

EH Subgroup Minutes

Meeting date Thursday 1st February 2024, 14:30 to 16:30

Meeting location Microsoft Teams

Meeting title Environmental Health (EH) Subgroup Meeting #50

HS2 contact or group planning.forum@hs2.org.uk

Stakeholder Environmental Health Subgroup to Planning Forum

External Attendees

Construction Commissioner

Independent Chair

Independent Planning Forum Chair

Nominated Undertaker Attendees

Air Quality Manager - HS2 Ltd

Air Quality Manager (Construction) - HS2 Ltd

Environment Graduate - HS2 Ltd

Environment Manager – HS2 Ltd

Head of Environment Technical Services - HS2 Ltd

Head of Noise Assessment - HS2 Ltd

Noise and Vibration Manager – HS2 Ltd

EH Attendees

Buckinghamshire Council (BC)

Buckinghamshire Council (BC)

Cherwell District Council (CDC)

London Borough of Camden (LBC)

London Borough of Camden (LBC)

London Borough of Camden (LBC)

London Borough of Ealing (LBE)

London Borough of Hammersmith & Fulham (LHF)

Solihull Metropolitan Borough Council (SMBC)

Solihull Metropolitan Borough Council (SMBC)

Staffordshire County Council (SCC)

Stratford District Council (SDC)

Three Rivers District Council (TRDC)

Westminster City Council (WCC)

Apologies

London Borough of Hammersmith & Fulham (LHF)

Staffordshire County Council (SCC)

Item 1 - Chairman's Introduction and Apologies

The Chair called the meeting to order and provided an overview of the meeting etiquette. The Chair welcomed attendees and asked for introductions to be made in the chat function. Apologies were shared by the Chair. The meeting was recorded to aid with minute taking, attendees were notified.

Item 2 - Review of Minutes from Previous Meeting

A review of the November 2023 meeting minutes was undertaken. There were no further comments and the meeting minutes for November 2023 were agreed.

Item 3 - Update from the Construction Commissioner

The Construction Commissioner provided a summary of the ongoing challenges of the HS2 programme.

Questions/Comments:

- (Q) Chair: Is there an update on the revised Prolonged Disruption Compensation Scheme (PDCS) and the Small Claims Scheme (SCS)?
- (A) Construction Commissioner: The revised PDCS has not yet been signed off, and the new terms have not yet been agreed. Changes are being made to the SCS to improve the performance of JVs and HS2 and streamline the response system.
- (Q) LBE: What are the potential impacts of delaying construction of Euston on the surroundings of the Old Oak Common site?
- (A) Construction Commissioner: Old Oak Common station becoming a terminus will likely have impacts on surrounding infrastructure, particularly the road network and public transport systems. Clarification is still needed from the government.

Item 4 - Phase One Project Update

HS2's Head of Environment Technical Services provided an update on changes to HS2 Ltd's organisational structure and the new 'Railway Directorate'.

The Phase One project update slides were shared with attendees in advance. The Chair confirmed that Phase One project updates will continue to be circulated ahead of future meetings.

Item 5 - Operational Noise Update

The Chair welcomed HS2's Head of Noise Assessment to provide an update on operational noise. An update was provided on noise relating to rolling stock including ongoing work on pantograph noise, track, and civils design. An update on the acoustic design process of the Colne Valley Viaduct was shared, including progress on the noise barrier testing.

Rolling stock

In Jan 2022 we discussed the award of our first rolling stock contract to Hitachi Alstom – JV in this forum. JV has committed to deliver a train quieter than NTSN noise requirement and has been further designing the train since. Pleased that the body aerodynamic sound source has improved upon assumptions used in the design. However, noise reduction from the pantograph is proving more difficult because of the need to achieve satisfactory performance between the pantograph and HS2's overhead line system.

HS2 are working with the JV to reduce noise from the pantograph as far as reasonably practicable. Expect the noise characteristics of the pantograph will be confirmed later this year following more detailed consideration. Will update this forum in due course. HS2 have instructed our civil contractors to sensitivity test their designs for changes in the level of the different train sources to test that the designs and any future changes to rolling stock assumptions will comply with IP E20. This work is underway now.

Track

As a recap, HS2 Environmental Statement assumed ballast track. Later a decision was made to switch to slab track for whole life cost reasons. Initially it was expected that noise emission from slab track would be higher than ballast. However, we completed Research & Development (R&D) work in 2018 which showed that this was not the case at high speed because of the roughness that can be obtained on high-speed slab track and the design of the rail fastening system.

HS2s surface slab track contractor (PORR) was appointed in 2021 and they have since been undertaking work to optimise HS2s slab track design. This has included measurements of noise emission from similar track systems in Germany in July 2023.

Civils Design

The civils design (including noise barriers) is progressive. Currently our contractors are in the detailed design stage where they are setting performance requirements, specifying the design and undertaking testing. A good example of this is Colne Valley Viaduct where project has made commitments to minimise noise and visual impact. The contractor has been modelling the cross-section in detail to understand how it performs. The inclined barriers and robust curbs with absorption on their face was expected to enhance the performance. Last summer a testing programme was undertaken on a mock-up of the Colne Valley Viaduct barriers. The results have been used to validate the models being used for design.

Questions/Comments:

BC: HS2 must remember to comply with the obligations of the Environmental Minimum Requirements General Principles to not exceed impacts set out in the Environmental Statement.

(A) Head of Noise Assessment HS2: Confirmed that contractors are considering EMR compliance in their current work.

- (Q) Chair: Why wasn't the issue with pantograph noise foreseen?
- (A) Head of Noise Assessment HS2: This issue relates to the compatibility of the pantograph with the HS2 overhead line system and has become apparent through design work undertaken after rolling stock contract award which has considered how the train interacts with the HS2 infrastructure.
- (Q) Chair: Have there been any implications for the train design following the rescoping of the HS2 programme?
- (A) Head of Noise Assessment HS2: Currently no changes have been made.
- (Q) BC: Will any of the Noise Demonstration Reports (NDRs) be based on actual train noise source terms in the future?
- (A) Head of Noise Assessment HS2: We are expecting this to be part of our NDRs submitted with bringing into use applications for the railway.
- (Q) BC: Have the noise barriers for the Colne Valley Viaduct been tested at the angle they will be at on the actual railway?
- (A) Head of Noise Assessment HS2: The test was designed to represent the viaduct as closely as possible, but it was not practical to implement some features. For example, the additional foundations required to angle the barriers would have been too costly. The contractor has constructed a computer model of the test set up and the results have been used to validate the models being used for the design of the viaduct.
- (Q) Planning Forum Chair: Are these noise barriers and their testing specific to the Colne Valley Viaduct?
- (A) Head of Noise Assessment HS2: Yes, although it is useful that the results have been used to validate noise models and we are currently looking at whether we need to undertake similar exercises on the barriers from other contracts.

Item 6 - Other Updates

It was raised that Planning Forum Note 5 has been agreed upon, which covers Schedule 17 conditions and additional details requests. The Planning Forum Chair noted that this followed statutory guidance which was published in November 2023 Planning Forum Update.

Item 7 - Ongoing Construction and Section 61 Experience

No discussion was had.

Item 8 - Action Log / Forward Plan / AOB

The Chair reviewed the action log, which has been updated to reflect items that remain open and those which are now closed. The Chair agreed that further details of the noise barrier testing process will be shared with attendees once complete.

BC raised the action of needing a local authority representative to attend the Joint Regulators Forum. This was added to the action log.

The Chair closed the meeting.