Comments on the Applicant's Response to Deadline 5 Submissions [part 10 – Residents Businesses]

Deadline for receipt of Comments: Tuesday 27th February 2024

Unique Reference Number: 20040614

Tritax's "Applicant's Response to Deadline 5 Submissions [part 10 - Residents Businesses]" of the 20th February 2024 tries to present itself as a meaningful Response to my earlier "Comments on the Applicant's Responses to the Examining Authority's Written Questions" document of the 9th February 2024.

I here make my Comments on the Applicant's Response document of the 20th February 2024. But as we shall see, Tritax's Response is so fragmentary that there is little for me to Comment upon apart from its paucity.

My "Comments on the Applicant's Responses to the Examining Authority's Written Questions" document of the 9th February 2024 ran to some 23 pages, almost all of this being new material. In their Applicant's Response document, Tritax have separated out the whole of my 23 pages into consecutive segments which they have labelled as their ***Matter Number 41*** to ***Matter Number 52***, making twelve such ***Matter Numbers*** in all.

For fully eight of their twelve ***Matter Numbers***, Tritax's Response is variously as follows:

"This was addressed at Deadline 5 18.17 Applicant's Response to Deadline 4 Submissions [part 11 - Response to Mr Moore and Dr Moore]."

"This was addressed at ISH6 and summarised in the Applicants Writen (sic) Statement of Oral Case (document reference: 18.15)."

"…..have been addressed through Deadline submissions."

In the last of those eight ***Matter Numbers,*** this being their ***Matter Number 52*** on Rating Penalties, Tritax do show some additional text, but do not mention that that they have simply copied it directly from the ***Applicant's Written Statement of Oral Case (document reference: 18.15)*** that I have indicated above!

In respect of the remaining four of their twelve ***Matter Numbers*****,** I Comment as follows:

Matter Number 46: **1.8.18 Tabular Comparison for Noise Effects**

"BS4142:2014 states that 'where the initial estimate of the impact needs to modified due to the context, take all pertinent factors into consideration, including the following;

• *The absolute level of sound;*

• *The character and level of the residual sound compared to the character and level of specific sound;*

• *The sensitivity of the receptor and whether dwellings or other premises used for residential purposes will already incorporate measures that secure good internal and/or outdoor acoustic conditions"*

Unfortunately, BS4142:2014+A1:2019 does not actually say that at all. What Tritax have done here, despite their use of a (single) quotation mark, is to represent three (long) numbered paragraphs by three bullet points, each of which shows only the first sentence from its (much longer) corresponding paragraph. Collectively, those three paragraphs run to some 31 lines of text!

Tritax offer no reason why their initial estimate of the impact might need to modified. Tritax modified the impact because if they had not done so then their Proposed Development would have had no hope of Approval.

Matter Number 47: **Construction Noise 1.8.4. Construction Noise**

This is in respect of the Examining Authority's Written Question ExQ 1.8.4 to the Applicant:

"Construction Noise
Likely noise effects at NSRs have been considered on an 'average case' and a 'worst case' scenario. For the average case scenario an 'approximate centre point of the closest area of construction' has been used.

a) Can the Applicant explain how this centre point was established for the purposes of assessments?

b) Further, can it identify the size of the closest area of construction and its distance from site boundaries, including reasons for such measurements, noting that Interested Parties ([REP1-109] to [REP1-113]) consider average case calculations to be correct only when plant is grouped at 300m from the site boundary and that the average area of construction is around 600m in width? If this is correct, what are the implications for noise assessments?"

Tritax state:

"The resultant effect is based on professional judgement. Given the stage of the proposals i.e. outline, limited information regarding the exact construction plant/methods is available. In reality, the impact of construction noise is likely to be between the average and worst-case scenario. There is a requirement for construction noise monitoring as part of the DCO and any impacts and mitigation requirements will be controlled through the CEMP (document reference: 17.1B)."

Tritax's Response does not relate to or address in any way the Examining Authority's Question 1.8.4, which therefore still goes unanswered. And Tritax's recourse to their Professional Judgement here strains credibility.

Tritax then go on to state:

"*As stated at ISH6, ISO-9613-2-1996 is not the correct calculation of sound propagation of construction noise.*"

Although this involves only a single line of Response from Tritax, I have Commented upon this in considerable detail here, in order to make the position clear.

Firstly, after scrutinising the Examining Authority's "Recording of Issue Specific Hearing 6 (ISH6) – Part 4 – 24 January 2024" and its associated Transcript in detail, I can confirm that **Tritax did not state** in the Issue Specific Hearing (ISH6) that "ISO-9613-2-1996 is not the correct calculation of sound propagation of construction noise."

What Tritax actually stated was that they had used BS 5228-1:2009+A1:2014 in their calculation of construction noise.

As I have explained previously, in its opening pages BS 5228-1 “Code of Practice for Noise and Vibration Control on Construction and Open Sites” states that it “gives ***recommendations for basic methods*** of noise control relating to construction sites”. (the bold italics are mine)

Overall, it aims to provide a simple and accessible guide to the noise levels that will prevail around construction and open sites, which are often small and fast-changing, so that elaborate calculations are inappropriate.

In contrast, “ISO 9613-2-1996 Acoustics - Attenuation of sound during propagation outdoors - Part 2: General method of calculation” provides a robust and comprehensive method for the calculation of sound propagation outdoors. Indeed, this ISO Standard is the one that Tritax have selected for noise modelling by their CadnaA acoustic software package.

In its first Section, describing the Scope of the Standard, ISO 9613-2-1996 states:

“This part of ISO 9613 specifies an engineering method for calculating the attenuation of sound during propagation outdoors in order to predict the levels of environmental noise at a distance from a variety of sources.”

And goes on….

“This method is applicable in practice to a great variety of noise sources and environments. It is applicable, directly or indirectly, to most situations concerning road or rail traffic, industrial noise sources, ***construction activities***, and many other ground-based noise sources.” (the bold italics are mine)

Now, it is a common occurrence, during construction other activities, that numerous noise sources are dispersed about an area, and a simple way is needed to calculate their collective noise impact at some considerable distance away. ISO Standard 9613-2-1996 describes a method of notionally grouping those noise sources, but carefully warns when the method **should, and should not, be used.**

The ISO Standard 9613-2-1996 description makes clear that Tritax should not have used the grouping method in the way that they have.

There is however, no mention of any of this in the much simpler BS 5228-1:2009+A1:2014 which Tritax have used in their calculation of construction noise. And on that basis, Tritax have felt free to use that same grouping method, but have also felt free to ignore any warning that does not come directly from BS 5228-1:2009+A1:2014 itself. And of course, because BS 5228-1:2009+A1:2014 does not describe the grouping method, there inevitably is no such warning.

Tritax’s approach is both extremely selective and disingenuous.

Matter Number 48: **Acoustic Absorption**

1.8.11. Ground Acoustic Absorption

1.8.12. Ground Acoustic Absorption

"The use of a ground absorption coefficient of 0.5 provides a conservative approach as in reality, the ground between the proposed development and receptors should be set as acoustically absorptive."

Tritax's use of a ground absorption coefficient of 0.5 is ***incorrect*** in the area encompassing the Reach Stackers, Gantry Cranes, Rail and Road vehicles, Outward-Facing Units 7, 8 and 9, and the Acoustic Barriers, as this area is acoustically reflective and has a ground absorption coefficient of 0.0. This is a critical and potentially resonant area.

Inappropriate modelling parameters should not be used when, as here, they are known to be incorrect. And especially when, as here, they will have the effect of underestimating the Operational Noise from the Proposed Development.

Matter Number 49: **Noise Sources from the Proposed Development 1.8.13 Background and Rating Levels.**

This is in respect of the Examining Authority's Written Question ExQ 1.8.13 to the Applicant:

"Background and Rating Levels
Does the BS4142:2014+A1:2019 "Technical Note" published by the Association of Noise Consultants Good Practice Working Group in March 2020 have any relevance to assessments in terms of background levels and rating levels? If so, could the Applicant explain the implications?"

Tritax stated:

"The ANC is a trade organisation and there are plenty of reputable specialist acoustic consultancies who are not members. The professional body for acoustic specialists is the Institute of Acoustics and there is a strict criteria-set for individuals to meet in order to gain membership."

Eminent and active Members and Fellows of the Institute of Acoustics choose to take up positions and responsibilities within the Acoustics and Noise Consultants (ANC).

All of the nine Board Members of the Acoustics and Noise Consultants (ANC) are Members of the Institute of Acoustics, and four of them are Fellows.

All of the seven members of the Working Group who Authored the Acoustic and Noise Consultants BS 4142:2014+A1:2019 "Technical Note" of March 2020 were Members of the Institute of Acoustics, and three of them were Fellows.

Tritax's Response here is both disingenuous and misleading.

Conclusion

Although Tritax have spread out my "Comments on the Applicant's Responses to the Examining Authority's Written Questions" document of the 9th February 2024 over no fewer than 31 of the total of 75 pages that make up their "Applicant's Response to Deadline 5 Submissions [part 10 - Residents Businesses]" document, the Comments that Tritax actually make over those 31 pages are woefully thin. Tritax have nothing new in the case of eight of their twelve Matter Numbers, and the remaining four are very short, weak, and sometimes rather confused.

In the same way that Tritax have (still) failed to respond to my first Written Representation document of the 10th October 2023, we see them once again failing to participate in the Examination Process.

Tritax may be trying to give the impression that, because of their lack of a meaningful Response, it might be concluded that most matters are settled. For clarity, I state here emphatically that no such conclusion should be drawn. Matters are by no means settled.

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.