

Woodbridge Town Council (WTC) Deadline 7 Submission
Written Representation (WR) on matters raised during ISH 8
on night-time rail freight noise/use

Introduction

1. WTC has listened to the hearing statements in Session 3 of ISH 8 on 25 August 2021 and comments on the following statements made between 4:32 – 20:05 of the session.
2. Mr Maund raised at the start of Session 3 WTC's WR comments at Deadline 2 for the Applicant to address specifically WTC's view that *"the rail noise assessment was inadequate and hadn't taken account of WHO guidance on sleep disturbance or taken proper account of klaxon sounds of trains or the level crossing sirens"*.
3. Mr Maund then referred to East Suffolk Council (ESC) and considered that that the council *"remained to be persuaded the night-time operation (of trains) can be done appropriately"* and asked for clarification on the ESC stance.
4. Mr Mark Kemp of ESC stated *"It's our position that the RNMS (Rail Noise Mitigation Strategy) represents the Applicant's responsibility to mitigate and minimise noise impact at LOAEL. It also represents their obligation to exhaust all forms of mitigation prior to providing the noise insulation in the form of the noise mitigation scheme. So, it's our assertion that it's got to be comprehensive, complete and committed to. The RNMS and the confidence in the delivery of the RNMS is key to accepting the noise mitigation scheme in terms of the rail freight at the EIA Significant Threshold as currently offered. However, should the RNMS prove to be undeliverable, deliverable in part or inadequate, we reserve the right to request that the noise mitigation scheme be used at LOAEL to boost that mitigation and minimisation of the impact from the noise."*
5. SCC Councillor Richard Smith raised two issues, firstly a passing loop between Saxmundham and Woodbridge to allow for daytime freight trains, a subject previously raised by WTC and other councils and secondly, vibrations induced by the freight trains referring to the marked vibratory impact of nuclear flask trains. WTC briefly comment below on his statement, the response by the Applicant and our position on these matters.

WTC assessment and position post ISH8 on night-time rail freight air borne noise

6. WTC remain of the opinion the Applicant has inadequately addressed the matters raised by WTC which Mr Maund kindly summarised before discussions occurred by other IPs and the Applicant. WTC was not represented as Councillor Sanders, who has undertaken research into the topic, was having a medical procedure that day. WTC note that the Applicant during those subsequent discussions failed to give an oral rebuttal on the matters Mr Maund and WTC has previously raised. This is regrettable and in WTC's view somewhat remiss.
7. The Applicant remains committed to its view that its approach to night-time noise is a "*generous*" one in that it believes it is only required statutorily to undertake noise mitigation measures at SOAEL (77dB $L_{Amax}/59L_{Aeq,8hr}$) and has elected unilaterally to undertake such measures at what it has termed the EIA threshold (70dB $L_{Amax}/55L_{Aeq,8hr}$). WTC fundamentally disagree that the Applicant's approach is a 'generous' one. Statements at ISH8 indicate it is supported in this view by both SCC and ESC.
8. WTC consider that the Applicant's approach is fundamentally flawed as it seeks to adopt noise insulation only to those properties that have façade night-time rail noise levels above its EIA threshold. The residents of those properties will have considerably reduced noise impact, probably approaching or below LOAEL (60dB $L_{Amax}/40dBL_{Aeq,8hr}$), but for those properties with façade night-time rail noise levels between LOAEL and the EIA Significant threshold, noise levels will remain at those elevated levels (a magnitude or greater) above LOAEL causing sleep disturbance to a significant proportion of residents.
9. ESC's position, in our view, is more reasonable and appropriate but we disagree with the acceptance of noise mitigation scheme at the EIA Significance Threshold for the reason given above unless ESC's use of the word "*all*", in relation to noise mitigation and minimisation, requires the Applicant to:
 - a) adopt all technically feasible measures to lower noise generated by freight train use, and
 - b) include technically feasible measures to minimise/remove the use of night-time rail freight trains either by greater use of marine freight, but not road, or more appropriately by improvements to the East Suffolk line to allow daytime freight train passages.

10. WTC accepts ESC's potential approach of adopting LOAEL for noise insulation. However, WHO's latest guidance¹ will be fully reviewed and integrated in part, or whole, into central government guidance in the next few years, i.e. well before the Applicant's proposed ending of night-time rail freight. This means that the guidelines on interventions for noise insulation are likely to be revised to take account of those research findings that have led to the latest WHO guidance. The night-time rail freight noise proposed by the Applicant will extend at least to the mid 2030's and, unlike most other construction-related noise adjacent to current residential housing, will be uninterrupted year-round during that period except for Sundays.

Rail improvements to permit daytime rail freight use

11. The Applicant's response to Councillor Richard Smith's proposal of a single passing loop between Saxmundham and Woodbridge was, in WTC's view, somewhat misleading. The Applicant stated that this option was deemed unfeasible by the Applicant and Network Rail (NR) due to the need for extensive works that would be required at 45 railway crossings. It is WTC's understanding that those works were not due directly to the passing loop itself but to a single passing loop being inadequate to allow both passenger and Sizewell C rail freight trains to access the line during the day unless the line was upgraded to allow rail freight trains to travel at much higher speeds than the currently proposed 20mph outside urban areas. This necessitated closure and diversion of a significant number of crossings for safety reasons.

12. WTC, and it understands other parish and town councils at and between Saxmundham and Woodbridge, accept that position and it is for that reason WTC proposed either two passing loops or preferably a full reinstatement of a dual line between Lime Kiln Quay Woodbridge and Saxmundham as those options would not require a raising of line speeds for Sizewell C freight trains and the numerous rail crossing closures. It would meet the longer-term policy set out by both SCC and NR for the East Suffolk line. These rail improvements remain our preferred option.

Freight train induced vibrations

13. Mr Thorney-Taylor on behalf of the Applicant (38:40) referred to the Applicant surveying for joints and 'soft' continuous welds to plan pre-Sizewell C works to remove these features from sensitive locations as they exacerbate rail traffic induced vibrations.

¹ Environmental Noise Guidelines for the European Region (2018)

14. Whilst it is appreciated the Applicant intends to remove these some sit upon what appears to be expired wood rail sleepers and track bed ballast which requires tamping. Visible movement occurs even under passenger train loads. Unless these matters are dealt as well WTC consider vibrations will occur.
15. Mr Thorney-Taylor stated vibration would be significantly different between the nuclear flask trains and the Sizewell C freight trains due to suspension in the wagons to be used for rail freight. He specifically referred to control on vibrations being associated with unsprung mass (the part of the train the track side of suspension – wheels and axles) and sprung mass (the carriage above the suspension).
16. WTC agree that loaded trains' unsprung mass is low in relation to sprung so vibrations are minimised, but this will not be the case for train passage of empty wagons which will form 50% of the Sizewell C rail traffic. For those trains unsprung mass will be a much higher in relation to sprung mass and WTC believe more pronounced vibrations can be expected from such trains. WTC would ask the ExA to ask to the Applicant to respond on the impact of vibrations from empty rail wagons.

Conclusion

17. WTC remains opposed to the current DCO application, but WTC seek the ExA to determine in its review of the DCO application, should it conclude with a principle of general acceptance of the DCO, that the Applicant should either
- a) be required to undertake works so that it only operates daytime freight trains i.e. it undertakes improvements to the line by the use of appropriate dualling between Woodbridge and Saxmundham, or
 - b) meet WHO proposed level of rail based night-time noise (44dB) which equates to approximately 4% of residents sleep being adversely affected, by either
 - i. setting a level that in its view seeks an appropriate balance between the disturbance to residents and the use of the rail (this can be informed by the reproduced graphic below from the WHO guidance taken from WTC's WR at Deadline 2), or

- ii. including a requirement for the Applicant to abide by all future updated rail noise level guidance by central government within a set period of that being published

Table 22. The association between exposure to railway noise (L_{night}) and sleep disturbance (%HSD)

L_{night} (dB)	%HSD	95% CI
40	2.1	0.79–3.48
45	3.7	1.63–5.71
50	6.3	3.12–9.37
55	10.4	5.61–15.26
60	17.0	9.48–24.37
65	26.3	15.20–37.33