

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?