Proof of Evidence on Nature Conservation & Ecology pertaining to Ancient Woodland and Ancient Trees affected by HS2 Phase 1

By

Richard Barnes, CBiol, MRSB, MCIEEM

On behalf of the Woodland Trust

Contents

The full evidence

Appendices

1. Summary of Evidence

1.1. Ancient Woodland is woodland that has existed since at least 1600AD. Some ancient woods may even link back to the original woodland that covered the UK around 10,000 years ago, after the last Ice Age.

1.2. Because they have developed over such long timescales, ancient woods have unique features such as relatively undisturbed soils and communities of plants and animals that depend on the stable conditions ancient woodland provides, some of which are rare and vulnerable.

1.3. Ancient woodland, as the product of centuries of habitat continuity and undisturbed soils, is an irreplaceable resource. As such, its loss cannot be compensated for by creating new woodland – an irreplaceable habitat cannot, by definition be replaced.

1.4. A nationally important project promoted by Government such as HS2 should be adopting best practice in relation to its impacts on ancient woodland. To achieve best practice there should be no net loss in biodiversity terms. Any project that adversely affects ancient woodland results in a net loss as ancient woodland is irreplaceable and no amount of translocation or planting can mitigate or compensate for that loss.

1.5. The Promoter set itself the aim of no net loss to biodiversity.

1.6. Because ancient woodland is irreplaceable the only means by which this objective could be achieved is by avoiding any loss to ancient woodland whatsoever.

1.7. HS2 results in direct adverse impact on 34 ancient woodlands amounting to over 30ha[1] of loss. That area of land equivalent to 49 football pitches.

1.8. A further 29 ancient woodlands adjacent to the route will be indirectly affected by HS2.

1.9. The Promoter asserts that HS2 causes no net loss to biodiversity. However, in order to establish this it relies upon a metric which allows for the loss of ancient woodland on condition that there is replacement planting.

1.10. The metric is flawed since it condones the loss of irreplaceable habit – by definition the loss of a habitat that is irreplaceable cannot be mitigated or compensated through further planting or translocation.

1.11. The Promoter has not achieved the objective of no net loss to biodiversity[2]; since it has not avoided loss of an irreplaceable habitat this objective cannot be achieved by the Scheme.

[1] HS2 Ltd. stated in AP4 that there is a loss of 30.5ha of ancient woodland in total, and in the Ancient Woodland Strategy (AWS) the figure given is 30.89ha However, HS2 Ltd. has confused the issue by stating in the No Net Loss in Biodiversity calculation that the loss of ancient woodland is 14ha. No explanation is provided to show how this figure was calculated. Therefore, in the absence of any clear figures from the Promoter, I refer to ancient woodland loss as "over 30ha" throughout my evidence.

[2] See HS2 No Net Loss in Biodiversity Calculation, Executive Summary – there is "*approximately a 3% reduction in the number of biodiversity units post-construction*"
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/490928/No_net_loss_in_biodiversity_calculation_-_methodology_and_results_v2.pdf

1.12. HS2 is not an example of best practice – far from it. The approach taken towards ancient woodland falls woefully short of best practice.

1.13. The Committee must ensure that the approach adopted by the Promoter is not held up as an example of an appropriate approach for future projects by stating that it does not accept that the Promoter has followed best practice.

2. Ancient woodland is one of the country's richest terrestrial wildlife habitats, home to 256 species of conservation concern as listed on the UK Biodiversity Action Plan. The varied climate and geology of the UK, combined with varied management by man, has led to a diversity of ancient woodland forms and species associated with them. The long timeframes involved in the formation of these woodland habitats means that they can never be recreated, making them one of the few landscapes in the UK that are regarded as irreplaceable. Newly planted woods do not provide suitable habitat for many of these species, so without ancient woodland these species will be lost. Furthermore, ancient woodland also holds a unique, immeasurable value for all those who visit or have an association with it, a feature of ancient woodland that is difficult to quantify and so is readily ignored. Natural England (NE) clearly states "the irreplaceable nature of ancient woodland and veteran trees means that loss or damage cannot simply be rectified by mitigation and compensation measures."[3]

3. Phase 1 of the proposed HS2 route between London and Birmingham will directly affect 34[4] ancient woodlands by causing the loss of over 30 hectares of woodland. It will indirectly affect a further 29 ancient woodlands by causing deterioration in woodland quality due to increases in noise levels, changes to lighting, dust and severance of the woodland from their historic landscapes. In summary, The Trust considers that the following are the unacceptable impacts of Phase 1 of HS2 on ancient woodland along the route;

3.1. Loss of over 30ha of irreplaceable and nationally important habitat.
3.2. Severance of ancient woodland from its historic landscape e.g. John's Gorse (CFA 22).
3.3. Large woods being split into two smaller woods increasing the length of woodland edge. This is a habitat readily exploited by generalist species which can then outcompete specialist woodland species leading to a deterioration in the quality of the wood e.g. Broadwells Wood (CFA 18).
3.4. Loss of landscape connectivity between woods either side of the proposed route as HS2 will effectively form an impenetrable barrier for many species e.g. at Sheephouse and Decoypond woods (CFA12 &13).
3.5. Woods being reduced so much in size that they can no longer support the diversity of species currently present e.g. the unnamed woods adjacent to Decoypond Wood (CFA 12).
3.6. Increase in noise in areas that have historically been quiet.
3.7. Increase in artificial lighting which can have impacts on birds and bats breeding and feeding.
3.8. Loss and damage of ancient woodland due to temporary construction activity, such as placement of haul routes and access tracks e.g. at Pinnocks Wood and Broadwells Wood (CFA 6 and 18).

[3] Natural England's *Standing Advice for Ancient Woodland and Veteran Trees* (April 2014) http://www.forestry.gov.uk/66B7FE44-6856-4D93-A1B9-C5667DABD08C/FinalDownload/DownloadId-8A3404FBD916665B84B2D248245E86AB/66B7FE44-6856-4D93-A1B9-C5667DABD08C/pdf/AncientWoodsSA_v7FINALPUBLISHED14Apr3.pdf/$FILE/AncientWoodsSA_v7FINALPUBLISHED14Apr3.pdf

[4] See Footnote 1 above. Table1 in the appendix lists the woods the Woodland Trust considers to be directly affected by Phase 1 of HS2. At the time of writing HS2 Ltd. did not agree with the Trust's assessment that Pinnocks Wood and Long Itchington Wood are directly affected by the scheme. Hence HS2 Ltd. states that there are 32 woods directly affected. HS2 Ltd. proposes to move a haul route through Pinnocks Wood, an ancient woodland on the ancient woodland inventory. The Trust considers Long Itchington to be directly affected because of the proximity of the tunnel portal and the works that will be needed within the wood to enable the construction of the tunnel which are not covered by the Hybrid Bill.

4. The loss of irreplaceable habitat means that it is not possible for Phase 1 of the HS2 project to achieve its stated aim of no net loss of biodiversity and the newly published No Net Loss in Biodiversity Calculation clearly shows that Phase 1 does not achieve this[5]. The Trust considers that a large publically-funded flagship infrastructure project such as HS2 should be world-class in terms of delivering environmental outcomes. However, there are many examples in the proposed design where this is clearly not the case. Irreplaceable habitat is lost, sometimes even to merely temporary works. Route options that have been chosen with too much emphasis on economic rather than environmental outcomes.

5. HS2 Ltd. should have sought to avoid harm to ancient woodland. To do so required a careful appraisal of woodland in order to assess whether it was ancient. In this way impacts upon ancient woodland could have been avoided by adopting alternative routes or proposals. Sadly, HS2's assessment of woodland was significantly deficient. Woodland was not identified as ancient when it should have been and the scheme was not designed to avoid it, resulting in significant loss to this irreplaceable habitat. Further, the Trust has identified many examples of works which could be moved to save ancient woodland; and where alternative engineering solutions, such as tunnels, can further reduce the impact of Phase 1 of HS2 on ancient woodland. For example, both South Cubbington Wood and Broadwells Wood could have been saved if tunnels under them had not been discounted.

6. The Trust believes that the amount of planting proposed by HS2 Ltd to compensate for the loss of ancient woodland is insufficient, given that the habitat to be lost is irreplaceable. This planting appears to have been approached as an afterthought – planting is only proposed within the Bill limits but the limits were not drawn in order to accommodate compensation planting. Under the Environmental Statement (ES) the Promoter was proposing to plant 280ha of new woodland[6] as compensation for the loss of woodland. It was not clear from the ES if ancient woodland to be lost is included in this figure. The Promoter has never released a total figure specifically relating to ancient woodland compensation despite the Trust requesting this repeatedly. Therefore, the Trust has had to make assumptions based on the limited amount of information available. The Trust would expect to see a minimum planting ratio of 30:1, equating to over 900ha of compensation planting, to take place for the loss of ancient woodland alone.

7. In addition to the new woodland planting, HS2 Ltd is proposing to translocate ancient woodland soils to ecological mitigation areas and plant these with new trees. Translocation is a relatively new technique, and the Trust has reviewed over 20 examples of ancient woodland translocation, including those undertaken as part of the Channel Tunnel Rail Link (CTRL), and has found no evidence that this is a process that provides a better quality habitat than planting of new woodland on non-translocated soils[7]. It most certainly does not recreate ancient woodland, as has been implied by HS2 at Committee[8]. Furthermore, it is of concern that the draft Ancient Woodland Strategy (draft AWS) for CFA 7 to 15 states that the "selection of translocation and compensation areas was based on parameters published by The Woodland Trust". The report referred to is the review discussed above (Ryan, 2013). This was never intended for use as a methodology of translocation and in fact the report concludes that there is no evidence to prove that translocation can recreate ancient woodland.

[5] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/490928/No_net_loss_in_biodiversity_calculation_-_methodology_and_results_v2.pdf
[6] Para. 8.1.28, Volume 3, Environmental Statement, November 2013
[7] Translocation and Ancient Woodland, The Woodland Trust (Ryan, L., 2013)
[8] Mr Peter Miller, Head of Environment and Planning for HS2 Ltd., evidence before the Select Committee, 6 January 2015, Para. 98 "*So providing you do this* [translocation] *carefully, and you do it well, then you're able to maintain the species diversity, and that's what we're trying to get out of the translocation*" .

8. Proposals for compensation planting all fall within the narrow strip of land contained within the Bill limits of the proposed scheme. The Trust considers that this has unduly constrained the quality and quantity of the potential compensation and there are practical means for effective compensation to occur successfully outside of the Bill limits. These include voluntary but nonetheless legally and financially binding "Conservation Covenants" between local authorities and landowners, or similar private agreements brokered by the Environment Bank or other independent providers. The Environment Bank already has landowners along the route corridor that have indicated a willingness to take on such biodiversity agreements, and these should be investigated to maximise woodland connectivity. Tackling compensation on a landscape scale and in accordance with the Lawton Review (published by the Government in 2010[9]), rather than within an artificially delineated area, will increase the ecological outcomes.

9. The Trust expects that a large publically funded infrastructure project such as HS2 should recognise the national significance of ancient woodland and be designed accordingly to reduce its impact on it. As it presently stands, it appears that decisions on the route have placed too much emphasis on economic outcomes rather than environmental enhancement or protection. The Promoter has set itself the aim of "no net loss of biodiversity" but by its own admission in the No Net Loss in Biodiversity Calculation has failed to achieve this. The only way no net loss could be achieved is by avoiding any loss of ancient woodland. Furthermore, there is a danger that by stating the project will achieve no net loss of biodiversity the project will be seen to be supporting the incorrect notion that planting of new woodland (on translocated soils or not) is enough to compensate for the loss of this nationally important irreplaceable habitat. The Committee must ensure that the approach adopted by the Promoter is not held up as an example of an appropriate approach for future projects by stating that it does not accept that the Promoter has followed best practice.

10. Assurances Sought

The Trust originally sought 36 assurances from HS2 Ltd. in November 2014 in relation to the construction and operation of Phase 1 of HS2. A further assurance was added to list in late 2015 in relation to Newyears Green Covert (CFA 6).

11. As a result of on-going discussions between The Trust and HS2 Ltd. The 37 assurances can be broken down in the following four categories;
    - 11.1. We have reached agreement on 14[10] of the assurances (1, 2, 3, 4, 6, 8, WT25, WT27, WT28, WT33, WT35, WT36 and HS2 9)
    - 11.2. We are still in discussion about 8 of the assurances (WT10, WT12, 5, 7, WT18, WT20, WT22, WT24)
    - 11.3. We could not come to agreement on 14 of the assurances (WT1, WT3, WT4,WT7, WT11, WT13, WT21, WT23, WT26, WT29, WT30, WT31, WT32, WT34)
    - 11.4. There is 1 assurance that is no longer relevant as it has been covered by another (WT9)

12. Appendix 2 contains the full text of these. The main body of The Trust's evidence is underpinned by the issues raised in the outstanding assurances.

[9] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/218690/201009space-for-nature.pdf
[10] Assurance WT 17 and WT 19 have been combined in to assurance 8.

13. We ask the Committee to:

13.1. Direct HS2 Ltd to avoid loss/harm to ancient woodland where still possible given the constraints of the Bill Limits, such as by tunnelling at the locations noted in our full evidence, and by moving haul routes and roads (WT1);

13.2. Direct HS2 Ltd to compensate for any residual impacts at an appropriately large scale (30:1 in the case of tree planting) in the wider landscape of the route, using conservation covenants or equivalent where necessary (WT7);

13.3. State that the approach taken by HS2 Ltd to identifying and assessing ancient woodland, and hence determining the route, did not follow best practice, was seriously flawed, and that best practice should be adopted for subsequent phases of HS2;

13.4. Direct HS2 Ltd to set up the Ecological Review Group at the earliest opportunity, and in any event before Royal Assent.

14. The full evidence

INTRODUCTION

The Woodland Trust

My name is Richard Barnes and I am employed by the Woodland Trust as a Senior Conservation Adviser. I have an Honours Degree in Biology and a post-Graduate Diploma in business management. I am a Chartered Biologist (since 1995), and a full Member of the Chartered Institute of Ecology and Environmental Management (since 2003).

15. I have worked in the nature conservation sector for over 25 years, including as Environment Team Manager in the planning department of a London Borough where I gave nature conservation evidence at public inquiries. When I was a Biodiversity Adviser at the Greater London Authority, I was the chair of the London Woodland Habitat Action Plan, and oversaw the production of the London Tree and Woodland Framework. At the Trust, I provide conservation policy and planning advice, and have given evidence to the Environmental Audit Committee (EAC) in relation to HS2 and to the Communities and Local Government Committee (CLGC) in relation to the National Planning Policy Framework (NPPF).

16. The charitable purpose of the Trust (the Trust) is enshrined in its Objects within its Memorandum and Articles of Association. This is to "*conserve, restore and re-establish trees and in particular broad-leaved trees, plants and all forms of wildlife and thereby to secure and enhance the enjoyment by the public of the natural environment*." The Trust is the UK's largest woodland conservation charity and aims to protect native woods, trees and their wildlife for the future. We do this by restoring and improving woodland biodiversity and increasing people's understanding and enjoyment of woodland. We own and manage 1,276 sites across the UK that cover over 23,580 hectares, and we have 500,000 members and supporters. The Trust is recognised to be a national authority on ancient woods and trees and a protector of the benefits and values that they deliver for society.

17. Context of the evidence

My evidence examines the information and proposals for HS2 Phase 1, with reference to ancient woodland, national planning policy, national biodiversity policy and national woodland policy.

18. The Trust is not against the principle of a high speed rail route, but has serious concerns over the environmental impact of the proposed route, the poor assessment prior to and during route selection, the poor assessment of the scheme's impact and the poor compensation proposals published by HS2 Ltd. Ancient woodlands cannot be re-created and therefore it is essential this habitat is protected from loss and damage. These issues have been repeatedly raised with HS2 Ltd by both The Trust and Natural England[11].

19. To quote the Government's current forestry policy document, "England's ancient woodlands and trees represent a living cultural heritage, a natural equivalent to our great churches and castles. They are also our richest wildlife habitat and are highly valued by people as places of tranquillity and inspiration." (Keepers of Time, 2007). The first policy statement in Keepers of Time is "The existing area of ancient woodland should be maintained and there should be a net increase in the area of native woodland". Phase 1 of HS2 will reduce the existing area of ancient woodland within the Bill limits by at least 30ha.

[11] See full text of emails and meeting notes between Natural England and HS2 Ltd in Appendix 3

20. Primary reasons for petitioning the Committee

The Trust has felt compelled to petition the Committee because the Trust believes that there are omissions, inaccuracies and flaws at all stages of the ecological impact assessment in relation to ancient woodland. HS2 Ltd. has failed to follow a proper mitigation hierarchy when designing Phase 1. In summary (see paras. 45 to 64 for a full discussion), this hierarchy should follow four steps:

20.1. Assess thoroughly the current ecological baseline, and hence the potential impact of HS2;

20.2. Avoid damage where at all possible e.g. by selecting a route that avoids ancient woodland;

20.3. Reduce damage where at all possible;

20.4. Adequately compensate for any unavoidable loss;

21. National Policy Summary

……HS2 Ltd's commitment to be an exemplar project. Building this network will inevitably cause some local effects on communities, the natural and the built environment. We will strive to limit the negative impacts through design, mitigation and by challenging industry standards and we will look for environmental enhancements and benefits.

22. *……Seek to avoid significant adverse effects on communities, business and the natural, historic and built environment. Minimise impacts where they occur and deliver enhancements as far as practicable to ensure there is no net loss to the natural environment.*[12]

23. These are HS2 Ltd's words and we agree that HS2 should be an exemplar project. As a flagship project, it should have followed the requirements of government policy. However, it has fallen very far short, and I set out below the key points.

24. National Planning Policy Framework (NPPF)

The NPPF recognises the value of ecological networks, specifically mentioning ancient woodland in paragraph 118:

> *planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland, and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.*

25. The Natural Environment White Paper (NEWP)

The evidence on which the Government has based its key policies in the White Paper is found in the Lawton Review[13]. The review's findings recognised the importance of habitat networks, and reducing fragmentation of habitats. The review also stated that the Government must "provide greater protection to other priority habitats and features that form part of ecological networks, particularly Local Wildlife Sites, ancient woodland and other priority BAP habitats". The White Paper carried this forward into a Government commitment to "providing appropriate protection to ancient woodlands and to more restoration of plantations on ancient woodland sites (in recognition of their particular value)."

26. The White Paper also says "We will move progressively from net biodiversity loss to net gain, by supporting healthy, well functioning ecosystems and establishing more coherent ecological networks."

[12] HS2 Ltd Sustainability Policy, April 2013

[13] See footnote 9

27. The Natural Environment and Rural Communities Act

Section 40 of the Natural Environment and Rural Communities Act (NERC Act, 2006) places a duty on public bodies to consider biodiversity in the full range of their activities. It is a legal requirement that: "Every public body must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity."

28. Ancient woodland and veteran trees: protecting them from development, Planning and Development Guidance from Natural England and the Forestry Commission (October 2015)

This sets out among other things that planning authorities and developers should start by looking for ways to avoid development affecting ancient woodland or veteran trees by means such as redesigning the scheme. On the issue of compensation it states: "Compensation measures are always a last resort because ancient woodland and veteran trees are irreplaceable. These measures can only partially compensate for damage."

29. Biodiversity 2020

The mission for the Government's biodiversity strategy Biodiversity 2020 is:

"to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people."

30. Paragraph 2.16 includes the following statement

"We are committed to providing appropriate protection to ancient woodlands"

31. Forest and Woodland Policy

The Government recently re-affirmed the policies in Keepers of Time (Keepers of Time; A Statement of Policy for England's Ancient & Native Woodland, 2005, Defra & Forestry Commission), which includes as its first policy (page 10, appendix J)):

"The existing area of ancient woodland should be maintained and there should be a net increase in the area of native woodland"

32. It is impossible for the proposed scheme to achieve a net gain for biodiversity and compliance with national policy in its current form because of the loss of irreplaceable ancient woodland habitat.

33. Assessment of Impact

Introduction

HS2 Ltd. has stated in their approach to mitigation (Environmental Statement 2013, Non-Technical Summary, p5) that they used the following 5 steps; avoid, reduce, abate, repair and compensate. The Trust considers that omitting to undertake a full assessment of the ecological baseline as the primary step in the mitigation hierarchy undermines the implementation of this approach.

section of the route corridor that have indicated a willingness to take on such biodiversity agreements. HS2 Ltd were made aware of this type of approach in a letter from the Chair of the Environment Bank to the HS2 on 14 April 2014 (Appendix 6), but HS2 Ltd. has not investigated this option to compensate on a landscape scale.

85. By tackling compensation on a landscape scale, in accordance with Lawton Principles[32], rather than within an artificially delineated area the ecological outcomes will be more successful. The Trust has asked HS2 Ltd. for an assurance (Assurance WT13, Appendix 2) that all newly planted woodland would be designed in accordance with Lawton principles[33]. HS2 Ltd has stated that they believe that they are already doing this; as such they will not accept this assurance. The Trust continues to disagree with this assumption.

86. Biodiversity Offsetting and No Net Loss of Biodiversity

Ancient woodland is an irreplaceable habitat and should not be included in any biodiversity offsetting metric. Since loss is irreplaceable it cannot be offset through mitigation or compensation. This is a position supported by both Defra and Natural England[34].

87. Compensation and Biodiversity Offsetting

The compensation proposed by HS2 Ltd. for the loss of ancient woodland has not been calculated using a biodiversity offsetting metric, but by "professional judgement[35]". HS2 Ltd. has never published a comprehensive set of figures showing how much planting is proposed for each ancient woodland lost, despite repeated requests from The Trust. Therefore, it is impossible to be certain what ratio of planting is proposed. However, as previously stated, we have estimated it to be around 3.4:1. Natural England also considered that the planting ratio was between 3:1 and 4:1 and clearly told HS2 Ltd. that this was completely unacceptable[36].

88. Natural England has suggested a ratio of 24:1 as this is the simple maximum available under the Defra metrics paper. However, major concerns with the method of assessment lie with the undervaluing of risk to achievement and the timescale to delivery of functioning habitat. The metric suggests that creation of woodland habitat is only medium risk but this appears to be based on a target habitat of a relatively simple tree and ground flora mix without understanding the impacts of soil biodiversity or invertebrate assemblages.

89. The timescale multipliers stop at 32 years based on an arbitrary assessment of ability to protect and manage the habitat. 32 years from planting will not create a functioning woodland ecosystem that compares to the complexity of an ancient woodland which takes many centuries to develop. In Appendix 2 of the metric there is an estimate of timescales for restoring habitats, for ancient woodland the timescale is given as being between 500 and 2000 years but the document clearly states - *No certainty of success if ecosystem function is sought.* Recent research for Defra into the future for conservation banking in the UK has identified ancient woodland as a habitat for which habitat mitigation cannot take place as ancient woodland is not substitutable, i.e. you cannot recreate a habitat as complex as ancient woodland within a reasonable timeframe (in the case of ancient woodland including PAWS, at all) (Treweek *et al* 2009, *Scoping study for the design and use of biodiversity offsets in an English Context. Final Report to Defra*[37]

[32] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/218690/201009space-for-nature.pdf
[33] "*We can summarise the essence of what needs to be done in four words: more, bigger, better and joined*" Making Space for Nature, A review of England's Wildlife Sites and Ecological Network Chaired by Professor Sir John Lawton CBE FRS, 2010
[34] See footnotes 3 and 30
[35] Para, 1.3.4 No Net Loss in Biodiversity Calculation, HS2 Ltd. 8 January 2016 "The extent of habitat mitigation and compensation included has been determined through application of professional judgement at a site-specific level, rather than through the use of a biodiversity offsetting metric or other loss-to-gain ratios".
[36] See meeting notes 1 August 2014, appendix 3
[37] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/218689/BiodiversityOffsets12May2009.pdf

and veteran trees and for compensation for any unavoidable loss.		and for compensation for any unavoidable loss.	
8WT. The Secretary of State or the nominated undertaker will work with appropriate conservation stakeholders, including the Woodland Trust, to identify suitable sites for compensation planting including compensation to be provided on land outside the bill limits where landowners are prepared to make their land available voluntarily for woodland planting.		4. (item 8 on the WT assurances list) Provided it does not increase project costs and subject to obtaining any necessary consents and permissions, the nominated undertaker will consider any reasonable and timely opportunities that arise to undertake enhancements of existing ancient woodlands outside Bill limits as an alternative to providing compensation as authorised by the Bill and consider new opportunities, where reasonably practicable, to maximise biodiversity gain.	Agreed
15WT. The Secretary of State will require the nominated undertaker to publish clear guidelines as to what targets the ecological mitigation is seeking to achieve so that the success of the mitigation and or compensation can be measured.		6. (Item 15 on WT assurances list) The Promoter will require the nominated undertaker to establish appropriate objectives in site management plans for each area of ancient woodland habitat compensation against which to monitor progress.	Agreed
17WT. The Secretary of State or the nominated undertaker will carry out an extended monitoring programme for all ancient woodland potentially affected by the route, and will undertake remedial action should this monitoring show deterioration attributable to indirect effects of the scheme.	Combined with 19 to create new assurance 8.	8. (Items 17 and 19 on the WT assurances list) The Secretary of State will require the nominated undertaker to establish an ecological review group to provide independent advice on the monitoring of ecological mitigation measures. The terms of reference for the ecological review group shall include: • receiving annual reports from the nominated undertaker detailing the results of monitoring of the ecological mitigation measures for an appropriate period of time to be agreed with Natural England; • scrutinising relevant data gathered for the purpose of these reports; and •where ecological mitigation measures are not meeting the project's objectives, reviewing and advising on remedial actions suggested by the nominated undertaker and recommending further reasonable remedial action	Agreed