

MINUTES OF ORAL EVIDENCE

taken before

HIGH SPEED RAIL COMMITTEE

On the

HIGH SPEED RAIL (LONDON – WEST MIDLANDS) BILL

Wednesday 3 January 2016 (Afternoon)

In Committee Room 5

PRESENT:

Mr Robert Syms (Chair)
Sir Henry Bellingham
Sir Peter Bottomley
Geoffrey Clifton-Brown
Mr David Crausby
Mr Mark Hendrick

IN ATTENDANCE

Mr James Strachan QC, Counsel, Department for Transport
Mr Richard Turney, Counsel, Department for Transport
Mr Alastair Lewis, Sharpe Pritchard

WITNESSES:

Ms Gina Rowe
Ms Annie English
Mr Matt Jackson
Mr Peter Miller, Environment Director, HS2 Ltd

IN PUBLIC SESSION

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1. CHAIR: Order, order.

Warwickshire Wildlife Trust

2. MS ROWE: Good afternoon everybody. My name's Gina Rowe, I'm the Living Landscapes manager for Warwickshire Wildlife Trust and with me is Annie English, our planning and biodiversity office, who has been doing the majority of work on HS2 work.

3. Thank you for the opportunity to come to the Committee again. Just briefly, Warwickshire Wildlife Trust is a charity which directly manages land and works with partners to manage land for nature conservation, and informs people about the need for nature conservation. We cover the geographic area of Warwickshire county, Solihull borough and Coventry city. We have around 24,000 members in that area, and 1,000 volunteers and we survey species and habitats across the area. Next slide, please

4. We have met with HS2 on a number of points over the last year, since our appearance last February. Some of those discussions are continuing. We have not received any assurances as yet, but we still wish to progress some of these to address some of these issues. Just to bring you up to date with where we are.

5. We are now petitioning on the key points regarding the AP2 changes and the impacts on the environment, as shown on the slide here. So, firstly, the effects on Marlowes woodland, and secondly the points regarding the compensatory measures for loss of ancient woodland, and the use of the biodiversity offsetting metric. Now, obviously, I appreciate we've had a long session on ancient woodland, but I will be focusing on the Warwickshire angle, and hopefully not repeating too much for you.

6. So, third slide please. With regards to the Marlowes woodland, and this is just – the woodland itself it just to the north of the HS2 line. Marlowes woodland is in an area known as Berkswell Estate, lies in the countryside between Coventry and Solihull, just to give you the context.

7. HS2 have undertaken surveys and identified that Marlowes wood is used by no less than nine different species of bat for breeding, including six of the rarer bat species, for example, including Liesler's bat, which is one of those.

8. To put this in context, Warwickshire has 13 species of bat present in the county in total, so an area that supports nine bat species is of great significance for bat populations in the county. In addition, Lesser's bat in particular, are very rare within Warwickshire which adds further significance to this assemblage of bats.

9. Looking at the slide itself, the two green arrows on the slide show the results of the bat surveys that HS2 undertook and as reported, they show the community flying routes of the bats which they use to move between where they're roosting overnight their feeding areas they're using. So, it's clear from those surveys that were done in 2012 and 2013, that the line of HS2 will sever two community routes, currently used by these bats, into and out of Marlowes wood in a north east/south west direction. Next slide, please.

10. We understand that HS2 agrees that it is an important wood for bats, from their reports, and that there needs to be mitigation for the severance effect of the route in this location. We disagree with HS2 that the scheme as currently planned, will actually achieve that mitigation. Following the changes made in this area in the AP2, in changing from two bridges with green elements, down to one.

11. The original scheme presented, for the mitigation, as seen on the screen now with the two bridges proposed, so the two orange lines are where the bridges were originally. And there still will be bridges there, but they won't have green elements in both. We have indicated the best place for a crossing point for the bat is the area shown by the large green arrow in the centre there which is the same place as the bats currently use for their commuting routes.

12. Now, bats are creatures of habit and use established routes for this, so they don't just chop and change and decide where to go. A crossing point as shown would link Marlowes wood to the created woodland plantation habitat on the southern side of the line. HS2 do not propose a green bridge here, but suggested to green the two footpath bridges to the north and to the south of the area, so the two orange arrows here, and linking them, to some degree, with additional planting.

13. Whilst this was not ideal the Trust was satisfied, at that time, that with two potential commuting routes over the bridges, was suitable vegetation, the bats may possibly learn to use one or other of them, and hopefully connectivity would be retained.

Next slide, onto slide 5, please.

14. However, with the AP2, that brought the removal of the green element of the southern bridge, M214, to the right hand side of the slide, which will leave only one potential crossing point for these bats, over the footpath on 215.

15. SIR HENRY BELLINGHAM: Do bats go over bridges?

16. MS ENGLISH: If they're vegetated.

17. MS ROWE: Yes, if there's...

18. SIR HENRY BELLINGHAM: Pardon?

19. MS ROWE: If they're sufficiently vegetated for their needs, yes, a tallish hedge.

20. SIR HENRY BELLINGHAM: Really?

21. SIR PETER BOTTOMLEY: If you had a broadish –

22. MS ROWE: It's got to be fairly broad.

23. SIR PETER BOTTOMLEY: Fairly broad, fairly long.

24. MS ROWE: And I think you've heard before that the ideal is 30 metres. We're not saying that we need that here, but we – it would need to be a reasonable width.

25. SIR HENRY BELLINGHAM: So they need to have, basically, a corridor, green corridor, which they would sort of over-fly. So what you're saying is that they – that they won't over-fly the line, unless there's a green corridor type crossing?

26. MS ROWE: Yes. They won't be able to link up across.

27. SIR PETER BOTTOMLEY: The line of soldiers in a Shakespeare play, holding up a tree each, wouldn't be sufficiently attractive, you need to have longer term – put more breadth and more sort of – sort of feel happy.

28. MS ROWE: Yes, they need sufficient there and it needs to be a certain height, and a bit of a mixture and sufficient width, as we mentioned, yes, to actually function correctly, yes. So, changing for the AP2 would just be one greened crossing point. You

will also see that compensatory woodland to the south side of the line has been reduced with two blocks of the proposed planting removed. Those are the blocks opposite the woodland on the slide there, so if you can see, on the current slide, there's two white gaps, basically, to the south there, yes. Just to the right and left of that band. Whereas on the previous slide, on 21014, it shows the woodland and proposed planting in there. So that's a change in the measures that are being proposed.

29. So, the Trust strongly disagrees that this new proposal will adequately retain connectivity for the bats from the wider landscape, round this area, to and from the Berkswell Estate. We query the case presented by HS2 and their PRD to us, for the change to the mitigation here, and I'll just outline those points. HS2 told us that the changes followed the results of the 2014 surveys but the Trust do not understand why this would lead to this change.

30. Originally, HS2 suspected that Barbastelle bats, one of the rarest species, may have a core colony here. They now do not believe this to be the case. Nonetheless, they did find nine other species of bats breeding and feeding in this woodland which with, or without the presence of Barbastelle bats, shows a strong reason to retain connectivity in this area. As I say, it is a significant assemblage for Warwickshire.

31. HS2 themselves, assign the same value to these populations as they did in the original ES document, being of county importance. We've looked through the information against the nationally accepted guidelines from the Chartered Institute for Ecology and Environment Management, CIEEM, guidelines of 2010, which state that this site would be of regional level importance, so that's quite a difference.

32. HS2 state that the new mitigation includes enhancing the condition of Marlowes wood, which is now within the Bill limits. Our query on that is that HS2 has already assessed this woodland as being in good condition for bats and this is confirmed by the survey results, so that many species are using it now. So, we want clarification from HS2 of how they will be able to effectively mitigate the impact of the loss of connectivity simply by enhancing the woodland for the bats, when it's already in good condition.

33. While in principle, we welcome enhancing and managing woodlands, we've mentioned that before, this proposed mitigation for this element does not address the

identified impact, which is the loss of the connectivity from the north side of the line to the south west.

34. HS2 also state that the additional landscape planting helps to link Marlowes Wood on the north side of the line to the rest of the Berkswell Estate. That's true, but there is already good connectivity north of the line, and so this isn't appropriate mitigation, this is – it's just an addition.

35. In their PRD, HS2 refers to mitigation by woodland habitat creation between Marlowes Wood and Sixteen Acre Wood, which again is – these are both on the north side of the line, so Sixteen Acres is the rectangular block slightly to the left, north and to the left.

36. MR STRACHAN QC (DfT): Here?

37. MS ROWE: Yeah absolutely, to the right of that, yeah, that section there is Sixteen Acre Wood. The Trust is most concerned about the loss of connectivity for bats to the wider landscape in this location, in particular the loss of connectivity to the south west, across the HS2 line, and that this needs to be mitigated. As far as we can tell, this will not be achieved by any of the measures set out in AP2.

38. Connectivity is vital to the survival of bat populations within the wider landscape. We know the Committee has already heard in some detail about aspects of bat ecology and I won't repeat all those points, but just refer you back to the evidence about bat ecology given in November 2015. That was specifically about Bechstein's bats, but a lot of it applies across the board.

39. So broadly, the mitigation for the loss of connectivity here has been reduced by the removal of the green element of the over bridge, M214. We don't believe that the green over bridge 215, on its own is sufficient to provide, in the long term, that east/west connectivity required to maintain that important assemblage of bats, and breeding bat species at this location. Next slide please, onto six.

40. So, our requests here are that we either have a specific green over bridge, solely for the use of wildlife, which would be suitable for the bats, in a more optimal location, to retain that connectivity, for instance where we broadly show it in the previous slide of

A21014.

41. SIR PETER BOTTOMLEY: As an additional –?

42. MS ROWE: Yes, to have that as the green element. The footpath bridges will need to be there anyway, as I understand it, it's a question of how green they are.

43. SIR PETER BOTTOMLEY: Were the promoters to agree to this green over bridge, would you still want the footpath bridges to be green too?

44. MS ROWE: No, we wouldn't need it, no.

45. SIR PETER BOTTOMLEY: You don't need it.

46. MS ROWE: If that one is there that would be sufficient. Or, the alternative is that HS2 suitably green both of the bridges as originally proposed, for use by the bats. As I say, the reason is for that is that neither of those two footpath bridges are in the optimal location for the commuting routes, but it will give them two options to use, rather than just one.

47. SIR PETER BOTTOMLEY: So in your view it's better to have – what you're asking for here, as one green bridge, and then they can do what they like with the footpath bridges?

48. MS ROWE: Yes, that's what our request would be.

49. SIR PETER BOTTOMLEY: And below that, to have two green bridges, which – as footpaths?

50. MS ROWE: Yes, that's what we're asking, thank you, yes. We did discuss this issue with HS2 Ltd in the meeting on 3 November, and we have not been able to reach agreement on it, so hence we brought it here. Moving on to slide seven, please. I'll now turn to the issue of the compensatory measures for loss of ancient woodland.

51. Obviously, you've heard considerable amount from the Woodland Trust earlier and we support their points. Likewise, we received the ancient woodland strategy in mid-January and have done an initial review of that information, some of which is in here. So, I want to just focus some points on the Warwickshire, Coventry and Solihull

area. So, the slide in front of you now shows that the location of the ancient woodlands across Warwickshire in relation to the HS2 line, and the areas of loss against each of those, as listed.

52. So, there are 13 ancient woodlands in Warwickshire that would be directly impacted by the line, the total loss is 12.8 hectare and that is significant in the county. Warwickshire has less than 2% cover of ancient woodland across the whole county, so it's very sparse – woodland anyway. The issue here is that HS2 have not demonstrated the use of any guidance or method for deciding how the scale of compensatory measures is adequate for the loss of this ancient woodland and that pertains to Warwickshire as much for the national picture.

53. We are told in the PRD that professional judgement has been used to decide how much habitat creation would be appropriate in each case, and again, you heard that earlier. We hope you would agree that professional judgement, no matter whatever the topic, is normally based on guidance or evidence, or at least explained in a way that should be repeatable for a similar professional having to make a similar decision. HS2 do not seem to have done this, it's not clear to us how those amounts have been calculated.

54. So, the Trust requests that clear guidelines are used by HS2 for deciding how much habitat creation would be appropriate. One example might be the 30:1 ratio suggested by Woodland Trust or the Defra 24:1, or using the biodiversity offsetting metric to guide decision making but having some clear understandable system. Next slide, please, onto eight.

55. This slide is to show you the scale – sorry?

56. MR HENDRICK: On that 24:1 that Defra recommend, are there any examples anywhere of that being adhered to and what is the status of it? Is it just advisory or recommendation, or does it have any other basis?

57. MS ROWE: I'm not sure we've got that evidence with us today.

58. MS ENGLISH: No, that was something to do with the Woodland Trust evidence. I don't know off the top of my head, I'm afraid.

59. MS ROWE: It is one that is being nationally stated, but we don't have the detail.

60. MR HENDRICK: Okay, thanks.

61. MS ROWE: So, slide eight shows the scale of measures still required to be done, using the two potential methods for deciding how much woodland habitat creation enhancement is appropriate to compensate for the loss of ancient woodland, to the degree that you can.

62. So, the top table there, using the diversity metric, shows a residual loss of woodland of 301 units, with a 22% loss. The units are part of a calculation of doing the biodiversity metric, so it's not hectares, it's a unit item. Alternatively, the ancient – using a ratio basis of hectareage, for the loss of 12.8 hectares, ancient woodland in Warwickshire, there is 42.2 hectares of woodland plantation proposed by HS2. This gives a 3.3:1 ratio on those areas, which is obviously only about a 10th of what Woodland Trust were proposing for tree planting, and as being stated by Natural England as being an unsatisfactory level.

63. SIR PETER BOTTOMLEY: Sorry, 12 hectares isn't the sum of what's on page 7, is it?

64. MS ROWE: Excuse me?

65. SIR PETER BOTTOMLEY: Twelve hectares isn't the sum of what's on page seven, is it?

66. MS ENGLISH: It should be.

67. MS ROWE: It should be, we did check it through the other day, so my understanding is it's 12.8, those figures should add up.

68. SIR PETER BOTTOMLEY: Well anyway, you think it's within 20% of that. The point's still valid.

69. MS ROWE: We did check it through, so that should be correct.

70. MR HENDRICK: Can I just say, and obviously, Mr Strachan is here, that figure you've got there, of the actual change which is negative, so there's no net gain, there's a

net loss, purely on hectare grounds, never mind the fact that there should be a ratio that multiples the replacement – Mr Strachan, why didn't have you that figure, yet the Wildlife Trust has that figure?

71. MR STRACHAN QC (DfT): Which figure are you referring to?

72. MR HENDRICK: The minus three – or one.

73. MR STRACHAN QC (DfT): That's not a – that's not a net hectare change, that is the Wildlife Trust's assessment of applying a biodiversity metric to their particular area, they take the view that the lost area, which is in units 1355, is compensated by a lost area calculated as 1054, which they say is a minus 301 deficit.

74. MR HENDRICK: Oh, sorry, my misunderstanding.

75. MR STRACHAN QC (DfT): The deficit – the hectareage is below, of 12.8 versus 42.2.

76. MR HENDRICK: Which is 3.321

77. MR STRACHAN QC (DfT): Exactly, and the biodiversity unit – metric calculation takes us into the no net loss calculations where there are assessments made of the value of a particular habitat and its loss, and those are factored up by judgements made as to what their worth, and then what is provided by way of...

78. MR HENDRICK: Yes, it's clear now, it's just I misinterpreted those figures at the time.

79. MS ROWE: Yeah, the top table's from using the Warwickshire County Council biodiversity metric which has been developed and used in numerous planning applications.

80. MS ENGLISH: That's HS2's own calculation...

81. MS ROWE: Sorry, beg your pardon, my apologies; that's the HS2 calculation of those figures. So that's from the HS2 recently released –

82. MR HENDRICK: Right.

83. MS ROWE: So, from both of those, it shows that there is a – there's definitely a loss and a gap in between the amounts of area or units, and the measures being proposed as compensatory measures. The Trust is very concerned about the loss of this irreplaceable ancient woodland in Warwickshire, and urges further work to address this issue. Next slide, please. So the compensation for loss of ancient woodland.

84. So, our asks on this are that HS2 set out clearly the rationale on which their professional judgment was based when deciding how much woodland creation or enhancement was appropriate to help compensate for the loss of ancient woodland. We ask that this rationale is based on current thinking and guidance from experts in the topic; for example, Natural England or the Woodland Trust, or both together.

85. We ask that having done that rationale, further compensatory measures are found in Warwickshire, Coventry and Solihull for the loss of the 12.8 hectares of ancient woodland, and we're very willing to discuss this further with HS2 as to how that could be implemented.

86. Finally, we ask for ancient woodland and other irreplaceable habitats be removed from the final biodiversity impact assessment calculation, in recognition that they will never be fully compensated for and that no net loss is not possible to achieve for these habitats, as we've discussed previously. Next slide, onto 10, our last one.

87. Picking up on the biodiversity metrics; HS2 has issued the no net loss calculations, published in January which we've had an initial assessment of. We are greatly concerned that despite the statement of aiming for no net loss, HS2's calculations currently show a 3% stated loss to the biodiversity, route-wide and there is a higher level of loss in the Warwickshire area of about 5%, so meaning that Warwickshire is taking a greater loss than other areas, certainly across the average of the route-wide.

88. At the present, there is no further statement of how that is going to be addressed; there must be a commitment to address this stated loss through additional measures. So, what we're asking for is that the metrics are independently reviewed to address the inconsistencies in there and so that we can understand how they've been arrived at. There are errors in the current data, and these could be addressed if they were independently reviewed.

89. The ecological technical group, which is again, route-wide, has produced an assessment and review of HS2 approach, which covers quite a lot of these issues, and I would recommend that as information for you, if that's appropriate; we can get that to you.

90. Secondly, we ask that HS2 reaches its objective of achieving no net loss to biodiversity. With the loss of the irreplaceable habitat such as ancient woodland dealt with separately from the metrics. And we would like that dealt with – the method agreed with an independent experts.

91. To achieve that no net loss, will require some contingency proposals and some reserve project sites to ensure that even if some of the currently proposed sites cannot be fulfilled, there are further options in order to fulfil no net loss, we are very concerned that there is going to be, still a gap, even after further work on it.

92. And thirdly, that HS2 continues to seek habitat creation outside the Bill limits in the most suitable locations for ecological benefit and I know that's been done in some areas. The Trust has identified some sites that maybe suitable and is willing to continue dialogue as appropriate to achieve best possible outcomes for biodiversity.

93. Finally, you'll be pleased to hear, Warwickshire Wildlife Trust supports the Wildlife Trust's national written submission to the Select Committee and would just like to stress two points from that, that the issues with the approach to calculation mean that the level of impact has been underestimated, and that's linked up with the calculation basis, and that indirect effects have not been considered as the calculation has only considered land within the Bill limits, and there are likely to be many adverse effects on the adjacent land which haven't been considered yet.

94. We do welcome HS2's including enhancement and management of woodlands, as we requested at our last petition in February 2015, so I'd like to acknowledge that. And we do acknowledge the work done so far by HS2 on the proposed mitigation and compensatory measures. However, our position is that much more remains to be done, even to meet no net loss. Thank you for your time and attention.

95. CHAIR: Thank you.

96. MR HENDRICK: Could I just ask; I don't know if you were present when Mr Barnes gave evidence earlier.

97. CHAIR: They were.

98. MS ROWE: Yes, we were.

99. MR HENDRICK: Clearly, your first bullet point asked for HS2 to outline their strategy, Mr Strachan did outline the strategy but it's not based obviously on this ratio that we talked about. What is your view on the strategy that they put forward?

100. MS ENGLISH: So they have a strategy for how they will find where the habitat will go, but as far as I can conclude, there is no strategy for how much woodland habitat creation or enhancement they will create for a lost woodland. So an ancient woodland that was two 2 hectares in the line, there is no strategy to decide how much compensatory planting should be provided.

101. MR HENDRICK: And what's your view of that?

102. MS ENGLISH: Our answer is either use a ratio approach, such as the 24:1 or 30:1 that the Woodland Trust has suggested, or use the biodiversity offsetting metrics to guide, based on valuing habitat, so that might work better if you want to enhance habitats, rather than just plant new ones.

103. CHAIR: Okay, right. Mr Strachan?

104. MR STRACHAN QC (DfT): Thank you. I think there are two issues; Marlowes Wood and the overall approach to no net loss. Can I deal with Marlowes Wood first? This is a good example of where the project adopted a precautionary approach in the initial design of the project and then has subsequently, as it said it would, done additional ecological surveys.

105. SIR PETER BOTTOMLEY: On 15632?

106. MR STRACHAN QC (DfT): Yes. Additional ecological surveys in order to inform the detailed design – sorry, not detailed design, the further design for the additional provisions, and you can see that for Marlowes Wood, where the scheme passes – a precautionary approach was adopted as to the presence of a core colony of

Barbastelle bats in Marlowes Wood, and subsequent surveys have been carried out in 2014, and, as you can see, there's a full report on this, contained – it's summarised on P15635.

107. SIR PETER BOTTOMLEY: Some of which we won't know until the 2014 survey?

108. MR STRACHAN QC (DfT): Exactly. And the further survey work to identify that there weren't Barbastelle present in the woodland, there are – there is an assemblage of other breeding bats in the woodland, and those have been identified; they are summarised in that. And in consequence, a revised strategy to dealing with this area of woodland has been adopted and, let me just show you...

109. SIR PETER BOTTOMLEY: Revised because there's more need or less need or – ?

110. MR STRACHAN QC (DfT): Different need.

111. SIR PETER BOTTOMLEY: Different need.

112. MR STRACHAN QC (DfT): Different need. And the revised strategy is to respond to this specific bat populations that exist. The essential difference in relation to Barbastelles is that they have longer, or more diverse commuting area, or foraging area which would have, based on our precautionary assessment, we put in the two bridges because they have a larger, far reaching foraging area.

113. The bat species which are actually present in the woodland don't have that same widespread foraging area, and so, let me just show you the original Bill scheme, P15634, in the Bill scheme, you can see, here's Marlowes Wood up here, in this area, where it's not shaded because it's existing, and there were two, obviously greened bridges for the footbridges and a large area of woodland planting proposed, to create one bigger area for woodland of this side, and connectivity proposed across the bridges on either side. As a result of the further survey work that's been done, the changes are no – if I show you on P15638, to respond to the species which are present, we now, in relation to Marlowes Wood...

114. SIR PETER BOTTOMLEY: This is option 3B is it?

115. MR STRACHAN QC (DfT): Exactly. In relation to Marlowes Wood, we've taken powers over the whole of the woodland so that it can be managed more effectively for the specific species, and there are many management measures that can be done for the existing species, but they include, for example, taking out non-native species like rhododendron, which may be present, and monitoring for the current bat species there to manage the woodland, in a way which enhances the habitat for them.

116. And you can see, one of the key changes is to connect up our planting, as it happens on an embankment, which stretches now all the way this way, across here, and we retain – in fact, we've widened the green bridge here, by, I think another three metres; it's now 21.5 metres, and we have taken out the planting here because there's no requirement for it with the additional connectivity and additional woodland planting over here...

117. SIR PETER BOTTOMLEY: There's no need for it, or you positively don't want it?

118. MR STRACHAN QC (DfT): Well I think – as I understand it, and I'll check, but I understood, it's better not to encourage the bats to fly over the railway in that location, so we provide more habitat for them, but connect it up to where they're currently focused, rather than encouraging them to cross the railway where they don't need to. And we've pulled back the planting; there is still – however, we are still retaining a flight line for connectivity alongside the railway, and there is no need to have a bat crossing point on that over bridge there, which is now just proposed as an over bridge. And so, all of that is a consequence of more detailed ecological survey work, and is actually a direct response, based on expert advice, as to what would actually improve the area.

119. And all I'm doing by that is summarising what you've got in much more detail; Sir Peter's already referred to it, but the report, technical note, set out at P156391, carries on two and three, you can see in that document, various options – sorry, would you go to slide two? Various options were considered as a result of the ecological survey; were do nothing, remove the vegetation from both bridges, remove it from one, or maintain hybrid Bill and add additional woodland planting. Those are discussed in more detail in the paper and option 3B, as Sir Peter's identified, on P15639 is the option

that was identified as the right one; remove one bridge and...

120. SIR PETER BOTTOMLEY: And this is on assessment of ecological need and benefit, rather than cost saving?

121. MR STRACHAN QC (DfT): Exactly. This is a direct response to the further ecological survey work we've discovered. And you can see – if you go over the page, this identifies – with this strategy, provided all of the things are done as we've identified, with early mitigation planting, robust construction management, and the improving ongoing management of the woodlands for which we're taking powers, we will identify no significant adverse effects on bats. And we also think that this provides the greatest potential for improving the connectivity between Marlowes Wood and Sixteen Acre Wood, which the petitioner was referring to. Because the consequence of us putting our planting on the east side, on the embankments, provides an even greater connectivity with the Sixteen Acre Wood.

122. So, this is very much an additional provision which is designed to reflect the more detailed information that's emerged through the process. And so, for all of those reasons which you can ask Mr Miller more about if you want, but the simple position is, this is our assessment, based on expert advice, as to what is the best solution for this area. We don't agree with the suggestions of either a green bridge – one green bridge in that location, or the need for two green bridges. To the contrary, we see it more advantageous to have one green bridge, as I've identified on M215, I think it is, and a simple footbridge, M214.

123. So, can I turn – as I say, the Committee has any questions, Mr Miller can answer them, but – can I turn to the issue of no net loss and the biodiversity calculation. We've explained, I think, throughout this process that the objective is for no net loss for the project and you've heard about that, I think already. We've been seeking to produce a calculation of the no net loss position. That is, inevitably, a calculation which has had to respond to the Bill as it's changed, and because there have been a number of changes, either as a result of the sorts of things I've just identified, or, as a result of Select Committee requests, or petitioner requests which have been agreed to, and what the no net loss calculation is based on, is the position up to AP4, which we think has the most significant changes to the Bill to allow one to do a no net loss calculation.

124. We published that in the beginning of this year, we already have received some comments, I think, from the Woodland Trust and we said we'd take on board their comments. There are some – indeed, there are some minor errors in the overall calculations, which we've identified, but which actually don't affect the figures, but in one or two of the sums, be we can still correct those, but the broad thrust of it is that so far as area habitat's concerned, we're identifying at the moment, a 3% no net loss deficit for the area of habitat.

125. And as is explained in that document, in the detailed design process, we hope to be able to improve on that, although 3% is getting very close to no net loss, in the event, but there is the opportunity to improve on it, and you've heard about various measures in detailed design, which can potentially result in less land being required; for example if ground conditions require, which all may affect the overall calculations.

126. But it is an ongoing process; it's out there for scrutiny already, because it's published, we're getting comments in on it, and therefore, no doubt, as the process continues, the detailed design goes forward, we can update the no net loss calculations. But it's a route-wide, as we've always said, it's a route-wide no net loss calculation, it's not specific to individual areas, and inevitably, in some areas, there will be different calculations which are applicable to others, but we haven't viewed it as a Warwickshire or a specific county-type based approach, it's an overall project assessment.

127. And it is important to note that the calculation metric itself was the subject of consultation with Natural England and Defra, so the methodology we've used, we have produced the methodology in consultation with both those bodies. The outcome – or the outturn of the assessments is what's been published in January and we'll no doubt receive comments on it.

128. I've already explained in response to the last petitioner on the ancient woodlands, that we don't adopt a ratio type approach of 30:1 or 24:1. We had published our ancient woodland – sorry, published is the wrong word; we provide to the Woodland Trust the ancient woodland strategy, and I've already shown that on screen, as to how our approach is to look at where there is loss, what we're doing in that area, by way of additional planting, or connectivity, and of course, translocation, recognising as we do, the limitations of seeking to replicate ancient woodland.

129. That's our overall approach, so we don't see the need for the additional undertakings or requests that have been sought by this petitioner when you look at everything we've done to date.

130. CHAIR: Okay, thank you.

131. MR HENDRICK: Can I ask if your strategy – what would you argue that your strategy is more about trying to enhance the quality of any land that's compensating for the loss, rather than quantity?

132. MR STRACHAN QC (DfT): Well I think it's a combination of both. There is, in many locations, actually an increased quantity of planting. I gave you a broad estimate.

133. MR HENDRICK: You gave us a net loss of 3% across – along the line.

134. MR STRACHAN QC (DfT): That's net loss, not in area, that's a net loss...

135. MR HENDRICK: Yes, across...

136. MR STRACHAN QC (DfT): ...in – when one factors it up for an assessment of the quality but we're hoping – as I say, the aspiration is to get it back to no net loss, but it's currently at about 3%, for areas. There's a different calculation for hedgerows – we're lower on hedgerows, I think it's like 20% at the moment, but that's very much something that detailed design, we hope, will be improved on, because we've made very conservative assumptions that where we have a site, you take all the hedgerows, as a precautionary assessment, in the detailed design. The practice will seek to retain as much of the hedgerows as can be done.

137. So, for the area calculation which you're focusing on, yes that's where we've got to at the moment but the – the individual areas, it's very much – and I think Mr Miller's explained this previously, it's very much a – it is a judgement, it's an ecological judgement which is made, as to what can be done best to that area, to link up, if possible with other areas and there's been some very constructive dialogue with landowners in part, other organisations, as to achieving that, in a way which also doesn't interfere with other activities in the area. So, we have benefited from that process with discussion, and we can see that continuing. But that's – I wouldn't like to say it's either quantity or quality, it's a combination of both which has gone into those judgements.

138. CHAIR: Okay, brief final comments?

139. MS ROWE: Yes, I'd like to come back on the bats issue, because there are unresolved elements there. What we were trying to get across was that, not that we're suggesting that you haven't the surveys, but the survey results, as we understand them, show that those bats are currently commuting across the line and what you're mitigating for does not mitigate for that. You've got routes shown on the south side of the line, on both sides of the line and the bats are using across the line.

140. The green bridge, whilst the width is very laudable at 20 – 21 metres, the width would sound satisfactory, but the location of it is the issue we have, in that the bats may not necessarily go to it, it's about 250 to 300 metres, I think, to the left, the west, and they're used to going straight north, basically, so they may not actually change their pattern.

141. MS ENGLISH: As far as I understand, it was never considered in your document about putting the green bridge in the right place in the first place; that doesn't seem to have been an option.

142. SIR PETER BOTTOMLEY: Have we heard about the position of the bridge? Why it's not where the petitioners recommend?

143. MR STRACHAN QC (DfT): Have I heard – sorry?

144. MS ENGLISH: So, why is the green bridge not on the current commuting line. Why is it 200 metres further north?

145. MR STRACHAN QC (DfT): If you can carry on making your comments, I'll find out.

146. SIR PETER BOTTOMLEY: We can wait, there's no difference. Or put it another way, can the position of the bridge be reconsidered?

147. MR STRACHAN QC (DfT): As I'm told, the location of the green bridge, the ones that we had in place, were designed to reflect best where the bats would commute with this line in place. Of course, we put our line in between and there's foraging generally in the area. So, we've identified where, as I understand it, where we consider

the best location is for these green bridges.

148. SIR PETER BOTTOMLEY: Would it make sense, chairman to – presuming that the bridge can be put in either position, given the powers of the Bill?

149. MR STRACHAN QC (DfT): I don't think that's right, actually.

150. SIR PETER BOTTOMLEY: Isn't it?

151. MR HENDRICK: Engineering problems.

152. MR STRACHAN QC (DfT): Well, we've got two footpaths as well, we've got the bridge – the line has to be crossed by the two footpaths, or new footpaths. If you're adding in a new structure, then we're potentially into a new provision.

153. SIR PETER BOTTOMLEY: I suspect we can't make a decision on this, I think if we heard that the petitioners and promoters can go on having discussion, there's an opportunity to review this in another place at another time, and if – one issue is, what's right for the bats. Secondly, there's a question of what the Bill powers would provide and whether alternatives are available there, and the third is if the bridge should be somewhere else for the bats, and if the Bill doesn't provide sufficient powers, people might give some thought as to how they can get round that, if it's appropriate.

154. MR STRACHAN QC (DfT): Well I'm very – we can continue discussions.

155. SIR PETER BOTTOMLEY: ...tell you what to do, or what the results should be, but how to approach it, I mean.

156. MR STRACHAN QC (DfT): All I was trying to identify and the report – I hope if the petitioners haven't read it, they will read it, but the report is based upon an ecological assessment by our experts, and that's why we are proposing what we...

157. MR HENDRICK: But is the location of the bridge based on the most convenient place for humans to cross the line, or has it been looked at from the perspective of the bats and that is the best place for them to cross?

158. MR STRACHAN QC (DfT): Well I suspect it's both. I imagine – as I say...

159. MR HENDRICK: Well, it would be coincidental if they were both in the same

location.

160. MR STRACHAN QC (DfT): We've got – there has to be crossings for people; there has to be, to a degree, crossings for bats, and in selecting where bats should cross, one seeks to provide the relevant habitat for them, either to minimise their crossing elsewhere, or to connect up with the best planting, and at the moment, what we're proposing, we see as the best outcome for the bats with the crossings that – which also provide for humans.

161. MR HENDRICK: Is the majority of the bat population resident in that area where you plan to put the green bridge?

162. MR STRACHAN QC (DfT): It's in Marlowes woodland and we extend, you recall, to the north, we're extending woodland planting along the embankment, so the idea is Marlowes Wood continues to be used, as will our new mitigation area, and that will connect further with Sixteen Acre Wood, which is to the east, north east, so you end up with a much larger connected area and that then – there is a bat crossing for the green bridge from that more westerly point. That's the strategy.

163. MR CLIFTON-BROWN: Mr Strachan, it always worries me when two sets of experts have different factual evidence. It does seem that the Wildlife Trust here is producing different factual evidence from your own experts, as to where the bats cross. Have you shared all your information with the Wildlife Trust and would it not be possible, to at least agree, where is the best place for the bats?

164. MR STRACHAN QC (DfT): I can't – it would be ideal to agree, I can't promise we always agree, because, as you heard, there's often dispute between those experts.

165. MR CLIFTON-BROWN: Why –?

166. MR STRACHAN QC (DfT): But in terms of sharing information, yes. I mean, I think that the information has been shared, or it's available, because it's published as part of our AP2 supplementary environmental statement. Our AP2 is accompanied by the Environmental Statement which has a range of technical appendices to it, and if they – if more information beyond that, which is already been published, is required, I'm sure they can ask us for it. But generally speaking our information is there and it's

underpinned by the Environmental Statement

167. CHAIR: Anyway, I expect conversations will continue and, as Sir Peter says, it could well come up again in the House of Lords, if there is a resolution, then presumably at some point, there may be a meeting of minds, or maybe not, we'll see.

168. MS ROWE: Yes. We welcome that opportunity, that's all I would say, if we can continue that discussion, that would be very, very welcome.

169. CHAIR: Okay, thank you very much to you both.

170. MS ROWE: Thank you.

171. CHAIR: Now we move on to the last petition today, which is AP2, the Berkshire, Buckinghamshire and Oxford Wildlife Trust, it's Matt Jackson. Welcome back.

Berkshire, Buckinghamshire and Oxford Wildlife Trust

172. MR JACKSON: Thank you very much. I hope to be fairly swift, I won't bother with introductions, I think everybody I've met or spoken to before, at any rate. I wonder if we could pop onto the second slide, please. I'm here really – there are two things I need to try and persuade you, and I focus really on this issue of the biodiversity metrics and how that's been applied. I'm here as an AP4 petitioner; we've not been able to cover this issue previously because, as Mr Strachan was explaining earlier, the calculations were only published in January, and they were published on an AP4 basis, so it's only post AP4 that we've been able to address this issue.

173. SIR PETER BOTTOMLEY: And essentially, you're going to suggest that they get under half way to meeting the need?

174. MR JACKSON: I am going to say something very like that, indeed. You've got it in one. So there are two points really I want to make; the first is that even if we allow HS2 to be judge and jury of their own approach, on their basis, there is still a significant gap which hasn't been addressed and Mr Strachan was explaining earlier, they hope to address that...

175. SIR PETER BOTTOMLEY: Is that BBO, or route-wide? It's moved on?

176. MR JACKSON: That's route-wide, yes. So even when they're doing their own assessment of no net loss, they fall short and we don't think it should be something that we hope will be dealt with in detailed design, we argued, as you know, last time, I was here about, that there should be a net gain as part of the project, that that's what we should be striving for, these sorts of large engineering projects where there are those sorts of possibilities. To fail to even achieve the no net loss, as identified by HS2 themselves, I think would be a significant failure. Equally, as you quite rightly suggest, we're not entirely happy with the approach that's being taken.

177. I just want to very briefly give a little bit of background about the approach to metrics in assessing no net loss, and in the last Government, in the last Parliament, Government decided that they wanted to look at using metrics in relation to biodiversity offsetting, where you have an impact, that can't be avoided or mitigated, thinking about where else you might provide it, and how do you top that up. They produced a green paper and they then instigated some pilots, six pilot projects across the country which use metrics derived by Defra. Natural England played a large part in developing those metrics, and all the pilot projects used that same basis for their metric approach.

178. One of the things I want to reinforce what was said by the Woodland Trust earlier, one of the things that was built into that approach, and indeed, what Jo Treweek was saying to you on Monday on behalf of HS2 Action Alliance, she was their witness who was talking about biodiversity metrics, one of the first principles that was built into metric approach, was don't include irreplaceable habitats in that, because you end up tying yourself up in knots in the same way.

179. I think Mr Strachan earlier referred to a 3% no net loss, or something like that, as a sort of outcome. That's not where we are at all. Where we are is that there is a loss of some irreplaceable habitats, which can't be replaced. They're gone, we can't do anything about that, we can compensate for it, we can do what we think is right to try and redress the balance, but there's a loss. That can't be dealt with.

180. We can then, look at the replaceable habitats, the impact on those, and consider how we measure whether we're achieving a reasonable balance in dealing with those. I'm not saying we shouldn't compensate for the irreplaceable habitat loss, I'm saying don't refer to it as no net loss, because you just end up tying yourself up in knots. You

essentially undermine the approach, and you make it quite easy for the decision maker to think that something is being balanced, but actually there isn't being an irreplaceable loss as part of the process. So that's my first plea, to reinforce what the Trust was saying to you earlier.

181. The second point about the loss that's been identified by HS2 – sorry, if we can go onto the next slide, please. Now, Mr Strachan said it's about a 3% loss in terms of their calculated units, and his explanation was very helpful of how the process works in terms of assessing, in terms of units rather than just hectares, considering the value of habitats, etc, but building in a calculation, was very helpful.

182. Now, that 3% loss, I think when Warwickshire County Council appeared, Mr Lewis, a week or two ago, he made the point to that in their scheme – they were one of the pilot schemes I was talking about earlier, they work on the basis that for each unit lost, the actual cost of dealing with those is somewhere in the region of six to £9,000. So, we're looking at that sort of range in terms of provision, if you were to pay somebody in the way we were talking about earlier, outside the bounds of the Bill, to do some works, be it either tree planting or, I was going to make the point for Mr Clifton-Brown who was asking the question about the conflict between the need for food generation on land.

183. One of the ways of dealing with biodiversity offsetting, of course, is to improve the management of existing assets. So, in which case, you're getting a biodiversity outcome, for instance bringing unmanaged woodland into management, would be a very sensible way of using those assets, which produces more biodiversity, without generating the sort of conflict you were talking about. That's one of the reasons we don't like this over constraining within the bounds of the Bill, when you're thinking about offsetting the impacts, so that was just to come back on the point you raised earlier.

184. So, the HS2 calculated deficit of 1,066 units is a significant deficit, and I don't like it being referred to as something they can just deal with at design stage; it needs to be addressed. Mr Strachan suggested that the hedgerow figure, 20%, which I think is the figure that's agreed on as the mismatch there, that's over 100 kilometres of hedgerow. Now, he portrayed it as being a precautionary approach they'd taken. In

fact, it was adjusted to take account of the fact that they thought they wouldn't lose all the hedgerows within the area, so that doesn't quite add up along the way, but even on, again, using HS2's own approach, somewhere, there's a missing 110 kilometres of hedgerow, so our appeal to you is to ask for it to be put right. It's nice and simple, that should be redressed somewhere; doesn't necessarily have to be within the bounds of the Bill, but provision should be made, if we are going to try and say that this is a project which is striving to achieve that no net loss, set out in the remit for HS2, then it's got to be addressed somewhere.

185. So, turning to the other point about the way the calculations are run up. My second point on that slide, I think is dealt with; Mr Strachan was saying that there's agreement about the fact that some of the calculations went a little bit array, and HS2, I think accept that we accept that in fact, the overall scheme of things, it doesn't make a huge amount of difference, I think it's some 20 something units that fall out of the process one way or another, so it doesn't make a big difference.

186. What is very different in HS2's approach to the habitat metrics that they've used, from the way that Defra, in conjunction with Natural England originally pulled them together, was that HS2 have, for very understandable reasons, tried to build in an estimate of the connectivity that's lost as part of the development of the railway. Unfortunately, the way they've applied it in developing the metrics, will reduce significantly, the deficit in the way that it's generated – I just want to take you through a couple of points to explain some of the background to that. So, if we can go onto the next slide.

187. What HS2 did was they built into their assessment of lost habitats, and approach to connectivity which is something Defra avoided doing in their pilot biodiversity metrics. And they've also applied connectivity slightly differently at the end of the process. I don't want to go into the detail of how they've done that because I think we wouldn't achieve very much in terms of getting there. What I want to get across to you is that I think that somebody independent should be looking at this. Funnily enough, I don't think a wildlife trust is the right people to review the approach either. Our view would be you should be pushing for the most biodiversity to come out the process, we're a wildlife trust, that's what we would do. Our concern is that neither should HS2 Limited be the people who derive that metric because their pressure is in the other direction;

entirely understandably, there should be an independent review and I'm going to explain some of the reasons why.

188. MR HENDRICK: I mean, I suggested earlier that perhaps Natural England should monitor and look at these things. Obviously, Mr Strachan gave a description of the body that he said would oversee and monitor this stuff; what's your view on that solution?

189. MR JACKSON: I think that would be the idea solution. Mr Strachan suggested that Natural England had been consulted as part of the development. My understanding of what happened with that process was that Natural England were approached to consider reviewing the approach that HS2 were taking. They responded to say that they didn't necessarily have the facilities to do that at the time, and that it then sort of fell out in the wash, that no actual review was undertaken. I met with Natural England yesterday to talk about the metrics and the approach and they assured me that they have, at no stage, actually reviewed the approach that's been taken by HS2 here. I think that's exactly what should happen.

190. MR HENDRICK: Again, if HS2 are judging, or marking their own homework, as far as these metrics and biodiversity is concerned, that's not necessarily a good thing, is it?

191. MR JACKSON: I agree with you entirely. Natural England are an obvious body to do that, there are also practitioners in the field, there are consultants that specialise in this area of work, they Warwickshire County Council have considerable experience, so Mr Lowe, who I think has appeared before you to talk about the metrics and the approach previously. He does this in his day to day work as a way of assessing the impact of development in Warwickshire. So, there are people out there who could do it and I would suggest a group of those, but Natural England, I agree with you entirely, should be a part of that process.

192. Otherwise, you have the danger of having two sets of Government derived metrics, the existing Defra approach and the HS2 approach, and on the basis of having run the calculations in the last couple of weeks since they came out, they give you very different answers, so I agree with you entirely that that needs to be addressed.

193. MR HENDRICK: One thing that is unavoidable, by the very nature of the fact

that you're building a railway line is the point you made of severance, and you're juxtaposing severance against connectivity. Are you saying there's a lot of emphasis on connectivity? For the sake of it, whereas you should be trying to, in some way, compensate for the severance?

194. MR JACKSON: I think – exactly, you need to do both, effectively. And I think one of our concerns about the overall approach that the promoters have taken with this scheme is that they've looked at connectivity along the line of the route, again, entirely understandable, they will be generating new connections along the line of the route, but to our mind, they've overemphasised that, and they've underemphasised that severance you were talking about and I'll come back to that in just a moment with an illustration.

195. So, in terms of connectivity, one of the concerns we have about the way the metric's been approached is that areas – the way the metric works is that you look at the distinctiveness of the habitat, how important it is, how much biodiversity is there in there, you look at the condition of it, how well maintained is it, and they've added in a connectivity measure, but it double counts in some instances, so the example I've got here is a grassland creation that's proposed on the edge of Aylesbury, so right in the heart of our patch. It's part of the promoter's scheme for ecological mitigation and they envisage creating some quite nice wet grassland in that area.

196. Now, the area prior, in the pre-calculation is given a very low connectivity score, because there's nothing terribly interesting there, so it's not connecting things up, from an ecological point of view. The area, post construction, after they've created the wet grassland, gets a high connectivity score, which seems instinctively right. But in fact, what it's doing is duplicating the increase in distinctiveness and condition that its generated elsewhere in the calculation, so it's a double accounting that's built into the process. That doesn't happen in the Defra metric, and we looked at the areas where this was calculated – the scores that were calculated for that are, using HS2's approach. They gave the area an increase of 500 of those units, come up with in the calculation, we ran the same approach that Defra used for their pilot methods, for exactly the same area, we came up with a deficit of 160 and so not only a movement, but a movement in completely the opposite direction.

197. So, real concerns about the way that's been provided. Could I have the next slide,

please?

198. Equally, as I say, there's been an emphasis of connectivity being generated along the line, because that's where a lot of the habitat they're proposing will be created, they're talking about an upgrade from arable land into something which will be very often, semi improved grassland that will have some biodiversity interest, not necessarily a lot, but a level of interest. And they appear to increase the connectivity score because things are connected to themselves, in a way, so you get these scores for connectivity along the length of the line. Can I have the next slide please?

199. Whereas, and this is the point I think you were making earlier, Mr Hendrick, when you look at severance, here you've got a feature which HS2 considered to have a very high connectivity score in their calculations beforehand, in fact, the green line, the dark green line across there, in the bottom half of that slide, despite the fact it has a railway running through it with a sort of sterile strip through the middle of it, it gets the same connectivity score at the end of it, but it's been severed in two. That happens repeatedly for features that are given a high score across the line in the calculations. So we see that there's been an upgrade in connectivity where they're creating habitat and then a lack of taking account of a loss of connectivity in the existing features as they go through.

200. So could we go onto the next slide, please? There are some other features where we think the approach to the calculations has been rather optimistic. One of those is in the time calculation that's built in it in terms of how long it will take to create habitats. For example, in grassland creation, HS2's figures are somewhere between five and 10 years for creating some interesting grassland. Now, again, the HS2 – the Defra metrics, the existing metrics that are out there, they reckon somewhere between 10 and 20 years for that. Now that's actually a hugely significant factor when you build it into the figures. It sounds like it's not very much difference, but if you're talking about a two or threefold increase in time, it makes a huge difference in terms of the way the metrics are calculated.

201. Equally, there is over-optimism in terms of the way that scores are calculated for the hedgerow calculation. It's interesting to note that, at the end of the process, HS2's assessment is that all the hedgerows that are created as part of their mitigation will get the highest possible score, so they're scored at a three, whereas their assessment of the

existing hedgerows that would be lost obviously are hugely different from that. They range from one to three, but of course, the managers of most of the hedgerows at the end of the process will be the existing managers of the hedgerows. They will be looking to the landowners who are there to be managing those new hedgerows, so we can't quite see why it's assumed that these hedgerows will all be beautifully looked after when the existing hedgerows aren't in the same state. So there appears to be an over-optimism built into that.

202. My final point, and again, I don't want – what I'm trying to achieve here is not to get across to you that all these individual defects need to be changed. My view is somebody independent should be looking at it, as we were discussing earlier. There's also an issue about indirect impacts which my colleagues from Warwickshire referred to at the end of their presentation, and if we can go onto the next slide, please, what they were saying was that the way HS2 have looked at the impact on biodiversity features, just because of the nature of the process they have used, is they limited that to the Bill limits.

203. So here we've got an example. This is just on the edge of Hertfordshire as the railway comes into my patch in Buckinghamshire, where the viaduct comes through Broadwater Lake, the Colne Valley, where it's coming through those areas, which are important for wintering wildfowl, and you can see there that the consideration of the impact of the route is limited simply to the width of the viaduct, effectively. No consideration of the impact on breeding wildfowl over the rest of the lake, and it's just the facet of the nature of the way the calculation has been run. Other practitioners, so the Warwickshire model, the Warwickshire pilot, what they did was issued a loss of condition in indirectly affected areas, so where you've got an example like this, they would look at the impact by suggesting the condition of the rest of the site has dropped.

204. That would get built into the calculation and some mitigation would come out of the end of the process built for that. So if we can have the final slide, please. So, going back to the point Sir Bottomley was making at the beginning, yes, indeed, I am going to suggest that there's a huge difference in terms of the way the calculation comes out if you use the established Defra approach or if you use HS2 Limited's approach, and we ran the calculation, and this is a haul route calculation, so not just...

205. SIR PETER BOTTOMLEY: And we read the word 'deficit' in your middle bullet point.

206. MR JACKSON: You can, and preconstruction would be – the value of the created habitat would be 9946, so there's a shortfall there... Yes, of 12,000 units, rather than 1000 units, I think the 1066 figure that HS2 generated themselves. Now, the Wildlife Trust, I have also cited Wildlife Trust, and asked them to come and address these points with you, but you felt, I think, the process was getting towards the end. So what they've done, and I hope it's arrived, is send you their comments, which cover a lot of the ground I have just been covering, in a report. I'm looking at Mr Caulfield in the vague hope that he's seen that. So we were asked to put those concerns in writing to you and that should have arrived with you on Monday.

207. MR STRACHAN QC (DfT): I don't we've been provided with that.

208. MR JACKSON: Then we will make sure that you get a copy. Sorry, I'm not quoting anything from there, but I reading from my evidence in the slides that I have already given you, so there's nothing there that you haven't had in the stuff we sent you previously, but I'll make sure you get a copy.

209. MR STRACHAN QC (DfT): What things you sent us previously?

210. MR JACKSON: The stuff I've just been running through now. The exhibits.

211. MR STRACHAN QC (DfT): That's all we've got, the nine pages. That's it.

212. MR JACKSON: Yes, this is essentially that in written form, but I will make sure you get a copy.

213. CHAIR: Okay.

214. SIR PETER BOTTOMLEY: I suspect that what we've heard is a pretty good summary of the essential points.

215. MR JACKSON: I'm finished.

216. CHAIR: Okay. Well, thank you very much for being brief and to the point. Mr Strachan?

217. MR STRACHAN QC (DfT): I'm going to, in light of what has just been said about this further document, I should preface this by saying, we're very happy to discuss with the Wildlife Trust points of concern they have about our no net loss calculations, we're not sure we've fully understood all of the concerns that are being expressed and at the moment there are some we obviously don't agree with, but I certainly think that we're happy to have these discussions. They'll be beneficial to understand those concerns from the Trust. If they want to communicate them to us, whether that's in the document that's been provided to the Committee or it could be supplemented, that's fine.

218. MR HENDRICK: Could you comment on the model and why it would – you know, the points about double counting, etcetera, because it seems to me that maybe you've developed a methodology that works for you, but actually doesn't necessarily help the environment at the same time.

219. MR STRACHAN QC (DfT): That may be the thrust of the criticism, but it's certainly not our understanding of how the model has been applied, the methodology has been applied, and indeed, as I indicated before, we developed our methodology before we applied it. We developed our methodology as explained in the methodology document, I think in 2013, in consultation with Natural England and Defra, and certainly, our understand is that both of those organisations thought it was a good idea to include the connectivity score of the type that we did by way of development of the model, and as I think has been recognised, this is all..

220. MR HENDRICK: Well, I think the connectivity was good. I think the point was made about taking into consideration severance.

221. MR STRACHAN QC (DfT): Yes, well, I think I'll ask Mr Miller to answer any questions you've got about that, but as I said, I just want to preface it by saying that it sounds to me that a lot of these points are ones which would benefit from further discussion, because of course what the no net loss document is, it's intended to provide an overview of how the project is doing against the objective of no net loss, and of course, ultimately, it will have to take account of the project as finally designed, but could I just ask Mr Miller to address you? Mr Miller, can you first of all – perhaps you just confirm what I just said, that the Trust are raising issues about calculations that are

shown in our documents, and I have indicated we're happy to understand those a bit better from – discuss them...

222. MR MILLER: Yes, that's right.

223. MR STRACHAN QC (DfT): Is that right, are you content with that?

224. MR MILLER: Yeah, the report is in an interim form. We agreed some months back that we would produce the report before the end of the Commons session. We have been playing catch-up with all of the additional provisions and so forth as they have been coming forward, so it's been quite an exercise to get to grips with, and it's probably no surprise there are probably a few areas in there. We've looked at some of them, and we're agreed on some of that. I think what you're talking about is an issue of method, and I think that we can sit down with you and talk that through with Defra and National England. We're quite happy about that.

225. MR HENDRICK: I think we're all in agreement about that. I just wanted you to answer some specific points raised by the Petitioner on things like double counting, the degree to which you've taken severance seriously, you know, those issues that he raised.

226. MR MILLER: Well, I certainly believe we have taken the connectivity seriously. When we produced the methodology, it was at a time when I think, as we've identified, Defra were out on a number of pilot schemes, so we were in a place where we had to come up with a methodology suitable for a major railway project. So that was different from the pilot schemes which were looking at much more individual development based housing estates and that sort of thing, so we have adapted the methodology suitable for a railway. Now, people can criticise for that, but we took it on the chin and we said, no, we're trying to get this right so it's right for a railway and railway infrastructure, so we included connectivity in the calculation, the calculation methodology.

227. I think that reflects generally the approach to environmental impact assessment for ecology, and I think you've heard from Warwickshire and other authorities and other wildlife trusts and other interested bodies about connectivity, and there a wide range of methods that people have put forward to say how we should go about doing this sort of thing. So we have incorporated that. Whether we've got it absolutely right, I'm not sure, but I don't think we are double counting. I've just been talking it through with my

ecologist, and there may be an error in calculation. That's a possibility, but we've put connectivity in. We think that's good practice. We talked that through with Defra.

228. We did take all of this before the Environmental Audit Committee when they audited us a year or so back, and we explained the position that the no net loss hadn't calculated – this sort of thing hadn't been tackled on a high speed rail project or infrastructure project ever in the UK, so we are at the leading edge. So I think what I'm trying to get across to you is, in taking that on in a leading edge kind of way, that we are also willing to have an open dialogue about that to see whether we've actually got it right or not.

229. MR HENDRICK: Can you comment on the three bullet points on the screen?

230. MR MILLER: Well, the first bullet point is the deficit from our calculation using our methodology as it's been published.

231. MR STRACHAN QC (DfT): That's the approximately 3% deficit?

232. MR MILLER: Yeah, that's right.

233. MR STRACHAN QC (DfT): I think that's currently the deficit.

234. MR MILLER: So it was 3% route wide. There is a bit of a gain from a water habitat perspective. So if you start looking at figures, I'm breaking them down, and as Matt has indicated, there is a deficit in terms of hedgerows. Now, the sort of thoughts that are going through our minds at the moment about how to redress the situation – and some of it has actually come out in these conversations over the last couple of days – is whether you can further preclude construction around sites of woodland, preclude construction around hedgerows, because I think we're taking into account a lot of hedgerow loss which simply won't come about because of the practices that we've got in our code of construction.

235. So when we move and look at the interim report in more detail, we were looking at it to see whether we can shrink the overall footprint, the overall effect, on the natural environment as we go through the detailed design, and I think you've heard me about the environmental requirements, which point to us doing that as we move from an outlined planning kind of a permission that we're seeking in this environment through to

a detailed planning situation which we're going to get through the planning regime of the Bill, schedule 16 issues and that sort of thing.

236. MR STRACHAN QC (DfT): On the second bullet point, I suspect that this is the area where future discussion was going to be of benefit, because there's clearly a difference in view. If I can give the example that the Petitioner gave, A2100(4), the Committee will recall this is actually currently a golf course.

237. MR MILLER: Yes.

238. MR STRACHAN QC (DfT): And under our bill proposals it becomes a habitat area.

239. MR MILLER: Yeah.

240. MR STRACHAN QC (DfT): So we have given it a consequential score to reflect that. It appears the Trust don't agree with our score and thinks a different score might be achieved. At the moment, we don't agree with that. We don't necessarily understand it. It's clearly something, if there is a different of view, that might benefit from further discussion.

241. MR JACKSON: Our point there is not that you shouldn't increase the score. What I haven't shown you is the change in score for distinctiveness and condition, which have also increased, and then you've added on top of that an increase for connectivity. The land is no more connected. It's where it was before. You're not moving it anywhere. You've given it – you've upgraded it for distinctiveness. You've upgraded it for condition and then, on top of that, you're claiming you're upgrading it for connectivity.

242. MR MILLER: I think what is being shown on these slides are a number of areas highlighting where people have got some divergence of view. When I look at these sorts of slides, I think to myself, well, actually, is that an exemplar that we can tackle and that we actually bring forward as pretty much a live example for a high speed railway, and test it out a little bit and see whether we have actually got it right, and I think if that's what the Wildlife Trust is looking for, I think that's we are anticipating with the further conversation on this interim report with Defra and Natural England, and

I'm happy to take that forward on that basis. Now, it may be that you are right. It may be that everyone is satisfied with our approach. I don't know what the answer to that is, but let's have a look at it.

243. There are number of other issues which are going on as a result of this committee's proceedings. We've talked about the various conflicts we've had with agricultural aspects along the line of the route, and we are starting to think and are considering areas outside of the railway corridor where it is important to ensure that those people remain in business, and I think you've seen not only biodiversity examples coming forward, but we have removed spoil on various farms. That enables them to farm and that sort of thing. So there are other issues which are in play at the moment. I think that has got to be further considered. The other thing coming out of this committee is, and I take the Colne Valley as an example, I think we've got...

244. MR STRACHAN QC (DfT): I think this is slide A2100(8), where the concern was, we have limited our assessment of indirect impacts. That's actually a slide relating to the Colne Valley, for which there is now an assurance for Colne Valley Regional Park with a budget to...

245. MR MILLER: I remind the Committee that, just a little bit further up here, we have ancient woodland and a site of special scientific interest, and through these proceedings we have looked at that once again, reduced the overall area of that land take. I think that shows that we are prepared and we are willing to take this on. That's a good example of how mostly the detailed design go, so the detailed conversation needs to take place with everyone who knows about these sites, but further, here we have the Colne Valley, where we've been through the big debate about whether there's a tunnel or whether it stays on the viaduct, and we've been asked to respond to the valley overall, and we've done that.

246. There is a package of measures that have been put together, in outline with funds, to see how far that can then be taken up by local communities responding effectively about the wider natural environmental landscape treatment, beyond the railway environment. That provides a lot of choice to people, and I think that that will then help expand and improve the result for biodiversity.

247. MR STRACHAN QC (DfT): To be clear, those sorts of prospective

improvements aren't included in the no net loss calculations to date. So this is simply looking at what is in the Bill or identified as costing...

248. MR JACKSON: Exactly, so it doesn't take account of any of the improvements that might come out of the Colne Valley Park.

249. MR STRACHAN QC (DfT): Which would improve the no-net-loss design. That's the point.

250. MR JACKSON: But from a position which is much worse than the one shown in your existing calculation, because that doesn't include any indirect...

251. MR STRACHAN QC (DfT): I think that's where the divergence of view is.

252. MR MILLER: We could probably argue the points. I think where I'd like to get to, Matt, is think that we've got to the point where we are moving towards the individual sort of site proposition. In one way, it's great to talk about all of these metrics and whatever, and outcomes, but we've actually got to get to the point of agreeing about what the final outcome does actually look like when it's detailed, and you mentioned about the quality of the landform at the end of this process, and yes, that very much is in our minds. We want a quality outcome so that we can support wildlife along the line of the route. We do think that it would improve connectivity along the line of the route, but everything that we have done by way of green bridges, tunnels and so forth, all of that is pointing towards that wider connectivity being addressed effectively as a result of our plans.

253. MR STRACHAN QC (DfT): I haven't got any more further questions.

254. MR HENDRICK: I have got one final question before the Petitioner comes in. Clearly, you said you consulted Defra. You consulted Natural England in your model, the methodology that you've used. How come then, if we can just go back to those three bullet points, there's such a discrepancy between Defra's figure that if you would have used up 9946 units – sorry, on AP4, 22,467, which Defra have got as a...

255. MR STRACHAN QC (DfT): That's the point of divergence, as I understand. We don't actually know how the Petitioners get to their calculations. That's...

256. MR MILLER: I suspect that there is this issue of the ancient woodland is in there. I think Matt has indicated that there are issues around connectivity and so forth, and that's drawing a different outcome...

257. CHAIR: Okay. Sir Peter?

258. SIR PETER BOTTOMLEY: I'm a member of parliament, so I'm used to offering to be helpful to everybody. I don't think we're going to fight this out – I'm not sure it's a fight anyway, but I don't think we're going to be able to fight it out ourselves in the time that remains to us. It might be sensible first for the Promoters to have the time to consider what is in the detailed papers and the transcript of today's hearing and the previous ones from some of the other people equivalent to you. The second thing, whether for this phase 1 or for other phases, for the Promoters and representatives of the Wildlife Trust and the ecology people to come together and say whether they can agree on someone who can look at the issues of practice, as to whether the areas could be brought together or the differences are clearly identified and give advice, not arbitrate, but give advice on how would be sensible way forward.

259. So I think if you can agree on a person to do that, it would be a helpful way of making progress, and I think that we understand, first of all, there is, on the face of it, a case that some things are irreplaceable, and other things which can have an estimate made of them. The Promoters can say how they are meeting that. I think we have also heard, and it's quite convincing, that things aren't as bad as they would appear to be because the Promoters are trying as they go through, first of all, to make changes and secondly to what else can be done which would help them to meet their aim on their terms of having no net loss if that can be avoided. I think, in practical terms, the first part of what you've put forward to us in this petition is one which I suspect that you and the Promoters ought to be able to find someone, who with general acceptance, could look at what appear to be differences and give a view, again, which will be...

260. MR JACKSON: Yes, our suggestions will either be Natural England or Defra or the ecology...

261. SIR PETER BOTTOMLEY: But we'd reach some agreement, I suspect.

262. MR JACKSON: Or whatever, and it sounded like Mr Miller was suggesting that

he was very open to the idea of Natural England and...

263. MR MILLER: Yeah, we're more than happy to sort that out.

264. CHAIR: Do you have any questions or would you just want to do your summary, since you...?

265. MR JACKSON: I can do my summary, which is essentially that I'm very pleased to hear that Mr Miller is open to the suggestion of a, as you say, somebody taking an external view. In fact, the EAC's recommendation was that there should be an independent review taken of the approach that has been looked at, so it would be in line with that, and I just want to say, one of the reasons we weren't able to address this point when the method was originally published is that part of the method involved taking professional judgment and applying it to the connectivity score, so until we can see how that had been done, we weren't able to work out what the implications of it were in terms of the actual outcome and the calculation, which is why we ended up where we are. Unfortunately, the calculations were only published on 11 January, I think, so we've had very little time to react to it.

266. CHAIR: Okay. Thank you very much indeed for your contribution. We now have Buckinghamshire.

Buckinghamshire County Council

267. SIR PETER BOTTOMLEY: I thought we said goodbye to you.

268. CHAIR: Mr Lewis, we didn't expect this bonus presentation.

269. MR LEWIS: Discussions with the county council, and I'm here today just for the county council, I ought to make that absolutely clear, not for Aylesbury Vale District Council or anyone else. These discussions, as you know, when we last appeared on the 20th I think it was, were progressed in the corridor. That resulted in a letter of assurance, and as is the nature of these things, it's an iterative process. The council had a number of problems with the letter which was received, and there's been a lot of toing and froing since and now there's been a lot of toing of froing in the corridor yet again, and we've reduced the number of points that we might have brought to your attention from something like 10 down to one. It's a small point, if you don't mind. It's to do with

Calvert. Now, in the open letter of assurance which we have from the Promoters on this, we have...

270. SIR PETER BOTTOMLEY: Was this transferred or was this the East West –?

271. MR LEWIS: This is the overall..

272. CHAIR: Everything.

273. MR LEWIS: Overall impact on Calvert and cumulative impact on Calvert. In the letter, we're pleased to say the Promoter said they support the county council on their aspiration for a coherent integrated approach in respect of environmental mitigation and minimisation disruption to the local community, and as one of the assurances which is given in this particular paragraph, paragraph 11 of Mr Hargreaves' letter, I think of yesterday, the latest version, there is a commitment on behalf of the Secretary of State recognising the particular situation at this location with introduction of major infrastructure, etcetera, etcetera, to pay a sum of – or make available a sum of £1 million to support further local environmental mitigation, which is over and beyond – we are prepared to admit that – that proposed in environmental statements.

274. So we're very, very grateful for the £1 million. Let that be said, and it's a very substantial sum of money. The point we have, which you might find a little parochial, but is extremely important for the council is this: there will be a cost to the council, in respect of their administration of this scheme, either to the county council or possibly to the Aylesbury Vale District Council, and what we don't want to happen is for those costs either to be borne by the councils or for those costs to eat into the £1 million, and so the simple request which we make is that, in addition to the £1 million, for reasonable costs of either the county council or the district council in administrating the fund, should be kept separate. There is a precedent for this. Again, I think it's an open assurance on the Colne Valley, where there is a similar arrangement, where there is a sum of money going into the additional mitigation for the Colne Valley and a separate sum of money for local authorities' administration costs. We think that this is a similar situation here, and we would ask that the Promoters – our suggestion are given to the Promoters.

275. MR HENDRICK: A £1 million offer was made, whether administration costs

would be part of that or not?

276. MR LEWIS: It was the letter which followed the discussions in the corridor, which I wasn't part of, because I was probably in here at the time. The letter which followed didn't make it clear. It just says, 'We are making available £1 million'. I'll read it to you again. 'The sum of £1 million to support further local environmental mitigation, which is over and beyond that proposed in the ES', etcetera, etcetera. So it wasn't clear. We want it made clear.

277. SIR PETER BOTTOMLEY: Unless Mr Mould is planning to say yes, they might have, in the corridor, had in mind corridor giving you £900,000 towards costs.

278. MR LEWIS: I'm not sure we'd appreciate that.

279. MR MOULD QC (DfT): Mr Mould isn't planning to say yes, I'm afraid, which is why we're here. Have you finished?

280. MR LEWIS: I have.

281. MR MOULD QC (DfT): What I perhaps ought to just point out, I'm sure it was a slip of the tongue on the part of Mr Lewis, that the sum is to be made under the assurance which is, it is true, was given to Buckinghamshire County Council as well as to Aylesbury Vale. The sum of £1 million is to be made available to Aylesbury Vale District Council to support further local environmental administration, and so the administration of that sum will call on Aylesbury Vale rather than Buckinghamshire.

282. SIR PETER BOTTOMLEY: Okay. Let's rewind. Let's pretend Mr Lewis wasn't just from Buckinghamshire, he was from Aylesbury Vale as well.

283. MR MOULD: He said he wasn't, I think.

284. MR LEWIS: I'm pretending.

285. MR MOULD QC (DfT): Yes, but that point needs to be – just to clarify the position, the sum of £1 million is a sum of money that is being paid over for environmental mitigation. How that sum is administered, what is done with it is a matter for the recipient local authority. I heard, it was mentioned outside that the justification for paying extra over administrative costs might be justified on the basis of

the new instruction, and it seemed to me that if that is – if this is in the nature of a burden, it's the sort of burden I'd be delighted to bear, to be paid £1 million, but being serious, the reality is, £1 million is being made available and it is reasonable that the recipient local authority should be responsible for the distribution of that money and for the administration of it.

286. It was on that basis that the money that was put forward, and the Secretary of State is not minded to add further to that sum, which of course takes its place alongside a wide range of assurances that have been offered to both Buckinghamshire County Council, Aylesbury Vale District Council and other constituent councils within Buckinghamshire, and that is the Promoter's position.

287. CHAIR: Okay. Can I say three things? The third one is a question but, first of all, congratulations on reaching agreement on so many of the other issues. That's very welcome, good news all round. Secondly, roughly what sort of sum did people have in mind? Whilst you are discussing that, Mr Mould, are there any other examples up and down the line of other local authorities asking for the same thing?

288. MR MOULD QC (DfT): Not individual councils. The example that Mr Lewis gave was of those bodies where we have agreed to constitute a panel which involves a number of different authorities, and you can see there that the need for some sort of contribution extra over to administrative costs is much more reasoned, is much more sensible, but here it's a single recipient and we think that they should administer the sum from the sum that is paid to them, or however else they wish to do it.

289. MR LEWIS: I'm getting whispers that one person would need to administer it for the period...

290. CHAIR: Administer it?

291. MR LEWIS: So how much that costs depends, I suppose, on the level of the...

292. SIR PETER BOTTOMLEY: Can I make a suggestion? I just want to show I'm up to date and I do actually watch the news, and having seen what's happened in the Iowa Caucuses, if you took that as, say, a quarter of a person for a year, let's say £10,000, divide it into two, call that £5000 and toss, and if Aylesbury Vale or

Buckinghamshire win, they get the £5000, and if they lose they get £5000 taken off the million. I have a coin and it has a head on it.

293. CHAIR: Okay.

294. MR LEWIS: A novel approach. I'm not sure...

295. MR MOULD QC (DfT): I think the Committee has seized the point.

296. MR LEWIS: Just finally, you know, I don't think I need to tell members of the Committee that 'cash-strapped' is a word which can probably be used to describe the local authorities in relation to this, and on the AVDC being the person who received the money, and me being instructed by BCC today, seriously, I mean this is something in which Buckinghamshire County Council do take of very serious interest, actually, so in a sense, it really doesn't matter who gets the money. The county are very keen to look after their local community and they want to make sure that the local authority gets as much of this money as they possibly can, and I think, with that, that's it, and I just wanted to say thanks for all the...

297. MR CLIFTON-BROWN: Can I just ask one question?

298. MR LEWIS: Yes.

299. MR CLIFTON-BROWN: The very last paragraph, I see that that has been impacted consideration of the haul road.

300. MR LEWIS: Yes.

301. MR CLIFTON-BROWN: I'm a little bit surprised to see in there that, if Buckinghamshire deems an alternative is desirable, why should Buckinghamshire have to meet the additional costs of that?

302. MR LEWIS: I think if I can...

303. CHAIR: He's representing Buckinghamshire.

304. MR CLIFTON-BROWN: Yes, but...

305. MR LEWIS: I am.

306. MR CLIFTON-BROWN: That's why this was agreed.

307. MR LEWIS: I may have to have some help with me on this, but I think the position is, on the haul road, that the assurance in broad terms says that HS2 are willing to fund it, subject to certain conditions, one of those conditions being that the county has to demonstrate that the haul road doesn't or won't cost any more than the Promoter's existing proposals for the haul road. That's one of the points which we actually discussed outside, and I think – and, you know, the council accepts the position. I think, if in the calculation of the cost of the alternative county council haul road, we got to the position where it seemed that that would cost more than the Promoter's current proposal, then a decision would have to be taken by the county as to whether or not to pay for the additional over costs, and obviously I can't say now and neither can they whether – what decision they would take under those circumstances.

308. They hope that they don't have to take that decision, but that's the essence of the agreement that's been reached on this matter. So it may well be that it doesn't go ahead. I should say that and be open about it. If it we get to the position where it's going to cost more, because the council, as I just mentioned, doesn't really have that amount of spare cash hanging around.

309. MR CLIFTON-BROWN: My concern about this would be that if the county councils consider it's desirable but actually decide not to implement it on the grounds of cost, the residents might be disadvantaged.

310. MR LEWIS: They may well be disadvantaged and disappointed, yes.

311. CHAIR: But we're not going to discuss the agreement which was reached. We have one outstanding issue, one that we'll opine on at some point maybe tomorrow.

312. MR LEWIS: Thank you very much, and can I just say, because I won't be here tomorrow, thank you very much to all of you for all of your patience over the last couple of years when I've been before you, and I wish you well and thank you to Neil as well for all his help.

313. SIR PETER BOTTOMLEY: You aren't the only person during this to make this said, but you are one of the people who I think others could regard as the model of how

to present issues.

314. MR LEWIS: Thank you very much. That's very kind.

315. CHAIR: Okay. Order, order. Thank you very much. You're going to withdraw from the room and we'll consider some issues.