

East West Rail Phase 1: Response to Caroline Robertson's Objection Statement, received by Oxford City Council, 22 April 2015, and to Caroline Robertson's Further Letter, dated 8 May 2015

Response to Objection Statement

Paragraph 10: WHO noise levels

1. You state that the '*WHO recommended community noise levels are considerably lower than ERM's predictions*'.
2. In response, we note that the only residual impacts which are predicted to exceed the World Health Organisation's (WHO) maximum recommended community noise levels are in outside spaces. The Noise and Vibration Mitigation Policy (NVMP) is clear that it applies only to the mitigation of noise impacts inside residential and other noise sensitive buildings. The question of noise mitigation in private gardens or similar locations was explored at the TWA Inquiry. The Inspector decided that the NVMP did not have to be applied to gardens and this is consistent with practice in relation to other transport infrastructure projects, including highway schemes.
3. The Noise Impact Threshold Levels which form the basis for all offers of mitigation in the Noise Scheme of Assessment (NSoA) have been developed using the relevant statutory noise levels set out in the *Noise Insulation (Railway and Other Guided Systems) Regulations 1996* (NIR). These are the levels that must be considered when coming to a decision on mitigation in line with the NVMP, and in relation to Condition 19, not the WHO noise levels quoted.
4. The Secretary of State agreed with the Inspector that the requirements in the NVMP and Condition 19 were sufficient to ensure that the Scheme in operation would have acceptable effects on local residents, businesses and the environment. He was, in particular, satisfied that the Noise Impact Threshold Levels in the NVMP, which would be applied under condition 19 were appropriate for their purpose (SR 7.3.21).
5. It should also be noted that, at the majority of locations where mitigation has been offered in the NSoA, the statutory noise levels as set out in the NIR will not be exceeded. Network Rail has, however, chosen to offer a higher standard of mitigation in line with the NVMP, offering a higher level of protection for residents through Section H, than would result in the absence of the NVMP.

Paragraphs 12 - 21: Future Service Assumptions for EWR Phase 1 - NR plans to increase capacity beyond that assessed in the original Environmental Statement (ES)

6. You state that Network Rail has waited until April 2015 to assert that the 16 'Cross Country' passenger trains each day should not form part of the 'planning assumptions' and have produced no evidence to support the assertion.
7. In response, we note that Section 3.3 of the draft NSoA, made public on 10 December 2014, stated that '*These and the other assumptions that have been used,*

for example in relation to types of rolling stock and train lengths, are the same as those used in the ES, except for the exclusion of an assumed Cross Country passenger service that is no longer planned (underline added). This information was also included in the NSoA for Section A, first submitted in January 2014 to Cherwell District Council.

8. Our direct response to your previous comments on the draft NSoA, dated 2 February 2015, also notes, at Point 7, that this service *'was withdrawn from their business plan and therefore will not run'* and so would not form part of the *'planning assumptions'*.

9. We would also note that paragraph 9.2.5 of Alan Dare's (Strategic Development Manager for Chiltern Railways) Proof of Evidence (CRCL/P/2/A) states that *'The EWR business case does not include any Cross-Country passenger services via EWR. However, these have been proposed from time to time and an hourly train each way was included as a part of the "reasonable worst case" in the Environmental Statement (ES) (CD/1.15 to 1.18).'*

10. The TWA Inspector's Report in paragraph IR 4.2.24 also notes that these Cross Country passenger services were only a possibility but again were included as a part of the ES as to present a *'reasonable worst case'*.

11. We therefore believe it is entirely defensible to remove these services from the planning assumptions as there is no operator yet identified who may wish to run this service and it does not form part of the EWR Phase 2 business case.

12. In response to the assertions that Network Rail intend to increase capacity beyond that assessed in the ES, we reiterate that the service levels specified in the NVMP take into account future growth in passenger and freight use of the line once EWR Phase 2 has opened and are the same as those assumed at the TWA Inquiry and in the ES, except for the Cross Country service already discussed above. The NVMP states, in paragraph 1.9, that *'when the East-West Rail (EWR) link is in operation, there may be more freight trains. For this reason, additional freight services were included in the noise assessment in the Environmental Statement, so that this reflects a reasonable planning scenario'*.

13. These future service levels were discussed and accepted by the Inspector at the TWA Inquiry (and confirmed by the Secretary of State's decision to grant the Order) to be *'reasonable assumptions of likely future service frequencies following the opening of East West Rail Phase 2 between Bicester and Bletchley'*.

14. These reflect the anticipated train movements after the opening of East West Rail Phase 2 and it remains Network Rail's position that this forms the appropriate basis for determining mitigation in both the Noise and Vibration Schemes of Assessments (SoAs) in line with the Secretary of State's decision.

15. The NSoA and VSoA have therefore used these assumptions, with all calculations behind them having been provided as part of the relevant submissions.

16. The SoAs have been found to be sound by Oxford City Council's Independent Expert (IE) for noise and both IEs for vibration and are seen as robust assessments of the impacts of the proposed Scheme.

17. Reference has been made to the potential use of EWR Phase 2 to serve the proposed Infrastructure Maintenance Depot for HS2 during the construction and operation of that line. Network Rail's position on this is the same as that set out above. Neither EWR Phase 2, north of Bicester, nor HS2 are yet approved schemes and no assessment has yet been undertaken of the likely train operations that may take place on EWR to serve HS2 construction or operations. In any event, HS2 Ltd is a separate company to Network Rail and the hybrid Bill proposing the HS2 Phase One has yet to be fully examined by Select Committee and the Royal Assent is expected, at the earliest, in December 2016.

Paragraph 22: 'The Environmental Statement is out of date and EWR Phase 1 falls within the scope of the Strategic Environmental Assessment Directive'

18. We do not consider that the Strategic Environmental Assessment Directive is relevant to East West Rail Phase 1, including the discharge of the planning conditions, because this approved Scheme is not, in the terms of that Directive, a plan or programme which sets a 'framework for future development consent'.

Paragraph 23: Network Rail has deliberately broken up Condition 19 into smaller parts in an attempt to avoid its obligations

19. There is no relevant '*government guidance and scientific evidence*' that states that noise and vibration must be considered together in a single report and the TWA Inspector drafted Condition 19 in such a way that allowed separate, but related, Schemes of Assessment to be prepared and approved.

20. The approach in relation to the provision of separate SoAs has been agreed with both relevant Local Planning Authorities and their appointed IEs for noise and vibration. As you will note, the City Council is still intending to consider both the noise and vibration impacts of the Scheme for Section H at a single Planning Committee, but it is not required to do so. Network Rail consider this to be a sound and logical approach to these intertwined but separate issues.

21. The preparation of separate NSoAs and VSoAs has been undertaken for a number of logical reasons:

- Noise and vibration are more easily explained as separate impacts with 'noise' resulting from fluctuations in air pressure detected by the ear and 'vibration' being a low-frequency disturbance which may potentially produce physical movement in buildings, which can be transmitted through the air or the ground. The provision of separate SoAs allows for the clearest presentation of these differing impacts;
- The assessments require differing methodologies and so it was considered prudent to present separate reports for each;
- Each topic was assessed by separate consultants (ERM for noise and Atkins for Vibration) but using the same planning and policy assumptions set out in the NVMP. Logistically, separate reports were a more straightforward option; and
- The VSoAs were prepared on a route wide basis. The NSoA has been carried out on a sectional basis appropriate to the type of location (e.g. Section H covers the general Wolvercote area of Oxford), specifically

allowed for under Planning Condition 3. This approach was again agreed with both relevant Local Planning Authorities and their appointed IEs to allow for the Scheme to be built in line with a tight construction programme.

22. Both sets of SoAs have fully addressed the impacts of the Scheme in line with the thresholds set out in the NVMP, with Network Rail committing to the provision of all required mitigation. There has been no attempt to avoid any obligations in terms of mitigation, nor could there be through the submission of separate SoAs.

Paragraph 25: Reassurances made by Network Rail at its meeting with residents at Lakeside, 7th January 2015 and at the meeting chaired by Nicola Blackwood MP, 5 March 2015 are not contained in the NSoA

23. You are correct in noting that statements relating to potential 4m high barriers and the use of Tata Steel 'silent track' are not specifically included within the NSoA. This is because the mitigation set out in the NSoA has been shown to meet the standards in the NVMP and is sufficient to allow Condition 19 (2) to be discharged without the need for such additional mitigation.

24. In relation to barrier heights, once detailed design is complete, a further submission under Condition 19 (13) will be made asking OCC to approve the 'size, appearance and location' of the barrier. During detailed design, Network Rail have stated that they will look for any improvements to the amount of noise reduction that can be achieved, by making local changes to the height and/or position of the barriers. This will have to be undertaken in consultation with local residents on a case by case basis, because of other potential impacts e.g. visual impact.

25. In relation to Network Rail's offer to install Tata Steel 'silent rail' technology within Section H, we reiterate that this is being offered and will be installed on a trial basis and so cannot form part of the NSoA. If it were, subsequently, not to receive 'type approval', its removal could result in the need to re-assess all of the noise impacts and vary the provision of barriers and noise insulation. It is again reiterated that the mitigation set out in the NSoA has been shown to meet the standards in the NVMP and is sufficient to allow Condition 19 (2) to be discharged without the need for this form of mitigation.

Paragraph 26: The NSoA does not show all the changes marked up

26. A copy of the NSoA with all changes marked up was submitted to OCC following the public consultation exercise. Additional information that was provided to Brian Hemsworth for clarification, in response to his queries, was included in his Independent Expert's report. These additional documents did not result in further changes to the NSoA.

Paragraphs 27 - 32: Lakeside stone trains and freight on full power on both Up and Down lines

27. You state that '*ERM has assumed that the two stone trains D2.2.11 will be idling for a period of 10 minutes next to Lakeside during the day. If all train paths are used*

during the day, it will not be possible for trains to be idling for this amount of time without timetabling issues.

28. In response, the assumption that trains will be idling for ten minutes, i.e. stationary at a red signal, is a worse case assumption. In normal day to day operations, trains run on green or amber signals with no idling at red signals. The ten minute assumption has been made in the NSoA to cater for the worst case of a freight train being held to allow a passenger train to pass. It is also noted that, from 2019, the line will be moving towards electric hauled freight.

29. Regarding the Hanson's aggregates depot at Water Eaton, to which the stone trains run, their opening times are restricted by Condition 24 of the planning permission attached to the TWA Order - *Aggregates depot hours of operation*. This states that:

No HGVs shall enter or leave the aggregates depot, nor shall unloading of trains or loading of lorries take place, except during the following hours: 06.00 to 19.00 Monday to Friday and 06.00 to 13.00 on Saturday. No such operations shall take place on Sundays or Bank Holidays

30. Normal day to day stone deliveries will be restricted to these hours.

31. You also assert that '*Trains will run at full power on both the Up and Down lines past Lakeside*'. Network Rail engineers have confirmed that, as a result of the gradients in this area, freight locomotives are likely to be on full power on the Down line only (travelling towards Bicester) but not on the Up line, which has a gradient falling towards Oxford. This is the assumption used in the noise modelling, as noted in paragraph D14 of the NSoA.

32. All of the assessment at Lakeside has been undertaken in accordance with the relevant guidance, for example, in Calculation of Rail Noise (CRN) and is correct. Trees, whether or not in leaf, do not attenuate noise to any measurable extent. This is in no way related to whether changes of less than 3dB are noticeable, although this statement is supported by research.

33. You assert that measurements at NML(PI)3 were carried out at approximately 50 m from the railway. The noise meter was set up at a distance of 10.4 m from the property façade which is approximately 21 m from the railway. This is approximately the same distance as the nearest properties in Lakeside will be to the proposed railway. Therefore it cannot be concluded that the majority of properties along Lakeside are much closer than NML(PI)3 and will experience much higher noise levels than those recorded during the survey as a result. The highest maximum noise level (L_{Amax,s}) recorded during the noise survey at NML(PI)3, which was carried out over several days and nights, was 81 dB. The foliage of trees and shrubs can provide a small amount of attenuation to noise, but only if it is sufficiently dense and several metres deep. ISO 9613-2 includes a small allowance for attenuation through foliage, where it is between 10 m and 20 m deep (no allowance is made for depths less than 10 m). CRN provide no allowance for attenuation from foliage. The NSoA for Route Section H reports that, with a noise barrier 2.5 m high (relative to rail height), maximum noise levels above 82 dB(A) are, however, predicted to occur at the nearest properties in Lakeside as a result of noise from passing freight trains and as a result, noise insulation will be

provided at these properties (subject to the provisos in Section 5.2.3 of the NSoA).

Paragraphs 33 - 34: Request for higher barriers and noise reduction at source

34. In response to your request for 4m high barriers at Lakeside, we would point out that the noise modelling assumes rolling noise to be at rail height and engine noise (from locomotives on full power) to be at a height of 4m relative to rail height, as specified in Calculation of Rail Noise (CRN). However, the overwhelming majority of vehicles that will generate rail/wheel noise are passenger DMUs and freight wagons. 2.5 m barriers provide effective screening for these vehicles.

35. We have noted your request for a 4m noise barrier. The mitigation set out in the NSoA has been shown to meet the standards in the NVMP and is sufficient to allow Condition 19 (2) to be discharged. Once detailed design is complete, a further submission under Condition 19(13) will be made asking the City Council to approve the 'size, appearance and location' of the barrier. During detailed design, Network Rail will look for any improvements to the amount of noise reduction that can be achieved, by making local changes to the height and/or position of the barriers.

36. The exact extent of the installation of the Tata Steel Silent Track on a trial basis has yet to be agreed.

Paragraphs 35 - 36: Condition 19 (4) cannot be discharged

37. You assert that the residents of 45 Lakeside have '*no guarantee that Network Rail will commit to the proposed mitigation*' at this property, as no budget has been agreed and that until this is agreed, Condition 19 (4) cannot be discharged.

38. In response, we note that Condition 19 (4) only requires '*measures to be identified to ensure that the noise caused by passing trains in the Studio at 45, Lakeside does not exceed 35dB LAeq, 30 min and 55dB LA1, 30 min, the standards to be met by music teaching rooms as defined in Building Bulletin 93, Acoustic Design of Schools (Table 1.1)*' - Condition 19 (4). The NSoA clearly sets out the proposed measures in Annex F of the document.

39. Network Rail will be obliged to install this mitigation by virtue of Condition 19 (5) which states that '*All mitigation measures, including those prescribed in the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996, required for Phase 1 and 2A shall be installed as soon as possible after commencement of the works and no later than the date on which a passenger rail service is resumed on that section of railway*'.

40. Whether or not a budget for these works has been settled at the present time is immaterial to this. We have been in contact with the residents of 45 Lakeside in this regard but are currently awaiting the decision from OCC on the NSoA for Section H before the design and layout of the extension can be undertaken and any planning permission secured. The undertaking of this and all other required mitigation is provided for in the overall budget for the project.

Paragraphs 37 – 38: Network Rail refuse to undertake a second round of future monitoring

41. It is noted that the planning conditions require monitoring, with Section 6 of the submitted NSoA describing these requirements. The exact locations for the measurements will be discussed and agreed with OCC before monitoring is carried out. The monitoring arrangements follow the principles set out in the NVMP, amended to take into account of the fact that both Phases of the approved TWA Order scheme between Bicester and Oxford North Junction is now being built as a single construction project.

42. The intention of monitoring is to identify defects in the installed barriers, such as gaps or unforeseen issues with the mitigation. Our experience of similar schemes, where post-construction monitoring has been carried out by ERM, is that the calculation procedures used in the NSoA have produced answers which closely match the noise reductions measured during post-construction monitoring.

43. The NVMP defines the times at which measurements will be undertaken (6 months and 18 months after opening). By that time, sufficient passenger and freight trains of the right types are likely to be running to enable accurate measurements to be made. Potential future increases in passenger and freight service frequencies (and train lengths), up to the 'reasonable planning assumptions' will be taken into account when reporting that monitoring.

44. The original programme of two rounds of monitoring was based on the assumption that there would be two construction stages, covering Phase 1 and 2A and, then at a later date, Phase 2B. The monitoring programme now set out in the NSoA has been changed to reflect the single phase of construction. This is entirely logical and in the spirit of that set out in the NVMP. This monitoring is both considered proportionate and adequate.

Paragraph 39 - Brian Hemsworth has not properly fulfilled his role as an Independent Expert

45. You assert that Brian Hemsworth has not fulfilled his role as an Independent Expert as he has not complied with the Civil Procedure Rules (CPR) Practice Direction Part 35.

46. In response we note that Brian Hemsworth was appointed to act in a 'professional expert role', as the courts understand the term. The Practice Direction you refer to is specific guidance for 'expert witnesses' being called to give evidence in civil claims proceedings.

47. While it is clearly a matter for OCC to confirm that it is satisfied with the conduct and reports provided by the IEs, Network Rail is entirely satisfied that Brian Hemsworth has provided clear expert advice in writing to the Council and, in accordance with the agreed arrangements, all contact between ERM and Brian Hemsworth has been via City Council Officers, in writing, as annexed to his report.

Response to Further Letter dated 8 May 2015

Paragraph s 1 to 19 - Multi stage development requiring new Environmental Impact Assessment (EIA)

48. In your response you state that *'The TWA Order was granted with planning conditions which required the consent of the Local Authority. Therefore, the development covered by the TWA Order constitutes a multi-stage development for the purposes of the EIA Directive. Under the Town and Country Planning (Environmental Impact Assessment) (Amendment) (England) Regulations 2008 (SI 2008/2093), if it becomes apparent that the project is likely to have significant effects on the environment due to effects that were not identifiable at the time of the original consent, then an EIA is required'*.

49. In response we would state that where a consent procedure involves more than one stage (termed a 'multi-stage consent'), for example, a first stage involving a principal decision (such as an outline planning permission) and the other an implementing decision (such as reserved matters), the likely significant effects of a project on the environment should be identified and assessed at the time of the procedure relating to the principal decision (See reference for a preliminary ruling in *R v. London Borough of Bromley ex parte Barker (C-201/02)* and *Commission v UK (C-508/03)*), as noted in footnote 23 of your letter.

50. The need for any further EIA would depend upon the extent to which the significant environmental effects had been fully identified at the earlier stage. An EIA has already been undertaken with the Secretary of State considering the environmental information provided sufficient for the purpose of granting a multi-stage consent for the project.

51. In any event, the environmental information that is available to the Local Planning Authorities when discharging the planning conditions is by definition not restricted to the original Environmental Statement (ES). It includes not only the ES and two Addenda to the ES, but also the applicant's reports and evidence presented to the TWA Inquiry in 2010 and re-opened in 2011. The environmental information also includes the representations made by third parties and relevant evidence from them at that TWA Inquiry. The Secretary of State, in granting the Order, was satisfied that this was adequate environmental information for the decision to grant permission.

52. Each application for the discharge of pre-commencement planning conditions, including the discharge of Condition 19, has been based on the most up to date available design and operating information. Where necessary, these applications report any relevant environmental information obtained from recent surveys.

53. Each relevant assessment, in this case the NSoA and VSoAs, have been updated to reflect any changes in the Scheme since the TWA Inquiry and these provide adequate environmental information to inform the City Council's decision on same.

54. In our view, the environmental information that is already available to the Local Planning Authorities when they are determining each of the planning condition submissions is adequate and so no further EIA is required.

55. In response to the assertion that the ES is out of date due to changes such as the relocation of the switches and crossings, it is, of course, the case that the Order and the planning conditions allow a certain degree of flexibility in the detailed design of the works and these switch locations were not specified as part of the Scheduled Works in the Order. There is nothing in the Order or the Planning Direction which would prevent Network Rail from re-locating these or any other switches, if necessary for operational reasons. In any case, adequate further environmental information has been submitted in relation to the proposed re-location, in order to allay any public concerns.

Paragraphs 20 – 21: Appropriate Assessment under the Habitats Regulations and Bats - *'Network Rail's plans have now reached a sufficient level of detail that it should be possible able to gauge whether or not there is likely to be a detrimental impact on the conservation status of Oxford Meadows SAC'*.

56. Although not relevant to the discharge of Condition 19, Conditions 31 and 32 were attached to the TWA planning permission, with the explicit purpose of ensuring the protection of the 'qualifying interest' under the Habitats Regulations, which is the lowland hay meadow habitat at the Oxford Meadows SAC, in relation to air quality. These conditions have already been discharged in relation to the baseline monitoring requirements with further submissions in relation to potential future monitoring and mitigation being currently discussed with Natural England and the relevant Local Planning Authorities.

57. The Inspector stated that Conditions 31 and 32 *'would serve to ensure that the operation of the new railway, including the associated road traffic effects, would not be likely to harm the qualifying interests or species for which the SAC was designated by virtue of air pollution'* - Paragraph 14 of letter from Martin Woods (DfT) to Eversheds, 17 October 2012.

58. The Secretary of State agreed with the Inspector that these Conditions to protect the SAC, requiring further assessments of air quality, were needed in accordance with the precautionary approach advocated by Natural England (SR 7.4.1-7.4.5). He stated that these would serve to ensure that the operation of the new railway, including the associated road traffic effects, would not be likely to harm the qualifying interests or species for which the SAC was designated by virtue of air pollution, for the reasons given by the Inspector at SR 7.4.6-7.4.11. On this basis, the Secretary of State concluded that it is unnecessary *'to carry out an Appropriate Assessment of the effects of the scheme on the SAC'* - Paragraph 14 of letter from Martin Woods, 17 October 2012.

59. In relation to the bats at Wolvercot Tunnel, a European Protected Species (EPS) licence was issued by Natural England on 6 February 2015, based on up to date information about the construction and operation of the Scheme.

ERM on behalf of Network Rail

14 May 2015

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