



HS2 Phase 2a: West Midlands to Crewe

Environmental Impact Assessment Scope and Methodology Report: Consultation Summary Report

A report to Hs2 Ltd by Arup / ERM

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ARUP



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Executive Summary

HS2 Ltd consulted on the HS2 Phase Two: West Midlands to Crewe Environmental Impact Assessment (EIA) Draft Scope and Methodology Report (the draft EIA SMR) from 8 March 2016 until 13 May 2016. The purpose of the consultation was to seek responses on the appropriateness of the proposed approach to the preparation of the EIA and subsequent formal EIA Report for Phase 2a of the proposed high speed rail network (HS2). The consultation led to 26 responses resulting in 736 individual comments.

Each of the 736 comments has been reviewed and considered by the technical environmental topic authors of the draft EIA SMR. This Consultation Summary Report provides a summary of the type of responses received and the main changes made to the EIA SMR as a result of these.

Consultation responses considered directly relevant to the draft EIA SMR have been considered, and incorporated into the revised SMR, where appropriate.

Comments that did not relate to the draft EIA SMR but which were relevant to the project in general, to the design or to the detailed EIA were discounted from the analysis but have been passed onto the relevant part of the project team and are being considered where appropriate as part of the development of the project.

1 Introduction

1.1 Background

1.1.1 The HS2 Phase Two: West Midlands to Crewe Environmental Impact Assessment (EIA) Draft Scope and Methodology Report (hereafter referred to as the 'draft EIA SMR') was published for consultation on the HS2 Ltd website for a period of nearly 10 weeks from 8 March to 13 May 2016. HS2 Ltd also wrote to a number of bodies and organisations directly informing them of the consultation. The draft EIA SMR set out the proposed method and content of the EIA and structure of the formal EIA Report for Phase 2a of the proposed high speed rail network (HS2), (hereafter referred to as the 'Proposed Scheme').

1.1.2 The purpose of the consultation exercise was to obtain views on the proposed scope and methodology of the EIA, its appropriateness in determining likely significant environmental effects and the proposed structure of the EIA Report.

1.1.3 This report summarises the findings of the consultation exercise on the draft EIA SMR.

1.2 Revisions to the draft EIA SMR

1.2.1 The feedback received during the consultation exercise has been considered and the draft EIA SMR has been revised in light of the comments received.

1.3 Structure of this Consultation Summary Report

1.3.1 This report is structured as follows:

- Section 2 - describes the consultation methodology;
- Section 3 - describes the process adopted for addressing the responses received as a result of the consultation;
- Section 4 - provides a summary of the types of comments raised, themes that have emerged from the consultation, the project's response and changes made to the draft EIA SMR as a result. Section 4 is broken down into headings consistent with the sections of the draft EIA SMR. These are:
 - Changes between Phase One and Phase 2a approach to EIA;
 - Stakeholder engagement;
 - EIA methodology;
 - Reporting of alternatives;
 - Agriculture, forestry and soils;
 - Air quality;
 - Climate change;
 - Community;
 - Cultural heritage;

- Ecology;
 - Electromagnetic interference;
 - Health;
 - Land quality;
 - Landscape and visual;
 - Major accidents and natural disasters;
 - Socio-economics;
 - Sound, noise and vibration;
 - Traffic and transport;
 - Waste and material resources;
 - Water resources and flood risk; and
 - Structure of the EIA report.
- Section 5 - describes the next steps that will be taken following this consultation exercise;
 - Annex A of this report contains the response form that consultees were asked to complete as part of the consultation;
 - Annex B of this report contains the list of organisations contacted by HS2 Ltd to inform them about the consultation; and
 - Annex C of this report contains the list of organisations who responded to the consultation before the deadline.

2 Consultation methodology

2.1 Consultation process

- 2.1.1 The draft EIA SMR was published for consultation on the HS2 Ltd website¹ for a period of nearly 10 weeks from 8 March to 13 May 2016. The consultation was open to all through the website, which included a response form (shown in Annex A) and invited responses via email or post. Dedicated email and FREEPOST addresses were provided.
- 2.1.2 HS2 Ltd also sent letters on 8 March 2016 to the organisations listed in Annex B of this report to inform them about the consultation. The organisations included statutory consultees and other groups likely to have an interest in the EIA SMR or the area potentially affected by the Proposed Scheme. Reminders of the consultation and its closing date were circulated to the same organisations by email on 25 April 2016.
- 2.1.3 The organisations and individuals that responded before the deadline on the 13 May 2016 are listed within Annex C of this report.

2.2 Quality assurance

- 2.2.1 HS2 Ltd sent out a series of 'test responses' to the dedicated email and FREEPOST addresses in order ensure the systems operated smoothly and to also establish the length of any potential lag between the send and receipt of FREEPOST responses. HS2 Ltd sent test emails on 24 February 2016 and 1 March 2016 that were received on the same day they were sent. HS2 Ltd also sent test letters to the FREEPOST address. All of the test responses were received, although this process revealed that letters could take up to 15 days to be delivered. Consequently, a 15 day grace period following the 13 May 2016 consultation deadline was allowed for the receipt of consultation responses by post.
- 2.2.2 Quality assurance exercises were carried out at different stages of the process to ensure that the receipt, coding and reporting of responses was consistent and fair. A sample of responses was read by the HS2 Ltd Consultation Team and cross-checked for consistency against the coding framework (see Section 2.3), in order to understand how codes had been developed and applied against respondents' comments. HS2 Ltd was satisfied that the analysis process was consistent and fair.

2.3 Processing of responses

- 2.3.1 On receipt, consultation responses were registered and logged with a unique response number.
- 2.3.2 Responses were then initially checked for validity and null representations² and late responses were discounted from the formal analysis, although have been reviewed separately. From each response various general information was recorded including:

¹ www.gov.uk/government/consultations/hs2-phase-two-west-midlands-to-crewe-draft-environmental-impact-assessment-scope-and-methodology-report-consultation

² A null representation was considered to be any duplicate response, blank response forms, responses with no name, or responses submitted under false names

- organisation;
- type of response (email or letter); and
- address.

2.3.3 Individual comments within each response were then reviewed and attributed codes based primarily on the different sections of the draft EIA SMR in order to aid analysis. Comments were passed onto technical members of the project team to consider if or how the comments would or should affect the draft EIA SMR. A summary of this process is presented in Section 4 of this report. Comments were considered and actions were identified in line with the following:

- the comment relates to a point that is already included in the SMR, and therefore, no change is required;
- the comment is relevant to the SMR and the project agrees that a change should be made to the SMR;
- the comment is relevant to the SMR, but is not considered to provide any new evidence that would make the SMR more robust, and therefore, no change should be made to the SMR;
- the comment is one that will be addressed during the detailed EIA process or through the Technical Notes and does not require a change to the SMR; or
- the comment is considered a wider issue, such as general stakeholder engagement or design related, which does not have direct relevance to the content of the SMR, and therefore, no change should be made to the SMR.

2.3.4 Not all of the comments received related to the draft EIA SMR. Comments that did not relate to the draft EIA SMR included wider project comments, design suggestions and general (i.e. not SMR specific) stakeholder engagement comments. These were passed on to HS2 Ltd and discounted from the analysis of the draft EIA SMR consultation responses.

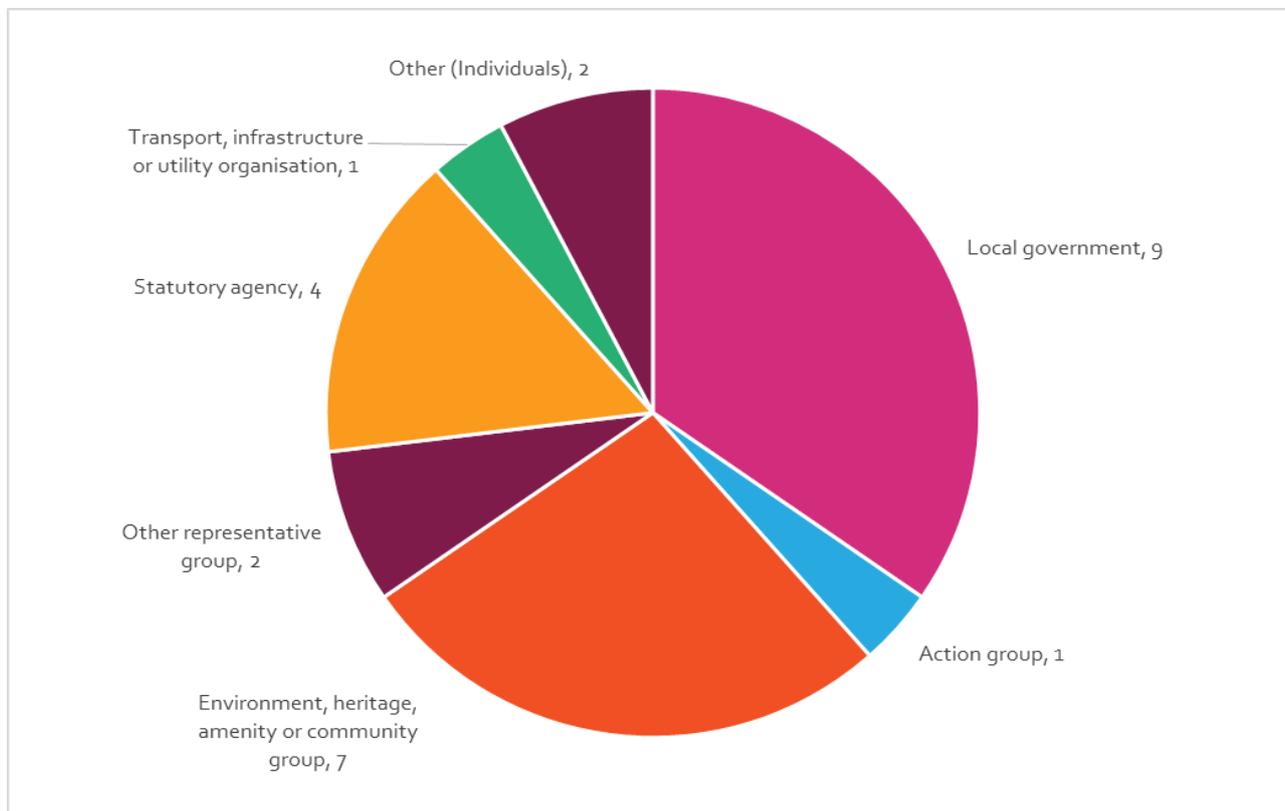
2.3.5 Some comments were useful to both the SMR and other related processes (such as the detailed EIA and Technical Notes), these comments were given multiple codes so that various parts of the project team could use them as well as being considered as part of the analysis.

2.3.6 After discussion with HS2 Ltd technical specialists, comments that resulted in a change to the method or scope of the EIA or a change to the draft EIA SMR, have been taken into account and amendments made in the revised EIA SMR; see Section 5 (Next steps) for further details.

3 Overview of responses

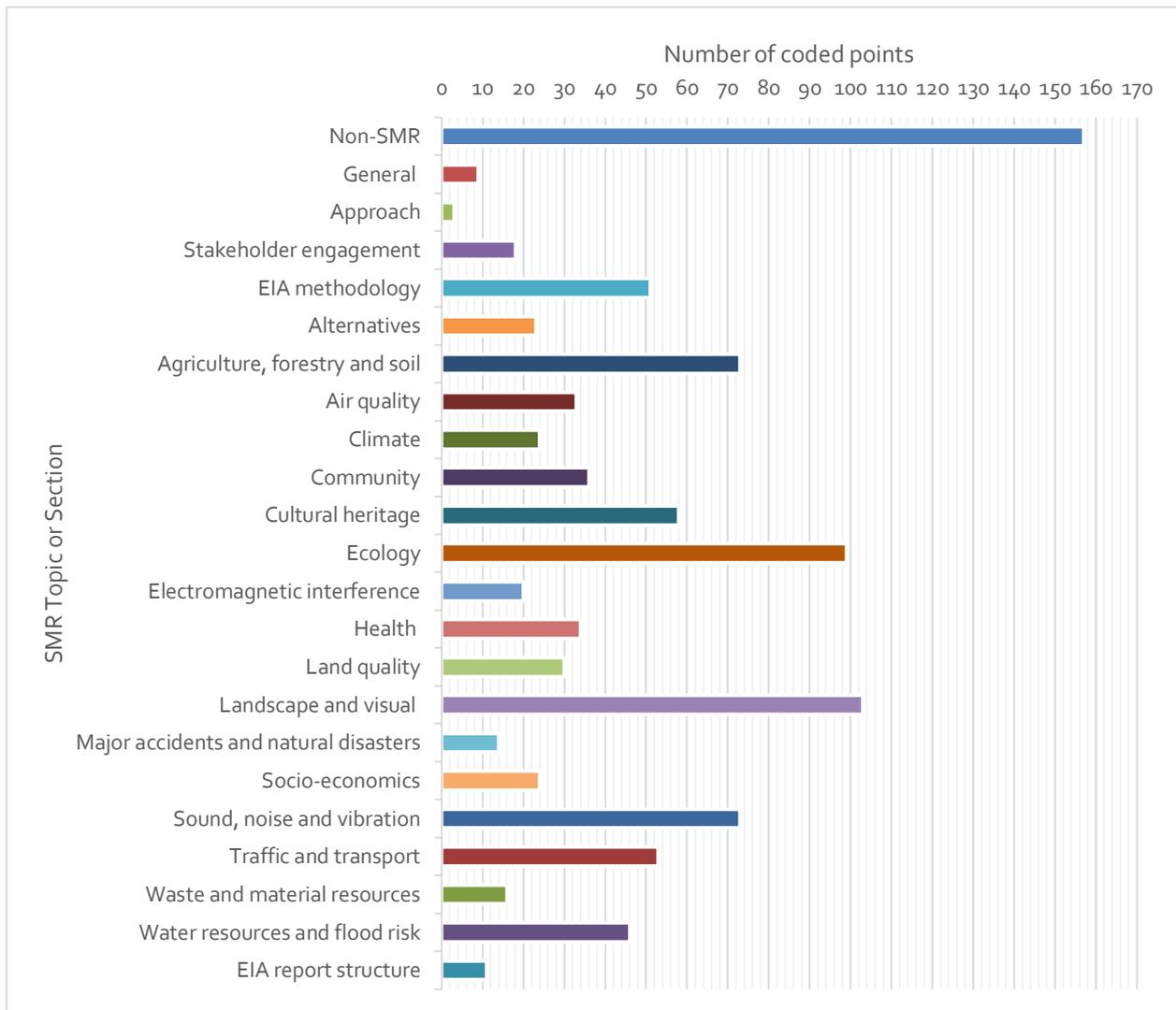
3.1.1 Twenty-six valid responses were received on the draft EIA SMR, including two responses from individuals and 24 from organisations (listed in Annex C). The breakdown of the types of respondents is shown in Figure 1.

Figure 1: Breakdown of respondents to the draft EIA SMR consultation



3.1.2 Within the 26 responses a total of 736 comments were made. Some comments related to more than one aspect or topic. These were therefore coded multiple times to ensure that the comments could be referred to the correct, and multiple, technical specialists in the project team and comprehensive consideration could be given to whether a change should be made to the draft SMR. For example, a comment about the assessment of ancient woodland was considered relevant to the ecology, cultural heritage and landscape assessments, therefore, this one comment was deemed to have made three points for consideration; it was, therefore, coded three times and passed to each of the three technical teams for consideration. A total of 1,008 of these 'coded points' were identified from the 736 comments. Figure 2 shows the breakdown of the 1,008 coded points by topic or SMR section.

Figure 2: Breakdown of the EIA SMR comments by topic or SMR section



3.1.3 Of the total 1,008 coded points, 157 of these did not relate to the draft EIA SMR. The remaining 851 coded points were considered relevant to the draft EIA SMR and are discussed in the following sections of this report.

3.1.4 In parallel to the draft EIA SMR consultation, HS2 Ltd also consulted upon the draft Equality Impact Assessment (EQIA) Scope and Methodology Report³. Comments received on the draft EQIA SMR that were relevant to the EIA SMR were coded as such and details were cross-referenced.

³ www.gov.uk/government/consultations/hs2-phase-two-west-midlands-to-crewe-draft-equality-impact-assessment-scope-and-methodology-report-consultation

4 Responses by technical topic

4.1 Introduction

4.1.1 This section of the report summarises the main 'themes' of the comments received for each section of the draft EIA SMR and provides details of the project team's response. The following sections mirror the structure of the draft EIA SMR. 'Themes' were established for this report by grouping together comments that raised similar issues. Individual comments are, therefore, not reported directly in this report, but are collectively summarised.

4.2 EIA approach

4.2.1 Three points were made in relation to the general EIA approach. The main themes to come through from the consultation and the project team's subsequent responses are summarised below.

Theme:

- General support was received in relation to the proposed integrated approach to assessment and the commitment to including information required by the EIA Regulations 2011⁴ as well as the EIA Directive 2014⁵.

Response:

- The proposed scope of the EIA has taken into account the new requirements of the EIA Directive 2014 as described in Section 2.2 (Changes to the EIA Directive) of the draft EIA SMR. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Concerns were raised that there appears to be no independent peer-review of the assessment methodology, of the thresholds of acceptance, or of the appropriateness or effectiveness of proposed mitigation measures.

Response:

- The assessment methodology and development of mitigation will adhere to the guidance of various published assessment methodologies and standards (set out in the draft EIA SMR) that are accepted as industry best practice. This consultation was undertaken to seek views from independent third parties, including feedback from EIA statutory consultees, on the scope and methodology of the EIA. Stakeholders and the public will also have the

⁴ The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (SI 2011/1824)

⁵ Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014, amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment – the 2014 Directive. The UK Government had not confirmed a date for the issue of new regulations for the implementation of this new Directive during preparation of this report. However, by the time the hybrid Bill is deposited it is anticipated that new regulations will have been introduced. Therefore in anticipation of these new regulations and guidance, HS2 Ltd has adopted the principles of the new Directive for Phase 2a in advance, liaising with the Department for Transport and Department for Communities and Local Government on the implications for the EIA for Phase 2a where possible

opportunity to comment on the working draft EIA Report⁶, and the formal EIA Report⁷, which will include the outcome of the assessment and any proposed mitigation measures. Comments on the latter will be collated by an independent assessor appointed by Parliament for consideration during passage of the hybrid Bill⁸. No changes have been made in the revised EIA SMR to reflect this theme.

4.3 Stakeholder engagement

4.3.1 Eighteen comments were made in relation to the proposed approach to stakeholder engagement in the draft EIA SMR and EIA process. The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- Comments reiterated the request that an open and inclusive approach to stakeholder engagement is undertaken, which should inform the EIA and its assessment.

Response:

- Noted and comments are being used to actively inform HS2 Ltd's stakeholder engagement activities, the EIA, and the development of the Proposed Scheme. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees requested guidance on how engagement with communities will be carried out and requested definition of the five community areas referenced in the draft EIA SMR.

Response:

- Further detail has been added in the revised EIA SMR on the geographical area spanned by each community area alongside that of the map of the route illustrating the five community areas (Figure 3 of the revised EIA SMR). This additional text has been added into Section 4 of the revised EIA SMR.

Theme:

- Consultees requested that a broader set of stakeholders than that set out in Annex B should be engaged through the EIA.

Response:

- The consultation on the draft EIA SMR included a targeted list of 96 organisations as well as being available on HS2 Ltd's website and open to comment by other stakeholders and the public. To help raise awareness a number of professional journals were also issued with information on the

⁶ The working draft EIA Report provides an initial environmental assessment of the current stage of design – see HS2 Ltd's website www.gov.uk/hs2

⁷ The formal EIA Report will report the output of the environmental assessment of the hybrid Bill design which will be deposited in Parliament, at that point Parliament will consult and the public and other stakeholders will have the opportunity to comment on the formal EIA Report

⁸ An Act of Parliament is required to authorise the construction and operation of HS2, these powers are sought via a hybrid Bill

consultation. HS2 Ltd has, and will continue to, engage with relevant stakeholders through the EIA process, which will include, but not be limited to, those stakeholders listed in Annex B. This will include periods of formal consultation on the working draft EIA Report and the formal EIA Report. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Detail was requested on how the EIA representations process will be managed.

Response:

- Additional commentary on how representations inform the EIA has been included in Section 3 of the revised EIA SMR. In particular, the HS2 Ltd consultation on the working draft EIA Report is occurring at an early stage in the development of Phase 2a of the Proposed Scheme. This is to allow early engagement with those potentially affected by the Proposed Scheme and to help inform the scheme design and assessment. Additionally Parliament will undertake a formal public consultation on the formal EIA Report after deposit of the hybrid Bill. Comments on the latter are collated by an independent assessor for Parliament to take into account when considering whether to pass the Bill.

4.4 EIA methodology

4.4.1 Fifty-one comments were made in relation to the EIA methodology. The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- Further clarification was requested on how the environmental effects of the Proposed Scheme would be monitored to ensure that they remain as described in the EIA through the detailed design and implementation processes.

Response:

- This is covered in Section 1.7 of the draft EIA SMR, however additional clarification has also been provided in Section 1.7 of the revised EIA SMR. This will be achieved through a combination of the arrangements within the Bill for approving details of design and construction and policies, commitments and undertakings entered into, such as the suite of documents comprising the Environmental Minimum Requirements.

Theme:

- A number of comments requested that non-technical language be used in the EIA Report as far as practicable.

Response:

- The working draft and formal EIA reports will include a non-technical summary, as required by the EIA Directive. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees raised concern that the EIA might be compromised by the developer undertaking the process.

Response:

- EIA is generally undertaken by the developer. It does not constitute a conflict of interest and does not conflict with the EIA Directive 2014. As noted in Section 4.5 of the draft EIA SMR, the EIA is being undertaken objectively by consultancies appointed by HS2 Ltd who are considered to be amongst the leaders in their profession in the UK. Representatives of environmental statutory authorities and government departments are also involved in the EIA as it progresses by way of ongoing engagement. HS2 Ltd will also consult on the working draft EIA Report and additionally Parliament will undertake a formal public consultation on the formal EIA Report after deposit of the hybrid Bill. Comments on the latter are collated by an independent assessor for Parliament to take into account when considering whether to pass the Bill. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees commented that the in-combination effects assessment should include Phase 2b as well as Phase One and concern was raised that in-combination effects may not receive sufficient attention.

Response:

- The EIA will take account of in-combination effects with Phase 2b where these can be determined based on the information available at the time of assessment, as noted in Section 4.4 of the draft EIA SMR. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- It was highlighted that environmental baseline data would be available for use in the EIA, this data is being collated as part of the preparation of local planning documents (such as Neighbourhood Plans).

Response:

- Relevant local planning documents will be reviewed for baseline data as part of further assessment work. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Concerns were raised about the use of professional judgement as part of the methodology for undertaking the EIA.

Response:

- The draft EIA SMR explains that the EIA is being undertaken by consultancies who are considered to be amongst the leaders in their profession in the UK, in conjunction with HS2 Ltd's technical specialists. The leaders for each technical environmental topic meet regularly to discuss the methodology being applied,

the issues, impacts and effects arising, and the solutions available. The individual topic impact assessments will be undertaken in line with recognised industry best practice. Representatives of environmental statutory authorities and Government Departments are also involved in the development of the EIA as it progresses.

- EIA as a process does require the application of professional judgement, for example when assessing landscape and visual impacts, and the EIA team and approach that HS2 Ltd has set up enables experienced EIA practitioners to apply expert professional judgement on a consistent basis. No changes have been made in the revised EIA SMR to reflect this theme.

4.5 Alternatives

4.5.1 Twenty-three comments were made in relation to the reporting of alternatives in the draft EIA SMR. The main theme to come through from the consultation and subsequent responses is summarised below.

Theme:

- Several requests were made for the scope of the EIA to be extended to consider particular alternatives (mostly in relation to the viaducts at various points along the route).

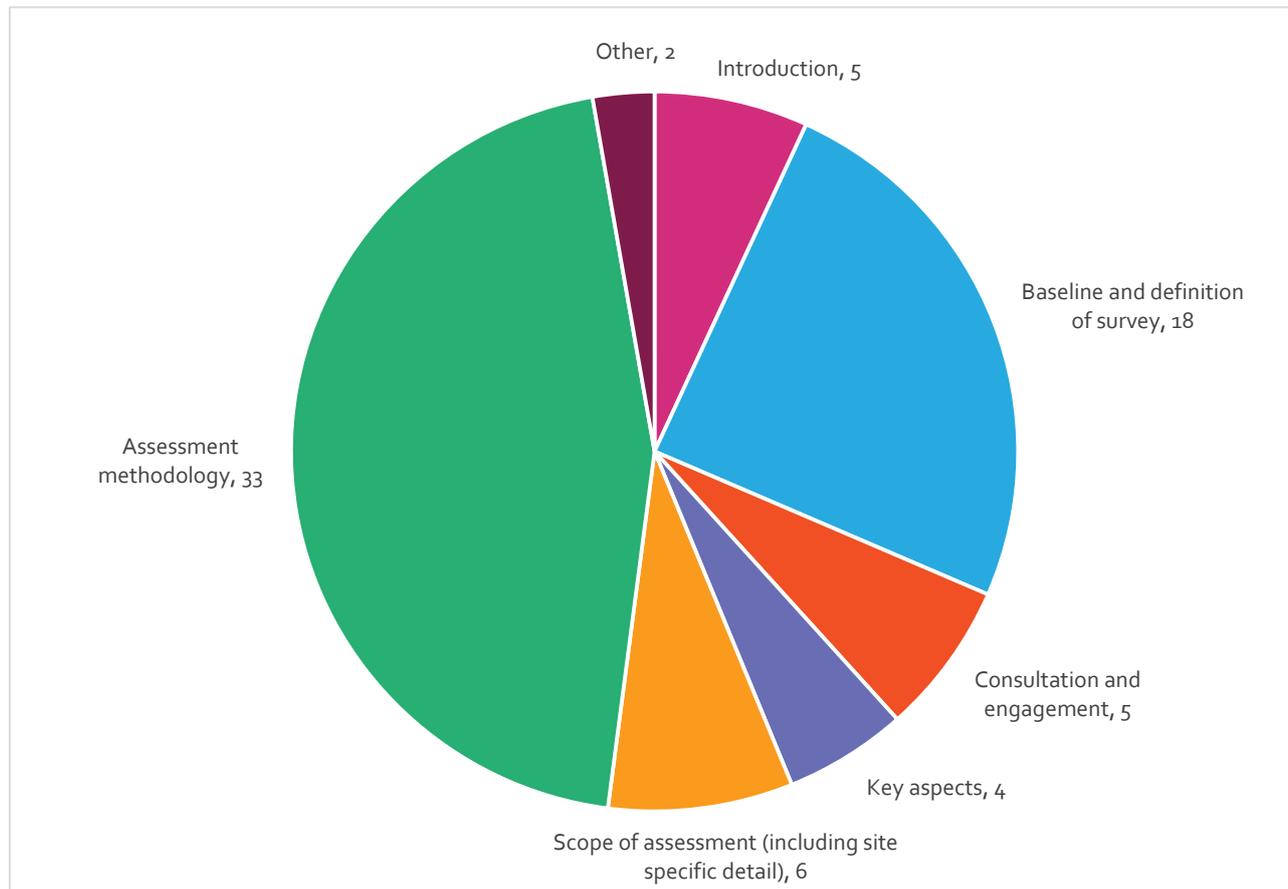
Response:

- The working draft and formal EIA reports will provide an outline of reasonable alternatives studied during development of the Proposed Scheme and the reasons for the option chosen, taking into account the effects of the Proposed Scheme on the environment. No changes have been made in the revised EIA SMR to reflect this theme.

4.6 Agriculture, forestry and soils

4.6.1 Seventy-three comments were made in relation to the agriculture, forestry and soils topic. Figure 3 shows the number of comments that were received per sub-section of Section 6 of the draft EIA SMR.

Figure 3: Comments by subsection - agriculture, forestry and soils



4.6.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- The inclusion of agriculture, forestry and soils in the scope of the EIA was well-received and consultees commented that they were generally pleased with the scope of assessment.

Response:

- Noted. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees identified additional potential receptors to be considered in the scope of the assessment and noted the potential for impacts on veteran trees, ancient woodland, livestock, aquaculture businesses and agricultural businesses.

Response:

- The agriculture, forestry and soils chapter is concerned with the impacts on forestry as a land use only. The impacts on veteran and ancient trees and characteristics of ancient woodland will be considered in the ecological assessment. Section 11.2 of the revised EIA SMR clarifies that veteran trees will be identified as part of the Phase 1 Habitat Survey, and that information gathered will be used to inform the assessment. A cross reference to the ecology topic has been included in Section 6 Agriculture, forestry and soils of the revised EIA SMR.
- The impact of noise on livestock will be considered in the assessment as stated in the draft EIA SMR Section 6.6.
- Section 6.2 of the draft EIA SMR explains that the term 'farm holding' is used in a wide sense and includes non-agricultural enterprises within the control of the main occupier. This would include fish farms and all forms of food production.
- Section 6.1 of the draft EIA SMR states that the impact on individual farm holdings is a key consideration. This is considered further within the spatial scope in Section 6.5 and in the significance criteria in Section 6.6 of the draft EIA SMR.

Theme:

- Similarly, it was requested that the impact on agricultural land as a whole, not just best and most versatile (BMV) land (Agricultural Land Classification Grades 1, 2 and 3a) be considered.

Response:

- Section 6.5 of the draft EIA SMR states that the scope of the assessment on agriculture, forestry and soils will include:
 - the quantity and quality of agricultural and forestry land that would be affected, both temporarily and permanently;
 - the nature and use of the agricultural and non-agricultural soil resource that would be affected (and displaced) by the Proposed Scheme;
 - the physical impact of land loss and severance and other impacts on agricultural enterprises and farm-based non-agricultural enterprises; and
 - the loss or degradation of features within agri-environment schemes.
- The formal EIA report will document the impact on all grades of agricultural land, and not just BMV land. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Comments were received on the significance criteria (including magnitude and sensitivity definitions) proposed to assess the impact on agriculture, forestry and soils and a number of suggestions were made for altering the criteria.

Response:

- The assessment criteria set out in the draft EIA SMR are the same as applied in the Phase One ES. They follow the proportions used by the Department of Environment, Food and Rural Affairs (Defra) and Natural England in their maps of the likelihood of BMV land.
- Certain refinements proposed by consultees to the significance criteria for assessing the significance of effect on soil resources have been accepted and reflected in Section 6.6 of the revised EIA SMR.

Theme:

- Consultees recommended the early gathering of baseline data and were pleased with the proposed collection of soils data.

Response:

- Baseline data has been collected at an early stage in the EIA and will continue as the EIA progresses. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Comments were received on the engagement strategy for those with agriculture, forestry and soil interests. In particular, it was requested that HS2 Ltd engage with tenants as well as landowners and several comments were made on the proposed content of the Farmers' Packs⁹.

Response:

- Section 6.2 of the draft EIA SMR states that information on tenanted farms will be obtained mostly from the tenant. Information on a tenanted farm holding will also be obtained from the landlord, as required (for example, where other non-agricultural interests need to be taken into account in the assessment). On broader property matters, HS2 Ltd will engage with both landlords and tenants.
- The comments on the proposed content of the Farmers' Packs were noted and have been passed on for consideration to those developing them.
- No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees sought further information on the proposed mitigation measures and expressed concern that land proposed for mitigation measures must be appropriate to the scale of land lost.

Response:

- HS2 Ltd will seek to reduce the agricultural land required for the Proposed Scheme where reasonably practicable. However, HS2 Ltd is committed to the

⁹ Refers to HS2 Guide for Farmers and Growers, May 2016
www.gov.uk/government/uploads/system/uploads/attachment_data/file/521286/HS2_Guide_for_farmers_and_growers.pdf

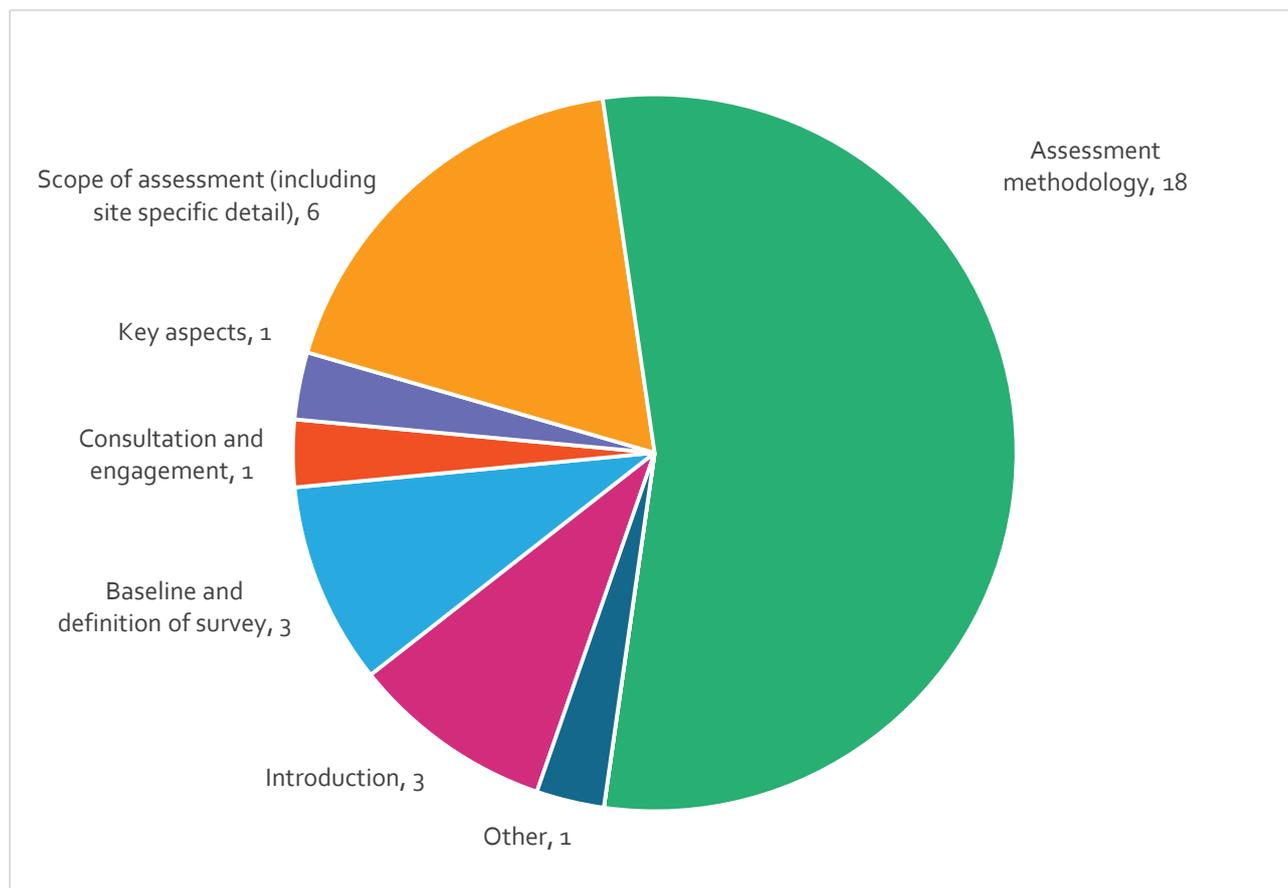
construction of a high speed railway to modern standards of design that will include earthworks, landscape planting and habitat creation to reduce impacts on communities and the environment. Furthermore, there is a balance to be struck between loss of agricultural land, landscape planting and creation of new ecological habitat within the railway corridor. In arriving at this balance, HS2 Ltd has sought to limit disturbance to agricultural holdings and farm management in consultation with land owners and farmers, and to use severed areas for ecological mitigation and tree planting, wherever practicable and suitable. The soils required for landscape planting and habitat creation/translocation are not generally those that will have been stripped from BMV land. Soils that have been stripped from BMV land are generally likely to be used for the reinstatement of BMV land.

- No changes have been made in the revised EIA SMR to reflect this theme.

4.7 Air quality

4.7.1 Thirty-three comments were made in relation to the air quality topic. Figure 4 shows the number of comments that were received per sub-section of Section 7 of the draft EIA SMR.

Figure 4: Comments by subsection - air quality



4.7.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- Consultees were generally pleased with the scope of air quality pollutants proposed to be included in the assessment, but requested the consideration of dust during the operational phase as well as during construction.

Response:

- Dust generation during operation of the Proposed Scheme is not considered to result in a likely significant effect. Whilst there is a theoretical possibility of dust production, it is not expected that this would be significant. No similar issue has been noted on the currently operational High Speed 1 (HS1) line. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- It was suggested that the scope of the assessment should be expanded to consider the potential effects of changes in air quality on ecological receptors

and a number of comments advised on the approach that should be taken in this assessment.

Response:

- The scope of the EIA includes the impact of construction dust deposition and operational nitrogen deposition on ecological receptors. Ecological impacts associated with air quality changes will be considered in the ecological assessment, as identified in Section 11.6 of the draft EIA SMR. A cross reference is set out in Section 7.6.11 (Air quality) of the draft EIA SMR indicating that the impacts of operational nitrogen deposition on ecological receptors will be considered as part of the ecology assessment.

Theme:

- Clarification was sought on the number of air quality management areas (AQMAS) that could be affected by the Proposed Scheme.

Response:

- The working draft and formal EIA reports will set out the AQMAS that could be affected by the Proposed Scheme. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees requested that air quality management be routinely reviewed through the life of the Proposed Scheme.

Response:

- The Code of Construction Practice (CoCP) includes measures relating to air quality management during the construction period.
- The air quality assessment during construction will consider the cumulative effects from other known construction works taking place in the area where there is sufficient information available regarding the other developments.
- Local Environmental Management Plans (LEMPS) will be prepared for each local authority area that will detail specific mitigation measures. The CoCP requires that the LEMPS are prepared with engagement from the local authority and other stakeholders.
- In addition, air quality management is a statutory duty of every local authority. Should either HS2 Ltd or the local authority identify an air quality issue associated with HS2 then appropriate action would be taken by HS2 Ltd to assist in resolving the issue.
- No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees asked for further explanation on how the significance of air quality effects would be judged.

Response:

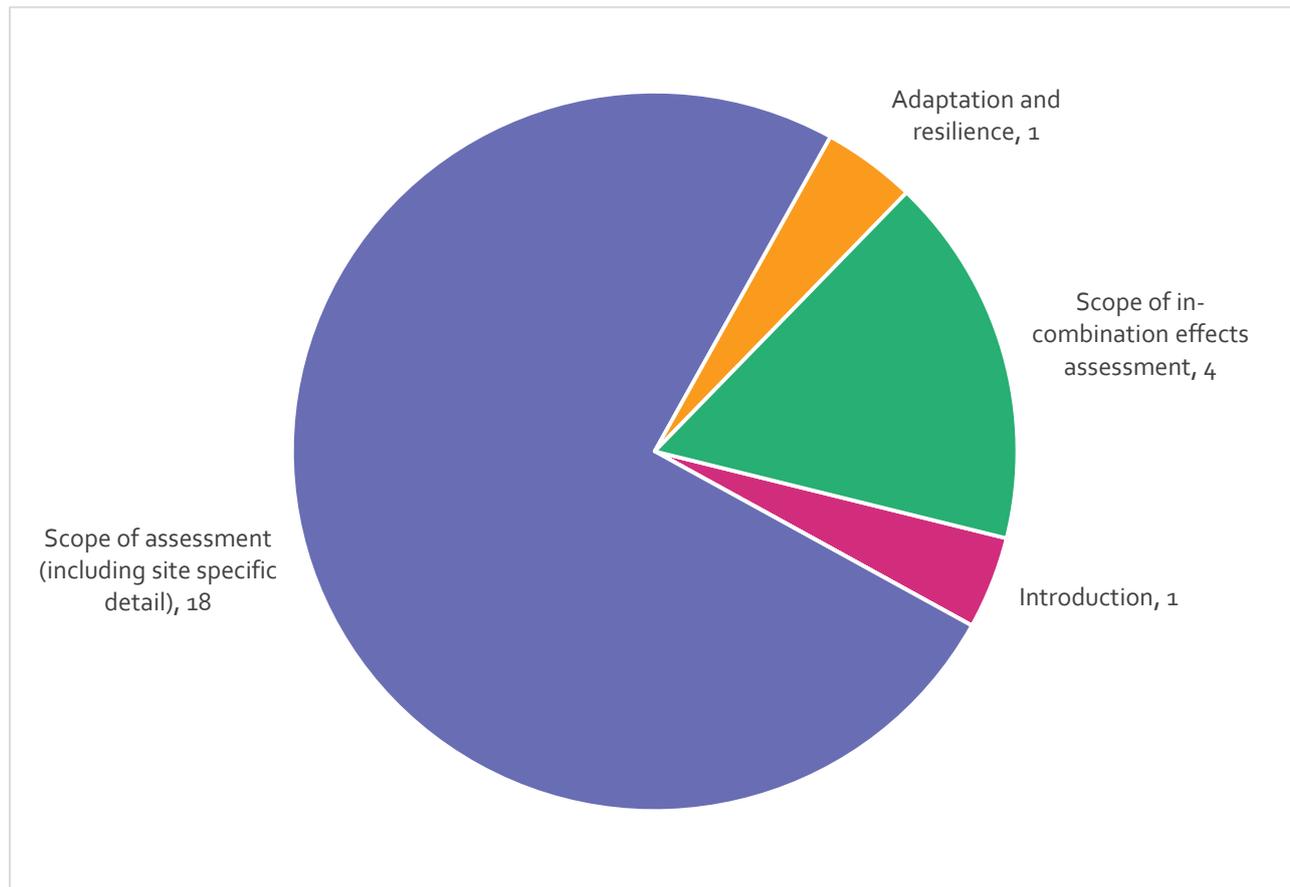
- The HS2 Ltd Phase One Air Quality Technical Note Guidance on the Assessment Methodology¹⁰ details how significance will be assessed. A similar approach will be taken on Phase 2a, which will be reflected in the Phase 2a technical notes. No changes have been made in the revised EIA SMR to reflect this theme.

¹⁰ Air Quality Technical Note Guidance on the Assessment Methodology, Annex A to the HS2 Ltd Phase One Addendum to the EIA Scope and Methodology Report, (CT-001-000/2), November 2013
www.gov.uk/government/uploads/system/uploads/attachment_data/file/260153/Vol5_Scope_and_methodology_report_addendum_CT-001-000.2.pdf

4.8 Climate change

4.8.1 Twenty-four comments were made in relation to the climate change topic. Figure 5 shows the number of comments that were received per sub-section of Section 8 of the draft EIA SMR.

Figure 5: Comments by subsection - climate change



4.8.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- Consultees raised concern that the scope of assessment focuses on the impacts of climate change on constructing and operating the railway, rather than the impact of the railway on climate change.

Response:

- The impact of construction and operation of the railway on climate change will be included as part of the assessment. This has been clarified in Section 8.3 of the revised EIA SMR.

Theme:

- Consultees commented on the geographical scope of the climate change assessment.

Response:

- As explained in Section 8 of the draft EIA SMR the greenhouse gas assessment is a complete life cycle assessment. It includes all life cycle greenhouse gas emissions irrespective of where they occur. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- It was requested that the assessment consider how the Proposed Scheme might alter the natural environment's response to climate change. In particular, it was highlighted that the Proposed Scheme should not impact the way in which ecological networks might adapt to climate.

Response:

- Additional wording has been added to Section 8.4 of the revised EIA SMR, which addresses in-combination climate change impacts and effects including those on ecology. Section 11.5 (Ecology) of the draft EIA SMR sets out that further details on the potential impacts and effects of climate change on ecological receptors, alongside the effects of HS2 on the ability of habitats and species in the wider landscape to respond to climate change, will be considered as part of the route-wide assessments for ecology and climate in Volume 3 of the formal EIA Report.

Theme:

- Consultees requested that the scope of the climate change assessment cover all of the EIA topics (whereas the current approach proposes a preliminary assessment for all topics, followed by a more detailed assessment of significant in-combination climate change effects where relevant).

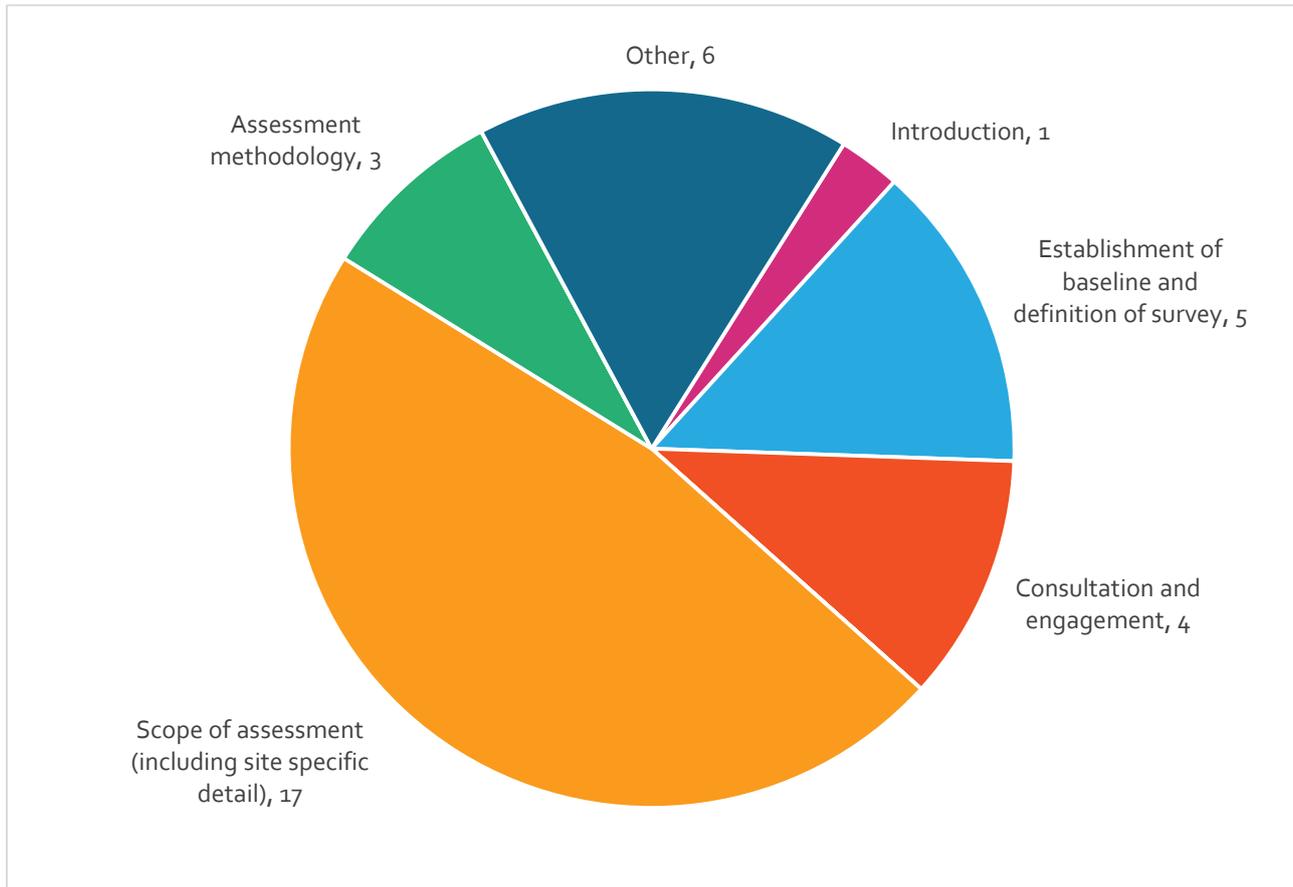
Response:

- The in-combination climate change impact assessment will consider all of the EIA topics in relation to potential climate change impacts. Additional wording has been added in Section 8.4 of the revised EIA SMR to clarify this and the scope and methodology is now more explicit.

4.9 Community

4.9.1 Thirty-six comments were made in relation to the community topic. Figure 6 shows the number of comments that were received per sub-section of Section 9 of the draft EIA SMR.

Figure 6: Comments by subsection – community



4.9.2 The main themes to come through the consultation and subsequent responses are summarised below.

Theme:

- Consultees raised specific concerns about potential impacts on local communities and made recommendations that these impacts are considered as part of the EIA.

Response:

- Concerns raised about particular community features will be considered as the EIA is undertaken and reported in the formal EIA Report. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees requested that the impact of the Proposed Scheme on property or asset values or implications of property blight be considered.

Response:

- Section 9.1 of the draft EIA SMR states that property will be considered as part of the assessment. This includes, for example a loss of housing stock or associated land (for example gardens) as a result of the Proposed Scheme. The community assessment excludes financial considerations, such as loss of property value arising from blight. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees requested that the draft EIA SMR include a description of local communities or resources that would potentially be affected by the Proposed Scheme and that reference be included to plans and strategies, such as Neighbourhood Plans.

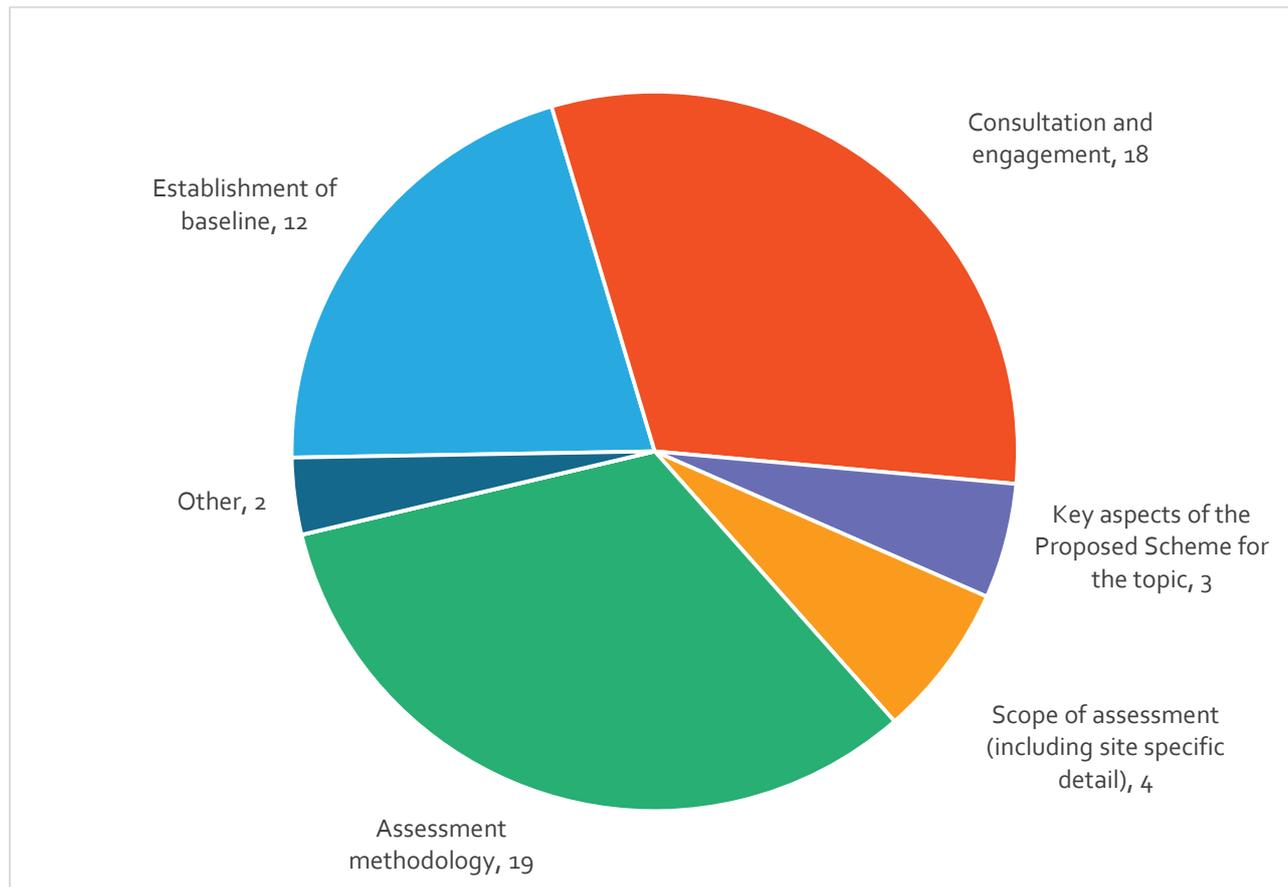
Response:

- The working draft and formal EIA reports will provide a description of the local communities or resources that would potentially be affected by the Proposed Scheme and information will be drawn from various sources, including relevant plans and strategies. No changes have been made to the revised EIA SMR to reflect this theme.

4.10 Cultural heritage

4.10.1 Fifty-eight comments were made in relation to the cultural heritage topic. Figure 7 shows the number of comments that were received per sub-section of Section 10 of the draft EIA SMR.

Figure 7: Comments by subsection - cultural heritage



4.10.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- Consultees asked for clarification of the cultural heritage study areas. It was noted that effects on the settings of cultural heritage receptors could extend beyond the Zone of Theoretical Visibility (ZTV).

Response:

- The wording of the revised EIA SMR has been adjusted (see Section 10.2.8) to clarify that data gathering to identify impacts upon designated heritage assets, and to understand the historic landscape, will be 2km either side of the land required. Data for designated heritage assets that lie beyond 2km of the land required but fall within the ZTV will also be collected. High value assets which lie outside of the ZTV, with a heritage significance which professional judgement suggests is likely to be significantly affected by factors such as changes to noise or light, will also be considered (see Section 10.5.8).

Theme:

- A number of comments were provided that identified site-specific detail in relation to particular heritage assets.

Response:

- Noted. This site-specific detail will be considered as part of the EIA. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- Comments were received on the significance criteria (including magnitude and sensitivity definitions) proposed to assess the impact on cultural heritage and a number of suggestions were made for altering the criteria.

Response:

- These comments were considered and the significance criteria have been amended. The revised EIA SMR includes the amended significance criteria in Section 10.6.

Theme:

- It was requested that the method for assessment of historic landscape character be included in the EIA SMR.

Response:

- A Technical Note, Cultural heritage – historic landscape, setting out the historic landscape assessment methodology is being developed and will be issued with the formal EIA Report. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- It was requested that clarification of the method for assessment of impacts on the viability of heritage assets be included in the EIA SMR.

Response:

- Additional detail has been included in Section 10.3 of the revised EIA SMR. The method for assessment of impacts on the viability of heritage assets will be based on professional judgement, taking account of impacts identified from other disciplines (e.g. community, agriculture and socio-economics) and will refer to existing national policy and guidance.

Theme:

- It was requested that a statement concerning survey limitations as the result of land access constraints be included in the revised EIA SMR.

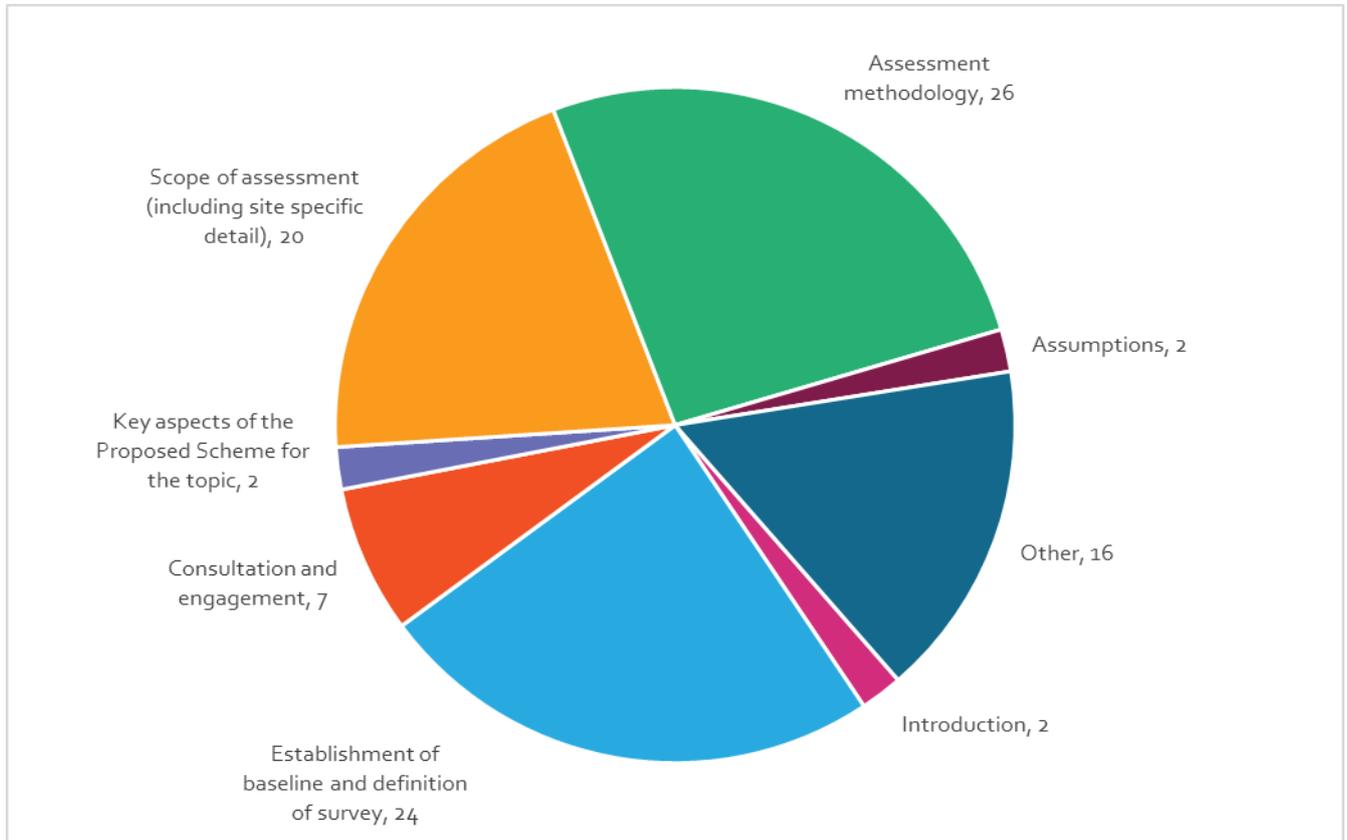
Response:

- Clarification of this point has been included in Section 10.7 of the revised EIA SMR.

4.11 Ecology

4.11.1 Ninety-nine comments were made in relation to the ecology topic. Figure 8 shows the number of comments that were received per sub-section of Section 11 of the draft EIA SMR.

Figure 8: Comments by subsection – ecology



4.11.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- It was commented that much of the baseline ecological data collected is old and that the impact assessment should give more weight to up-to-date information.

Response:

- Section 11.2 in the draft EIA SMR sets out the commitments to undertaking field surveys to collect up to date information, where access is available, which will then be taken account of in the assessment. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees felt that the survey list in the draft EIA SMR was not comprehensive (e.g. omission of brown hare surveys, veteran tree surveys and identification of irreplaceable habitats, such as ancient woodland) and requested a programme of repeating and updating ecological survey work.

Response:

- Section 11.2 of the revised EIA SMR clarifies that veteran trees will be identified as part of the Phase 1 Habitat Survey, and that information gathered will be used to inform the assessment. Desk study and field surveys are underway where access is possible to gather ecological data from site including identifying ancient woodland, which is an irreplaceable habitat. Information on other species not listed in the draft EIA SMR specialist surveys list, such as brown hare, will be noted during site surveys and if further specialists surveys are considered necessary these will be programmed. In order to ensure that all likely significant effects of the Proposed Scheme will be identified where baseline information is incomplete, for example due to restricted access, a precautionary approach of assuming a 'reasonable worst-case' valuation will be adopted. This approach will be utilised to assign precautionary values to both known receptors and potential receptors based on the best available information.
- Following the completion of the EIA and submission of the hybrid Bill, the need for follow-up ecology surveys will be subject to review by HS2 Ltd; such surveys will be planned as required to support future project requirements such as licence applications, detailed design and construction activities.

Theme:

- It was requested that baseline data collection include ancient woodlands that might not be on the Ancient Woodland Inventory.

Response:

- Consideration is being given to ancient woodlands and potentially ancient woodlands that will be identified through review of historical mapping and site surveys. This has been clarified in section 11.2 of the revised EIA SMR to reflect this.

Theme:

- The spatial extent of the study area was queried, particularly the discrepancy between the area for data request (5km) and the area within which impacts would be considered (500m). Consultees requested that the study area be re-examined, that ecological survey and data collection are not restricted to a narrow corridor and that it take account of ecological connectivity.

Response:

- The assessment will allow for both consideration of impacts beyond 500m and the inclusion of ecological connectivity. The spatial extent of the desktop data study area (5km) is used to inform the understanding of the wider ecological context around the Proposed Scheme, including consideration of ecological connectivity and to provide information for developing mitigation measures. The spatial extents for ecological site surveys varies between species and is dependent on likely significant impacts from the Proposed Scheme. Surveys are undertaken up to 500m from the Proposed Scheme but where it is considered that significant impacts from the Proposed Scheme on a particular

species might extend beyond 500m from the Proposed Scheme then the survey area for that species will be extended. In a similar way if it is considered a requirement, the desktop data study area would be extended to consider particular linear features that might provide strategic ecological connectivity or to allow for the further consideration of strategic mitigation for the Proposed Scheme as a whole.

- Additional text has been added into Section 11.5 of the revised EIA SMR, which refers to a commitment to strategic mitigation, part of which will focus on maintaining habitat connectivity.

Theme:

- It was requested that the assessment should take into account the effects on habitat connectivity and maintenance of ecological networks. Further information on the proposed methodology to calculate biodiversity metrics for this assessment was requested.

Response:

- Habitat connectivity and the maintenance of ecological networks is covered in the EIA as well as in scheme-wide 'no-net loss calculations'. The methodology for the no net loss calculations is contained within a separate HS2 Ltd Technical Note 'Methodology for demonstrating no net loss in biodiversity' (see Annex A of the draft EIA SMR for reference). This Technical Note was published alongside the Phase One ES Report and is currently undergoing review by Natural England. A revised Technical Note which takes account of the recommendations of this review will be included alongside the formal EIA Report. As stated in Section 11.5 of the draft EIA SMR, the output of these calculations will not be included within the formal EIA Report, as biodiversity offsetting is not required under the EIA Regulations. This will be reported separately at www.gov.uk/hs2. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- It was considered that the scope of assessment should consider potential indirect effects on sites of special scientific interest (SSSIs) and Natura 2000 sites and it was noted that there was no reference to Habitats Regulations Assessment in the ecology section (despite this being highlighted in the draft EIA SMR introduction).

Response:

- Section 11.5 of the draft EIA SMR states that the assessment will cover receptors that could be indirectly affected by the Proposed Scheme and also states that impacts on designated sites against the requirements of the Habitats Regulations will be undertaken. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees expressed concern that the outputs from the 'no net loss' calculations (part of the Biodiversity Offsetting) would not form part of the EIA.

Response:

- HS2 Ltd has provided a commitment to seek 'no net loss', and to report the findings, including the calculations. The reporting of the no net loss calculations will be after the submission of the formal EIA Report as stated in the draft EIA SMR; 'no net loss' assessment is not required under the EIA Regulations. Some additional text has, however, been added into Section 11.5 of the revised EIA SMR to confirm that the methodology for the no net loss calculations will be based on that developed for Phase One but adapted as necessary to take into consideration comments from a review of the methodology by Natural England. The outputs from the no net loss calculation will be reported at www.gov.uk/hs2.

Theme:

- It was requested that a holistic approach be undertaken to the assessment and that impacts from changes in air quality, noise and other EIA topics are considered in relation to ecology.

Response:

- The assessment will take account of the impacts on ecological receptors that might arise as a result of emissions to water, air and noise, as well as impacts from lighting from the Proposed Scheme and also interactions with other specialist topics (e.g. water resources and flood risk, cultural heritage and climate change). Some of these interactions are already identified throughout the ecology section of the draft EIA SMR (e.g. climate change in Section 11.5 and noise and air quality in Section 11.6). Additional text has also been added to Section 11.5 of the revised EIA SMR to clarify the interactions between the ecological impact assessment and other topic assessments in the EIA.

Theme:

- Consultees requested that the programme for pre- and post- scheme monitoring be specified.

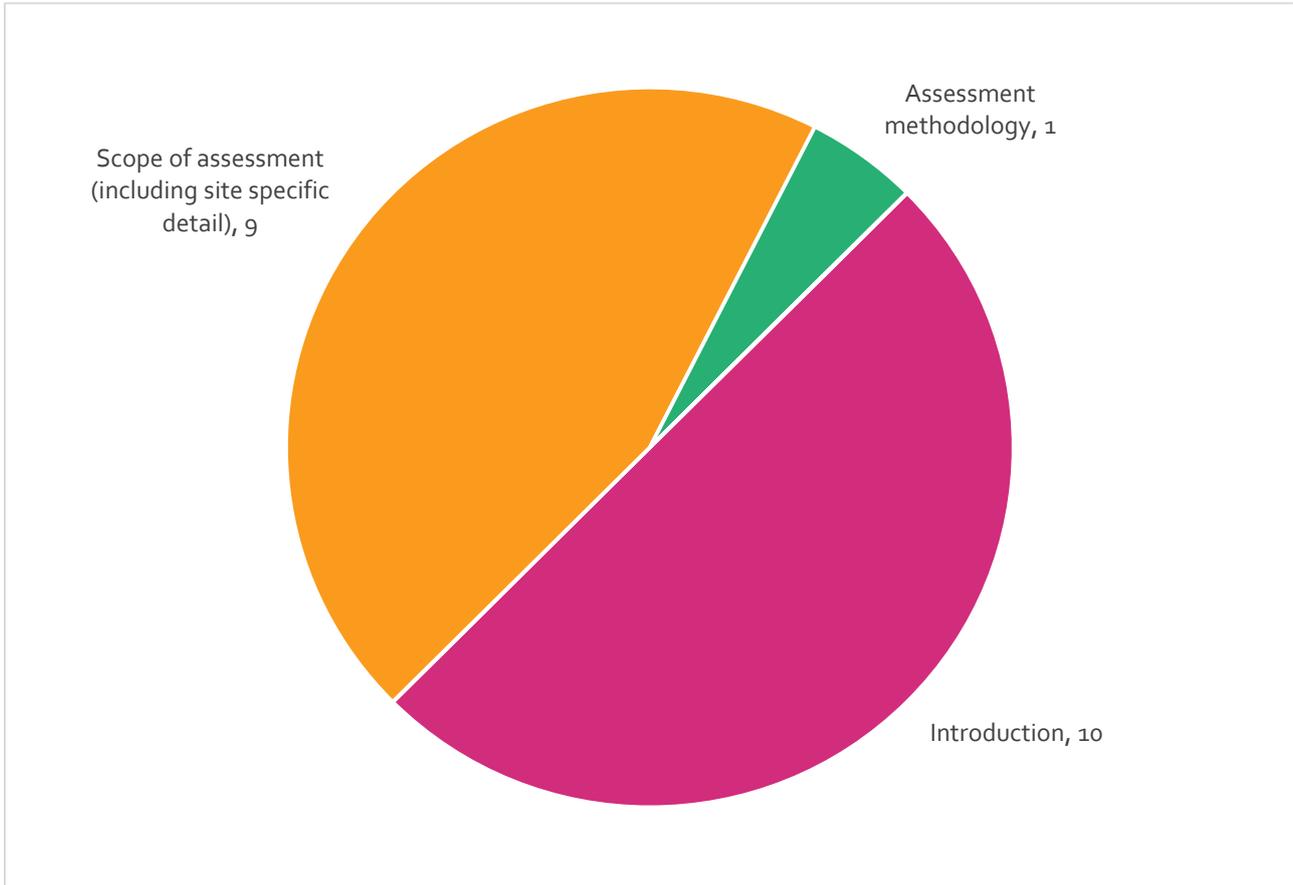
Response:

- HS2 Ltd is committed to a programme of monitoring. The procedures and time period for the monitoring programme will be drawn up by HS2 Ltd as part of the overall monitoring approach. This has been reflected in Section 11.6 of the revised EIA SMR. Further clarification on monitoring has also been provided in Section 1.7 of the revised EIA SMR.

4.12 Electromagnetic interference

4.12.1 Twenty comments were made in relation to the electromagnetic interference topic. Figure 9 shows the number of comments that were received per sub-section of Section 12 of the draft EIA SMR.

Figure 9: Comments by subsection - electromagnetic interference



4.12.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- Consultees noted that comparisons to HS1 should be avoided, as consultees considered HS1 likely to create different impacts to HS2 in terms of electromagnetic interference.

Response:

- The method of assessment draws on HS1 where appropriate and was accepted as part of the EIA for Phase One of HS2. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- Concerns were raised about the impact of the Proposed Scheme on communication utilities (particularly radio, TV and mobile phone) and it was requested that the EIA consider the impact of the Proposed Scheme on all relevant bands of radio-frequency emissions.

Response:

- Section 12.1 of the draft EIA SMR explains that electromagnetic interference (EMI) is an issue that can normally be mitigated through the application of Electromagnetic Compatibility (EMC) industry accepted practice during railway design and installation. The detailed design of the Proposed Scheme will seek to address impacts on radio-frequency emissions across all relevant frequency bands. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- It was requested that the assessment consider the potential health impacts arising from electromagnetic interference.

Response:

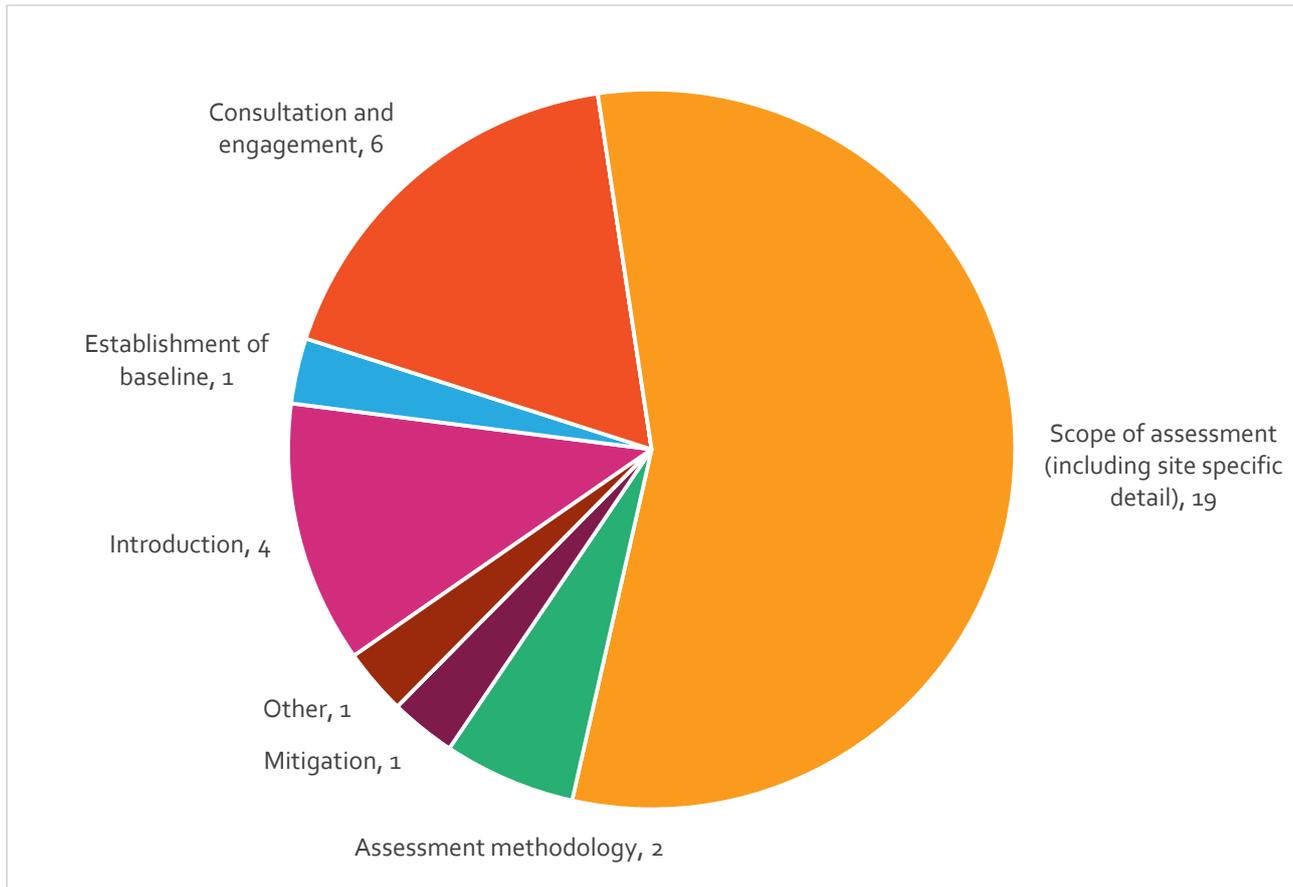
- Health will be considered as is required by the limits set out in EU Directive 2013/35/EU Electromagnetic Fields¹¹, which is already identified in Section 12.6 of the draft EIA SMR. No changes have been made to the revised EIA SMR to reflect this theme.

¹¹ EU Directive 2013/35/EU Electromagnetic Fields (2013) European Commission

4.13 Health

4.13.1 Thirty-four comments were made in relation to the health topic. Figure 10 shows the number of comments that were received per sub-section of Section 13 of the draft EIA SMR.

Figure 10: Comments by subsection – health



4.13.2 The main themes to come through from the consultation and subsequent responses are summarised as follows:

Theme:

- Most of the comments related to the scope of the assessment and in particular requested that 'mental health' be given appropriate consideration within the assessment.

Response:

- The health assessment covers physical and mental health and wellbeing, as per Section 13.6 of the draft EIA SMR. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- The acknowledgement that green spaces influence health and wellbeing was welcomed and consultees requested that the assessment seek opportunities for new provision of green infrastructure.

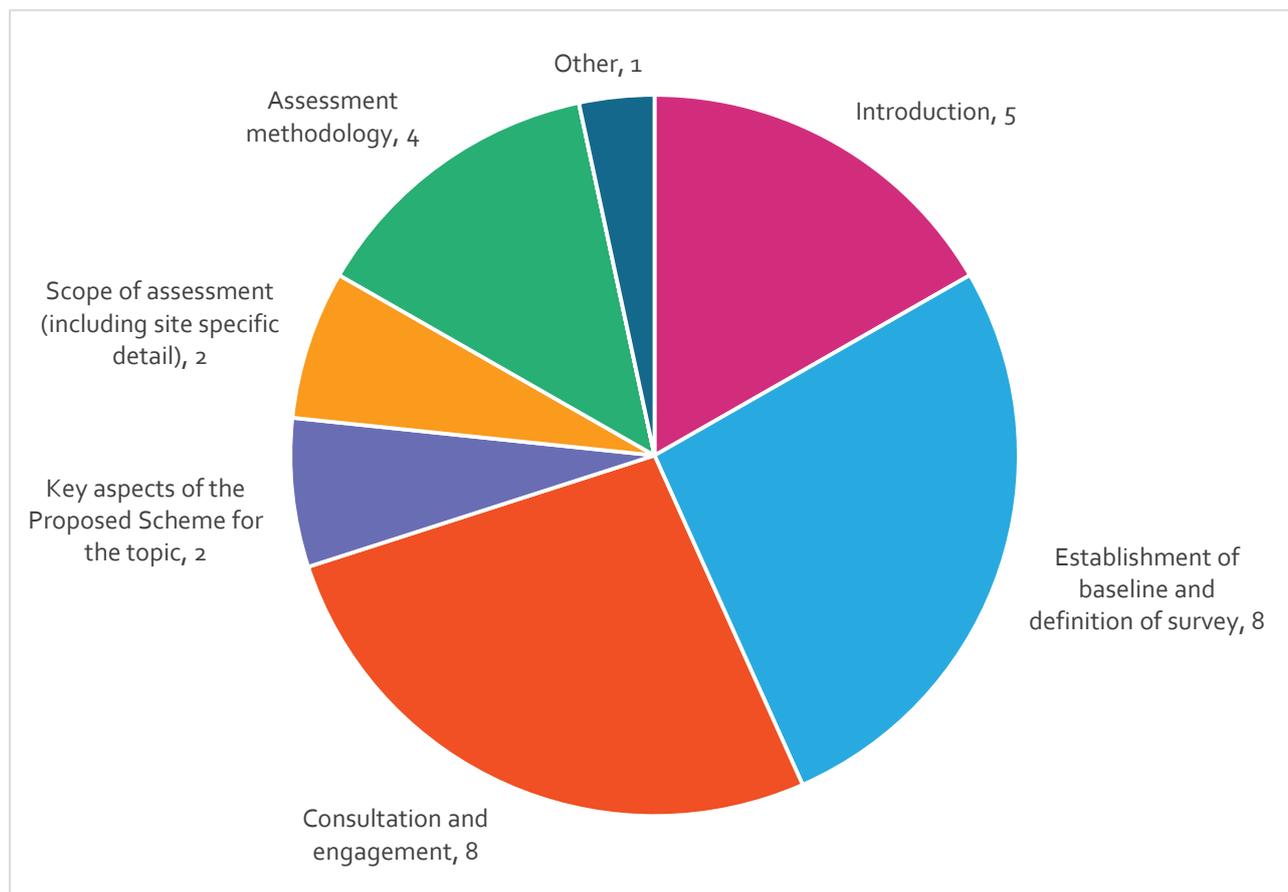
Response:

- The health assessment will assess the potential impacts on the determinants of health, including access to green space and contact with nature. Where there is a requirement for new green infrastructure to be considered in relation to mitigating the effects of the Proposed Scheme this will be undertaken. No changes have been made to the revised EIA SMR to reflect this theme.

4.14 Land quality

4.14.1 Thirty comments were made in relation to the land quality topic. Figure 11 shows the number of comments that were received per sub-section of Section 14 of the draft EIA SMR.

Figure 11: Comments by subsection - land quality



4.14.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- Consultees commented that the scope of the assessment needs to ensure that the potential impacts and opportunities on geological SSSIs are taken fully into account.

Response:

- Geological SSSIs and sites of geological interest that are identified within the study area will be considered as part of the assessment. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- A number of suggestions were made on the proposed baseline data collection. It was requested that the information provided during the Phase Two route consultation, that supplements publicly available information, be taken into account.

Response:

- The formal EIA Report will consider additional information provided where appropriate. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- It was requested that the presence of evaporite specific geologies and illegal waste sites be taken into account in establishing the baseline, and that data be sourced from the Ministry of Defence and The Crown Estate as well as the sources already cited.

Response:

- The formal EIA Report will consider evaporite specific geologies in so far as this is relevant to land quality, and information about known illegal waste sites will be included where this information is available. Information from The Crown Estate and Ministry Of Defence will be requested for the formal EIA Report. Section 14.2 of the revised EIA SMR has been updated to include The Crown Estate and the Ministry of Defence.

Theme:

- Consultees noted that the EIA SMR should acknowledge that contamination will need to be remediated prior to construction and that the assessment needs to take account of existing pollution sources and pathways, not just those created by the Proposed Scheme.

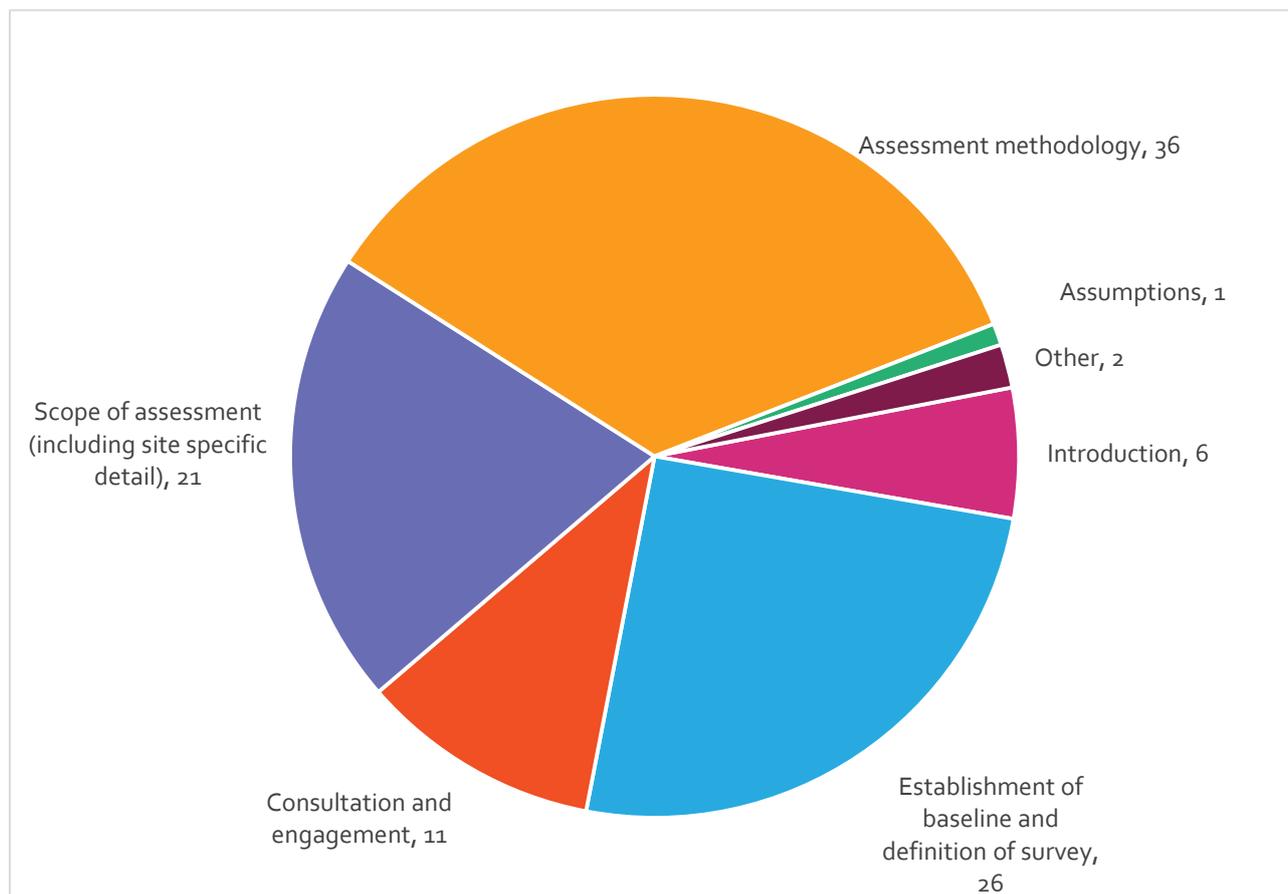
Response:

- The draft EIA SMR states in Section 14.6 that existing contamination predating the project will be remediated during construction so there will be no continuing significant adverse effects from existing contamination during the operational phase. The EIA will examine effects associated with ground contamination that may already exist and effects associated with the potential for polluting by substances that are used during construction and operation of the Proposed Scheme. No changes have been made to the revised EIA SMR to reflect this theme.

4.15 Landscape and visual

4.15.1 One hundred and three comments were made in relation to the landscape and visual topic. Figure 12 shows the number of comments that were received per sub-section of Section 15 of the draft EIA SMR.

Figure 12: Comments by subsection - landscape and visual



4.15.2 The main themes to come through from the consultation and subsequent responses are summarised as follows:

Theme:

- Consultees welcomed the proposed use of photographs and photomontages to support the assessment although, it was requested that the photomontages be produced carefully to ensure that they are representative.

Response:

- Photomontages will be produced in accordance with widely accepted industry guidance (including the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition [GLVIA3]¹² and the Landscape Institute Advice Note 01/11¹³ as appropriate). Minor changes have been made in Section 15.6 of the revised EIA SMR to reflect this theme.

¹² Landscape Institute, (2013), Guidelines for Landscape and Visual Impact Assessment, 3rd Edition

¹³ Landscape Institute, (2011), Photography and photomontage in landscape and visual impact assessment

Theme:

- A number of comments were received on the impact significance criteria and it was emphasised that the assessment of significance must clearly reflect GLVIA₃.

Response:

- The impact significance criteria for the landscape and visual impact assessment follow the guidance in GLVIA₃ and guidance provided by the Landscape Institute. Minor changes have been made to Section 15.1 of the revised EIA SMR, and Figure 13 and 14 have been added to explain the landscape and visual assessment process more fully (in place of Figure 10 in the draft EIA SMR). Table 26 has been revised to include a 5-point scale for landscape sensitivity. The 4-point scale for landscape magnitude of change (Table 27) and visual magnitude of change (Table 30) is consistent with GLVIA₃.

Theme:

- A number of features of the Proposed Scheme were suggested for consideration in the assessment, for example embankments and mitigation measures, such as noise barriers.

Response:

- The revised EIA SMR now includes specific acknowledgement of these features in Section 15.4.

Theme:

- It was suggested that the ZTV be extended to consider broader views.

Response:

- The ZTV uses a 1.6m height above ground level that is consistent with GLVIA₃ and captures public vantage points and receptors. The ZTV parameters were selected to capture likely significant potential effects and are considered appropriate for the assessment. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- The temporal scope of the assessment was challenged and it was suggested that additional time-slots be considered, for example 25 years post-construction.

Response:

- The temporal scope of the assessment accords with GLVIA₃; is consistent with the Phase One EIA; and is considered appropriate to the size and type of assessment. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- Clarification was requested on how the cumulative landscape and visual impact assessment would be conducted.

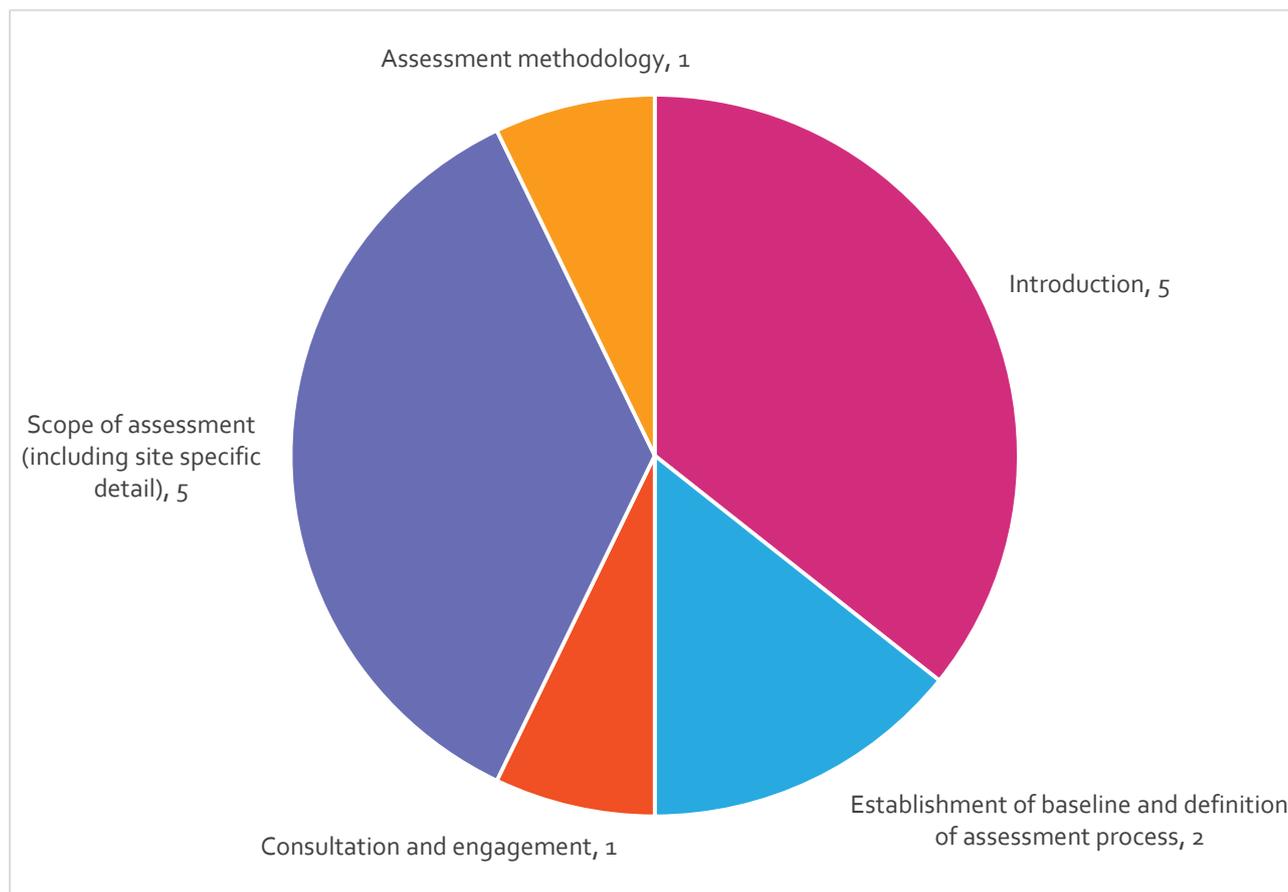
Response:

- The draft EIA SMR provides detail on the cumulative landscape and visual impact assessment methodology in Section 15.5. No changes have been made to the revised EIA SMR to reflect this theme.

4.16 Major accidents and natural disasters

4.16.1 Fourteen comments were made in relation to the major accidents and natural disasters topic. Figure 13 shows the number of comments that were received per subsection of Section 16 of the draft EIA SMR.

Figure 13: Comments by subsection - major accidents and natural disasters



4.16.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- It was commented that community anxiety and stress should be included as part of the major accidents and natural disasters assessment.

Response:

- The health effects arising from perceptions of risk will be reported in the health assessment of the formal EIA Report as set out in Section 13.6 of the draft EIA SMR. Addressing anxiety and stress from perceived effects is important in reducing adverse effects on health, particularly mental wellbeing. Where there is known to be concern among the affected community about a potential health effect (based on consultation responses), this will be taken into consideration in the EIA. This will include a range of issues known to be of concern to communities, of which potential for major accidents may be one. A scope of the assessment of the impacts from major accidents and natural disasters is set out in Section 16.5 of the draft EIA SMR, the framework for this

includes consideration of human health, which includes mental health. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- It was commented that the scope of assessment should cover a wide range of potential incidents.

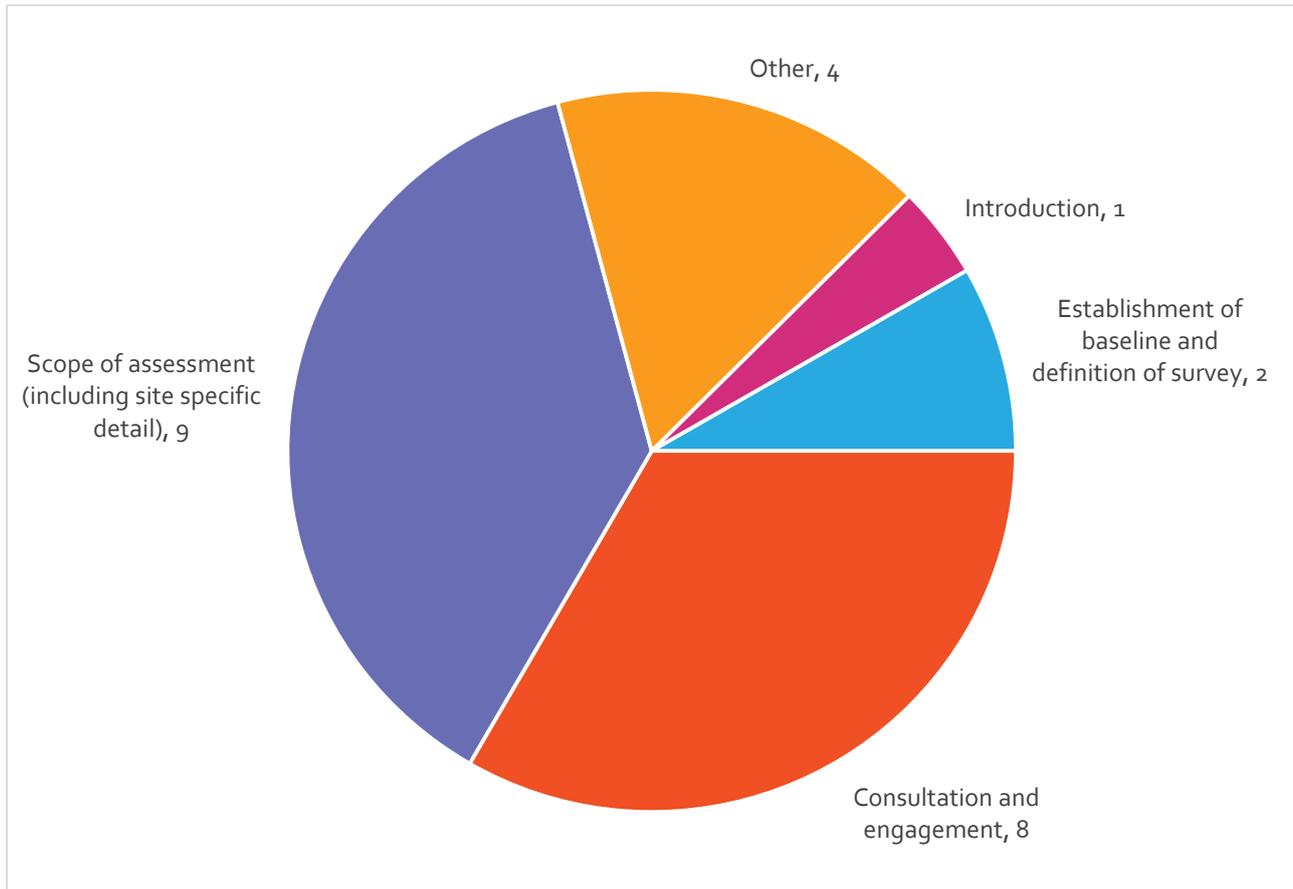
Response:

- The draft EIA SMR does not define any restrictions to the scope of assessment, which will consider all sources of potential hazard. Section 16.1 of the revised EIA SMR has been amended to clarify this.

4.17 Socio-economics

4.17.1 Twenty-four comments were made in relation to the socio-economics topic. Figure 14 shows the number of comments that were received per sub-section of Section 17 of the draft EIA SMR.

Figure 14: Comments by subsection - socio-economics



4.17.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- A number of concerns were raised about the impact of traffic disruption and road closures on businesses.

Response:

- Table 32 in Section 17.5 of the draft EIA SMR identifies that the impact of traffic disruption on businesses forms part of the scope of assessment. Indirect effects on businesses arising from potential trade diversion (as a result of traffic disruption from heavy goods vehicles and the isolation of businesses arising from road closures) will be considered in the formal EIA report when significant residual traffic effects are identified. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- It was highlighted that communities of low population would be more sensitive to impacts.

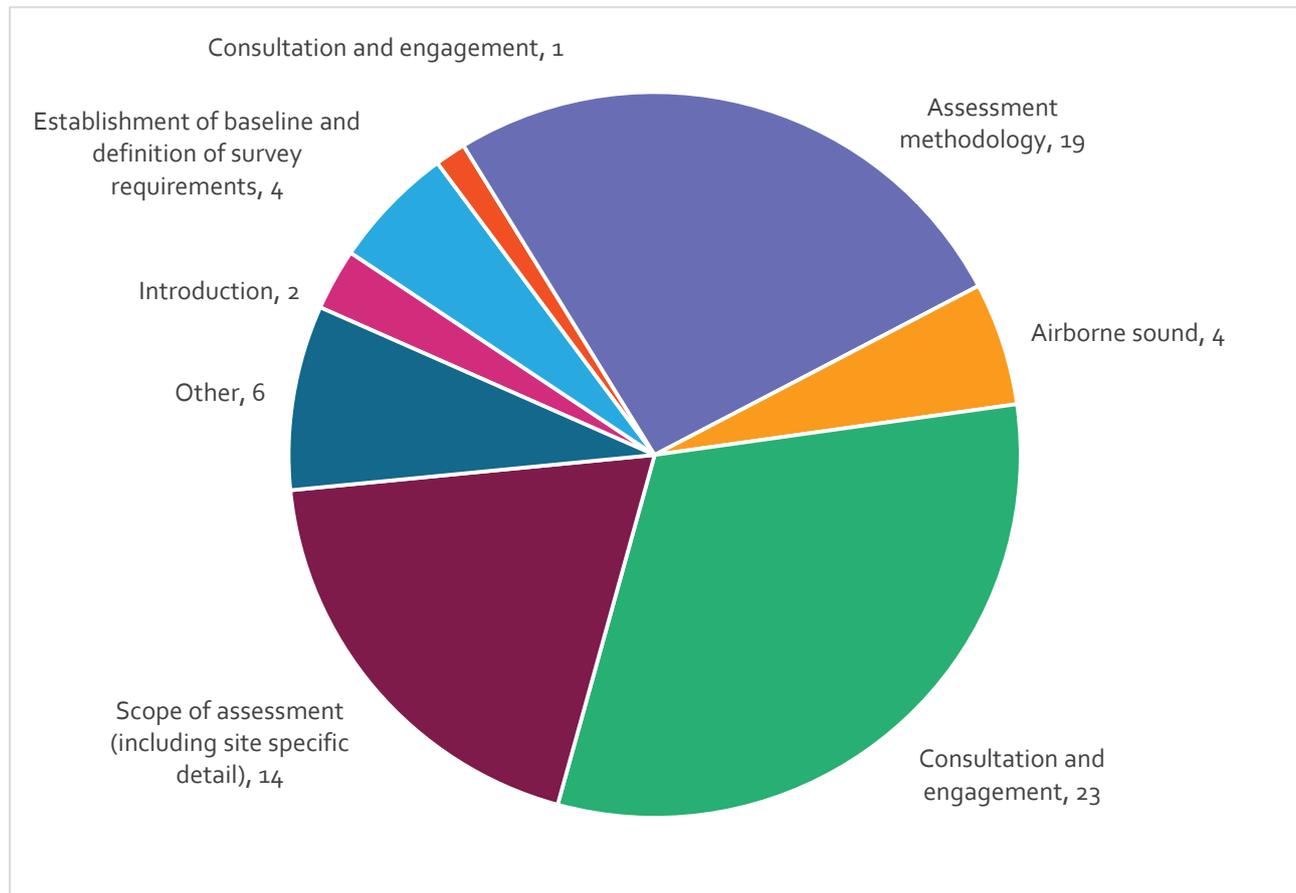
Response:

- Noted. The methodology does allow for magnitude of effect to be moderated in relation to surrounding scale. No changes have been made to the revised EIA SMR to reflect this theme.

4.18 Sound, noise and vibration

4.18.1 Seventy-three comments were made in relation to the sound, noise and vibration topic. Figure 15 shows the number of comments that were received per sub-section of Section 18 of the draft EIA SMR.

Figure 15: Comments by subsection - sound, noise and vibration



4.18.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- It was requested that the integration of the EIA and the health assessment with regard to sound, noise and vibration be clarified.

Response:

- The assessment of sound, noise and vibration is based upon Government's 'Noise policy statement for England'¹⁴ as was the case for HS2 Phase One. The noise policy vision is to "Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development." Therefore, the assessment of sound, noise and vibration in environmental terms (quality of life and amenity) and health are integrated. Furthermore, HS2 Ltd has taken the decision to integrate the EIA and health assessment reporting for Phase 2a in line with the

¹⁴ Noise policy statement for England (2010) Department for Environment, Food & Rural Affairs

2014 EIA Directive. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- It was requested that the method for assessment of sound, noise and vibration impacts on heritage assets be strengthened to take into account their particular attributes, and that the potential impact on Shugborough Hall be scoped into the assessment.

Response:

- The baseline conditions will be considered at heritage assets, including Shugborough Hall. The draft EIA SMR (Section 18.6) proposes that a quantitative assessment of the effects of airborne sound will be undertaken for all receptors within 500m and 1km from the centreline of the line of the route in urban and rural areas respectively, or the area within which sound levels from the Proposed Scheme are forecast to give rise to potential impacts, whichever is the greater. Therefore, properties such as Shugborough Hall, which are more than 1km from the Proposed Scheme, will be included within the assessment where sound levels are forecast to give rise to a potential impact. In this situation it is worth noting that Great Haywood is located between Shugborough Hall and the Proposed Scheme and it is unlikely that an impact will be identified at Shugborough Hall given the mitigation which is likely to be included into the Proposed Scheme to protect the, much closer, community of Great Haywood, but this will be confirmed in the formal EIA Report. With respect to the tranquillity of the area, this is determined by the landscape and visual assessment (see Section 11.5 of the draft EIA SMR); tranquillity considers multiple factors, of which sound level is only one. Should the landscape and visual assessment identify the area surrounding Shugborough Hall as a highly tranquil landscape, where sound is a material factor, then the outside space will also be specifically included within the sound assessment where a potential impact may occur. No changes have been made in the revised EIA SMR to reflect this theme.

Theme:

- Consultees requested that the source(s) of evidence that support the selected criteria be presented in the EIA SMR.

Response:

- The evidence behind the criteria defined in the draft EIA SMR is presented in the HS2 Phase One ES and health assessment. As part of the EIA process, the evidence is being reviewed, and currently in response to further research and a request from the Phase One Select Committee, specific studies on health indicators and airborne noise on livestock are being conducted. These studies, where appropriate, will be used to determine the assessment and evidence presented in the formal EIA Report. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- Consultees requested that the impacts of construction and operational noise on livestock be included in the scope of assessment.

Response:

- An assessment of airborne sound on livestock, horse and ecological receptors, using the approach defined for the Phase One ES, will be undertaken for the Phase 2a Proposed Scheme. In response to the HS2 Phase One Select Committee second report, further work is being undertaken to consider airborne sound during operation and construction on livestock. The results of this study, where appropriate, will inform the assessment presented in the formal EIA report. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- Concern was expressed from consultees regarding the control of airborne sound generated from trains operating on viaducts.

Response:

- Proven experience from other projects, including HS1, show that airborne and structure-borne sound from trains operating on viaducts can be mitigated, through the provision of wayside noise fence barriers and the selection of a resiliently mounted track system. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- There were a number of requests for the data to be presented through noise contour maps and sound booths.

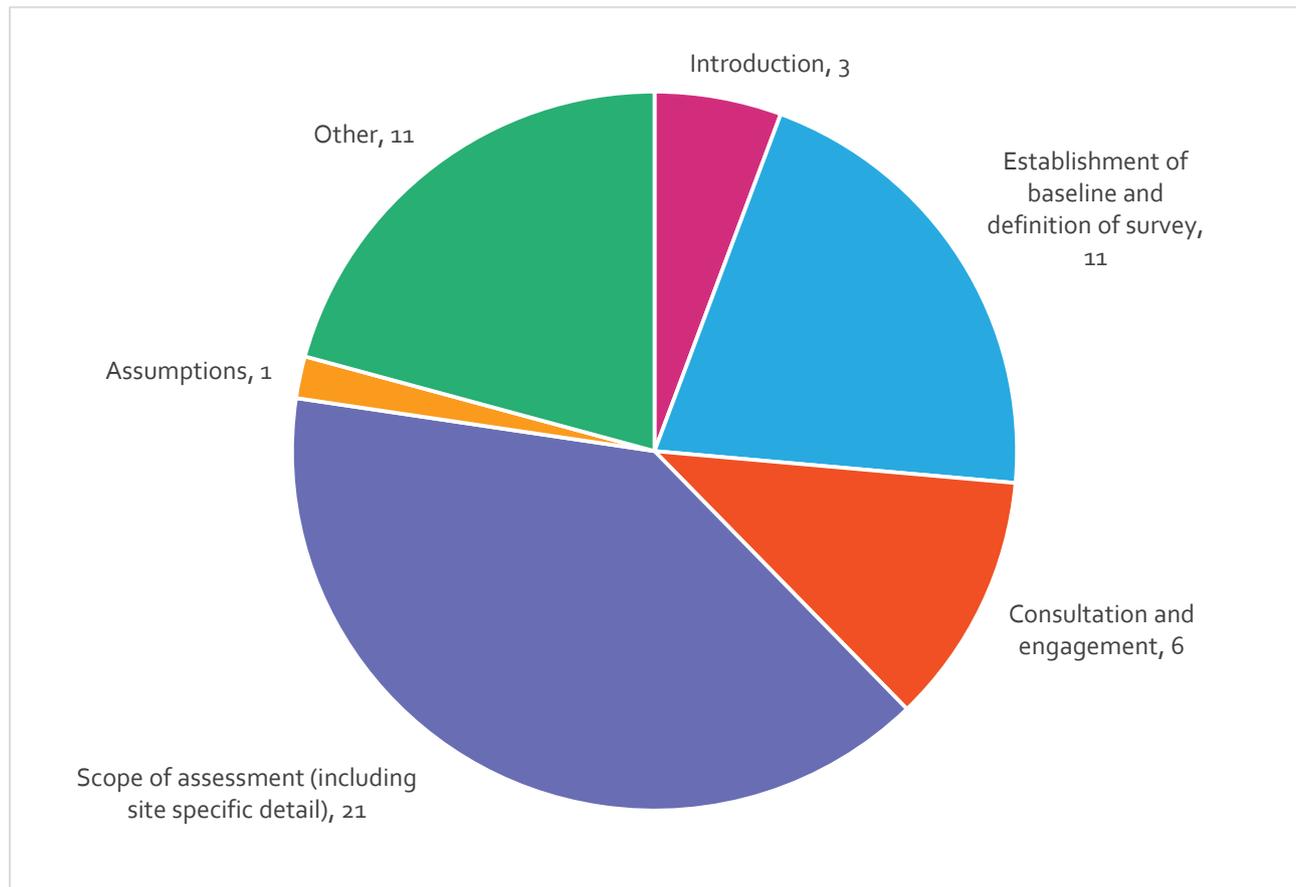
Response:

- Noise contour maps will be prepared and presented as part of the working draft and formal EIA reports. For the working draft EIA report the contours are presented in Map Series SV-01. This includes day and night time equivalent continuous sound level contours for the operation of HS2. The contours will include the lowest and the significant observed adverse effect levels in line with Government noise policy. It is not practicable to provide contours for maximum train pass-by event levels as the prediction methodology is highly susceptible to variation over short distances, which does not enable robust extrapolation of data required to produce contours. However, maximum levels will be presented in tabular form in the formal EIA Report at specific assessment locations. The use of sound booths will be considered, where appropriate. No changes have been made to the revised EIA SMR to reflect this theme.

4.19 Traffic and transport

4.19.1 Fifty-three comments were made in relation to the traffic and transport topic. Figure 16 shows the number of comments that were received per sub-section of Section 19 of the draft EIA SMR.

Figure 16: Comments by subsection - traffic and transport



4.19.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- Concern was raised that the community severance associated with road closures and increased traffic was not given sufficient attention in the draft EIA SMR.

Response:

- The draft EIA SMR addresses the issue of community severance in Section 9, (Community), and traffic impacts in Section 19 (Traffic and transport), with cross reference to the socio-economics assessment set out in Section 17. This includes the impact of construction related traffic as well as any substantial temporary closures or diversion required to construct the Proposed Scheme and also the permanent changes to the transport networks to accommodate the Proposed Scheme. Access restrictions and severance will be assessed and impacts on routes and communities will be considered in the EIA. The impact of severance on communities will be reported in the community section of the formal EIA Report, which will take into account the cumulative effects from all

relevant environmental topics to consider the wider community impacts. The EQIA will also consider the impacts of severance on community groups. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- It was requested that the EIA SMR include reference to emergency vehicle access and the assessment include potential impacts on emergency response time.

Response:

- The draft EIA SMR does not specifically identify emergency medical care transport as a receptor. The EIA will identify changes to access and journey times for all users, which includes all emergency vehicles. HS2 Ltd is committed to engaging and liaising with the emergency services throughout the development of the Proposed Scheme and this dialogue is ongoing. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- Consultees requested clarification that the assessment would consider impacts of the Proposed Scheme on existing or non-HS2 rail traffic.

Response:

- Section 19.4 of the draft EIA SMR states that this is within scope and will be assessed. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- Consultees requested assurance that sufficient baseline traffic data had been collected for the assessment.

Response:

- Every reasonable effort to collect representative traffic data has been and will continue to be made. Where there are potentially localised issues that affect traffic flows (for example, the traffic management around the highway works on the A34 and in the Crewe area) data collected is being supplemented by historical data provided by highway authorities and traffic models. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- Consultees noted that construction traffic from the Proposed Scheme should be comprehensively assessed and that routes affected by traffic diversions arising from the Proposed Scheme should be included in the transport modelling.

Response:

- The transport assessment will include comprehensive assessment of the impacts of the construction works across the route and appropriate mitigation will be proposed. This will include assessment of construction traffic generation and the impact of diversions associated with any substantial

closures as noted in Section 19.4 of the draft EIA SMR. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- Consultees commented that the scope of assessment should be expanded to provide more focus on waterway users and school transport and that changes in demand on station car parking should be assessed.

Response:

- The impacts on navigable waterways in terms of navigation and amenity and on car parking including at stations will be considered in the assessment as identified in Section 19.4 of the draft EIA SMR. However, it would not be appropriate to consider school transport in the assessment, due to the frequency with which school transport arrangements change. Notwithstanding this, where the construction works associated with the Proposed Scheme would have a direct impact on access to schools, whether this is an impact on school bus services or walking routes to school, discussions will be held with the responsible authorities to understand the impacts and ensure where practicable appropriate mitigation are provided. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- Consultees commented on the apparent inconsistency in traffic flow and delay thresholds for construction and operation. Section 19.4 of the draft EIA SMR sets out the minimum threshold for construction as "40 vehicles per day in urban areas or 10 vehicles per day in rural areas" while for operation the definition is "40 vehicles per hour in urban areas or 10 vehicles per hour in rural areas".

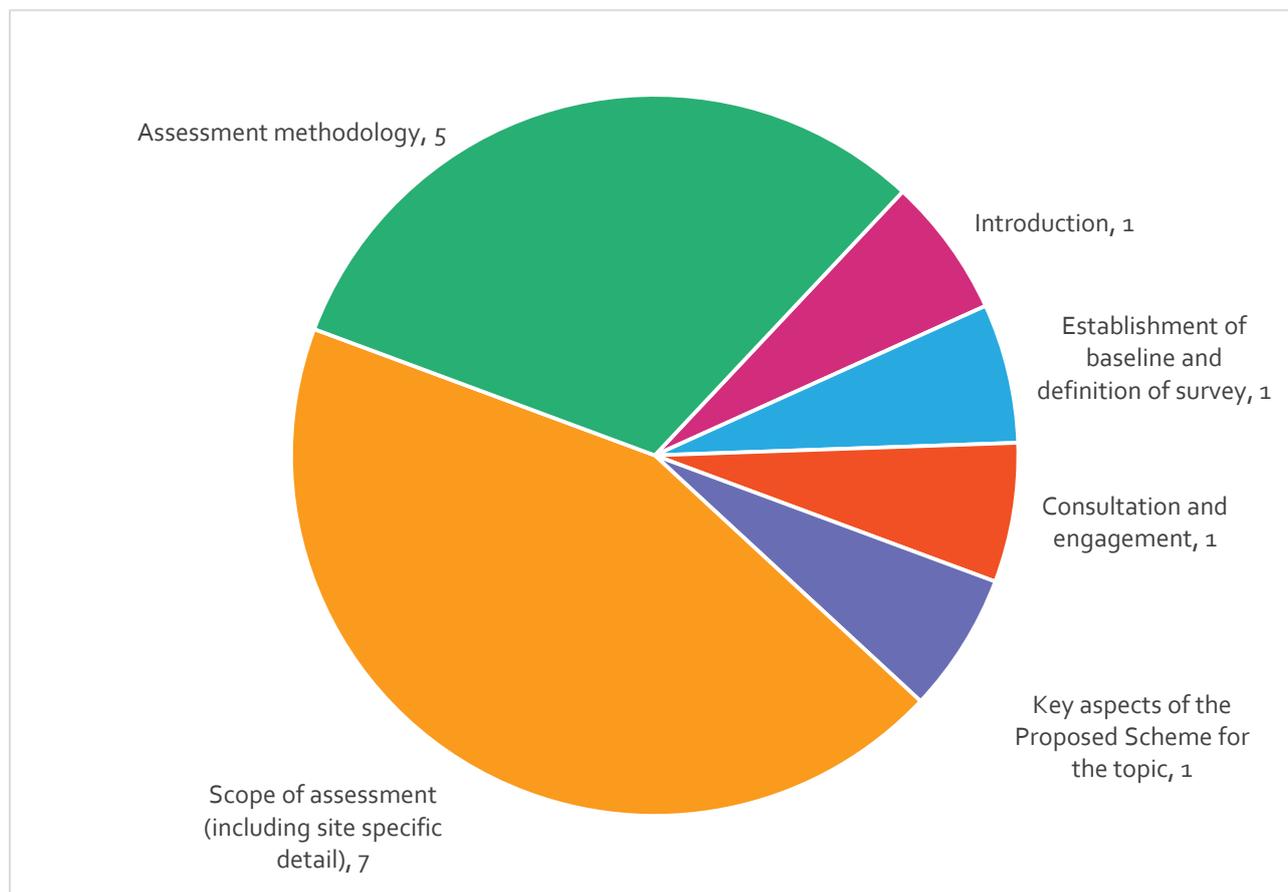
Response:

- The inconsistency is noted and the revised EIA SMR has been amended (now in Section 19.6 of the revised EIA SMR) to a threshold of 40 vehicles per day in urban areas or 10 vehicles per day in rural areas for both construction and operation.

4.20 Waste and material resources

4.20.1 Sixteen comments were made in relation to the waste and material resources topic. Figure 17 shows the number of comments that were received per sub-section of Section 20 of the draft EIA SMR.

Figure 17: Comments by subsection - waste and material resources



4.20.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- It was requested that the scope of assessment consider vegetation that is made waste during construction and operation.

Response:

- The quantity of green waste being generated during the construction and operation of the Proposed Scheme is likely to be relatively small and has been scoped out from the assessment. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- It was commented that landfill void capacity should also be assessed in accordance with waste type (inert, non-hazardous, hazardous) and operational status.

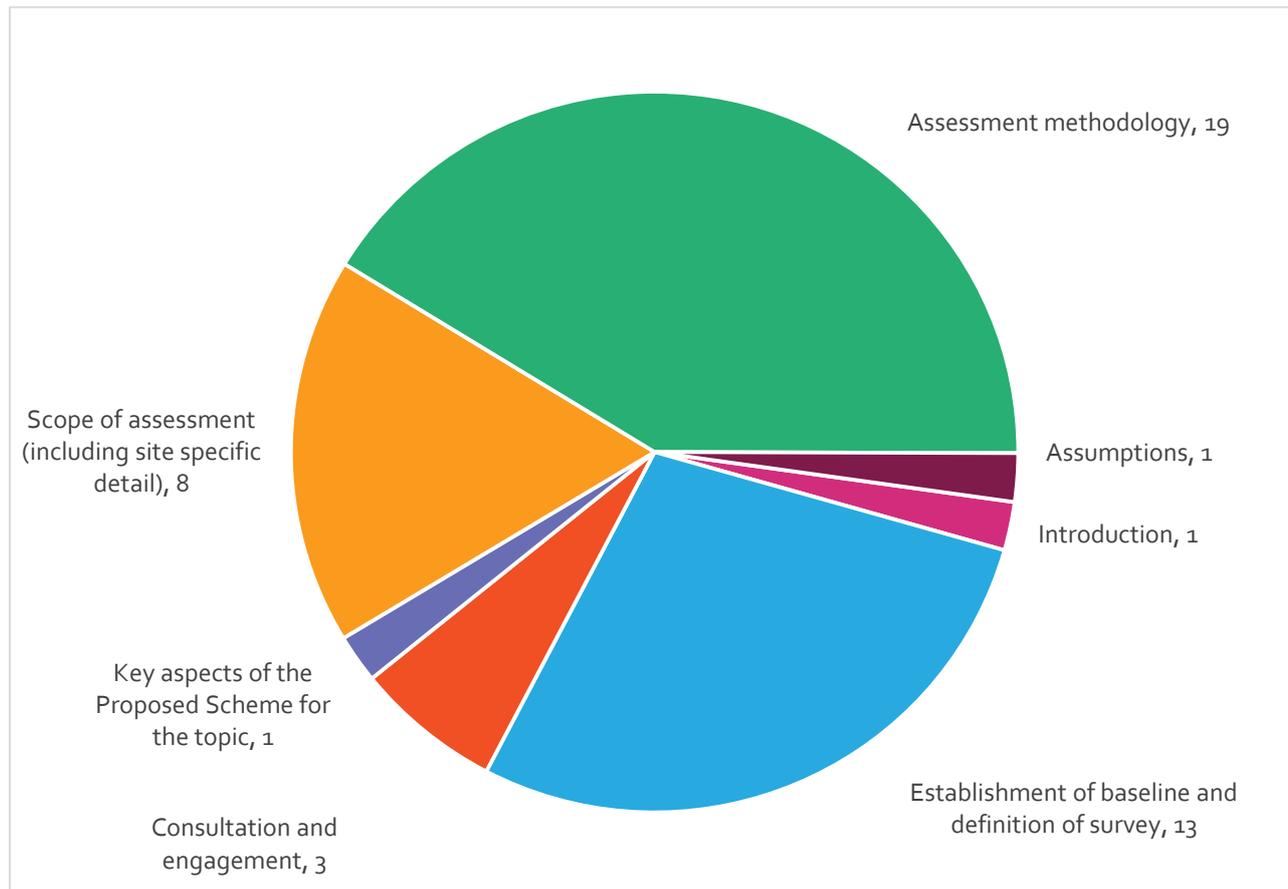
Response:

- Liaison with local authorities and selected landfill operators will be undertaken to check availability of landfill void space capacity as the EIA progresses, as noted in Section 20.2 of the draft EIA SMR. No changes have been made to the revised EIA SMR to reflect this theme.

4.21 Water resources and flood risk

4.21.1 Forty-six comments were made in relation to the water resources and flood risk topic. Figure 18 shows the number of comments that were received per sub-section of Section 21 of the draft EIA SMR.

Figure 18: Comments by subsection - water resources and flood risk assessment



4.21.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- It was requested that the Water Framework Directive (WFD) assessment section of the EIA SMR make reference to ecological or biological receptors, including groundwater dependent terrestrial ecosystems.

Response:

- Appropriate reference has been included in Section 21.2 of the revised EIA SMR.

Theme:

- Consultees suggested that the temporal scope of the assessment be adjusted to take account of features such as wetlands that will take time to become fully established.

Response:

- Appropriate reference has been included in Section 21.5 of the revised EIA SMR.

Theme:

- Surface water flood risk and flow routes were identified for inclusion and it was requested that the impacts on these receptors be considered.

Response:

- Appropriate reference is included in Section 21.2 of the draft EIA SMR. No changes have been made to the revised EIA SMR to reflect this theme.

Theme:

- Consultees challenged the 1km screening distance proposed for surface water and groundwater features scoped into the assessment and commented that impacts could extend more widely.

Response:

- The revised EIA SMR has been amended at Section 21.5 to clarify that all receptors within 1km have been included and consideration will be given to potential pathway linkages to high value receptors outside of this limit. Professional judgement will then be used to decide whether additional assessment is required. Receptors would only be scoped-out if it is clear that no such pathways exist.

Theme:

- It was requested that the scope of assessment consider the links between water resources and flood risk impacts and other topics such as terrestrial ecology and land quality.

Response:

- Appropriate reference has been included in Section 21.6 of the revised EIA SMR.

4.22 Structure of the EIA report

4.22.1 Eleven comments were made in relation to the 'Structure of the EIA report' (Section 22) of the draft EIA SMR.

4.22.2 The main themes to come through from the consultation and subsequent responses are summarised below.

Theme:

- In reference to Section 22 of the draft EIA SMR it was requested that each community area section of the EIA report be accompanied by data from immediately adjoining community areas.

Response:

- The community areas have been defined in Figure 3 and Section 4 of the revised EIA SMR. Impacts, and supporting data, will be reported in the community area to which they apply based on the location of the receptors affected. In addition, where a receptor lies across a community area boundary, information relating to that receptor and any associated effects will be provided in both community area reports. This will include, as required, consideration of data and impacts on receptors from adjoining community areas and where the Proposed Scheme joins Phase One and Phase 2b.

Theme:

- It was requested that full copies of individual reports (e.g. air quality assessment) be provided in the EIA report appendices and consultees encouraged the use of photographs and visualisations in the reporting.

Response:

- Detailed technical appendices will be published supporting the assessment reported within the formal EIA Report. These will include photographs and visualisations, as appropriate. No changes have been made to the revised EIA SMR to reflect this theme.

5 Next steps

- 5.1.1 The draft EIA SMR has been updated to reflect the consultation responses and the revised EIA SMR has been published alongside this EIA SMR Consultation Summary Report on-line at www.gov.uk/hs2.
- 5.1.2 A working draft EIA Report, presenting the findings so far of the EIA based on the draft EIA SMR, has also been published on-line at www.gov.uk/hs2 for consultation. Consultations are also taking place on a working draft EIA Report and design refinement. Details of all consultations are available on-line at www.gov.uk/hs2.
- 5.1.3 The revised EIA SMR will be used to develop the formal EIA Report, which will include the outcome of the assessment and any proposed mitigation measures.
- 5.1.4 Stakeholders and the public will have the opportunity to comment on the working draft EIA Report and the formal EIA Report. Comments on the latter will be collated by an independent assessor appointed by Parliament for consideration during passage of the hybrid Bill.

References

EU Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (2011), as amended by Directive 2014/52/EU (2014), European Commission

EU Directive 2013/35/EU Electromagnetic Fields (2013), European Commission

HM Government, 2011, Town and Country Planning (Environmental Impact Assessment) Regulations 2011, The Stationery Office

HS2 Phase Two: West Midlands to Crewe Environmental Impact Assessment (EIA) Draft Scope and Methodology Report (2016), HS2 Ltd Website, available at:

<https://www.gov.uk/government/consultations/hs2-phase-two-west-midlands-to-crewe-draft-environmental-impact-assessment-scope-and-methodology-report-consultation>

Landscape Institute, (2013), Guidelines for Landscape and Visual Impact Assessment, 3rd Edition

Landscape Institute, (2011), Photography and photomontage in landscape and visual impact assessment

Noise policy statement for England (2010) Department for Environment, Food & Rural Affairs

Annex A – Consultation form

HS2 Phase Two: West Midlands to Crewe



Draft Environmental Impact Assessment Scope and Methodology Report Consultation 2016 Response form

This consultation seeks your views on the Government's draft Environmental Impact Assessment (EIA) Scope and Methodology Report, which will inform the way the EIA is carried out.

This consultation will close on Friday 13 May 2016 at 23.45.

Please respond to us by one of the methods below:

By email

HS2SMRConsultation2016@arup.com

By post

Freepost HS2 SMR CONSULTATION 2016

HS2 Phase Two: West Midlands to Crewe Draft EIA Scope and Methodology Report Consultation 2016

To prepare for the deposit of a hybrid Bill in Parliament, the Government has commissioned consultants to undertake an EIA and prepare an EIA Report to meet the requirements of Parliamentary Standing Orders. This consultation seeks your views on the draft EIA Scope and Methodology Report, which will inform the way the EIA is carried out.

Please write your response clearly in black ink, within the boxes and, if applicable, attach additional evidence to the response form, clearly stating the question to which it refers.

Confidentiality and data protection

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act (DPA) 1998, and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals with, amongst other things, obligations of confidence.

In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, in itself, be regarded as binding on the Department for Transport or HS2 Limited.

The Department for Transport and HS2 Limited will process your personal data in accordance with the DPA 1998, and in the majority of circumstances, this will mean that your personal data will not be disclosed to third parties.

I wish my response to be treated as confidential.
Please write your reasons below.

PART ONE

Information about you

It is important to give us your name to ensure your response is included. Your email address will be used to inform you of the outcomes of the consultation.

Your contact details

First name
Surname
Address
Postcode
Email

Are you responding on behalf of an organisation or group?

Yes	No
-----	----

If yes, state the name of your organisation or group:

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If you are providing a response on behalf of an organisation or group:

The name and details of the organisation or group may be subject to publication or appear in the final report.

What category of organisation or group are you representing?

Please tick one box that applies.

- Academic (includes universities and other academic institutions)
- Action group (includes rail and action groups specifically campaigning on the high speed rail network proposals)
- Business (local, regional, national or international)
- Elected representative (includes MPs, MEPs, and local councillors)
- Environment, heritage, amenity or community group (includes environmental groups, schools, church groups, residents' associations, recreation groups, rail user groups and other community interest organisations)
- Local government (includes county councils, district councils, parish and town councils and local partnerships)
- Other representative group (includes chambers of commerce, trade unions, political parties and professional bodies)
- Statutory agency
- Real estate, housing associations or property-related organisations
- Transport, infrastructure or utility organisation (includes transport bodies, transport providers, infrastructure providers and utility companies)
- Other
- Prefer not to say

Please tell us whom the organisation or group represents and, where applicable, how you assembled the views of members.

Please write in the box below

PART TWO

Consultation questions

To prepare for the deposit of a hybrid Bill in Parliament the Government has commissioned consultants to undertake an EIA and prepare an EIA Report to meet the requirements of Parliamentary Standing Orders. The draft EIA Scope and Methodology Report, will inform the way the EIA is carried out.

Do you have any comments on the draft EIA Scope and Methodology report?

Please provide as much detail as possible in the box below.

Please attach additional pages as required.

PART THREE

Submitting your response

Thank you for completing the response form. Please send it to the Freepost address below.

Freepost HS2 SMR CONSULTATION 2016

Please note: no additional address information is required and you do not need a stamp.

Or email your response to HS2SMRConsultation2016@arup.com

The consultation closes on Friday 13 May 2016 at 23.45.

Please ensure you send your response by this date.

Please only use the response mechanisms described in this form when responding to this consultation. We cannot guarantee that responses sent to other addresses will be included in this consultation.

Annex B – List of consultees

The following table sets out the list of consultees who were consulted on the content of the draft EIA SMR. This includes statutory consultees as well as non-statutory EIA organisations.

The draft EIA SMR was also made available on the HS2 website. Consultees were therefore not limited to this list and responses received from others have been taken into account where relevant as part of the draft EIA SMR consultation.

Alrewas Parish Council
Armitage with Handsacre Parish Council
Arriva
British Transport Police Authority
Campaign for Better Transport
Campaign to Protect Rural England (CPRE)
CPRE – Cheshire
CPRE – North West
Canal & River Trust
Cannock Chase AONB Unit
Central Association of Agricultural Valuers
Chapel and Hill Chorlton Parish Council
Checkley-cum-Wrinehill Parish Council
Cheshire East Council
Cheshire Fire Authority
Cheshire Police Authority
Cheshire Resilience Forum
Chorlton and Hough Parish Council
Civil Aviation Authority
The Coal Authority
Coal Pro
Colton Parish Council
Colwich Parish Council
The Commission for Rural Communities
Country Land and Business Association
Crewe Town Council
Crown Estate Commissioners
Department for Culture, Media & Sport
Department for Communities and Local Government (DCLG)
Department for Energy and Climate Change (DECC)
Department for Environment, Food & Rural Affairs (Defra)
Design Council
The Disabled Persons Transport Advisory Committee
Doddington and District Parish Council
East Staffordshire Borough Council
English Heritage
Environment Agency
Equality and Human Rights Commission (EHRC)
Forestry Commission

Fradley and Streethay Parish Council
Friends of the Earth
Greenpeace
Hamstall Ridware Parish Council
Health and Safety Executive (HSE)
Heritage Alliance
Highways England
Historic Buildings & Monuments Commission for England (Historic England)
Hopton and Coton Parish Council
Ingestre and Tixall Parish Council
International Union of Railways
The Joint Nature Conservation Committee
Kings Bromley Parish Council
Lichfield City Council
Lichfield District Council
Local Government Association (LGA)
Madeley Parish Council
Marston Parish Council
Mavesyn Ridware Parish Council
Ministry of Defence
National Association of Areas of Outstanding National Beauty
National Farmers Union
National Parks England (Formerly English National Park Authorities Association)
National Trust
Natural England
Network Rail
Newcastle-under-Lyme Borough Council
NHS England Midlands & East
NHS Staffs & Surrounds CCG
The Office of Rail Regulators and Approved Operators
Public Health England (PHE)
PHE North West
PHE West Midlands
Rail Future
Ramblers Association
Royal Society for the Protection of Birds (RSPB)
RSPB Midlands
RSPB Northern England
Sports England
Stafford Borough Council
Staffordshire County Council
Staffordshire Police Authority
Staffordshire Prepared
Stoke-on-Trent and Staffordshire Fire and Rescue Authority
Stone Parish Council
Swynnerton Parish Council
Transport Focus (formerly Passenger Focus)
UK Coal

The Water Services Regulation Authority
Weston and Basford Parish Council
Whitgreave Parish Council
Whitmore Parish Council
The Wildlife Trusts
Wildlife Trust - Cheshire
Wildlife Trust - Staffordshire
Woodland Trust
Wynbunbury Parish Council

Annex C – List of consultation respondents

The following is the list of organisations that responded to the consultation on the draft EIA SMR before the deadline.

Whitmore Parish Council
Mid Cheshire Footpath Society
The Coal Authority
Country, Land and Business Association
Wybunbury Ward and Associated Parishes
National Trust
Historic England
Woodland Trust
Hopton and Coton Parish Council
Ingestre with Tixall Parish Council
Staffordshire County Council and Lichfield District Council Joint Response
Forestry Commission
Weston and Basford Parish Council
Hough and Chorlton Parish Council
Natural England
Environment Agency
Canal & River Trust
National Farmers Union
Public Health England
Cheshire Wildlife Trust
Cheshire East Council
Highways England
Ingestre and Tixall Against HS2 Action Group
Swynnerton Parish Council
Two Private Individuals