

HS2 DRAFT ENVIRONMENTAL STATEMENT

Buckinghamshire Councils' response

Volume 1

Introduction

- 1.1 As stated in the covering letter to the consultation responses, the submissions reflect the views of all five councils in Buckinghamshire, namely: Aylesbury Vale District, Buckinghamshire County, Chiltern District, South Bucks District and Wycombe District Councils. The five councils expect any consultation report to clearly state that fact and do not expect reference to only one council. Within this response on Volume 1, 'the councils' is taken to mean all five councils in Buckinghamshire, as listed above.

Overarching Comments

- 1.2 As part of future consultations, the councils expect that the memorandums for planning and heritage; and the protocols, processes and legislation determining the historic environment are the subject of appropriate consultation with relevant stakeholders and partners.
- 1.3 The councils are concerned that there is no detailed assessment of pantograph noise, nor any background work or peer-reviewed research on its effect. They therefore conclude that the noise contour maps are based on operational rail noise alone, mitigated by measures that have yet to be agreed or analysed.

Initial Comments

- 1.4 The councils note from the Preface to Volume 1 that the purpose of the consultation on the draft Environmental Statement (draft ES) is to provide the public with an opportunity to comment on the contents to inform the formal Environmental Statement (ES). However, with the limited nature of the material presented, and in the absence of much baseline data and supporting surveys, the councils question whether the purpose of this consultation was to acquire as much information from the public, local authorities, other key organisations and technical experts to fill the omissions that are apparent in all volumes of the draft ES.
- 1.5 The Preface also states that the cumulative effects of both Phases of High Speed 2 will be determined by combining the Appraisal of Sustainability (AoS) for Phase Two with the ES for Phase 1. Assuming that the same approach for the AoS (used on Phase 1) is adopted for Phase 2, it will be very difficult to provide robust information about cumulative effects to decision makers. Comparing 'apples' with 'pears' means that Parliament may be asked to make a decision about proposals without adequate information, or where only individual impacts are identified.
- 1.6 The councils also trust that there will be "...refinement of the assumptions of how the Proposed Scheme would be built..." and that the public consultation will "...raise issues that result in changes being made...". It would be an ineffective consultation if it did not result in changes being made.

- 1.7 The fact that HS2 Ltd has chosen to proceed with a consultation, in spite of the absent information, requires them to ensure that the process is both meaningful and lawful. The councils are being asked to develop a response based on the likely, the possible, the will be, should be, and subject to approval. The question raised is whether this consultation is truly fit for purpose.
- 1.8 Further comments in the Preface to Volume 1 reinforce the limited understanding of the environment through which the Proposed Scheme will be built and operated. The draft ES does not include a summary of the SMR document to enable assessment of the methodologies used, too much is left unfinished, or where allegedly complete is omitted. The councils are surprised to learn that, more than three years into the development of a 'nationally significant project', *"the understanding of the current environmental baseline is based on literature reviews, consultation with relevant bodies, and measurement, monitoring and surveys of environmental parameters in the field where access has been permitted."* It is clear that the data on which any assessments are based is inadequate at best, which undermines the ability to respond appropriately to the consultation exercise.
- 1.9 It is further reinforced when it states that the draft ES has *"...been based on the information available at the time..."*, meaning that *"...professional judgement has been used where appropriate to bridge gaps in information..."* Presumably it is therefore likely or even certain that *"...the assessment of effects presented in the formal ES, and the mitigation provided may change from that presented in the draft ES."*
- 1.10 The conclusion of the Preface to Volume 1 summarises the position very effectively by stating that the formal ES will *"also include further and / or fuller details on the following..."* and then lists the alternatives studied, further studies for each topic, technical details and supporting data for each topic, greenhouse gas effects, implications of climate change, likely significant environmental effects of HS2 combined with other projects, and likely significant environmental effects on the wider transport network. With such a list, it is questionable if the draft ES contains enough information to merit detailed consideration, to the extent that the councils have questioned whether the effort expended on this consultation is worthwhile.
- 1.11 Paragraph 1.1.2 describes the Government's vision for a transport system, using a phrase appearing on many of the consultation materials, *"an engine for economic growth"*. With no revised business case included or a detailed socio-economic assessment this cannot be quantifiably verified. With the councils committed to economic growth and job creation, the opportunity to review evidence that the Proposed Scheme will create such an engine is anticipated.
- 1.12 Paragraph 1.1.2 goes on to list the key considerations that are important for the transport system and in turn HS2. These are constraints on rail capacity, growth in demand for inter city travel, supporting economic growth, carbon impacts, connectivity, and new build vs upgrades. The councils are convinced that these can be addressed and met at least as well as, if not better, by the Optimised Alternative (OA) than the HS2 proposal. This is further addressed in the response to Chapters 7 and 8 of Volume 1.

- 1.13 Paragraph 1.3.3 sets out the information required to meet TCPA and EIA requirements. This is a comprehensive list setting out the requirements that should be included in the formal ES. Since little information has been collected to date to support the draft ES, it is questionable if there is enough time to meet the needs of the formal ES, including environmental effects (both direct and indirect, secondary, cumulative, permanent / temporary, positive / negative, short / medium / long term), mitigation measures, and an indication of difficulties encountered, bearing in mind the Government's proposed timetable for publishing the formal ES and Hybrid Bill.
- 1.14 The councils will be carefully reviewing the formal ES to ensure that all the required information is included to assess the environmental impacts of the proposals and will understandably seek to challenge the process should there be remaining omissions or inadequate assessment.
- 1.15 Paragraph 1.3.4 states that there will be public consultation on the formal ES. The councils expect the:
- Consultation period long enough to enable proper consideration of the formal ES
 - Formal ES to address the concerns expressed in this consultation response
 - ES consultation response to be published before consideration by Parliament
 - HS2 Ltd to publish a report on all consultation responses and concerns raised
- 1.16 Paragraphs 1.4.1 – 1.4.6 describe the Environmental Minimum Requirements (EMRs) for the Proposed Scheme. Should the Proposed Scheme proceed the councils will work with the Secretary of State and his representatives to ensure that local concerns and issues are considered and addressed within the EMRs and the supporting policies, procedures and practices, published in accompanying documents.
- 1.17 The councils would stress that the views expressed in paragraphs 2.3.1 and 2.3.2 do not reflect recent data published on rail growth (2.6% fall in rail passenger numbers in the first quarter of 2013) or the likely impacts of planned upgrades to existing networks. Improvements to both WCML and ECML are planned, and appear to contradict concerns about disruption to existing networks. Paragraph 2.4.8 states that the economic benefits of high speed rail are greater but no assessment of environmental damage is included.
- 1.18 Paragraph 2.4.10 seeks to describe the benefits for commuter and freight services that HS2 might offer. These considerations were not part of the original business case but appear to be part of the wider economic benefits that are claimed (without quantification). The councils believe that this is another example of the Proposed Scheme's benefits that cannot be measured or judged.
- 1.19 Section 2.6 seeks to consider greenhouse gas emissions. Paragraph 2.6.3 is clear that no conclusion can be reached about the carbon credentials of the Proposed Scheme, since *"Whilst a high speed line may not necessarily be the lowest carbon solution, it is considered to offer the optimum balance between carbon reduction and economic benefits."* It therefore relies on future developments to achieve carbon benefits.

- 1.20 Paragraph 2.7.1 states that environmental assessment has been central to route development, both in the AoS and as part of the draft ES. The councils are concerned that this assertion is not supported by any evidence or examples. It appears instead that a route has been designed by engineers to run a train at an agreed very high operational speed (400kph) and that any potential mitigation, whilst often better in sustainability terms, has been dismissed in favour of the preferred route unless the changes save money or reduce the construction period.
- 1.21 Section 2.8 considers the policy and legislative context for the Proposed Scheme. In paragraphs 2.8.5 – 2.8.8 the draft ES describes the requirements of the National Planning Policy Framework (NPPF) and sets out the three aspects of sustainable development – economic, social and environmental – stating that they should not be considered in isolation. The councils would welcome an explanation of how the Proposed Scheme contributes to these three dimensions or delivers sustainable development more than any other alternative.

The Proposed Scheme (Chapter 3)

- 1.22 Section 3.2 sets the generic objectives for the Proposed Scheme, setting safety, reliability, capacity, interoperability, services and sustainability as key objectives. There is nothing set out in this section that precludes other options being acceptable, suggesting that insufficient consideration may have been given to other alternatives.
- 1.23 Paragraph 3.3.5 sets out the planned service patterns for Phase One and Phase Two, describing a pattern of 11 trains per hour in each direction, rising to 14 and then 18 during peak hours with Phase Two operational. The councils regard this high frequency service pattern as almost impossible with the practical considerations of interaction with the classic / conventional rail network.
- 1.24 Design speed of the railway is set out in paragraph 3.3.6, suggesting that the track could enable train speeds of up to 400kph (248mph), with initial speeds of 360kph (225mph). The highest speeds will be achieved between the Chiltern tunnel and Birmingham interchange, through the rural parts of Phase 1. The councils are concerned that the railway is being designed for inappropriately high speeds that affect both the vertical and horizontal alignments of the Proposed Scheme. It appears that speed and journey times are no longer a key aim of the Government and therefore changes are possible, which would in turn lessen the overall impact on communities and reduce the required mitigation.
- 1.25 Paragraph 3.4.12 describes the route as it enters Buckinghamshire. It states that “...*the design of the high-speed corridor would enable a spur to Heathrow to be added at a later date without major disruption to HS2.*” The councils believe that this is clearly pre-emptive as the link to Heathrow will not be confirmed until the Davies Review publishes its report on airport capacity.
- 1.26 Paragraph 3.4.15 introduces the maintenance loop between Nash Lee Road and Old Risborough Road, and is part of the Design Refinement Consultation. This introduces further impacts that were not apparent in the January 2012

announcement. The councils are concerned that this late revision to the Proposed Scheme introduces further impacts that were not previously considered, and that mitigation measures must fully address the broad range of visual, environmental, noise, light and other impacts in this location.

- 1.27 Section 3.5 sets out the principal features and infrastructure for the Proposed Scheme. Whilst paragraph 3.5.2 states that the route would “...*typically accommodate two railway tracks with an overall width (excluding earthworks) of about 19m...*”, the next paragraph suggests that “...*space requirements would vary along the route...*”. Whilst this variation is understandable, the councils want early and detailed clarification of the route widths throughout the county.
- 1.28 Paragraph 3.5.4 refers to the need to fence the entire route, but no supporting details are provided, such as design, height, distance from the line etc. The councils are concerned that such details have a significant impact upon the land-take, landscape and ecology aspects of the scheme, and therefore in turn its overall design and mitigation. This is an omission that must be rectified at the earliest opportunity.
- 1.29 The councils support the ambition expressed in paragraph 3.5.5 that “...*as far as reasonably practicable to achieve a balance between cut and fill at each location.*”. They do, however, believe that this is realistically unachievable, especially at the Chilterns tunnel portal where vast amounts of chalk will be excavated. As such, HS2 Ltd must develop further plans to explain how excess excavated materials will be managed.
- 1.30 Construction of significant structures (bridges, viaducts, tunnels etc) is described between paragraphs 3.5.10 and 3.5.21. The councils do not believe that the design standards are of a sufficient quality and do not take account of local landscapes and circumstances. Agreed standards in the formal ES should be of the highest quality and suit the local area, being sympathetic to local landscape characters.
- 1.31 Paragraph 3.5.14 refers to the design of the bored tunnels and much is made of the tunnels not harming the groundwater flow. The councils are concerned however, that groundwater will be significantly impacted, since the design is two parallel tunnels (one tunnel width apart except at tunnel entrances), with cross tunnel access, meaning that ground water may be effectively trapped between the two tunnels or intercepted by cross passages.
- 1.32 The design of tunnel ventilation shaft head houses is described at paragraph 3.5.18. This suggests that they will be 4m tall and incorporate lifts. If the lift entrance / exit is at ground level to support accessibility needs, the councils expect that the lift gear will sit proud of the ground floor building meaning that the actual height will be higher than 4m. This should have been made more explicit in the draft ES.
- 1.33 The paragraph goes on to state that the detailed design of these structures will be agreed with local authorities to match the local surroundings. For the tunnel ventilation shaft head houses within the nationally designated AONB the councils expect HS2 Ltd to engage at the earliest opportunity with the relevant parties to suggest and agree suitable designs.

- 1.34 The proposed Infrastructure Maintenance Depot (IMD) at Calvert is described at paragraphs 3.5.43 and 3.5.44. Since this is only a verbal description it is very difficult to determine the impacts in the local area. It is however clear that this facility will have a major impact during both construction and operational phases. The councils therefore expect greater detail to emerge, preferably in advance, of the formal ES about the local and cumulative impacts and how these will be mitigated and managed effectively.
- 1.35 Paragraph 3.5.46 states that “*an optical fibre cable network, with cables laid in trenches beside the track, would provide a communications backbone linking all line-side equipment, stations and the control centre.*” In the unlikely event that the project should proceed the councils expect any and every opportunity offered by HS2 be exploited to enhance local broadband connectivity, in support of the clear ambition to establish a high speed broadband network across Buckinghamshire.
- 1.36 At paragraph 3.5.52, the document considers noise barriers along the line of route. The councils are concerned that the only distinction made appears to be between urban and rural areas, with no account taken of site circumstances. It suggests that in rural areas noise barriers may be of timber construction, whilst in urban areas concrete or metal may be appropriate. Buckinghamshire communities should enjoy the best noise mitigation, appropriate to the location and sensitivity.
- 1.37 The councils are pleased to note that new or diverted roads would be constructed to the appropriate standard for each location (paragraph 3.5.54). The County Council, as highway authority, expects to be involved in discussions about the nature and form of any new, diverted or realigned roads to ensure that these meet the needs of local communities. The County Council would welcome an assurance to that effect from HS2 Ltd.
- 1.38 The councils have severe concerns about the construction phase of the Proposed Scheme (as described in Section 3.6), with its associated impacts on road networks across the county. It is noted that construction routes are considered in the Community Forum Area reports and the Code of Construction Practice, but the expectation is that these will be considered in conjunction with local authorities. Such discussions should help develop and agree working hours, local environmental management plans, sites appropriate for site compounds and thereby work to limit and manage the impacts of construction.
- 1.39 Paragraph 3.6.7 refers to excavated material being used as fill in embankments *if suitable*. The councils believe that this is a clear acknowledgement that not all excavated material will be suitable as fill. In paragraph 3.6.9 it is stated that excavated material may need crushing and or screening, but as in other areas there is no further detail. It is therefore not clear where these works will happen and what noise, dust or other issues may arise. The same paragraph concludes that some minerals may need to be excavated from local borrow pits, without any thought on transport or permission. The councils can only assume that the need for locally excavated materials has not been formally assessed by HS2 Ltd but must form part of the final ES.

- 1.40 The councils note the proposed commitment to community engagement during the construction phase, and welcome any measures that will keep individuals, businesses, community groups and local authorities informed of proposed works. Based on experience to date the councils are not confident that this will be successfully implemented but do urge HS2 Ltd and its contractors to work closely with local authorities to develop a stakeholder communications strategy and plan that exploits all available channels (including social media) to ensure messages are relayed. Any costs associated with this approach must be met by HS2 Ltd and the Government.
- 1.41 Whilst the concept of a noise and vibration strategy, as an integral part of the Code of Construction Practice, is welcomed by the councils, the question remains whether this goes far enough. However, without an understanding of the likely impacts of noise and vibration during the construction phase, an issue notably absent in the draft ES, the councils find themselves at a loss to determine if the proposals (paragraphs 3.6.63 to 3.6.65) address all aspects and issues. They do, however, note that in certain areas it is implied that HS2 Ltd will re-house residents while work is undertaken, although it is unclear if this will include properties outside the safeguarded area.
- 1.42 Statements relating to waste management and disposal (paragraphs 3.6.66 – 3.6.68) are welcomed but do seem very high level. As with all matters relating to the Code of Construction Practice the devil will be in the detail and the councils are keen to ensure that they play a key part in informing and shaping such detail.
- 1.43 The councils' response to the Code of Construction Practice details the concerns and reservations about proposals for working hours (paragraphs 3.6.69 – 3.6.76). It does however seem that the initial proposal to limit working hours (at paragraph 3.6.69) is subsequently diluted by caveats, exceptions and other reasons in the clauses that follow. As such the councils have little faith that any limits will be adhered to, but would nonetheless welcome involvement in the development of Local Environmental Management Plans, more specific to the Community Forum Areas, and that might help establish sensible working practices in individual areas.
- 1.44 There can be little doubt that one of the greatest areas of concern for the councils is the issue of traffic and transport, and as far as the Code of Construction Practice is concerned, traffic management (paragraphs 3.6.77 – 3.6.82). There is very little to comment on in the draft ES as a detailed traffic and transport assessment is not included. These paragraphs therefore concern themselves with matters of principle that appear to be broadly appropriate, but without baseline data are lacking in detail. The councils' hope is that subsequent discussions with HS2 Ltd about traffic and transport during 2013 will help clarify the baseline and the approach taken.

Environmental Impact Assessment (Chapter 4)

- 1.45 Paragraphs 4.1.3 – 4.1.5 make it clear that there is still work to be done, absent in the draft ES. Indeed the final paragraph summarises the picture very clearly stating that *“analysis of future baseline conditions and the identification of other relevant*

developments will be reported in the formal ES". As such, without the necessary information the councils find themselves at a loss to respond appropriately.

- 1.46 The councils question how effective the engagement has been, at all levels (paragraph 4.1.7). Feedback received suggests that the Community Forums have often failed to engage effectively and have simply been opportunities for HS2 Ltd to relay information. Similarly the councils would question the efficacy of the Planning and Environment Forums. It is disappointing that HS2 Ltd, Dft and the Government have, to date, chosen to ignore requests for a high level route-wide Forum, as developed and successfully implemented for Crossrail.
- 1.47 Building on previous comments, the councils recognise the ES preparation process described at paragraph 4.1.8, but do have concerns that all comments made are based on material that is already six months old. As a consequence of the 'design freeze' (enabling work for the draft ES to be prepared) the councils find themselves commenting on a design that has already been superseded in many areas.
- 1.48 The point made at paragraph 4.1.10 is noted. The councils reiterate their concerns that this information has not been collected to date, and that the opportunity for further comment (and subsequent consideration) is likely to be hindered by the accelerated timetable for Parliamentary consent for the Hybrid Bill.
- 1.49 Section 4.2 (Scope of the Assessment) seems to be a long list of reasons why certain assessments, surveys and impacts have yet to be considered. Paragraph 4.2.5 does not specify the precise geographic scope of the proposed scheme, and does not quantify the exact land-take. Paragraph 4.2.7 (relating to trans-boundary effects, or effects beyond the UK) raises issues about larger than local impacts. It suggests that such effects are either too difficult or out of scope and unlikely to be considered in the formal ES. The councils believe that such an approach disqualifies any subsequent assessment of carbon impacts in the formal ES, if it fails to consider and assess impacts outside of the UK, such as the substitution / replacement of domestic flights with long haul flights.
- 1.50 Paragraph 4.2.12 refers to using a consistent approach to expressing assessment results, but fails to follow this through elsewhere in the draft ES with variations of terms used. For example the effects on landscape character areas are described variously as '*moderate adverse*' or '*major adverse*'. This is a clear inconsistency, especially as the extensive and detailed criticisms posed by 51m in May 2012 (about the lack of objective assessment criteria in the SMR document) have not been addressed by HS2 Ltd.
- 1.51 A further concern is raised at paragraph 4.2.16 where it suggests that if data is not available, professional judgement will act as the main substitute, considering a range of factors including spatial extent, magnitude, duration, frequency etc. The councils do not believe that such a broad brush approach to assessment of impacts can enable robust judgements to be made, and therefore expect that in the formal ES this subjective approach is replaced by an objective, evidence-led one.
- 1.52 With reference to Section 4.3 the councils repeat their concerns about the absence of the consideration of cumulative effects in the draft ES. Indeed paragraph 4.3.2 is

very clear that “*Cumulative effects are not described in this draft ES, but will be included in the formal ES.*” Paragraph 4.3.4 goes on to state:

*“Inter-project effects will be **identified in the formal ES**. Localised cumulative effects involving more than one environmental topic will be **identified in the formal ES**. Cumulative effects occurring across more than one CFA or across the Proposed Scheme as a whole will also be **identified in the formal ES**.”*

- 1.53 Section 4.4 (General assumptions and limitations) reads as further reasons for the limited information, data and analysis within the draft ES. Notwithstanding this, the councils are very concerned that certain issues will be presented in the formal ES as having a range of impacts (paragraph 4.4.2) rather than adopting a precautionary principle or worst case approach. Information presented in such a way does little to inform decision makers and can cloud certain matters. Paragraph 4.4.3 reinforces the limitations of the draft ES stating that it has been prepared while the design and assessment of the HS2 proposals continue, and that therefore it is a provisional document. This makes it very difficult for the councils to reach any conclusions on the content of the draft ES.
- 1.54 Section 4.5 (Consultation) describes the consultation and engagement process that have been implemented by HS2 Ltd, and it is hard for the councils to challenge the accuracy of the statements. They can, however, challenge the effectiveness of the arrangements that have offered a voice to HS2 Ltd to disseminate information, without achieving dialogue; and failed to reflect local concerns about key issues. The councils would also question the benefits of the Planning and Environment Forums, and ask why requests for a high level route-wide Forum (as for Crossrail) have been ignored.
- 1.55 The councils expect representatives of the Community Forums to respond to points made in paragraphs 4.5.8 – 10 about their effectiveness as means of engagement. They do, however, have strong reservations about the adequacy of representation, and whether local views have received the attention and responses deserved.

Scope and Methodology for Environmental Topics (Chapter 5)

- 1.56 Whilst the councils claim no specific expertise on agriculture, forestry and soils, they are concerned about the methodology suggested in paragraph 5.2.3 that suggests significant effects are “...*defined as a corridor 200m wide measured from the centre of the Proposed Scheme.*” Whilst this establishes a corridor it fails to recognise that the severance or diminution impact on agricultural land has significant effects that influence the productivity or value of the land remaining. To suggest that land lost as ‘Best and Most Versatile’ (BMV) is only that taken by the Proposed Scheme does an injustice to the number of farms and agricultural businesses that will be permanently affected by HS2. As a consequence, the councils ask that this matter is reviewed and reassessed as a matter of urgency to establish the true impact and cost on agricultural land in Buckinghamshire.
- 1.57 The councils are concerned concerns about the methodology for air quality assessment that apparently requires no background air quality modelling to

determine sensitive receptors. It is hard to believe that there are no areas where air quality is already poor and the situation will be exacerbated by the impact of construction or traffic.

- 1.58 The councils find it hard to believe that the total carbon footprint of the Proposed Scheme will be presented in the formal ES. All calculations to date have been based on a range of carbon impacts and there is little to suggest that a definitive answer will emerge in the coming weeks.
- 1.59 The councils are concerned that the community assessment has a limited focus, since it considers only isolation effects, changes in amenity, presence of construction workers and residential properties, facilities and infrastructure affected by land required for the Proposed Scheme or its construction. This fails to take account of cumulative impacts or impacts felt further afield as a consequence of road realignments, diversions or construction routing.
- 1.60 Paragraph 5.5.4 states that the “...*first year of operation, 2026, is assessed. No years beyond this are assessed as effects are unlikely to persist...*” This is a point that the councils contest as community impacts are likely to increase with changes in train service patterns, assuming Phase 2 is completed. Further caveats are offered in paragraphs 5.5.6, 5.5.7 and 5.5.8 that suggest far more is excluded from the community assessment than has been included. This must be rectified in the formal ES.
- 1.61 The councils are concerned that the approach to Cultural Heritage (Section 5.6) fails to address the substantive criticisms set out in the 51m response to the draft SMR document. The assessment methodology remains ambiguous and non-substantive and HS2 Ltd have made no attempt to describe how palaeoenvironmental remains are to be assessed.
- 1.62 Paragraph 5.6.2 states that the study area is restricted to the 250m ZTV with no explanation why this arbitrary distance has been determined. The councils question why only a 250m distance is considered appropriate for assessing the significance of the scheme’s impacts on the setting of heritage assets. The text is contradictory when it states that the setting is only considered for designated assets, but then that *‘impacts have been assessed on all heritage assets, designated and non-designated, within 250m of construction works’*. The councils expect more clarity is provided about heritage assets that are subject to assessment within the ZTV.
- 1.63 The councils believe that the best approach for Ecology (Section 5.7) should be to follow the EU Environmental Impact Assessment Guidance under the European EIA Directive (Directive 2011/92/EU) since it is far more rigorous and requires impacts to be considered at the generic level as well as for species and populations etc. This might be appropriate especially for the assessment of impacts on species / populations protected under European legislation at risk of significant adverse effects at this level e.g. certain species of protected bat species.
- 1.64 Paragraph 5.7.8 states that HS2 Ltd does not believe they will gain access to survey all land where it has been requested before they complete and submit the formal ES. The councils are concerned that the assessment of impact, using the

precautionary approach being developed in consultation with Natural England, will be based on partial information only.

- 1.65 The councils are disappointed that the baseline information for land quality (Section 5.9) is largely a desk based assessment, with very little land having been visited in person to date. Whilst landscape and visual impacts have been broadly considered, the full information is to be reported later in the year in the formal ES.
- 1.66 Sound, noise and vibration are critical issues for the councils and local communities, with effects varying from person to person. The CFA maps do include sound contours, but these are acknowledged to be fairly rudimentary, based as they are on daily average sound levels. They do not show overall net impact, or increase on ambient noise levels and fail to follow World Health Organisation guidelines on noise disturbance. The councils are therefore concerned that the information presented, offers a very limited view of sound, noise and vibration impacts, potentially underplaying the effects of the Proposed Scheme, especially in more tranquil areas of Buckinghamshire.
- 1.67 The councils wish to place on record that when asked about noise from tunnel ventilation shafts HS2 Ltd stated that any noise would be '*suppressed to an agreed level*'. This was the reason no noise contour mapping was produced to show noise impacts at these locations. This will be further scrutinised as further work emerges to ensure that these statements are accurate and that noise from ventilation shafts will not be an issue.
- 1.68 Paragraph 5.12.21 states that the draft ES has assumed the HS2 trains will be specified to be quieter than the relevant current European requirements and that the track will also be specified to reduce noise. It is unclear on what basis these assumptions are made since quality is linked to cost, meaning a higher specification will cost more, and the councils do not believe that a future Government will choose more expensive trains or tracks. As such they believe both the draft ES and the formal ES should consider trains at or below current European standards.
- 1.69 The councils are unable to comment on Section 5.13 (Traffic and Transport) since there is so much information missing. Paragraph 5.13.4 summarises the situation stating that, "*The output from this modelling is the basis for the traffic and transport assessment. The model outputs will be reviewed in May 2013, and form the basis for the traffic and transport assessment in **the formal ES.***"
- 1.70 The County Council, as transport authority, finds this unacceptable and insists that HS2 Ltd share their survey results, data, and modelling results as soon as they are able to ensure that the traffic and transport assessment is properly scrutinised. This assessment does, after all, underpin the consideration of a number of other environmental impacts, including community and air quality.
- 1.71 Sections 5.14 and 5.15 (Waste and material resources, and Water resources and flood risk) also contain limited information, assumptions, and outline considerations only. The councils expect HS2 Ltd to rectify these omissions in the formal ES.
- 1.72 Paragraph 5.15.5 refers to the lowering of groundwater levels to below projected track level. The councils are unclear what effects such a proposal would have on

both groundwater and above surface flows. The following paragraph (5.15.6) clearly states that HS2 Ltd has limited knowledge about the water table owing to a lack of information about boreholes and groundwater sources. The councils consider this a major omission in the draft ES and expects this to be rectified as soon as possible, and certainly a long time before the formal ES is submitted.

Approach to Mitigation (Chapter 6)

- 1.73 Paragraph 6.1.1 states what an ES is expected to include, and paragraph 6.1.3 shows that HS2 Ltd recognise the draft ES falls short by stating that *“The draft ES considers the likely effectiveness of the adopted mitigation.”* and at paragraph 6.1.5 *“...some mitigation is currently under development... some mitigation will be defined in principle in the draft ES but... will not be defined until the formal ES”*. The councils do not believe that this is acceptable at this stage of the Proposed Scheme and must be put right as soon as possible.
- 1.74 Section 6.2 (Mitigation) helpfully lists the type of mitigation measures that may be used as part of the design and implementation of the Proposed Scheme. It also states that this is not an exhaustive list, suggesting that there is further work to be completed ahead of the formal ES.
- 1.75 Paragraph 6.3.3 implies that HS2 Ltd will compulsorily purchase the land needed for the construction sites and once complete previous landowners will be given the opportunity to buy back the land. The councils believe that land should be automatically returned to the original landowner or land holding, since it is unfair to insist landowners buy back the land.
- 1.76 The councils believe that the approach set out about Restitution of open space and community facilities (Section 6.4), lacks detail and is far from ideal. It suggests mitigation measures for both temporary and permanent significant effects that appear to minimise additional land take or any off-setting elsewhere. This is not acceptable and needs to be addressed in the formal ES.
- 1.77 The remaining sections of Chapter 6 (6.5 – 6.15), also lack detail, generalise issues based on the mitigation hierarchy and highlight that the majority of the work will be completed between now and the submission of the formal ES. In that context, and to ensure a more concise response, the councils have chosen not to repeat previous comments about concerns and reservations.
- 1.78 Paragraph 6.10.6 suggests that off-site planting to reduce adverse effects may include planting in more remote locations by agreement. The councils are unclear if this is beyond the safeguarded / construction area and therefore beyond HS2’s control. If that is the case HS2 Ltd will surely require agreements to enable off-site planting, and the proposal must form part of the scheme assessed in the formal ES.
- 1.79 The councils also have concerns about statements made in paragraphs 6.15.1, 6.15.2 and 6.15.4 about discharge of surface water runoff, implications on future groundwater flows and the reporting of a water framework directive compliance assessment. The statements in all these paragraphs do not go far enough, and

provide insufficient assurance to the councils that all necessary steps will be taken ahead of the formal ES.

Strategic and Route-wide Alternatives (Chapter 7)

1.80 Chapter 7 is probably the most important section of Volume 1 since it reviews the alternatives considered by HS2 Ltd and DfT during development of the Proposed Scheme. This is to try and meet the requirement that the Hybrid Bill should be accompanied by an Environmental Statement with *“An outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects.”* (paragraph 7.1.2).

1.81 The first thing to note is that there is no justification for development in a nationally designated area, i.e. the Chilterns AONB. Prior to the adoption of the National Planning Policy Framework (NPPF), Planning Policy Statement 7 (PPS7) set out the tests for the exceptional circumstances that needed to be satisfied:

- The need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy
- The cost of, and scope for, developing elsewhere outside the designated area, or meeting the need for it in some other way
- Any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated needs to be justified.

The NPPF does not reduce the importance of a nationally designated area, and therefore it is not unreasonable to assume that the tests should still be met. The councils are concerned that there is still no detailed justification for development in the AONB in the draft ES, other than relying on the nationally significant infrastructure label. Chapter 7 does NOT provide convincing evidence of the need for development, or a robust case why this specific route has been selected.

1.82 Paragraphs 7.1.3 – 7.1.7 describe the four categories of alternatives reported, namely: do-nothing, strategic, route-wide and local. Do-nothing options are those where no additional investment in transport schemes is expected beyond that planned and committed; strategic options are defined as non-high speed rail that seek to meet the Proposed Scheme’s objectives; route-wide options are different configurations for high speed rail between London and the West Midlands; whilst local options focus on different responses to specific locations in the preferred route corridor – considered in Chapter 8.

1.83 Paragraph 7.1.8 clearly describes the factors apparently used to compare alternatives, derived from strategic considerations. These factors were broadly:

- Compliance with capacity / journey time objectives
- Engineering feasibility and deliverability
- Environmental impacts, and scope for mitigation
- Benefit Cost Ratio (BCR) and value for money
- Wider economic benefits

- Degree of disruption to existing categories
- Opportunities to reduced greenhouse gas emissions

The councils had expected to see a table that assessed the range of options (do-nothing, strategic, route-wide and local) with the Proposed Scheme, against these factors. This is absent in the draft ES and has not appeared in any previously published report.

- 1.84 Consideration of the ‘do-nothing’ option is set out in Section 7.2. It is interesting to note that a further set of criteria are described against which the ‘do-nothing’ option clearly fails. But these are not the same as those set out in paragraph 7.1.8. Whilst ‘do-nothing’ options would probably fail against these factors, that comparison is not made. The councils question why this comparison is not included.
- 1.85 Review of strategic alternatives is described in Section 7.3. These were split into three main categories – modal alternatives (non-rail transport modes), conventional rail-based alternatives, and high speed rail alternatives to the Proposed Scheme. Modal alternatives considered were enhanced air travel or new / enhanced motorways. The councils are not convinced that this represents the full range of modal alternatives, since bus and coach options have not been assessed.
- 1.86 The assessment of enhanced air travel (paragraphs 7.3.3 – 7.3.6) does not compare this option against the factors in paragraph 7.1.8, but rather makes subjective judgements about modal interchange (switch from rail to air), carbon emissions, and ability to meet inter-city travel needs. This alone seems sufficient reason for this option to be dismissed or rejected.
- 1.87 In a similar way new motorways (paragraphs 7.3.7 – 7.3.9) are rejected as an alternative to HS2. There is no effort to illustrate why this alternative fails to meet the factors, and therefore no objective consideration of the identified factors.
- 1.88 The draft ES does consider selective enhancement of the road network (paragraphs 7.3.10 and 7.3.11) involving capacity improvements to the motorway network between London and Birmingham – with four options. These options are rejected, but not because they fail to meet the critical factors, rather that they would offer no more than a series of short-term fixes.
- 1.89 As a consequence of this review, the councils are concerned that all strategic alternatives have been dismissed / rejected without detailed reference to the factors. The councils believe that such rejection is opaque, since it is not properly explained, and does not allow any independent scrutiny.
- 1.90 The draft ES also considers rail-based alternatives to the Y network, focusing on options to the Y network (infrastructure upgrades for WCML, MML, ECML and possibly CML); or options for a London to West Midlands high speed line (upgrading WCML or a new-build rail line), paragraph 7.3.12. The rail options (Scenarios A-C) to the Y network are described at paragraph 7.3.13 and between paragraphs 7.3.15 – 7.3.21. At paragraphs 7.3.22 – 7.3.24 scenarios A and C are rejected but only because *“they represented poor value for money”* although no comparison is made with the HS2 Y network.

- 1.91 At paragraph 7.3.23 Scenario B is rejected because it is *“not considered to represent an acceptable alternative to the Y network”*. The councils do not believe that this is a good or valid reason for rejection, since once more an option is compared to the preferred option, namely HS2 and the Y network, and not the identified factors.
- 1.92 Conventional rail-based alternatives (to a London and West Midlands high speed line) are considered at paragraphs 7.3.25 – 7.3.40. These are identified as Rail Packages 2/2A, 3/3A, 4, 5 and 51m Group. It appears that RP 3/3A, 4 and 5 were rejected early on in the process, since they offer poor value for money – not because they fail to meet the factors.
- 1.93 Rail Package 2/2A was re-evaluated in 2011 as was the 51m alternative. This was supplemented with new information from Network Rail on infrastructure costs and operational impacts, information not shared with 51m. It is acknowledged that *“Each of these alternatives would increase capacity by enhancing the WCML, with RP2 achieving the greatest saving in journey times.”* The draft ES goes on to state (at paragraph 7.3.40) that *“...all three schemes were found to offer a substantial margin of benefits over costs, which exceeded that of a high speed London and West Midlands route in isolation...”* but *“the overall scale of benefits would be less than that achieved by the HS2 network.”*
- 1.94 The councils are concerned that these alternatives were rejected without adequate consideration or further discussion with the promoters. As such, a clear opportunity to demonstrate and maximise the benefits of the 51m alternative was missed. It appears that HS2 has always been the preferred option, with a new build high speed rail network favoured over incremental and lower cost improvements. At the end of paragraph 7.3.40 it is stated that *“...the short term benefits offered by these alternatives could not match the longer term and wider benefits delivered by HS2, and they were therefore rejected.”* The draft ES has made no attempt to describe, quantify or illustrate these longer term and wider benefits.
- 1.95 New build conventional rail is considered at 7.3.41 and 7.3.42, but rejected for unjustified reasons. It acknowledges that this alternative would be significantly cheaper than HS2 but suggests that longer journey times would reduce the level of patronage by a similar amount, apparently a 33% reduction in revenue and benefits. The councils would welcome sight of the evidence that underpins this assertion.
- 1.96 A similar assertion is made in paragraph 7.3.44 when it is acknowledged that *“...enhancements of the existing network were likely, on balance, to give rise to less environmental impact than a new-build high speed line.”* but that this needed to be balanced *“...against the correspondingly greater travel – and therefore economic – benefits of a new high speed line.”* Without detailed data or statistics such a statement is hard to either prove or disprove, and therefore, the councils would welcome sight of the evidence that underpins this assertion.
- 1.97 The councils do not feel it necessary to comment on the high speed alternatives to the Y network, as these make no difference to the route or alignment of Phase 1 through Buckinghamshire.

- 1.98 The councils challenge the way alternative specifications for the high speed route have been assessed, and particularly the consideration of alternative speeds. The difference in journey times between a 360kph and a 300kph route increase journey times between London and Birmingham by four and a half minutes, and slightly longer for destinations further north. Such a small time increase is claimed to reduce benefits over costs by 15%, an assertion that is also made without reference to evidence or the business case. The major benefit achieved by reducing the design speed is giving greater flexibility in route alignment, but this is not properly assessed in the draft ES.
- 1.99 The lower speed options are reconsidered briefly in paragraphs 7.4.24 - 7.4.26. They are rejected since “...*the benefits of designing the route for lower speeds would be marginal...*” The councils refute this claim, but cannot substantiate any view without evidence or data.
- 1.100 As the councils are opposed to the Proposed Scheme for HS2 and believe that the 51m alternative more than meets all the necessary objectives and requirements, they will not be commenting on the alternative corridors for the London and the West Midlands route, described between paragraphs 7.4.6 – 7.4.17. They also do not intend to comment on alternative routes through the West Midlands.
- 1.101 Paragraphs 7.4.41 and 7.4.42 identifies that work was completed in 2009 and revisited in 2011 to look at provision of intermediate stations (on different route options) at Aylesbury, Bicester and Milton Keynes. The draft ES states that any local community benefits that might be derived come “...*at the cost of reduced capacity (by about 20%) on the London and West Midlands route.*” The councils believe that this means Buckinghamshire gets all the pain with absolutely no gain whatsoever.
- 1.102 The councils are disappointed that no firm decision has yet been made on a connection to Heathrow Airport. The draft ES explains the chronology to date, but concludes that the decision will be delayed until the Airports Commission reports, but that the design makes passive provision for a spur in the Colne Valley CFA. This means that many in the area are left with blight hanging over them for the foreseeable future.

Local Alternatives (Chapter 8)

- 1.103 Chapter 8 reviews the local alternatives considered during the development of the Proposed Scheme before January 2012. Paragraph 8.2.1 states that these “...*were assessed against factors such as their cost, engineering feasibility, impact on journey time and compliance with the AoS criteria.*” It is disappointing that Table 6 (p107-108) does not include reference to these factors, and instead provides a limited ‘project response’.
- 1.104 Specifically with reference to Table 6, the councils wish to register the following comments:

- **Colne Valley**
Efforts should be made to minimise and avoid impact on the complex mix of leisure and other uses in this area
- **Quinton**
Consider options for minimising the diversion of Station Road and impacts on Quinton, whilst maintaining access to the Buckinghamshire Railway Centre

1.105 Whilst the councils recognise the thinking behind the choice of Calvert for the Infrastructure Maintenance Depot (paragraph 8.4.3), they are concerned that this area is being asked to cope with a mix of challenging issues and is probably, the most affected area, of any in Phase 1. As such the councils insist that the best possible mitigation measures are developed for such a currently tranquil and rural area.

1.106 The councils remind DfT and HS2 Ltd of the 'Buckinghamshire Mitigation Blueprint', seeking to secure appropriate mitigation measures, should the project succeed. They trust that this is being used as the baseline for mitigation in Buckinghamshire. With the County comprising a third of Phase 1, all opportunities for local enhancement must be fully maximised and exploited.

Comments on HS2 Sustainability Policy

1.107 The councils note that the policy sets out '*HS2 Ltd's corporate approach to incorporating environmental and sustainability aspects*' but are disappointed that it restricts itself to '*the high level principles which will define how these matters will be addressed on the HS2 project*', rather than concerning itself with the necessary detail.

1.108 It is stated that, '*the CoCP will form a component of the HS2 Environmental Minimum Requirements (EMRs)*.' The councils recognise that these only '*set out the high level environmental and sustainability commitments that the Government will enter into through the Hybrid Bill process*', and would clearly welcome further detail at the earliest opportunity.

1.109 Paragraph 3.3.1 of the CoCP states that, '*as part of its sustainability policy, HS2 Ltd will develop an environmental management system (EMS) in accordance with BS EN ISO 14001*'. This is not reflected or referenced within the Sustainability Policy document, despite its obvious relevance. Such an EMS, suggested by Figure 1 of the CoCP, should be available imminently since it is planned for the second part of the initial Parliamentary design stage.

1.110 The councils believe that the Sustainability Policy is little more than a statement of intent and contains nothing measurable. A detailed sustainability strategy is absent in figure 1 but should not be left to a later stage. Rather it should be developed by HS2 Ltd now, supported by effective engagement with communities and other key stakeholders to ensure that environmental and sustainability management measures are designed and implemented to protect communities and the environment during detailed design development and construction. Such a strategy

should also include emphasis on the different aspects of HS2 Ltd's work supported by specific outcomes, targets, deadlines and strategies.

- 1.111 The councils are disappointed that the policy remains silent about the legacy of the line in future years, and its future significant impacts. As a major development it would not be unreasonable to expect more detailed consideration of delegated responsibilities and the risks to be borne by nominated undertakers and contractors.
- 1.112 The councils are disappointed that the Sustainability Policy contains no commitment to the relevant environmental legislation. It is noted that HS2 Ltd will be seeking to achieve environmental enhancements and benefits, but this is the bare minimum expected by the councils.
- 1.113 The councils note the aspiration to maximise the proportion of material diverted from landfill to reduce waste, in line with the European Waste Directive. It is hoped that further discussions with local authorities will enable this aspiration to be realised. The councils do not understand how the HS2 proposals support the Government's objective to encourage wellbeing and protect the environment, and believe that this policy and / or the draft ES should specifically and explicitly refer to health and safety protection.
- 1.114 The councils clearly welcome the aspirations about stakeholder engagement, but based on experiences to date, are not convinced or confident that the ambitions will be achieved. In line with good governance arrangements, they also welcome the aim to create and develop robust processes, but remain to be convinced that the HS2 Ltd intentions can be met given the recent track record.
- 1.115 It is noted that HS2 Ltd plan to openly and regularly report progress on delivering sustainability commitments. Whilst this is welcomed, the councils would like to see a specific timetable for such progress reports. Further requirements include reporting on progress made, and lessons learned about the delivery of commitments on community, economic and environmental issues.