

To: Date: 27th February 2014
Ref:
Circulation: Contact: Louise Staples
Tel: 02476858558
Fax:
Email: Louise.staples@nfu.org.uk

The NFU represents more than 55,000 farming members in England and Wales. In addition we have 41,000 countryside members with an interest in farming and the country.

HS2 –Phase One – Environmental Statement

HS2 have stated that the Environmental Assessment (EA) has been the foundation of route selection, design development, arrangements for construction and operation of the railway and measures to mitigate the project's environmental impacts. It states that in developing the project HS2 Ltd have had two aims: to enable the nation to take full advantage of the opportunities and benefits offered by the project and to mitigate the adverse environmental effects of the project.

It is stated that by law the Environmental Statement (ES) is required to include a description of the measures envisaged in order to avoid, reduce and if possible remedy the significant adverse effects of the project. It is stated that HS2 have the aim of avoiding adverse environmental effects where practicable and if not to have measures to reduce or abate such effects. Where they are predicted to occur HS2 has proposed repair and compensate measures.

The mitigation proposed by HS2 includes an assessment of the nature and severity of the adverse effect. **The NFU is interested in the proposed mitigation on farmland and the adverse effect the route will have on NFU member's farm businesses. The HS2 proposal has already caused significant distress and disruption to 100's farm businesses along the proposed route, as it has too many local communities and businesses. For some farming families HS2 will destroy their business permanently.**

We would also like to take the opportunity in this response to highlight the NFU's ongoing concerns with this project.

We are calling for Government to:

- Implement a binding and comprehensive **duty of care** that sets standards and timescales for the conduct of HS2, its contractors and sub-contractors during construction
- Appoint an **independent ombudsman** to swiftly resolve breaches to this duty of care
- Incorporate a **substantial programme of 'accommodation works'** within HS2 construction plans to minimise long term impacts on farm businesses
- **Promptly pay enhanced compensation** reflecting the dislocation, distress and income lost as a result of the project
- **Consult regularly and honestly with farmers and growers** and their representatives throughout the project
- Plan, fund and implement an **aftercare programme**, including safety and ongoing maintenance, for land within the designated safeguard zone and mitigation features

The following highlights comments from the NFU on the different volumes which make up the ES.

The Non-Technical Summary

The Non-Technical Summary (NTS) states that developing the route mitigation measures have considered the following:

- avoiding adverse effects on residential properties, businesses, farm buildings, sites of ecological and or heritage importance and the wider landscape
- using earth mounding and planting to screen views and integrate the project
- providing noise barriers
- providing links across the route to maintain access roads, public rights of way and properties and allow safe passage of wildlife **(No mention is made of access for farmers to severed blocks of land)**
- creating new habitats and other features of ecological value to compensate for unavoidable losses
- limiting as far as reasonably practicable the amount of land required for constructing the project **(It is very important that this happens so that our members businesses do remain viable, which is now under question due to the amount of land being acquired for mitigation shown in the map books)**
- managing excavated materials locally to reduce the number of heavy lorries on local roads
- avoiding or reducing impacts on floodplains and food storage areas
- providing balancing ponds to control surface water run-off.

To make sure that environmental effects of constructing Phase 1 will not significantly exceed those assessed in the ES a set of controls, known as Environmental Minimum requirements (EMRs), will be established. The controls highlight how the Environment Agency, Natural England and English heritage must work together to ensure design and construction is carried out with environmental considerations, a planning memorandum, a heritage memorandum to limit the impact on the historic environment and to carry out undertaking and assurances given during the passage of the Bill through Parliament. **The NFU believes that the absence of a memorandum to limit the impact on the best quality agricultural land is a very serious omission. Farmers are going to have to rely on the undertaking and assurances approved with the passing of the Hybrid Bill.**

The Case for Phase 1.

The consultation states that in addition to the gain in capacity, enhanced connectivity is one of the key objectives of HS2, delivering wider transport choice, and reduced journey times that will translate into long term economic benefits. **The NFU believes that this wider connectivity, particularly with rural communities, is essential if our members are going to see any benefit from the building of HS2 Phase 1.**

Land Required

It has been stated that land will be required for the operational corridor, stations (including power feeder stations which will have two compounds), depots and mitigation (including earthworks, land for sustainable placement of excavated material and new ecological habitats). Land will be required to divert or realign some roads, public rights of way and watercourses. It will also be needed during construction for site compounds, worker accommodation sites, temporary road diversions and permanently for access to the railway for maintenance. **This statement highlights just how much**

land is actually going to be required to construct the high speed line and this is far more than just the minimum width of 19m between barrier fences needed for two tracks.

It has been highlighted that during construction 31 main compound sites and 299 satellite compounds will be needed. In the siting of these it does state that existing land use has been considered and that after construction land will be restored to agricultural use were practicable, otherwise it will be used for compensatory and replacement ecological habitat. **The NFU believes that it is essential that the majority of these compound and satellite sites are returned to agricultural use, and by preference should be located on previously developed land. A lot of these sites have been located on large areas of productive land and should not just be planted up with trees.**

At chapter 5 it has been stated clearly that the ES has been prepared in accordance with European legislation and Government guidance on EIA and that it provides detailed information and assessment on the likely significant adverse effects. Where these have been identified the ES sets out mitigation to avoid reduce or manage the environmental effects. **It is felt that the mitigation highlighted throughout the ES is at a cost to the best and most versatile agricultural land.**

Economic case

Chapter 6 states that the Government's policy is to ensure there is sufficient transport capacity and connectivity between the largest and most productive urban centres to support long term economic growth.

The NFU still questions the economic case for this project. The 'Economic Case for HS2 October 2013' report highlights the heavy financial magnitude of the project and it is still questionable from the figures presented whether the HS2 project provides a high enough benefit cost ratio to justify the expenditure when compared to other transport and infrastructure projects. Whether HS2 will deliver value for money depends on a myriad of policy decisions including for example how cities are redeveloped around the new station hubs.

The cost of land has been considered in the economic case, but the actual cost and impact of farming businesses has been ignored. We accept that the price of land has been considered and that landowners and farmers will be compensated for the value of the land but the cost and risk status report does not reflect the inflated cost of land needed to replace that compulsorily purchased. The open market compensation payment for land rarely covers the value of the land and buildings to the agricultural business or the wider rural community in the area. Land and agricultural buildings cannot easily be substituted. The demand to buy agricultural land already outstrips supply in the market place without the effects of an infrastructure project of this size compulsorily acquiring land. Neither the economic case nor the ES has considered the limited supply of land available on the open market and how the increasing capital value of land is going to be taken into account.

The NFU believes that it is vital that there is a clear and widely accepted business case before the project is given the green light due to the major impacts of the project along its route, including many farming families and their businesses. We understand that an Independent Growth Task Force has been commissioned to look at economic growth and job opportunities provided by HS2 and to report on its findings and recommendations. We believe that this report must show a positive outcome to help balance the business case for HS2.

Environmental Overview

- Agricultural forestry and soils: In this chapter under 'Agricultural forestry and soils', the overview states that during construction approximately 2,500 ha of high quality agricultural land will be required, with 2,300ha of poorer quality land. This is also stated in the summary of route

wide effects along with stating that in percentage terms this is only 0.07% of high quality land. It further states that where land is only needed temporarily it will be reinstated and so agricultural land lost will reduce to 1,500 ha of high quality and 1,300ha of poorer quality. It is highlighted that this represents 0.03% of the national total and that this is a significant effect. **This section states that where high quality land is affected a range of measures will be put in place to reduce impacts, however the NFU is concerned that no measures are highlighted. The ES fails also to recognise that the loss of land locally is far more significant on local agricultural economies as local supply and processing chains will be dislocated.**

It is stated how owners and occupiers of affected agricultural land will be entitled to receive compensation under the existing statutory compensation arrangements. **It is well known that statutory compensation falls short of what is required and it is made worse by the final instalments of compensation payments due to farmers who have lost land to schemes have to wait years to receive this final payment.**

The Non-Technical Summary goes on to highlight a summary of environmental effects for each community forum area. A criticism of the draft ES was that it failed to highlight areas of land to be acquired under the section '**Agriculture, Forestry and Soils**' for each CFA. The ES does now state the number of holdings to be affected and the area of land to be permanently acquired. The ES further states that if it believes any of the agricultural holdings will cease to operate. For example, the Stoneleigh CFA, where the NFU head office is affected on Stoneleigh Park, it is highlighted that 16 holdings will be affected and likely that two holdings will cease. There is approximately 171ha of land to be taken for the scheme but no further details are given. **The NFU believes that this is disappointing and it should be a requirement of the ES to clearly make the distinction between the actual amount of land being taken for the railway line itself and the amount that is being taken for habitat creation/mitigation adjoining the line and away from the line.**

- Landscape and Visual Assessment': Under the heading of '**Landscape and Visual Assessment**', again it states how design has tried to reduce the impact. It has been highlighted that trees and vegetation will be planted along the route to provide visual screening and states that 2 million trees will be planted to integrate the railway line into the landscape. **The NFU is concerned about the area of agricultural land that is being acquired for tree planting away from the line for mitigation.**
- Ecology: Under the heading 'Ecology' for each of the different CFAs, for some it highlights the area of ancient woodland to be lost and how this will be replaced by an increased area of secondary broadleaved woodland planting, or an increased area of lowland mixed deciduous woodland. For example
 - Drayton Bassett area: 3.1ha of ancient woodland will be lost, but 14.6ha of woodland will be created near Hints.
 - Whittington area: 5.4ha of ancient woodland will be lost, but 21ha of lowland mixed deciduous woodland will be planted to support the existing habitat.
 - Central Chilterns: 9ha of ancient wood/coppice will be lost, but 40 ha of new woodland will be planted.
 - Calvert/Twyford area: 1.1 ha of ancient woodland will be lost, but 5.7 ha of broadleaved woodland will be planted.
 - Cublington area: 2ha of ancient woodland will be lost, but be 17.7ha of new woodland will be planted. This is referred to as a permanent significant beneficial effect.
 - Castle Bromwich: 16.6ha of marshy grassland will be planted to replace woodland and species rich grassland lost.

All of these examples above highlight how much agricultural land take there is going to be for habitat creation. Further, under the Stoke Mandeville CFA it states how HS2 and the National Trust have discussed plans for mitigation. We know that this includes fields to be planted with trees which are not even on National Trust land.

In the summary overview it states how a total of 650ha of woodland will be planted for landscape mitigation and ecological habitat creation or replacement to help offset the 250ha of woodland that will be lost to the scheme. This shows how HS2 is intending to plant up an area of land that is nearly three times the area being lost. It further says in the overview under Ecology how HS2 Ltd is trying to achieve no net loss in biodiversity. Under habitat it confirms that 330 ha of habitats of principal importance will be lost, including 195ha of lowland mixed deciduous woodland from 19 sites. Further 60 ha of lowland meadows will be lost. To compensate for this it states that 520ha of habitats of principal importance will be created including 280ha of lowland woodland and 165ha of lowland meadow. **The NFU believes that the areas of habitat being highlighted for creation are excessive compared to the areas being lost. This has to be seriously questioned because whilst it may be beneficial for habitat, it is a significant, detrimental and unacceptable impact on productive agricultural land. Further we question whether such habitat need to be re-created in the immediate locality.**

- **Traffic and transport:** Under the sub-heading 'traffic and transport' it states whether construction traffic will affect pedestrians, cyclists and horse riders and whether the temporary and permanent diversion of public rights of way, cycle paths and bridleways will increase travel distances for these users. **The NFU is concerned that there is no mention of how construction traffic might affect rural businesses or how the line severing land or a road will affect a farming business with the increased travel in distance to reach the block of land which has been severed.**
- **Water resources and flood risk assessment:** Under this heading it has been stated for many of the CFAs how tunnelling and piling could affect groundwater quality and the potential to temporarily affect the public water supply. **We believe that serious consideration must also be given to the impact on the water supply for livestock farms. This could be a real issue for dairy farms.**

Volume 1 – Introduction to the Environmental Statement and the Proposed Scheme

1 Introduction –

1.5 HS2 and sustainability

It is highlighted at 1.5.7 how the appraisal of sustainability (AOS) followed four sustainability principles; one being to promote sustainable consumption and production. It further states in a table for this priority to optimise the land resource. The project would seek to maintain and enhance land use, provided that does not compromise other sustainability aims.

1.6 The acquisition, use and return or disposal of land

It is stated here how compensation for land compulsorily acquired will be in accordance with the general statutory framework. It goes on to say the compensation payable will be based on the open market value of the land plus home loss payments, or basic and occupier's loss payments reflecting disturbance. The compensation code states that 'claimants' should be no worse off in financial terms after the acquisition than you were before. This is the principle of equivalence. In theory, the compensation code should work, but in practice it does not. It is very rare for someone to receive enough compensation to put them in the position they were in before the compulsory acquisition. This

is well known and the effect on agricultural owners and Agricultural Holdings Act tenants when land is taken, which could also include their house and buildings, will be immense.

The NFU has previously recommended to the Hybrid Bill Team of HS2 that they should consider increasing all the Loss Payments by 30% and there should be no capping. *“This would reflect the uncompensated loss of the purchase being compulsory and not at a time of the landowner’s choosing, the unrecoverable expenses necessarily committed prior to the scheme being confirmed, reflection of variation in valuations and reflect the limits on decision making during scheme planning and delivery that can stagnate all businesses along the route.”* Due to the size of the scheme and the amount of land that is going to be acquired for mitigation for landscaping, **the NFU believes that it is even more important that the Basic Loss and Occupiers Loss payment are increased by 30% and uncapped. These payments apply when land is acquired and the person is not entitled to a home loss payment.**

Therefore, the NFU would like to take this opportunity to restate our previous Recommendation 9 to the HS2 Hybrid Bill team last year: that ss.33A-C of the Land Compensation Act 1973 be amended by the Hybrid Bill to clarify that the Home, Basic and Occupiers Loss Payments are assessed by reference to the entirety of the claim. These Loss Payments should be at 30% and uncapped

3. Approach to consultation and engagement

This chapter clearly sets out the different forums that HS2 has engaged with, including the environment forum, non - government organisation forum, planning forum and the community forum. Agricultural owners and occupiers are supposed to fall under this category. The NFU, along with the CLA and CAAV, has made it very clear that landowners and occupiers will have very different concerns than rural villagers due to the land take and direct effects on their businesses and livelihoods. **The NFU is disappointed that a formal forum for agricultural land owners and occupiers was not set up.**

8. Scope and methodology summary for environmental topics

The section on Agricultural, forestry and soils looks at the scope and methodology for EIA topic and 8.1 covers Agricultural, forestry and soils. Under assumptions and limitations it states very clearly that it is assumed that land taken for environmental mitigation will no longer be available for agricultural use. This will clearly not be the case in respect to lowland meadow, which has to be grazed. At 8.1.10 it states that it has been assumed that farm buildings and dwellings demolished due to the scheme will not be replaced. This is not the case. **The NFU knows that many of its members are, where it is viable to do so, looking at replacing buildings and dwellings on their holdings that they still retain after the scheme has been constructed.**

In our paper of recommendations to the HS2 Hybrid Bill team in 2013, the NFU has already recommended that the planning situation should be looked into. We stated that *“where the core business will survive, businesses will usually wish to replace those buildings and the dwellings associated with them and in most cases this will require a full planning application. While the cost of dealing with planning can be factored into the compensation payable, the uncertainty over whether an application will be approved and the time delays that can arise if a case goes to appeal can all be very difficult for a business to manage”*. In our communication, the NFU, along with the CLA and CAAV, proposed that *“the Hybrid Bill should make provision for an amendment to the General Permitted Development Order so that the replacement of any building used for business purposes and any associated dwelling which is acquired by HS2 will be permitted development subject only to the prior notification procedure”*

Therefore, the NFU would like to take this opportunity to restate Recommendation 7 that we made to the HS2 Hybrid Bill team last year: the Hybrid Bill should make provision for an amendment to the General Permitted Development Order so that the replacement of any building used for business purposes and any associated dwelling which is acquired by HS2 will be permitted development.

Further, under 'assumptions and limitations', it states that severed land will continue to be used where access is available and if required new field accesses to severed parcels of land will be created from public highways. **A lot of land is going to be severed in this way and the NFU believes that in some cases just creating a new access off the highway will not enable the farming business to continue.** For some, the cost implication of driving the extra distance by road to access the land will be too high. For livestock holdings, particularly dairy, direct access to blocks of severed land will be needed for a business to continue and for the farming enterprise to remain viable. Sometimes the access along a country lane may not be wide enough to cope with agricultural machinery and so a new bridge or underpass to access severed land will be essential.

9. Approach to Mitigation

This states that the Environmental Impact Assessment regulations require an ES to include a description of the measure envisaged in order to avoid, reduce and if possible remedy significant adverse effects. It states for the scheme that a hierarchy has been adopted with priority to avoiding and preventing, and if necessary to offset through repair or compensation. This approach has been driven by the HS2 Sustainability Policy.

- Section 9.2 it states that mitigation has been incorporated into the route alignment including avoiding impacts at source on farm buildings. Further, that it has included bridges or underpasses to avoid the severance of Public Rights Of Way and private accesses. **The NFU believes that this must also include bridges and underpasses for severed farmland. It is far more important to provide a farm business access to a severed block of land to enable the business to remain viable than providing a bridge or underpass for a public footpath.**
- Other mitigation provisions include noise fence barriers and earth bunds close to sensitive properties. **Due to the success of noise barriers on HS1 the NFU feels that noise barriers should be used in other locations and not just near to sensitive properties.**
- Further mitigation measures included are the creation of new habitats and other features of ecological value to compensate for losses and the planting of trees to screen views to assimilate the proposed scheme. Again, it states how there is commitment to plant 2 million trees as was highlighted in the non- technical summary. **The NFU would like to raise the question as to why it is necessary to plant 2 million trees. The NFU would like to see that the creation of new habitat should just be to replace what is lost and that no new vast areas of habitat are created. The commitment by HS2 to plant 2 million trees is at a cost to losing high quality agricultural land out of food production.**
- Section 9.3.2 states that were there is a permanent significant community effect resulting in the loss of public open space, mitigation might be in the form of provision of compensatory open space or community facilities as part of the design of the permanent works within the Hybrid Bill. **If compensatory open space is going to be required and created, it should be done through a process of voluntary negotiation directly with landowners and not just appear on a map.**
- Section 9.3.3 states how the Code of Construction Practice (CoCP) includes provision to mitigate community effects including the appointment of community relations personnel,

community helpline to handle enquiries from the public and the maintenance of public roads, cycleways and PROW around construction sites. It is disappointing that it does not state under the next section, 9.4 Agriculture, that the same will be detailed under the CoCP for agricultural owners and occupiers. **The NFU believes that there needs to be an agricultural liaison officer and an agricultural helpline running 24 hours a day.**

- Section 9.4 Agriculture states how the impacts on agricultural holdings will vary and how work with farmers will be undertaken to mitigate the effects of the proposed scheme. We understand that there are still many farmers who have had no contact at all and some have only just realised that they are now affected by the scheme due to the proposed larger areas to be taken for mitigation highlighted in the map books in the ES. **The NFU is asking that more work by HS2 is urgently required to make sure all farmers have been properly informed and made contact with in order to fully appreciate the impact on their businesses.**
- It is stated how drainage schemes and water supplies severed during construction will be re-instated or made as good as early as possible to enable their functioning through construction. **This is very important and even more so that drainage and water supplies are not affected once the scheme is operational.**
- It has been stated how the scheme will sever some accesses within agricultural holdings and new field layouts created that require new accesses. It is highlighted that the scheme drawings show the new accesses to be created. The NFU knows from member meetings held at the beginning of January that there are farmers who are going to have land severed, but there is no mention of access being provided by an underpass or bridge on the maps for these businesses. **Therefore, the NFU is demanding that severed land should only be acquired as a last resort; this area of land to a business can be the difference as to whether it is still viable.**

Ecology

Under this heading it is stated how design has been carried out to mitigate the impact on ecology and that where compensation is required this includes areas to act as receptor sites for habitats translocated prior to construction and further areas for ecological value to be created. **The NFU raises the question again as to whether these areas necessary.** For example, at section 9.8.6 it states how the scheme will seek to achieve a no net loss in biodiversity at a route wide level. The areas will be measured using a modified version of the Defra biodiversity offsetting metric. It further states that the methodology has sought to promote mitigation that adheres to the Lawton report principles of 'bigger, better, more joined up'. **The NFU is very concerned about the principles of bigger and better. The significant areas that have been highlighted for habitat creation and tree planting will be taking land out of agricultural production which is not actually necessary for the construction of the proposed new railway line.**

This section goes on to state how the environmental memorandum includes a commitment to provide long term management of habitat creation to ensure its target value is achieved. **What is the target value and how has this been set? Who will be paying for the long-term management?**

9.10 Landscape and visual

It is stated that earthworks have been designed to achieve visual screening and to facilitate the restoration of agricultural land. **Earthworks incorporated into embankments will only be able to be restored to a certain extent back into agricultural use.**

The mitigation will include the planting of trees away from the route to reduce adverse landscape and visual effects. **As stated above, the NFU does not think that this planting should take place on high quality agricultural land.**

It has also been stated how the areas of mitigation outside the rail corridor will be transferred to third parties, subject to the correct management agreements. **Farmers should have the first offer and then it should be offered to third parties. The NFU believes that landowners and farmers will not want to have to manage large blocks of woodland if there are no management payments.**

The NFU responded to the consultation on Biodiversity Offsetting last November 2013 carried out by Government. In our response we highlighted numerous practical areas which the Government had failed to address, including contractual arrangements, financial returns, costs of offsetting, land tenure and offsetting to be by a voluntary provider. As stated in this response, we believe that biodiversity offsetting takes land out of agricultural production and leads to reduced productivity, which is exactly what will happen under the areas of land which have been highlighted for the mitigation offsetting under the headings above ecology and landscape & visual.

By 2025 we expect the UK population to be approaching 70 million. This will increase domestic demand for food and UK farmers will have to play a bigger part in meeting the global challenges of feeding a growing urbanising population. **Therefore, the NFU firmly believes that all of the mitigation/creation of different habitats away from the line should be balanced with the challenge to increase food production and not the bigger better principle. The mitigation which is planned away from the line should only be on farmland already out of production or of low inherent fertility which would include ALC grades of 4 and 5. Further, these mitigation areas should be offered to a voluntary provider and further work needs to be carried out by HS2 to achieve this.**

9.11 Socio economics

This states how businesses displaced by the proposed scheme will be compensated under the National Compensation Code and how the cost of relocation is taken into account under the heading of disturbance compensation. HS2 have stated how they recognise the importance of displaced businesses being able to relocate to new premises and will therefore provide additional support over and above statutory requirements to facilitate this process. **We are very disappointed that there are no details given regarding what the additional support will be provided and how it might work and HS2 should not underestimate how difficult to achieve this for farmers who are displaced from their holdings.** As we have already highlighted, land for sale is in short supply and at a high value. Once the construction of this proposed scheme starts and land is taken there will be hundreds of farmers in a small area along the line all looking to replace land lost to the scheme.

9.12 Sound, noise and vibration

This section highlights how mitigation of noise has been looked at at source, by noise barriers and by reducing noise entering properties. It further states that preference has been given to the most sustainable means which includes that noise barriers in rural locations should be by a landscape earthwork instead of a fence barrier. **The NFU does not agree with the preference for creating an earth bund. Decisions should be made on a case by case basis and in some circumstances a fence barrier might be preferable as the loss of agricultural land will be far less.** Another reason for the use of a fence barrier is due to the noise reduction that can be achieved as explained at 9.12.10.

9.13 Traffic and transport

At 9.13.4 it states how a PRoW may be temporarily closed and realigned/ diverted and once the railway line is in operation some PRoW will have a permanent realignment. **It is essential that landowners**

and farmers are included from the outset in discussions regarding the new route of a footpath. NFU members are extremely concerned that they now have footpaths going diagonally across fields or through fields where there was previously no access. In some cases the first they know about the new route of a PRow is from seeing it on the plans in the map books in the ES.

Volume 2 – Community Forum Area Report –

CFA 18 Stoneleigh, Kenilworth and Burton Green

The Stoneleigh CFA has been looked at due to the head office of the NFU being located at Stoneleigh Park, which will be affected by the proposed scheme. It is understood that each CFA describes the mitigation measures for the purposes of avoiding, reducing or managing the likely significant adverse effects in that area.

Under the Agriculture, forestry and soils section there is very good detail about the agricultural land quality highlighting details of the main soil properties and the land classification. It is stated that the land needed permanently for the scheme in this area is 59% Grade 2 and 39% 3a.

- Section 3.3.31 to 3.3.33: The information on the holdings effected, the size of the holdings and the sensitivity to change is very detailed from 3.3.31 to 3.3.33 including table 8. The NFU is pleased to see that HS2 has acknowledged that the nature and scale of the farm depends on how well they can cope with change and adapt to impacts from the scheme. **The NFU is in agreement that the farms which rely on the use of buildings (intensive livestock and dairy) and horticultural units with irrigation are less able to accommodate to change.**
- Section 3.3.35: Regarding the future baseline it has been stated in regard to environmental schemes that the future is uncertain due to CAP reform and that it is likely that the majority of schemes will cease in the next two to three years. **The NFU would like to clarify that there are going to be new environmental schemes and it might be acceptable to say that old agreements will cease but farms will be able to enter into the new schemes well before the construction of the HS2 line begins**
- Section 3.4.1: The NFU is very pleased to see that over bridges and underpasses have been highlighted at 3.4.1 to help avoid mitigate the impact of the scheme and enable three holdings in particular reach severed areas of land. **The NFU would like to highlight how important it is that the detailed construction of these bridges and underpasses is agreed with the relevant landowners to make sure that vehicles and machinery can pass over the bridges or through the underpasses.** It states wide enough for agricultural vehicles but no further details are given. **Agricultural machinery these days is a lot wider than agricultural vehicles, this along with the weight that will need to be taken over bridges must be considered. The bridges need to be able to take a weight of 40 tonnes.**
- Section 3.4.2: The NFU would like to state the importance of the information at 3.4.2 regarding the need to avoid environmental impacts to soils during construction and how the areas for temporary and permanent use are stripped and stored so that land can return to agricultural use and to its pre-existing agricultural condition. It is known through experience from storing soils on other schemes, including HS1, that it is very difficult to return soil to its pre-existing condition. All farmers will highlight that it takes a very long time for soil to be able to grow crops to the same yield and quality once it has been disturbed. **Therefore, the NFU believes that the aftercare period should be at least 10 years to ensure stabilisation of the soil structure and this should be carried out in all instances.**

- **The NFU is pleased to see that it has been stated that there will be a method statement for the handling of soil and that this is detailed in the CoCP.**
- **We believe that the maintenance of farm and field accesses affected by construction is vital as this can make the difference between a farm being able to stay viable during construction when the area of land take is greater.** This seems to be a recurring theme along the full length of the line.
- As under the draft ES, it is absolutely essential that drainage systems and water supplies for livestock are maintained. **The NFU believe that “where practicable” is not an option, and all field drainage must be restored or new systems installed so that the drainage of fields is back to full working order.**
- **3.4.4. The NFU cannot stress enough how important the liaison and advisory arrangements for affected landowner, farmers and their agents.**
- 3.4.6: It has been stated how the proposed scheme will sever and fragment individual fields and operational units and goes on to say how the scheme seeks to minimise structural disruption by incorporating inaccessible severed land for mitigation works. **The decision as to whether a piece of land is inaccessible should be made with the landowner and occupier of the land. The NFU is in agreement that if the land is inaccessible then it should be used for mitigation, but this must not take precedence over efforts to first providing access to severed land.**
- The detail provided at table 9 highlighting how much land will be restored after construction to agricultural use is very helpful and will help landowners and farmers to plan.

Impacts on holdings

Sections 3.4.13 to 3.4.19: The information provided from 3.4.13 to 3.4.19 including table 10 and 3.4.26 and table 12 is very useful for landowners and farmers to see how HS2 thinks the proposed scheme will impact on their businesses. It has been stated that overall 20 holdings will experience moderate to major temporary effects during construction in the Stoneleigh CFA. **Even though the information is helpful in all the tables provided throughout this section, with regard to temporary and permanent effects the NFU has concerns over how accurate this information is.** For example, we know that a member’s farm in a different CFA area, which is an intensive dairy unit, is going to be severed in two by the proposed route. An access over bridge is going to be provided, but this has been located at the far end of the farm and there are no existing tracks across the farm to reach this over bridge. The A43 which runs along the boundary of the farm at the present time is to be re-aligned and land from the farm is being taken for this as well. It is a very busy A main road but HS2 are proposing that this A road should be used as an access route for the farm. This road is not safe to use for farm machinery or to move livestock. The tables in this section 3 refer to this land take as only being negligible and that the severance effect is low. When in actual fact the loss of land and the effect of the severance is very high and it is questionable whether this business will be able to survive the construction phase. The family house is being demolished along with the cottages at the main stabling. **HS2 need to more fully appreciate how important every acre is to a small intensive dairy unit and for this farm also how important a diversified enterprise is.**

- Section 3.4.20: Under ‘Permanent Effects’ 3.4.20 it is stated what the land will be used for after construction including operation of the railway, returned to agricultural use and used for ecological and landscape mitigation. **The NFU is very disappointed to see that no attempt has been made to highlight the areas of land for each of these categories. It is very important that the ES should highlight the area of land take from each holding for the ecological and landscape mitigation. Presently only total areas are highlighted for ecological mitigation.**

Further, no attempt has been made in the map books to differentiate between the land that is to be taken permanently or on a temporary basis. This information is very important for farmers to be able to plan their businesses going forward during the construction phase.

- Section 3.4.27: This section states that one holding will experience major or moderate permanent adverse effects and goes on to clarify that although financial compensation will be available, there is no certainty that this will reduce the adverse effects. It states that the purchase of land or replacement buildings will help to reduce the impacts. **The NFU has repeatedly stated since the proposed scheme was first announced, that it will be nearly impossible for landowners to purchase land to replace land lost to the scheme due to the size of the scheme.**

Volume 3 - Route Wide Effects

It is stated that the effects in this report are those considered to be appropriately assessed at a geographical scale, including the overall effects on the agricultural, forestry and soil resource. It is also stated that during the operation there will be no effects that become significant through accumulation across the proposed scheme.

Reference is made to the fact the HS2, through the Appraisal of Sustainability, has selected the route alignment to avoid the highest quality agricultural land but that it has not been possible in all cases due to other environmental and engineering considerations. **The NFU feels strongly that not enough consideration has been given to land take of grade 1, grade 2 and 3a land.** It is also stated that the temporary requirement of about 2,500 ha of BMV during construction phase will be significant, but that it represents a very small percentage (about 7%) of the BMV agricultural land in England. Further the permanent land take of 2,800 ha with 1,500ha of this being BMV. This permanent requirement is a very small percentage 0.04%. This will have medium impact and moderate adverse effect. **The percentage of land take within the counties affected is not a small amount and will have a significant impact and adverse effect. Once again, the NFU believes that the ES is failing to take into account the effect of the loss of land on the individual farming businesses.**

It is stated again how temporary land take will be reinstated to its pre – existing agricultural condition by following the guidance on sustainable use of soils to minimise soil degradation. **The NFU is very pleased to see that HS2 has stated that soils do provide important services and functions including food production.**

It has been stated that 250ha of forestry land will be permanently removed but will be offset by replanting approximately 650 ha of woodland for landscape mitigation and ecological habitat creation or replacement. **The NFU has already raised its concerns under the other volumes in regard that it cannot be correct to be planting an extra 400 ha of woodland on top the 250 ha lost on prime agricultural land.**

Volume 5: Technical Appendices CFA 18 – Agriculture, forestry and soils

The NFU is pleased to see the detail that has been included in sec 4 'assessment of effects on holdings'. Under the details for Stoneleigh Park under permanent effects it has been highlighted how the reconfiguration of field boundaries and access tracks will be important. **The NFU would like to highlight that the reconfiguration of field boundaries will be important on all working farms where land is acquired and especially where a block of land is severed from the main holding.** The

amalgamation of severed fields into other fields will be necessary. To do this field boundaries will have to change and it is likely that some hedgerows will need to be taken out.

Due to this issue being so important, the NFU submitted it as specific recommendation in its paper to HS2 in 2013 to be included in the Hybrid Bill: Recommendation 8 The Hybrid Bill should provide that the Hedgerow Regulations 1997 do not apply to hedges which have to be removed to allow the reasonable re-organisation of field boundaries where land has been acquired by HS2.

The detail included under New Kingswood Farm again under permanent effects highlights how this holding will be impacted from the loss of buildings including farmhouse and workshops. The NFU has raised how this can have a massive impact on whether a holding can carry on functioning after the scheme is operational. Due to the importance of the farm steading to run the agricultural business and the importance of being able to relocate buildings and a new farm dwelling on the existing holding as stated in this report under Volume 1, the NFU submitted a recommendation on its paper to HS2 in regard to planning and that it should be a permitted development. This has been highlighted above under 'Scope and Methodology'.

Conclusion

- It is stated that Government, as required by law, must provide Parliament with a detailed statement assessing the significant effects of this Phase One project. We believe that our members will be greatly affected by this major infrastructure project, which will extend for 143 miles, and that **the true impact on agricultural operations and the future viability of individual farm businesses has been significantly underestimated.**
- **The NFU has consistently questioned the Government's cost benefit assessment of this project**, which relative to many other publicly funded projects is very weak. Despite this weak business case the Coalition Government is pressing ahead with the project.
- We know from meetings and discussions with our members that **the detail highlighting how significant the land take is to a farm business within the tables in the CFAs is not accurate and as a result this is underestimating the effect of loss of land has on a farm business remaining as a viable unit.**
- **Far more thought and design work is needed in regard to access to severed land.** Our members also need to have much greater detail in regard to access to reach blocks of land which are severed and which land is only being taken on a temporary basis. They need this information in order to have confidence that the appropriate mitigation measures needed, particularly including access bridges and underpasses, will be provided to enable their farm businesses to carry on operating through the construction period and once the scheme is operational. We know that some of the access routes proposed to our members in meetings with HS2 along existing tracks or lanes are far from suitable.
- **Finally, the NFU will use all its influence with the Government, High Speed 2 Ltd and with MPs to minimise HS2's impact on farm businesses, and will argue for prompt and enhanced levels of compensation and call for a binding duty of care during the construction phase.**