 is located approximately 260m from the proposed development and is screened by the existing farm buildings. Therefore, impulsivity associated with the	

Comments	Applicant's Comment
proposed development will not be highly perceptible at NSR1, particularly given how quickly point sources attenuate with distance.	
Similarly, at NSR2, impulsivity associated with the proposed development will not be highly perceptible as it is located approximately 460m away from the proposed development.	
I have applied the method as it is written, using the applicant's own projected operational sound levels which have been attenuated to each NSR, accounting for both distance and topography.	
They are the applicant's own projected sound levels at NSRs, as listed in the applicant's Table 10.47. This has been repeatedly explained to the applicant since Deadline 1.	
The applicant has not claimed that I have failed to follow the West Midlands Rail Freight Interchange method. The applicant has not disclosed any method whatsoever.	
Furthermore, the operational phase noise assessment is agreed with BDC and HBBC through the Statement of Common Ground.	
This is a procedural comment, not a technical justification.	
Tonal rating penalties	
The applicant did not comment on this section.	
Operational noise assessment - Weekend, night-time (2300-0700) Assessment Outcome & Context	The comments refer to the application of acoustic penalties. This remains a point of disagreement. There
Notwithstanding the points detailed above, this is a pre-mitigated impact based on the atypical noise levels measured when no trains were running.	are no new points here and the Applicant has previously responded to comments regarding the application of acoustic penalties at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference:
The applicant has performed assessments for both pre- and post-mitigation scenarios, my response to the Examining Authority's written question also looks at pre- and post-mitigation scenarios.	18.15, REP5-025).
The applicant wrongly expunged the Saturday night-time noise levels measured by NMP4. Since Deadline 1, this has been repeatedly explained to the applicant and accompanying evidence has been provided.	
In response to the Examining Authority's request, I have reinstated the Saturday night-time noise levels measured by NMP4, as listed in the applicant's report.	
The results of the noise and vibration assessment show that with mitigation in place and once context is taken into account, the resultant impacts will be low.	

Comments	Applicant's Comment
The applicant is not referring to my submission.	
Operational noise assessment, with mitigation - Weekend, night-time (2300-0700)  As detailed above, it is not appropriate to take the lowest measured level from a long-term data set. If there are trains running 6 nights out of 7, then the 'typical conditions' are that trains run during the night-time. The one night that trains do not run is atypical and not representative of the prevailing conditions.	The comments refer to the application of acoustic penalties. This remains a point of disagreement. There are no new points to address, and the Applicant has previously responded to comments regarding the application of acoustic penalties at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025).
The applicant's BS 4142 assessment includes four time periods: weekday daytimes, weekday night-times, weekend daytimes and weekend night-times. It's appropriate that assessments are conducted for different time periods, because sound levels can vary significantly during different time periods.	
The applicant has wrongly expunged the Saturday night-time noise levels measured by NMP4. In response to the Examining Authority's request, I have reinstated them.	
Based on the above, the analysis for the ambient sound levels and predicted LAFmax levels is not correct and does not take into account the typical ambient and LAF max levels in the area.	
I have applied the method disclosed and used in The West Midlands Rail Freight Interchange Environmental Statement On Noise and Vibration. The applicant has not claimed that I have failed to follow the method. The applicant has not disclosed any method whatsoever.	
Using instead the Sunday night-time ambient sound levels measured by NMP4 of 50.1 dB would still lead to +9 dB impulsive rating penalties at numerous NSRs, leaving the highest predicted rating levels unchanged.	
Impulsive Penalty Allocation, with mitigation - Weekend, night-time (2300-0700)	The comments refer to the application of acoustic penalties, and the Applicant has already responded on
The table is based on the incorrectly applied penalty which has been applied without taking account of any factors such as distance, screening and mitigation.	that matter. This remains a point of disagreement. The Applicant has previously responded to comments regarding the application of acoustic penalties at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case
The applicant's claim that penalties have been applied "without taking account of any factors such as, and screening and mitigation" is completely untrue. I have applied the method as it is written, using the applicant's own post-mitigation projected operational sound levels which have been attenuated to each NSR, accounting for both distance and topography. They are the applicant's own sound levels, as listed in the applicant's Table 10.61. This has been repeatedly explained to the applicant since Deadline 1.	(document reference: 18.15, REP5-025).
Tonal rating penalties	
The applicant did not comment on this section	
Operational noise assessment, with mitigation - Weekend, night-time (2300-0700) Assessment Outcome & Context	The comments refer to the application of acoustic penalties, and the Applicant has already responded on that matter. This remains a point of disagreement. The Applicant has previously responded to comments

Comments	Applicant's Comment
Notwithstanding the points detailed above, this is based on the atypical noise levels measured when no trains were running	regarding the application of acoustic penalties at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025).
The reinstatement of the expunged Saturday night-time sound levels measured by NMP4 has already been addressed above.	
and an inflated rating level which does not take into account any factors such as distance, screening, mitigation and the existing noise climate.	
These claims are untrue and have been addressed above.	
Notwithstanding this, with mitigation in place, the absolute noise levels predicted in garden areas at NSRs will be below the guideline value to 50dB LAeq,T during the daytime, and would only marginally exceed the internal noise level criteria of 30dB LAeq,T during the night-time.	
The applicant is not referring to my submission.	
The post-mitigation specific sound levels listed in the applicant's tables don't include the noise associated with the gantry cranes, as the applicant explains in Paragraph 10.284.	
The applicant's post-mitigation specific sound levels have no rating penalties applied.	
I have addressed other deficiencies in the applicant's assessment elsewhere. I'm not going to repeat them here.	
The results of the noise and vibration assessment show that with mitigation in place and once context is taken into account, the resultant impacts will be low.	
The applicant is not referring to my submission.	
I have addressed other deficiencies in the applicant's assessment elsewhere. I'm not going to repeat them here.	
Weekend Daytime & Weekday Operational noise assessment  Unsurprisingly, the weekend daytime assessment is fairly similar to the weekend night-time assessment, although more deficiencies needed to be corrected because the Sunday daytime included train pass bys and the applicant hasn't attenuated to the NSRs.	The comments refer to the application of acoustic penalties, and the Applicant has already responded on that matter. This remains a point of disagreement. The Applicant has previously responded to comments regarding the application of acoustic penalties at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025).

Comments	Applicant's Comment
Even using the overstated 53.7 dB ambient sound level in the applicant's report and applying the West Midlands Rail Freight Interchange Method led to 9 dB impulsive penalties at numerous NSRs in both preand post-mitigation scenarios.	
I don't intend to go through the applicant's responses to the weekend daytime and weekday assessments which have been variously addressed earlier in this document and in other submissions.	
Burbage Common & Woods (NMP3) Operational noise assessment	
There is no technical basis provided for the statement on operational rating level.	
As I have repeatedly explained to the applicant, the applicant hasn't provided predicted LAFmax noise levels due to impulsive and tonal elements at NSR 19. I can't perform any calculations because the applicant hasn't supplied the necessary data.	As Burbage Common is not considered to be sensitive during the night-time (2300-0700), and LAF,max levels are related to sleep awakening, the LAFmax levels are not relevant for this receptor.
The final statement is incorrect. The results of the assessment with operational noise from the gantry cranes is provided in paragraphs 10.311 to 10.313 of Chapter 10 Noise and Vibration (document reference: 6.1.10A, REP4-039)	
The applicant's response is confused.	
As I explained numerous times in my response to the Examining Authority's written question, the post-mitigation specific sound levels listed in the applicant's tables don't include noise associated with the gantry cranes.	
The applicant explains this in Paragraph 10.284: "Considering this, the noise associated with the gantry cranes and associated character correction have been removed from the following assessment."	
The applicant then shows tables listing post-mitigation specific sound levels. These specific sound levels don't include noise associated with the gantry cranes, as explained in Paragraph 10.284.	
Following on from those tables are Paragraphs 10.311 to 10.313 which also do not show post-mitigation specific sound levels with the gantry cranes included.	
Paragraph 10.312 is actually an admission that once the gantry cranes are re-included, the post-mitigation specific sound levels are higher than the levels listed in the applicant's earlier tables. In my response to the Examining Authority's written question, I had to use the post-mitigation specific sound levels in the applicant's tables.	As stated within the noise and vibration chapter, with all sources operating and the proposed boundary mitigation in place, the predicted increase in noise levels at all of the NSRs remain unchanged (less than 1dB). The largest increase in the overall level is at NSR 24, where a 2.5dB increase is predicted, however it is considered that this is unlikely to be perceptible. Therefore, the residual effect is likely to remain at permanent, minor adverse for all receptors, which is not significant.
They are the only post-mitigation specific sound levels supplied by the applicant. They don't include the noise associated with the gantry cranes.	

Comments	Applicant's Comment
Tranquillity assessment I wrote:	
I wrote "This means that I also can't go through the tranquillity assessment at Burbage Common & Woods, because the operational noise forms part of projected noise."	
This statement is incorrect. The assessment includes on-site operational noise including the gantry cranes.	
The applicant's response is confused.	
There were two primary reasons why I couldn't go through the tranquillity assessment. These two reasons are explained in my response to the Examining Authority's written question.	
The first is that the applicant has not supplied LAFmax levels for NSR 19. This meant that I couldn't apply the method disclosed and used in the case of the West Midlands Rail Freight Interchange to apply rating penalties to the specific sound levels and generate rating levels.	As Burbage Common is not considered to be sensitive during the night-time (2300-0700), and LAF,max levels are related to sleep awakening, the LAFmax levels are not relevant for this receptor.
The second is that the post-mitigation specific sound levels for NSR 19 listed in the applicant's tables do not include noise associated with the gantry cranes.	This is incorrect, the noise levels detailed in Table 10.64 of Chapter 10 Noise and Vibration 6.1.10A, rep-039 Revision 08 include noise associated with Gantry Cranes as detailed in paragraph 10.341.
The applicant's other responses have been addressed elsewhere.	
Cumulative Impact	
This statement is incorrect. Figure 6.3.10.15 shows the noise propagation across the site from operational noise including road traffic on the A47 link road, with mitigation in place.  I wrote: "As I explained in my written representation, the noise report does not include a cumulative 'all in' calculation of predicted changes in sound levels at NSRs due to the cumulative effect of projected sources of sound during all time periods. These would include all noise from the site, increased road	The requirement for a cumulative assessment of all site noise including off-site road traffic and off-site rail movements demonstrates a fundamentally misunderstanding of the noise assessment, how different elements have been assessed and of the different psychoacoustic community responses to different type of noise.
traffic noise and increased off-site rail movements."	
Figure 6.3.10.15 does not include the calculations I described showing the cumulative change at NSRs	
Comments on Applicant's Written Statement of Oral Case at ISH6 by William David Moore	
6a Baseline Noise Conditions  The ambient sound of the distant road noise has been measured by NMP4 & NMP3. The ambient sound of train pass bys have been measured by NMP4 & NMP3. Those ambient sound levels have then been copied to the NSRs associated with NMP4 & NMP3.	The comments refer to the baseline noise conditions and existing train movements, and the Applicant has already responded on that matter. This remains a point of disagreement. The Applicant has previously responded to comments regarding the baseline noise conditions and existing train movements at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025)

Comments	Applicant's Comment
But the NSRs aren't in extremely close proximity to the railway line, so attenuation corrections need to be applied to the sound of the train pass bys measured by NMP4 & NMP3.	
The applicant has refused to do this. Instead, the applicant is attempting to rely on the applicant's road noise contour map and DEFRA strategic rail noise contours, neither of which are levels measured at the site by NMPs.	
The applicant is attempting to use those contours to make claims about ambient sound levels at some NSRs.	
The applicant's own report acknowledges the applicant's road noise contours overstate ambient sound levels versus those measured by NMPs. The strategic rail noise contours introduced by the applicant also overstate ambient sound levels versus those measured by NMPs.	
This is why the applicant should use measurements made by NMP4 & NMP3 during different time periods, and attenuate the sound of the rail noise measured by NMP4 & NMP3 during different time periods.	
Instead, the applicant is making claims using contours which are known to overstate ambient sound levels.	
During the meeting, I made three points which the applicant did not address on the day, and which the applicant hasn't addressed in the written statement of the applicant's oral case at ISH6. Those are:	
1. The applicant's noise assessment update note doesn't address all the NSRs associated with NMP4.	It is assumed that this refers to the resultant noise levels at NSRs 1 and 24 which are now shown below
	NSR         Daytime (0700-2300)         Night-time (2300-0700)           Rating Level         Ambient Level         Rating Level         Ambient Level         Rating Hambient Level         Increase Ambient Level         Rating Hambient Level         Increase Ambient           1         47         56.2         56.7         +0.5         47         54.8         55.5         +0.2           24         50         56.2         57.1         +0.9         47         54.8         55.5         +0.2
<ol> <li>The applicant has misstated the locations of NSRs 2, 3 &amp; 4. Those NSRs should not have been included in Table 5 of the applicant's update note and the applicant's claims relating those NSRs can be discarded.</li> <li>The applicant has attempted to attribute 50 dB of rail noise to the NSRs in Table 5, but all the NSRs in Table 5 are outside the rail noise contours introduced by the applicant.</li> </ol>	The Applicant has provided a further response to the Rule 17 Letter received 20 <sup>th</sup> February in the Hinckley NRFI Noise Note Response to ExA Rule 17 letter (document reference: 22.3) submitted as part of Deadline 7.
	The Applicant has previously responded to this comment through the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). This remains a point of disagreement.

Comments	Applicant's Comment
I explained why the contours introduced by the applicant shouldn't be used in lieu of measurements by NMPs. The applicant has responded to those points.	
I have included the words submitted by the applicant at Deadline 5 in red. I have included the words I submitted at Deadline 4 in <i>italics</i> .	
1. The long-term noise levels measured at NMP1 and NMP2 are within 3 dB of the noise levels predicted by the 2019 baseline road traffic noise model. This is within accepted tolerances and shows good correlation between the measured and predicted noise levels. For reasons set out within paragraph 10.226, noise levels measured at NMP5 and NMP6 are less reliable.	
The applicant is attempting to make claims about ambient road noise by using a road noise model which their own report acknowledges overstates sound levels. The applicant should not be doing that. The applicant is knowingly using overstated numbers.	The Applicant has previously responded to this comment through the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). This remains a point of disagreement.
This has led to the applicant claiming NSRs associated with NMP4 experience 55 dB of daytime road noise. This is higher than the total daytime ambient sound levels measured by NMP1, located ~300 metres from the M69, and applied to NSRs 9-11 as shown in the report's Table 10.43. The applicant's road noise model predicted levels 5.4 dB higher than the levels measured by NMP1 and used in Table 10.43.	
This has led to the applicant claiming NSRs associated with NMP4 experience 53 dB of night-time road noise. This is <b>higher</b> than the total night-time ambient sound levels measured by NMP1, located ~300 metres from the M69, and applied to NSRs 9-11 as shown in the report's Table 10.44. The applicant's road noise model predicted levels 6.4 dB higher than the levels measured by NMP1 and used in Table 10.44.	
1.1 Notwithstanding the above, it is also worth noting that ambient noise levels used within the noise assessment are the lowest reported representative level over the assessment periods.	
Which is why it isn't appropriate for the applicant to use contours which aren't derived from NMP measurements during different time periods. The applicant isn't comparing like with like.	
2. This is incorrect, noise levels measured on Saturday night did not include rail movements, as detailed in paragraphs 10.106 to 10.108 in Chapter 10 Noise and Vibration (document reference 6.1.10A, REP4-039). Therefore, the noise levels do not include all sources of sound.	
The applicant's response is confused.	
I wrote: "2. NMP4's Saturday night-time measurements (which the applicant wrongly expunged) had ambient sound levels due to all sources of sound of 44 dB, as shown in the report's Table 10.23. This is 9	The Applicant has previously responded to this comment through the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). This remains a point of disagreement.

Comments	Applicant's Comment
dB below the night-time ambient sound level which the applicant is now attempting to ascribe to NSRs 1-8 & 24-26 purely due to road noise during night-time periods."	
I only referred to the applicant's road noise claims, I didn't refer to the applicant's rail noise claims. This was precisely because the measured Saturday night-time period doesn't include rail noise.	
The 44 dB measured by NMP4 was not just due to road noise, it included all sources of sound on that night, e.g. birdsong and aeroplanes. It was 9 dB below the 53 dB which the applicant is attempting to attribute to NSRs associated with NMP4, purely due to distant road noise at night.	
3. Table 55 details the BS4142 assessment of operational noise with mitigation and does not reference daytime ambient noise levels.	The Applicant has previously responded to this comment through the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). This remains a point of disagreement.
The applicant's response is confused.	
I wrote: "3. The applicant is attempting to claim that daytime ambient levels due to road noise are 16 dB above the weekday background sound levels, as shown in Table 10.55. As explained at the beginning of this document, the distant road noise generates a very small gap between the background sound level and the ambient sound level."	
Table 10.55 shows the applicant's weekday daytime background sound levels for NSRs 1-8 & 24-26. This level is 39 dB. The applicant is attempting to attribute 55 dB of daytime ambient road noise to NSRs associated with NMP4, which is 16 dB above the weekday background sound levels.	
As I have previously shown and explained to the applicant, the distant road noise generates a small gap between the background sound level and the ambient sound level.	
4. The ambient noise levels in the area are dominated by rail movements and road traffic and therefore it is not surprising that noise levels do not fluctuate significantly across the site.	The Applicant has previously responded to this comment through the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). This remains a point of disagreement.
The applicant's response is confused.	
I wrote: "4. The applicant is attempting to claim that ambient sound levels at NSRs 1-8 & 24-26 purely due to road noise are higher than the weekday ambient sound levels used in the report for NSRs 9-11, as measured by NMP1, located ~300 metres from the M69. These lower ambient sound level figures for NSRs 9-11 are shown in the report's Table 10.43. The levels in the PEIR noise report were even lower."	
Point 4 refers solely to the applicant's road noise claims, that's why I wrote "purely due to road noise". The applicant's reference to rail movements is inappropriate.	
5. This is incorrect, it is not appropriate to compare the DEFRA road noise contour maps with the applicant's road contour map. The applicant's road contour map only includes those roads within the	This remains a point of disagreement. The Applicant has previously responded to comments at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore]

Comments	Applicant's Comment
study area and the DEFRA road noise contour maps only include roads for major roads with more than 3,000,000 vehicle passages per year. Therefore, the two are not directly comparable.	(document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025)
The applicant's response is disingenuous.	
Look at the road noise contours emanating from the M69 in the applicant's road noise contour map and then look at the road noise contours emanating from the M69 in the DEFRA road noise contour map. The two are incompatible.	
Any suggestion that this is due to the DEFRA road noise contours not including every road is untrue. These higher levels in the applicant's road noise model feed through to stated higher levels at NSRs.	
It isn't surprising that the applicant's road contours state higher sound levels than the DEFRA road noise contours, because the applicant's own report states the NMP measurements were below those predicted by the applicant's road noise model.	
7. This is incorrect, the noise levels generally vary by 3dB day-to-day which is within accepted tolerances and is not significant.	
The night-time ambient sound levels measured by NMP1 varied by 6.4 dB across different days of the week.	For NMP1, week night levels varied by 3dB and weekend night-time levels varied by 2 dB.
Noise levels measured adjacent to the railway line are lower over a weekend period, and this has been accounted for when selecting representative noise levels for these periods.	
The rail noise contours introduced by the applicant don't distinguish between different days of the week. The applicant is attempting to attribute 50 dB of rail noise to NSRs associated with NMP4 during all time periods.	The Applicant has previously responded to this comment through the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025). This remains a point of disagreement.
It's true that measured noise levels due to train pass bys were lower over the Sunday periods which were used in the applicant's operational noise assessment, but the applicant hasn't attenuated the measured sound of the train pass bys to the NSR locations, which returns us to the original problem.	
The applicant has developed a very unfortunate habit of saying: this is negligible, this is not significant, this is within acceptable tolerances. This ignores the cumulative impact of multiple problems	This is the correct terminology to use when defining significance of effects.
Noise attenuation at Burbage Common  The Applicant explained that Burbage Common is not a single receptor, it is a much bigger area and that is considered within the assessment.	The comments refer to the baseline noise conditions and existing train movements, and the Applicant has already responded on that matter. This remains a point of disagreement. The Applicant has previously responded to comments regarding the baseline noise conditions and existing train movements at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the
The receiver point for Burbage Common is located at approximately 80m from the site boundary, within the nearest area to the HRNFI, which provides a robust scenario. However, the sound propagation across	Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025)

Comments	Applicant's Comment
Burbage Common as a result of operational noise and road traffic on the A47 link road is shown on Figure 10.15 (document reference 6.3.10.15, APP-284).	
The applicant's numerical calculations within the BS 4142 assessment for Burbage Common & Woods and the applicant's numerical calculations within the tranquillity assessment for Burbage Common & Woods both use the location of NSR 19, which is a fixed location.	
The Applicant explained that the further you get from the rail line, the more road noise is going to dominate. The analysis undertaken for NMP4 suggests that the noise levels back into Burbage Common are representative.	
The applicant's suggestion that being $\sim$ 80 metres away from the railway line at NSR 19 rather than at the railway line means there is a dramatic difference in the distant road noise is not credible.	
However, moving from being in extremely close proximity to the railway line to $^{\sim}80$ metres away, absolutely does have a dramatic impact on the ambient sound of the measured train pass bys.	
The distant road noise and the sound of train pass bys have been measured during different time periods by NMP3. Unlike NMP3, NSR19 is not in extremely close proximity to the railway line, so attenuation corrections need to be applied to the measured sound of the train pass bys.	
The road and rail noise contour maps introduced by the applicant overstate ambient sound levels versus those measured by NMPs, and they should not be used in lieu of NMP measurements.	
The applicant needs to apply attenuation corrections to the sound of the train pass bys measured by NMP3 during different time periods, to attenuate them to the location of NSR 19.	
Ambient noise levels at NSR caused by additional noise sources	
The Applicant stated that the assessment of this matter is set out within the Noise and Vibration ES chapter (document reference 6.1.10A, REP4-039). The assessment does not include offsite rail noise on the basis that Network Rail control the offsite trains and could run these regardless of whether the HNRFI comes forward or not, so these are not a consideration of the noise assessment. The Applicant noted that the A47 link road and the onsite operational noise, including the gantry cranes, have been included in the assessment.	
In response to the interested parties comments in regard to freight movements, the Applicant reinforced the fact that Network Rail's statutory position is that it is entitled to increase the use of trains and it is protected in terms of nuisance for running extra trains on this line, which is a strategic freight line and is a key cross country route, the HNRFI is using some of these paths, but Network Rail remains entitled to use these paths.	

Comments	Applicant's Comment
The Applicant further explained that in terms of the capacity study and the sensitivity of Burbage Common, the expectation is that 20 of these routes will have paths that will be used going east towards Felixstowe, London Gateway and the eastern ports, whereas up to about six will go west through Burbage Common. If all of the trains passed through Burbage Common they would not be stopping at HNRFI.	
If the applicant's proposal is to receive credit for a switch from road to rail then it should also be credited with necessitating additional freight train movements. One follows the other.	
Network Rail could run these trains regardless of whether the HNRFI comes forward or not, but Network Rail is not currently doing so and there is no reason to believe Network Rail would do so in the absence of the applicant's development.	
The worst case scenario for the projected 32 additional daily freight train movements should be included in the cumulative impact assessment	The Applicant maintains that the assessment of noise as a result of additional trains is outside of the scope of the Noise and Vibration Chapter (document reference: 6.1.10A, REP4-039) and has only been provided for completeness. However, the results are not a material consideration of the application.
Baseline and Off-Site Rail Movements	
The Applicant confirmed that, as had been previously stated, a significant reduction was needed for there to be an appreciable difference. The baselines used had been confirmed by NR and the Applicant's rail consultant as being accurate and representative.	The Applicant maintains that the assessment of noise as a result of additional trains is outside of the scope of the Noise and Vibration Chapter (document reference: 6.1.10A, REP4-039) and has only been provided for completeness. However, the results are not a material consideration of the application.
The applicant's response is disingenuous, the number of trains with timetable listings is not and never has been in dispute. However, the number of freight train pass bys during a typical day is far lower than the number of freight trains with timetable listings. This has been repeatedly explained to the applicant since Deadline 1.	
In the case of Narborough level crossing, the barrier downtime has been measured. The barrier downtime is a product of actual train pass bys. The applicant hasn't added in additional downtime for all those freight trains with timetable listings which didn't run on each day. I haven't seen anyone suggest the applicant should do so.	
Yet, in the noise assessment, the applicant has included every single freight train with a timetable listing, disregarding how many actually pass by during a typical day.	
In respect of Saturday night when no trains run, the noise data measured onsite shows that trains run on the other 6 nights a week, and so Saturday night is atypical.	
Train pass bys are lower on both Saturday and Sunday nights. The applicant hasn't conducted a weekend assessment.	

Comments	Applicant's Comment
It was noted that BDC and HBBC agreed with the Applicant's model.	We do not agree with this statement. The SoCG is not a procedural document but is a means for the relevant parties to record their agreement, noting that both LPAs have agreed with the noise and
This is a procedural comment, not a technical justification	vibration methodologies
"The Applicant noted that Mr Moore had applied a +9 dB correction to account for impulsivity, and the Applicant strongly disagreed with this as the +9db penalty applied without any account of factors such as screening, distance and existing noise. A +9bd penalty is not the case for at least one receptor which is not going to experience impulsivity that highly. At SR2, the location of this receptor also will mean that impulsivity is unlikely to be highly perceptible. As such, the approach taken by Mr Moore fails to take account of the receptor in its environment.	The comments refer to the application of acoustic penalties, and the Applicant has already responded on that matter. This remains a point of disagreement. The Applicant has previously responded to comments regarding the application of acoustic penalties at Deadline 5 - Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore] (document reference: 18.17, REP5-050), and through Issue Specific Hearing 6, summarised in the Applicants Written Statement of Oral Case (document reference: 18.15, REP5-025).
In response to Mr Moore's comments that he had used the methodology employed at East Midlands Gateway, the Applicant noted that the method of assessing ratings penalties was subjective and was primarily based on professional judgement. It was also the Applicant's view that the methodology employed by Mr Moore failed to account for mitigation."	
I did not say I had used the methodology employed at East Midlands Gateway.	
I said: "I've used the method which was disclosed and used in the West Midlands Rail Freight Interchange noise report".	
You can see this at 1:21:55 on the Recording of Issue Specific Hearing 6 (ISH6) – Part 4. I have repeatedly explained this to the applicant since Deadline 1.	
The applicant has misquoted me, has 'responded' to something I did not write or say and yet again failed to respond to my submissions on this topic since Deadline 1.	
In the case of The West Midlands Rail Freight Interchange Environmental Statement On Noise and Vibration, a clear method was disclosed and used "to provide a consistent, quantified approach to determining the likelihood of each characteristic being audible." Applying that method to the sound levels in the applicant's report leads to far higher rating penalties than the unsubstantiated rating penalties in the applicant's report.	
The applicant's claim that I applied penalties using that method without any account of factors such as screening, distance and existing noise or mitigation is completely untrue. I have applied the method as it is written, using ambient sound levels measured by NMP4 and the applicant's own pre- and post-mitigation projected operational sound levels which have been attenuated to each NSR <b>by the applicant</b> , accounting for both distance and topography. They are the applicant's own projected sound levels at NSRs, as listed in Table 10.47 & Table 10.61.	

Comments	Applicant's Comment
Comments	Applicant's Comment
This was explained in my response to the Examining Authority's written question and it has been repeatedly explained to the applicant in other correspondence since Deadine 1.	
The method disclosed and used in the case The West Midlands Rail Freight Interchange is a method which has already been through an examination process.	
The applicant has not claimed that I have failed to follow the method. The applicant hasn't disclosed any method whatsoever. There is nothing backing the applicant's rating levels other than the applicant's declaration	
Sharon Scott	
Comments on additional submissions received by deadline 5 Tritax and Network Rail	
1. Tritax state that the congestion at junction 21 M1 is a long-standing issue and acknowledge that there is no commitment to fix it. Tritax are making no investment in this junction. They state that the operation of HNRFI will have little impact on junction 21. This is a frankly ludicrous assertion. Tritax see South Leicester as one of their three key markets. The M69 is the main route into South Leicester from HNRFI. Other routes would involve using non-strategic routes such as A47 – which was never designed to take the expected level of HGV traffic that HNRFI will generate – or, even worse, 'B' roads through the villages. Furthermore, Leicester City Council state that they expect a significant number of employees for HNRFI to come from the Leicester City. In view of the lack of rail transport to the area, these employees will have to drive or be bussed in via junction 21. I have bitter personal experience of Junction 21, having commuted via M69 / M1 / A46 into Leicester for many years. I have missed countless early business meetings and personal evening engagements due to congestion at this junction. If HNRFI is approved with no improvement to junction 21 (and it would have to be a significant improvement), it will compound the misery currently experienced by residents of the area and result in increased loss of productivity	The Applicant has addressed this point throughout the Examination. Current capacity constraints at Junction 21 are longstanding and driven by the restricted width of the M1 underbridges on the circulatory carriageway and constraints on the Mainline M1 carriageway, identified through merge diverge assessments reported within the Transport Assessment (document reference: 6.2.8.1A, REP3-157) Widening of these underbridges to address such constraints would be of a significant magnitude and require considerable Government investment. Whilst there is a clear aspiration from both LCC and NH to improve the junction, there is currently no scheme identified.  As set out in Paragraph 49 of Circular 01/2022 'planned improvements to the SRN or local road network should be considered in any assessment where there is a high degree of certainty that this will be delivered'. Given there is no scheme committed or even foreseeable to address these existing issues at Junction 21, LCC's PRTM2.2 model reflects the current arrangement. This was agreed with the TWG as part of the Infrastructure Log for PRTM2.2.  LCC and NH have suggested that the PRTM should be rerun with unconstrained flows. However, this is a theoretical scenario whereby there is no congestion at J21 and traffic will choose its most convenient route. It would not inform the assessment of the HNRFI and its mitigation package. Rather, it would inform the requirements of an unidentified, unfunded and uncommitted improvement scheme. Hence,
	undertaking the assessment is considered an unreasonable requirement and contrary to Circular 01/2022.  The modelling demonstrates the magnitude of impact is negligible in both scenarios and whilst the
	junction operation is worse without the committed LUE improvements, the development impact on queues and delay remains marginal. Hence, the impact is not considered to be 'severe' and it is maintained that highway mitigation is not justified.
2. Tritax continue to state that Magna Park will be a key market for HNRFI. This means that more warehouses will be built to support a 9 mile road journey to a complex of warehouses that is already the largest dedicated logistics park in Europe. The onward journey from Magna Park will then be largely by HGV, so it is difficult to see how this is helping to decarbonize the UK. In their response to my deadline 4 submission, Tritax say that a rail link to Magna Park would be unfeasible due to crowding on the West Coast Main Line and to funding issues. As regards the first point, connection to the West Coast Main Line	The warehouse development at HNRFI will serve the increasing demand for directly accessible rail services and also provide rail services for businesses within a c20 mile radius, including, but not only Magna Park. The Applicant has made it clear that the rail connectivity of actually being on the Felixstowe to Nuneaton is exceptional.

Comments	Applicant's Comment
is not the only option for rail connecting Magna Park. (See LuttetworthLine – Freight Report that I submitted for deadline 5), and I would have thought that the HS2 link between London and Birmingham ought to free up capacity on the West Coast Main Line. As regards the second point, funding is always an issue for major infrastructure projects, but I am not aware that the possibility of contributions from Gazeley plc, the operator of Magna Park, or long-standing tenants, in order to enable them to fulfill their net zero commitments, has been explored. Tritax say that a commercial development provides funding to secure land for infrastructure, but they are proposing minimal highway improvements to the area around HNRFI – in particular, they are not proposing any contribution to improve junction 21 M1.	The referenced Lutterworth Line Freight report (PINS REF REP5-094) does not include for the cost of creating a Rail Freight Terminal at Magna Park. The cost of the rail link, at the author's estimation, would therefore be c80-£100m more to create than HNRFI (at 2020 prices).  There is no supporting development to fund either a rail terminal or the proposed rail link. Magna Park is fully consented already, and the author acknowledges that the logistics industry is a highly competitive low margin industry.
	The needs of Magna Park can be met in combination by HNRFI and DIRFT / Northampton Gateway (depending on origin and destination), increasingly using short range electric HGVs for the stem mileage between the rail terminals and off-site warehousing.
	The Government's recent announcement to grow Railfreight is predicated on viable private investment in infrastructure with small scale interventions to support further growth. The DfT has already refused the author's previous passenger and freight proposal.
	Contrary to the representation made, the Applicant is proposing significant highway infrastructure, including the much-needed A47 link road and south facing slips at M69 J2, . It mitigates its impact inclusive of background traffic and development generated trips.
3. Network Rail state that there is currently no commitment to electrify the Felixstowe to Nuneaton Line, although this is likely to be required in the medium to long term. All services will be diesel and / or diesel alternative fuel. This means that HNRFI is unlikely to play any major role in decarbonizing the UK for decades to come.	Until such time as either the Felixstowe to Nuneaton Line is electrified or alternatives such as hydrogen developed, even with diesel engines, HNRFI will still significantly help to reduce carbon emissions. Each diesel train is estimated to save between 64-67% CO2e, at c3.74 killo tons per annum per train. (70.12 ktpa at 16 trains). This is detailed in the Written Statement of Oral Case ISH2 submitted at Deadline 3 (document reference: 18.6.7, REP3-052)
4. Network Rail talk about a possible consolidation role for HNRFI given its position on the cross-country route from Felixstowe to West Midlands, with connections to the West Coast Main Line at Nuneaton. However, during the examination, Tritax have mentioned both blockages at Water Orton, which impacts on the route into the West Midlands, and congestion on the West Coast Main Line at Nuneaton. In an earlier deadline submission, they confirmed that many of the freight trains serving HNRFI will return to the ports empty. This all suggests that the most likely method of operation for HNRFI will be to bring freight in from Felixstowe by diesel- hauled rail and then drive it up and down the UK by long-haul HGV – either directly from HNRFI or via Magna Park. It is extremely difficult to see how this can play any meaningful role in decarbonizing the UK	This explanation is not recognised. The loading of laden rather than empty returns is expected to be much better via HNRFI because of the size of the manufacturing base it will serve and efficiencies it can create in its rail operations, for example, with an ability to use one train set for two trips a day to Felixstowe.  Equally the expectation is that HNRFI will serve a c20mile radius of businesses and act as a rail hub for other UK domestic services, entirely in order to maximise the use of rail and minimise the use of long-haul HGV.
5. Network Rail have failed to send a representative with technical expertise to any of the public hearings, so neither local residents nor the local councils have had the opportunity to put questions directly to them. I strongly support transfer of freight from road to rail, but nothing that I have seen or heard during the examination process has convinced me that HNRFI will achieve this objective. Many of the HGVs that currently route through the Midlands are doing so as part of a long-haul road trip and are not serving the local area. It is evident that a large part of HNRFI will be long-haul HGV, either via Magna Park or directly from HNRFI. This will only add to the highway congestion in our area. We need to work towards ensuring that freight passing through the Midlands does so by rail thereby removing HGVs from our roads and alleviating pressure on key junctions such as junction 21 M1. Only a national network of	The representation is acknowledged, and the final sentence is supported by the Applicant, because HNRFI is a key step in creating a national network of SRFI's located across the country, which uniquely HNRFI can enable through its central location on Network Rail 's Strategic Rail Freight Network and ability to efficiently route trains, maximising their individual utilisation in a day.  The focus of the Needs Case (Rail Freight Market Demand and Supply) (document reference: 16.1, APP-357) throughout has been on the local market, for imports and export of parts and products, with an ability to maximise the use of rail, both for global markets and domestic flows.

Comments	Applicant's Comment
SRFIs located across the country will wean the logistics industry from its reliance on the 'Golden Triangle,' and achieve this aim	The 'Midlands Engine' economy comprising the West and East Midlands, without Northants, is the largest regional economy in the UK outside of London, equivalent to the size of Denmark, with a population of c11 million people. (see 5.11 Rail Freight Market Demand and Supply) (document reference: 16.1, APP-357). Logistics space is not just for National Distribution Centres in the Golden Triangle.
	The presumption is that long haul HGV moves should be moved to rail wherever possible; and HNRFI will be a significant rail-based development designed to achieve exactly that.