

Minutes

Meeting date	February 06th 2019, 13:00 to 15:30
Meeting location	Mary Ward House, London, 5-7 Tavistock Place, WC1H 9SN.
Meeting title	Environmental Health (EH) Sub Group Meeting #25
HS2 contact or group	planning.forum@hs2.org.uk
Stakeholder	Environmental Health Sub Group to Planning Forum

External Attendees

Peter Carey- Independent Chair of EH Sub Group

Ted Allett – Chair Planning Forum

Nominated Undertaker Attendees

Anthony Coumbe – HS2 Ltd

Matt Dormer – HS2 Ltd

Stephen Hyland - HS2 Ltd

Andrea Davidson – HS2 Ltd

Diane Booth – HS2 Ltd

Noah Bold - HS2 Ltd

Chris Crabtree – HS2 Ltd

Tim Robins – HS2 Ltd

Richard Greer (Arup) – HS2

EH Attendees

Tom Parkes - London Borough of Camden (LBC)

Camilo Castro - London Borough of Camden (LBC)

Richard Hiscock - Aylesbury Vale District Council (AVDC)

Richard Peers - Staffordshire County Council (SCC)

Elizabeth Fonseca - London Borough of Hammersmith and Fulham / Royal Borough of Kensington and Chelsea (LBHF + RBKC)

John Penny – South Northamptonshire Council (SNC)

Monica Mulowoza – Hillingdon (LBH)

Steve Braund - Chiltern District Council / South Bucks District Council (CDC/SBDC)

Debrina Fowler – North Warwickshire Borough Council (NWBC)

Zoe Bickley – North Warwickshire Borough Council (NWBC)

Julian Smith – Wycombe District Council (WDC)

Olayinka Ekundayo – London Borough of Brent (LBB)

Nick Mottram – Oxfordshire County Council (OCC)

Dominic Towey – Solihull Metropolitan Borough Council (SHBC)

Jack Twomey – Lichfield District Council (LDC)

Item 1 - Welcome and Introductions

The Chair called the meeting to order, welcomed attendees and introductions were made. It was stated that the HS2 Construction Commissioner would be attending the April EH Subgroup.

Item 2 - Review of Action Log and Minutes from Previous Meeting

3a March 2018 – HS2 to return to the EH Sub Group with more information on operational noise, when available. Item covered at the Feb 2019 EHO Subgroup meeting. Item closed.

2a May 2018 – HS2 to check date when Prolonged Disturbance Scheme will be finalised. Item open.

3a July 2018 – HS2 to give a complaints handling update in approximately 6 months' time. HS2 to present an update in April. Item to remain open.

4a July 2018 – HS2 to explain the reporting process in the case of a potential EMRs breach at a future meeting. HS2 are working on a process for both EMRs and U&As with the DfT. HS2 will share the outcome with the EH Subgroup in a future meeting. Item to remain open.

11a July 2018 – HS2 to look into releasing contaminated land data. HS2 to send an email to EH Subgroup and share the process for accessing data. Following distribution of email the item can be closed.

5a Nov 2018 – HS2 to create a working group for noise barriers with the inclusion of Steve Braund (CDC/SBDC). Working group meeting to be held on March 6th. SBDC to attend on behalf of EH Sub Group.

9a November 2018 – Contact details to be shared for Environment Manager and Consents Managers in HS2 with LA's. HS2 to share email with EH Group. Following distribution of email the item can be closed.

9b November 2018 – Complaints Manager to update at future EH Subgroup including categorisation of complaint types. HS2 to present an update in the April EH Subgroup meeting. Item to remain open.

10a November 2018 – HS2 to give further consideration to development of S81 working group. The issue will be considered on an ad-hoc basis. Outputs from last planning forum (in formatives) were sent to LAs showing the mechanism for LAs to reiterate controls within the CoCP/planning process as part of a Schedule 17 approval. These have been sent through the planning forum. Item closed.

10b November 2018 – HS2 to respond to SBDC comment on SoS position concerning preference to aesthetic vs noise mitigation features based on recent public sentiments HS2 suggested the question could better be addressed if the situation arises in the light of SCDC's review of designs, rather than responding to a hypothetical scenario. SBDC/CDC are content with this approach. Item closed.

Review of Minutes from Previous Meeting – Minutes agreed.

Steve Braund represents the Chiltern District Council and South Bucks District Council. Change all references to CDC/SBDC throughout minutes.

Post-meeting update: The changes have been amended into the final version of minutes.

No other comments. Minutes agreed.

Item 3 – Operational Noise

HS2 discussed planning forum note 16; *“Demonstrating that noise from the operational railway and altered roads has been reduced ‘as far as reasonably practicable’ in parallel with seeking Schedule 17 approvals”*. This was shared with the EH Subgroup members prior to the meeting and feedback was encouraged. Comment deadline was February 18th 2019. The coordination of comments will be managed through the Planning Forum.

Richard Greer (Arup) delivered a presentation on operational railway noise ‘source terms’, and set out progress with regard to the design and specification of the track, train and maintenance to reduce noise ‘as far as reasonably practicable’ (AFARP).

Originally a small number of ‘TSI compliant’ trains (in terms of noise emission) were assumed as part of the Environmental Statement (ES). These were assumed to be services operated ‘by others’ on HS2. Originally this was to allow for services to / from the HS1-HS2 Link but the service assumptions were maintained as part of a ‘worst case’ when the HS1-HS2 Link was removed from the Phase One hybrid Bill. The HS2 Train Service Specification does not include non-HS2 services, hence the assumptions for the detailed design of HS2 Phase One now include quieter HS2 Ltd specification trains only (i.e. no ‘just TSI compliant’ trains).

The presentation noted that Train Service Specification (like the ES) provides for two types of HS2 trains:

- Captive (i.e. can only operate on HS2); and
- Conventional Compatible (i.e. can run on existing rail network as well as HS2).

The presentation assumed that the Conventional Compatible (CC) train may be slightly noisier at very high speeds due to aerodynamic noise. This is because CC trains have a smaller gauge to fit on existing lines and this constrains some of the aerodynamic design features that can be delivered on the wider Captive trains. The procurement process for HS2 trains incentivises the delivery for quieter trains. Thus, the matter will likely require further presentations once the contract to design and supply HS2 trains has been let.

AVDC inquired if for Schedule 17 applications HS2 are still assuming 3dB above the ES levels. RG confirmed that HS2 Ltd is now working to ES levels again for HS2 captive trains and 1 dB above ES for CC train following the completion of two years of design and analysis work.

RG noted that the reasonable worst-case assumption of emission levels 3 dB above ES Track described in the 2018 EH Subgroup meeting, primarily stemmed from the removal of ballasted track (assumed in the ES) in exchange for slab track. However, the further detailed analysis and verification against measurements has shown that the principle parameters that determine HS2 rolling noise source terms are:

- 'rail decay rate' (i.e. how quickly along the rail noise reduces from contact point between each wheel and the rail) – and this will be higher (i.e. lower noise) for the types of two stage rail fastening likely for HS2 slab track compared to ballast track;
- Rail roughness - the further work has confirmed that the low levels of roughness assumed in the ES can be realistically maintained on HS2; and
- Wheel design - the ES assumed TGV wheels with curved webs (to allow for tread brakes) whereas, the latest HS trains (with disc brakes) have straight profile webs that are quieter.

Overall these findings show that the combination of the lower rail decay rate (quieter rail) and the straight wheel web (quieter wheel) make-up for the small increase in noise that otherwise would occur in changing from ballast to slab track, due to removing the acoustic absorption provided by ballast.

AVDC asked if smoothness has been improved since the establishment of the ES. RG stated that Train/Track and Maintenance assumptions have changed.

AVDC asked has two stage rail fastening system (that reduces rail decay rate) been specified in procurement.

Action: HS2 to confirm if two stage system is specified in the procurement process.

Planning Forum Chair asked why the two-stage system used on HS1 was not used as the basis for HS2. RG noted that the two-stage fastener on HS1 is only for tunnels (to control ground-borne noise in overlying properties) and speeds only up to 250 km/h. The starting point for HS2 is the different track systems that are proven for surface and 360 km/h. The ability to specify and design these systems, so that the rolling noise is no noisier than ballast, has only been proven since the ES (for Phases One and 2a).

AVDC asked about pantograph and pantograph recess aerodynamic noise. RG noted that: first, HS2 train procurement requires the reduced pantograph aerodynamic noise assumed in the ES; and second, that pantograph recess aerodynamic noise is not a concern for modern HSs trains. This is because pantographs are distributed along modern trains in aerodynamic housings distinct from original Eurostar trains (for example) that have more than one pantograph in a large recess that then causes aerodynamic noise.

RG noted that all recent data have been confirmed by measurements (including measurements in Spain) for trains running at 360km/per hour.

CDC/SBDC asked if HS2 had committed to modern trains and whether older rolling stock would be occupying the HS2 line. HS2 Ltd stated that only procured trains are likely to operate on Phase One and the supply chain are incentivised to reduce train noise. RG noted that train service and design assumptions will be set out in parallel with contractors seeking Sch 17 approvals (in line with PFN10 and PFN16). Following

HS2 train procurement and detailed design, Schedule 17s would be updated (as necessary) as set out in PFN16.

CDC/SBDC asked why this was not done 2 years ago. RG stated that this presentation shows two years' worth of work, both modelling and measurement.

The Chair asked if this information is feeding into the procurement process. HS2 confirmed this (see earlier action).

AVDC asked if the train maximum noise level source terms were also being updated following the recent design and specification work. RG confirmed that that they have been.

Item 4 – Noise Barrier Update (Common Design Elements)

HS2 gave an update on CDE for noise barriers that was previously done at the Planning Forum meeting.

Planning Forum Chair noted that earthworks will mitigate noise, however this does not include trees and landscaping.

The Chair asked if transparency (of barriers) is to improve passenger experience. AC noted this is to also reduce the landscape and visual effects.

Planning Forum Chair asked about the sustainability – what is the criteria for this?

Action: HS2 to respond on criteria for sustainability in noise barrier design. Feedback will be communicated at the next EH Subgroup meeting.

Item 5 – Air Quality 2018 Annual Data Update

Andrea Davidson (HS2 Phase 1 Air Quality Lead) presented an Air Quality update. Featured discussion points include:

- Annual Air Quality reports (2016 & 2017) are in the process of being updated following a review of the categorisation of diffusion tubes (i.e. roadside, kerbside, urban background) following engagement with the Camden residents group.
- HS2 Innovation panel approved a NRMM emission reduction project with Kings College London & Costain-Skanska Joint Venture. The project kicked-off in January 2019, and equipment trials will be taking place on sites in and around London. The project will be considering plant emissions and relevant individual exposure levels on and off-site.
- Compliance Dashboards (November 2018 / December 2018 / 2018 Annual Statistics) are loaded on the SharePoint site & Monthly monitoring reports and data saved on gov.uk

The 2018 EWC vehicle and NRMM compliance figures were shared with the EH Subgroup attendees.

General data summaries are featured below:

- 35,690 vehicle trips (approx. 42% HGVs), 44 approved exemptions (1% of the total unique HGVs).
- Area South figures indicated 98% compliance with the HGV Euro VI requirement, with Area Central and North figures indicating 79% and 77% respectively with the HGV Euro VI target (requirement from 2020).
- Figures across the areas indicated between 66 – 74% compliance with the LDVs Diesel Euro VI and Petrol Euro IV targets (requirement from 2020).
- There were 865 NRMM across the route – 45 approved exemptions (5% of the total for viability and short term). With between 98 and 99% compliance across Phase One.

HS2 obtained independent advice from the Energy Saving Trust when reviewing exemptions. The first NRMM annual exemption review took place towards the end of 2018 which has resulted in a route-wide block exemption for the calendar year 2020, i.e. the stricter requirements will only be applicable from 01 January 2021, and current requirements will be extended for one additional year. This exemption considered: NRMM registered to date with HS2, NRMM registered with the GLA, projected HS2 NRMM usage, projected route-wide NRMM availability in 2019 and 2020, projected NRMM sales in 2019 (last year of EU Stage IV), average commercial NRMM stock renewal, and availability of certified retrofit emission control devices to maintain the highest practicable emissions controls.

HS2 is continuing to work with and challenge the industry and supply chain through the Energy Saving Trust to manufacture and certify appropriate retrofit options.

The Chair enquired why LDV compliance rates are lower than HGVs. HS2 explained that LDVs (made up of cars and vans) are predominantly being used for Ground Investigation works. Van manufacturers are also behind in the conversion to Euro VI, however they are becoming more widely available, and with the introduction of various city Clean Air Zones (which includes Birmingham) this will further promote a shift in the industry. In terms of construction projects, the bigger emitters are attributed to HGVs and NRMM. As the project progresses, moving into main works, it is anticipated that LDV numbers will decrease.

SMBC asked if HS2 are concerned about displacement of old vehicles north to areas outside London. HS2 indicated that it is in the interest of contractors to invest in new fleets or retrofit devices fitted. Euro VI HGVs refers to those vehicles manufactured from 2014 onwards. Considering the average contractor fleet turnover, it is envisaged by the start of main works, that vehicles pre-2014 will have been replaced as part of usual fleet renewal. Further to this, the introduction of various city Clean Air Zones (which includes Birmingham) will make Euro VI HGVs a regulated requirement by 2020.

LBHF&RBKC asked if HS2 are implementing measures to target non-compliant LDVs. HS2 stated that the organization is motivating contractors by setting interim targets to promote compliance ahead of the requirements in 2020.

LBC asked if HS2 have produced a data summary detailing rejections from site. HS2 stated that it is in the Contractor's best interest to supply compliant vehicles as each rejection costs them money, but HS2 also

has measures which will be implemented if repeated non-compliances are identified. HS2 has information on rejections on site and can share with individual LAs on request.

LBHF&RBKC asked where the breakdown of the NRMM exemptions are detailed by area. HS2 indicated that these statistics are broken down on the dashboards which are available on the SharePoint site.

Item 6 – HS2 Phase One and Phase 2a Update

Anthony Coumbe (Phase One - HS2 Head of Environment) gave an update on Phase One and Phase Two.

CDC/SBDC queried tree die-off percentage rates for the project. HS2 stated lost trees from drought conditions will be replaced in due course.

HS2 Woodland Fund - funding will re-open again in Spring 2019. Nick Mottram offered advice to LAs as he sits on the independent panel.

HS2 noted that Construction Partners for the southern stations at Euston and Old Oak Common has been awarded (subject to 10-day standstill period).

HS2 noted that the AP2 consultation has begun for Phase 2a. The consultation closes at 11:45pm on 29 March 2019. Information on the consultation can be found at the following link:

<https://www.gov.uk/government/consultations/hs2-phase-2a-additional-provision-2-environmental-statement-and-supplementary-environmental-statement-2-consultation-february-2019>

The Chair asked if Brexit has any implications on the HS2 project. HS2 stated we are preparing for Brexit and investigating the potential implications of it from a legislative point of view on how it may affect the project.

Item 7 – Planning Forum Feedback

Matt Dormer (HS2 Town Planning Lead, Phase One) summarised key issues discussed at the January Phase One Planning Forum.

- HS2 CEO Mark Thurston attended the Planning Forum and delivered an update on Phase 1 and Phase 2. Mark will attend the Planning Forum again in Jan 2020.
- Sir Mark Worthington, the new Independent Construction Commissioner, was introduced to the Planning Forum.
- A presentation on noise barrier Common Design Elements was given.
- Actions on other CDEs – another working group is scheduled for March 6th
- Noted by PF members that HS2 look-ahead is causing LA difficulties for resourcing. If works are delayed this needs to be communicated. Lack of joined-up approach for schedule 4 and 17 raised.
- HS2 shared an update on Planning Forum notes, including PFN16 on operational noise.

The Chair sought an update on Signed Legal Agreements (SLA's) for LAs. HS2 stated that the majority of SLAs have been signed, but there is some ongoing concern about invoicing and format of this.

Item 8 – Ongoing Construction and Section 61 Experience

CDC/SBDC stated that contractors should treat SOIs as normal S61 in terms of timings for applications. They requested more detail from contractors in early consultation to determine if an SOI or S61 is required. HS2 advised LAs to contact area specific HS2 environment contacts if there is concern and HS2 can pick this issue up with contractors individually.

Item 9 – Forward Plan / Meeting Agenda Items

Items for next meeting:

- Sarah Goodburn – complaints update
- Construction Commissioner introduction
- HS2 noise insulation working panel – special cases under E23 (what's the approach, process panel?)
- Process for a Potential EMR breach
- An introduction from the S61 adjudicator (will require DfT to approve).
- CDE – noise barriers

Item 10 – Any Other Business

The Chair raised the topic of LEMPs and asked for an update. HS2 stated LEMPs are being reviewed on a 6 monthly cycle, however these documents are only updated if the baseline is updated. Therefore, updates won't be actioned due to a change in construction areas. If LEMPs are updated, HS2 agreed to notify the relevant LA.

LEMPs for all LAs can be found at the below address: <https://www.gov.uk/government/publications/local-environmental-management-plans-for-hs2-phase-one>

LBC asked about contractor management plans being shared with HS2. HS2 to address in one of the regular Environmental meetings with LBC.

SMBC noted that Bernice Larkin has left. HS2 will update the distribution list accordingly.

Next EH Sub Group meeting will be held on **Thursday April 4th**.

Actions

Action - 3A February 2019: HS2 to confirm if a two stage system was specified in the procurement process.

Action - 4a February 2019: HS2 to respond on criteria for sustainability in noise barrier design.

Action - Action outside meeting: HS2 to advise if claims can be made retrospectively once the Prolonged Disturbance Scheme is finalised.

Action - Action outside meeting: HS2 to clarify how Interim Construction Commissioner's concern regarding overlap with Prolonged Disturbance Scheme and the Construction Complaint process is to be clarified.

Action – Action outside meeting: HS2 to confirm at a future meeting how E20 requirements are communicated to LPAs and how 'AFARP' principles apply to temporary highways.

FINAL