

**Agenda supplement: Network Rail
presentation to West Area Planning
Committee 13 September 2016 (v2)**

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Section 73 applications and Section 1/2 Schemes of Assessment

West Area Planning Committee
13 September 2016

Presentation

- ▶ Overview
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- ▶ Agenda item 5 Noise and Vibration Schemes of Assessment Section I/2
- ▶ Concluding remarks

Overview

- ▶ Network Rail response to key points made in the Officers' reports and presentation
- ▶ Strong commitment to environmental mitigation across whole of EWR
- 5 ▶ For example, we will spend upwards of £16million on noise barriers and insulation, including £3.5 million in Oxford
- ▶ We continue to engage with local residents and the Council and have responded with changes eg moving the Woodstock Road crossing, replanting etc.
- ▶ Network Rail have worked closely with Officers over many months and have undertaken continued public engagement on the issues before the Committee.
- ▶ Network Rail looking for the Committee to secure a sensible and balanced outcome in deciding these applications

Noise barrier photos



Noise barrier photo towards First turn



Agenda item 3 Rail damping Sections H and I/1

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Rail damping applications: Reasonably practicable

- ▶ Officer's concerns about what is 'reasonably practicable' seem to be based on the Arup report in Appendix 4
- ▶ Officers' slide 9 sets out the four components of what 'reasonably practicable' means, but it is the Committee to consider **ALL** of the factors, in particular the balance between the environmental benefits (if any) and the disproportionate costs.
- ▶ The courts have decided that if costs are 'grossly disproportionate' to benefits, this is **NOT** 'reasonably practicable'

Rail damping applications: Arup advice

- ▶ Arup agree that noise reduction will not be above 2.5 to 3dB
- ▶ We accept that figure without barriers, but because this is a diesel hauled railway, trains on power traction noise will be a significant component, particularly in Section H, and this is not reduced by rail dampers.
- ▶ Our expert's evidence is that overall reduction in Oxford will therefore be less than 2.5 to 3 dB.
- ▶ The generally accepted position that **'changes of less than 3 dB are not noticeable to most people'**.

Rail damping: Is 3dB reduction significant?

- ▶ We disagree with Arup's argument about whether a 3dB reduction is significant
- ▶ Arup do not challenge the 'not noticeable' view, but
- ⇒ suggest that by using dampers, we could avoid noise insulating some upper floors, mainly bedrooms in Wolvercote and part of Stone Meadow. This they call a significant benefit.
- ▶ Noise insulation already being installed and resulting internal noise levels in these houses would be much **worse** if we substituted rail dampers

Rail damping: local conditions

- ▶ We believe we have ‘optimised track design’ and mitigation locally
- ▶ Arup Table 1 has a long list of ‘mitigation measures’. The only one we have powers to do and are not intending is rail damping.
- ▶ Our position on mitigation is based on sophisticated local noise modelling, barrier design and noise insulation
- ▶ What we are doing is **well beyond the NIR requirements and meets NVMP**

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Four components

- Four areas where Officers express doubts (i) cost (ii) environmental benefits and use of WebTAG to measure benefits (iii) targeted installation (iv) the trial.
 - **1. Cost.** We have costed properly for the product and installation on a live railway.
- 13 • **2. Benefits.** 2.5dB reduction will not be a noticeable benefit to residents already having barriers and NI. We back this view up with the WebTAG analysis. This is an accepted economic appraisal tool for placing a monetary value on the environmental effects. This kind of analysis is used across the public sector for evaluating social policy and transport investment. It is the only way of comparing directly the costs and benefits.
 - Our published analysis shows at best a Benefit to Cost Ratio (CR) of 0.35 in Section H, ie a **return of £3 for every £10 invested**. Objectors have not criticised the robustness of the assessment methodology and haven't considered that we have **overestimated** the benefits of SilentTrack.

3. Targetted installation would improve the BCR towards 1.0, but is likely to be opposed by those who miss out and is still a poor business case.

4.Trial. This offer made in good faith in March 2015, but to enable the Project to get the funding we had to complete a **thorough** cost benefit review which proved **unequivocally** that funding, even a trial for a product that had such a poor return, was not viable.

Summary

- We agree with Arup that dampers will not reduce noise, ignoring barriers, by more than 2.5 to 3 dB
- The generally accepted position is that **'changes of less than 3 dB are not noticeable to most people'**
- Grossly disproportionate cost in relation to benefit
- Barriers and most Noise insulation are already installed as agreed with OCC
- If we are unable to agree these applications now Network Rail will have little choice but to appeal against these decisions. It is in both parties interests to avoid this as to have the matter heard at public inquiry will incur substantial unnecessary costs for both the Council and NR which are entirely avoidable.

Agenda item 4 Noise and Vibration Monitoring Sections H and I/1

Noise and Vibration Monitoring Applications

We are, as the Officers' slide 13 says, 'reverting back to the requirements of Condition 19 (with enhancement)' which, to be clear is the addition of vibration monitoring. Your Officers are happy with the proposed methodology for these surveys. Noise monitoring will be done at 6 and 18 months after the railway reopens ie in 2017 and 2018. This is the requirement under the NVMP, which we will meet. In our Supplementary Note, we have explained that this completes NR's commitments under this TWA Order.

Supplementary note

“all of the works authorised by the TWA have been delivered by Network Rail as a single delivery package. Hence, only one set of N and V SoAs have been produced, based on the overall train service scenario, which includes services likely to be introduced once what is now called EWR Phase 2 has been completed. The noise mitigation has been designed and installed as a single tranche of barriers etc capable of mitigating the overall EWR Phase 2 train services scenario.”

Noise and Vibration Schemes of assessment for Section 1/2.

Noise and Vibration Schemes of assessment for Section I/2.

- We are disappointed by this Agenda Item. At the Technical Briefing we attended last week, OCC's Officer's **HAD** recommended the "**Approval**" of I-2's Scheme of Assessment. This last minute change is highly unusual and contradicts the recommendations of the Council's Independent Expert.
- In response to the Officers' Slide 18, this is an over-simplification of a complicated situation. Baseline levels at night in I-2 are much higher than the NVMP thresholds of 45dB.
- The results in Table 5.1 of the NSoA show some properties where the predicted impact is generally 3 dB or less with two locations showing an impact of 4dB. Our estimation is that the overall noise reduction from Silent Track would only reduce noise levels to between 1 and 2 dB which is generally accepted as being less than can be perceived by the human ear. The reasons why, we estimate, SilentTrack would not provide the 3-4dB stated above are as follows:

Noise and Vibration Schemes of assessment for Section I/2.

- (i) Firstly all trains will be accelerating away from Oxford Station or braking towards it, therefore engine traction and braking noise will be the dominant noise sources. Neither of these noise sources will be mitigated by SilentTrack.
- (ii) Secondly SilentTrack cannot be used at crossing points which are common in Section I-2.
- 20 ➤ (iii) Finally, there are no works being carried out under the TWA Order here, therefore, OCC shouldn't impose conditions on tracks not covered by the TWA.
- These factors mean that, the benefits of installing SilentTrack in Section I-2 would be extremely limited.

Summary

- The independent expert agreed with our proposal and confirmed that no noise mitigation was required
- OCC agreed with our proposal in a technical meeting then changed their position
- SilentRail is not suitable or provides barely perceivable, if any benefit in this area.
- There are no TWA works in this area.

Conclusions

Rail damping

- We agree with Arup that dampers will not reduce noise, ignoring barriers, by more than 2.5 to 3 dB
- The generally accepted position that **'changes of less than 3 dB are not noticeable to most people'**
- Grossly disproportionate cost in relation to benefit
- Barriers and most Noise insulation are already installed as agreed with OCC

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Noise and vibration monitoring H and I1

- We agree with the Officers recommendations except the need for ANY additional monitoring after 18 months.

Noise and vibration monitoring I2

- The independent expert agreed with our proposal and confirmed that no noise mitigation was required
- OCC agreed with our proposal in a technical meeting then changed their position
- SilentRail is not suitable or provides barely perceivable, if any benefit in this area.
- There are no TWA works in this area.

Final note

- If we are unable to agree these applications now Network Rail will have little choice but to appeal against these decisions. It is in both parties interests to avoid this as to have the matter heard at public inquiry will incur substantial unnecessary costs for both the Council and NR which are entirely avoidable.

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