

# EH Subgroup Minutes

<b>Meeting date</b>	July 24 <sup>th</sup> 2019, 13:00 to 15.30
<b>Meeting location</b>	Mary Ward House, London, 5-7 Tavistock Place, WC1H 9SN.
<b>Meeting title</b>	Environmental Health (EH) Sub Group Meeting #28
<b>HS2 contact or group</b>	planning.forum@hs2.org.uk
<b>Stakeholder</b>	Environmental Health Sub Group to Planning Forum

## ***External Attendees***

Peter Carey – Independent Chair

## ***Nominated Undertaker Attendees***

Anthony Coumbe – HS2 Ltd

Tim Robins – HS2 Ltd

Andrea Davidson – HS2 Ltd

James Meconi – HS2 Ltd

Hannah Lyon – HS2 Ltd

Gennaro Sica – HS2 Ltd

Chris Crabtree – HS2 Ltd

Louise Murphy – HS2 Ltd

Diane Booth – HS2 Ltd

### ***EH Attendees***

Tom Parkes – London Borough of Camden (LBC)

Olayinka Ekundayo – London Borough of Brent (LBB)

Karen Dixon – Stratford upon Avon District Council (SDC)

Richard Hiscock – Aylesbury Vale District Council (AVDC)

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

Dominic Towey – Solihull Metropolitan Borough Council (SMBC)

John Penny – South Northamptonshire Council (SNC)

Richard Peers – Staffordshire County Council (SCC)

Zoe Bickley – North Warwickshire Borough Council (NWBC)

Jack Twomey – Lichfield District Council (LDC)

Alasdair Carlin – London Borough of Hammersmith and Fulham (LBHF)

Rizwan Yunus – London Borough of Hammersmith and Fulham (LBHF)

Philip Smith – London Borough of Hammersmith and (LBHF)

Nick Mottram – Oxfordshire County Council (OCC)

### ***Apologies***

Ted Allet's – Planning Forum Chair

## **Item 1 - Welcome and Introductions**

The Chair called the meeting to order, welcomed attendees and introductions were made.

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

The June 2019 EH Subgroup minutes were reviewed and agreed during the July 2019 EH meeting.

Page 3 – Local Authority Contacts List – HS2 to confirm this has been uploaded on the EH SharePoint. Post Meeting Note: the SharePoint has been checked and the document had been uploaded previously and is entitled 'HS2 Local Authority Contacts'. Any issues in accessing SharePoint should be flagged to HS2.

Page 3 – The Independent Construction Commissioner (ICC) needs to be revised on the HS2 Webpage. Anthony Coumbe has notified Sir Mark Worthington and the Webpage is being updated.

Page 3 – The noise barrier Common Design Element (CDE) has been agreed between CDC/SBDC and HS2 at the CDE Working Group. Steve Braund (CDC/SBDC) is to step-down from his role as the Phase 1 Local Authority representative within the CDE Working Group as it is no longer considered necessary by the group.

Page 5 – HS2 will update Planning Note 7 with guidance on "Bringing Into Use". HS2 to issue planning Note 7 to the EH Subgroup following its publication.

## **Item 3 - Operational Noise Update Including Low Frequency Noise**

The Chair welcomed Gennaro Sica (HS2 Acoustic and Vibration Engineer) to share information on Low Frequency Noise from High Speed Trains.

Infrasound and Low Frequency Noise (ILFN) is defined as sound with a frequency below 200Hz. ILFN is considered to be inaudible but there is a perception of the sound in the body. HS2 scoped out ILFN from the Noise and Vibration Assessment because there was no evidence that ILFN from high speed trains could result in significant effects.

ILFN was examined in the House of Commons and House of Lords in response to a petition from Southam Town Council citing a Japanese study on the effects of wayside (within 36m from railway) ILFN from high speed trains. The study comprised the measurement and simulation of wayside ILFN on residents and houses adjacent to the high speed railway in Japan. GS (HS2) noted that the study is very specific to Japanese conditions where residents generally live closer to the railway than with HS2.

The evidence shows that measured ILFN from Japan's high speed trains was relatively weak at the wayside and because it is perceived as a whole body effect - ILFN would need to be 20dB higher than what was measured to be detected by the human body. The Japanese Study produced an equation for the rate of decay of ILFN with distance that includes terms for the decay of sound in the near-field (close to source) and

far-field. Because people will be far away from the HS2 railway (source), only far-field is applicable. ILFN in the far-field decays rapidly with distance, and therefore, the far-field sound will blend into the standard train noise. GS (HS2) notes that ILFN may be generated in tunnels; however, design of the tunnels will include porous portals to mitigate for this potential effect. Following the cross-examination, no recommendation were made to investigate ILFN further; this remains HS2 position.

A question was raised by KD (SDC) if HS2 looked at the effects of ILFN for the whole route or just for the Southam area. ILFN was looked at for the whole route and scoped out of the Environmental Impact Assessment because it was considered that no significant effects were likely based on available evidence. The Chair asked if there was any known issues associated with ILFN from the High Speed One experience – HS2 stated that they are unaware of any such issues.

HS2 and SDC/Southam Town Council are to take this topic forward, if required, at the next bilateral meeting.

#### **Item 4 – Air Quality Update**

The Chair welcomed Andrea Davidson (HS2 Air Quality Lead) to provide a Phase One High Speed Two update on air quality across the route.

The Air Quality Annual Report and Action Plan for 2018 has been published at gov.uk and saved on the Local Authority Sharepoint site. All compliance dashboards for June and 'year-to-date' are provided on the Local Authority Sharepoint and the monthly air quality reports have been uploaded to gov.uk.

With regards to the NRMM emission reduction Innovation Project (refer to June 2019 Meeting Minutes), the personal exposure monitoring component of the project has been completed and the data is currently being analysed by the Kings College London. The mini portable emissions measuring systems (mini-PEMS) will measure emissions from existing NRMM Stage IIIB and Stage IV equipment. Equipment will then be retrofitted with the goal of getting existing plant to meet Stage V standards. Testing on existing NRMM equipment is expected to commence late Summer; however, there will be a delay in testing the retrofitted equipment as a suitable retrofit devices are not available to market. Manufacturers have generally focused on buses due to market demand; however, manufacturers have confirmed that the technology is available and are in the process of assessing the most suitable plant to develop the device for. Progress update on this testing will be provided at future EH Subgroup meetings.

The impacts of dust from construction sites are more evident this time of year (Summer) as it becomes hotter and drier. An update on dust management during the demolition works will be given by the Early Works Contractor at the October EH Meeting.

As a means to ensure the monitoring HS2 undertakes was understood by all, AD provided an overview of the dust monitoring undertaken across sites. The Environmental Statement (as amended) reported that there would be no significant effects associated with changes in the 24-hour daily mean Particulate Matter (PM) with the exception of Euston Road. Therefore, HS2 is committed to monitoring PM<sub>10</sub> using Indicative

Monitors at sites classified as Medium/High risk as per the *IAQM Guidance on the Assessment of Dust from Demolition and Construction*. Kings College London completed a study on the suitability of Indicative Monitors and concluded that the monitors are good for construction sites in terms of setting trigger levels. Indicative Monitors are certified (MCERTS) by the Environment Agency, but do carry a higher level of uncertainty than reference monitors and therefore results cannot be strictly compared to the Air Quality Standards for the UK. Instead, the trigger levels, set as PM<sub>10</sub> at 190µg/m<sup>3</sup> mean over one-hour, are used as an alert system to ensure the effectiveness of the on-site controls. The actions taken following a trigger alert are documented in Section 7.3.8 Code of Construction Practice.

AD presented the vehicle emission compliance figures for June 2019 and year to date across Area South, Central and North and the Non-Road Mobile Machinery (NRMM) compliance figures to date.

HS2 has been working with the Construction Equipment Association in the development of the CESAR Emissions Compliance Verification System (EVC badge) – which was launched at Plantworx in June 2019. The EVC badge is a tamper proof bolt-on product that provides details on the emission stage of the plant.

Nick Mottram (OCC) enquired whether HS2 was collecting information on pollutants (e.g. heavy metals) from brakes and tyres. HS2 confirmed that pollutants from brake and tyres is not monitored, but it is a known concern in the wider industry, highlighting that the PM<sub>10</sub> monitoring undertaken at Medium and High risk sites is to ensure the effectiveness of on-site mitigations

Links:

2018 Annual Air Quality Report: <https://www.gov.uk/government/publications/hs2-phase-one-annual-air-quality-report-2018>

Air Quality Action Plan: <https://www.gov.uk/government/publications/hs2-air-quality-action-plan>

## **Item 5 – Air Quality: A Local Authority Perspective**

The Chair welcomed Tom Parkes (London Borough of Camden) to discuss the air quality from a Local Authority Perspective. TP gave an overview of the context of air quality in local authorities, detailing health impacts and statutory requirements, provided an overview into the production of Camden's Clean Air Action Plan 2019 – 2022, as well as how Camden is influencing the construction industry in mitigating the impacts of construction on air quality.

The key priorities of the Camden Clean Air Action Plan (2019 – 2022) is aimed at reducing construction, building and transport emissions, supporting communities and schools, reducing emissions from delivery, servicing and freight, continuing efforts to raise awareness around public health and lobbying to national government. In 2018, Camden also became the first London borough to formally adopt the stricter World Health Organisation (WHO) targets for both PM<sub>10</sub> and PM<sub>2.5</sub>.

Construction activities is responsible for approximately 25% and 10% of PM<sub>10</sub> and PM<sub>2.5</sub> emissions in Camden, respectively. LBC also introduced a Construction Management Forum that helps manage air quality impacts from all the construction works within Camden, and encourages residents to report concerns in this

forum. LBC uses a number of planning controls to manage air quality management, including requirements for air quality assessments, screening assessments, and construction management plans. In addition, LBC provides guidance and recommendations to contractors working within LBC on the latest emission standards and best practices control and mitigation methods.

AC thanked TP for his overview highlighting that many of the controls within the HS2 Code of Construction Practice have been developed in collaboration with the EH subgroup and it be useful assess their effectiveness by comparing air quality data from HS2 sites to other traditional construction sites. TP agreed but highlighted that data received from construction sites is not always reliable and site-specific conditions can make it difficult to directly compare between sites.

CC (HS2) highlighted the importance of working together to educate the public on air quality and HS2 will be working with Camden on this.

## **Item 6 – Carbon Innovations**

The Chair welcomed Tim Robins (HS2 Head of Environment, Route Wide Systems) to discuss Carbon Innovation during the design, construction and operation of HS2.

HS2 aspires to go further than other infrastructure projects in realising carbon reductions. HS2 direction has been influenced by their Strategic Objective to create an environmental sustainable solutions and be a good neighbour. This cascades down to HS2 Strategic Goal to design, construct and operate HS2 to reduce its carbon footprint.

HS2 is realising their sustainability goals by aligning to the PAS2080 Carbon Management System for progressive reductions in carbon emissions – starting with leadership at the top and cascading down to policy and approach. HS2 embeds the requirements to reduce carbon through:

- Management – Contractor and supply chain are required to achieve PAS2080;
- Targets – Cascaded down through the supply-chain;
- Opportunities – Maximise efficiencies as they arise and ensuring they are fed through to the design;
- Assessment – Life Cycle Assessments; and
- Operational Performance – Requirement to comply with Part L of the Building Regulations to achieve a building CO<sub>2</sub> emission rate (BER) of less than or equal to zero kg(CO<sub>2</sub>)/m<sup>2</sup>/y.

HS2 has set whole life carbon reduction targets for its contractors against a verified baseline.

Carbon savings are monitored through Life Cycle Assessments (LCA) over a 120-year design life; however, other savings such as water and waste are also considered in the LCA. Small scale works, which have a minimal carbon contribution compared to the overall project are excluded from the LCA; however, LCA are required on all large infrastructure works, e.g. bridges and tunnels.

HS2 challenges its contractors to incrementally reduce carbon levels from their baseline. Overall, all these incremental carbon savings taken from design, construction, maintenance etc. add up to significant carbon savings compared to baseline.

NM (OCC) asked if solar is being considered in the station design. TR (HS2) responded by stating that using Photovoltaics is a big part meeting stations net-zero Carbon Building Energy Requirement target and BREEAM Excellent rating. The Chair raised a question on carbon efficiency on noise barriers; AC stated that HS2 looks at the sustainability of all Common Design Elements. RY (LBHF & RBKC) asked if ground source heat pumps were considered in the Old Oak Common design – CC (HS2) replied that ground source heat pumps would have been considered at all Stations throughout Phase One.

NM (OCC) asked if it is HS2 long-term intention to achieve carbon-zero. HS2 is reviewing government policies and the 25-year Environment Plan. HS2 will review if it should be implemented for Phase 2a and 2b. All stations within Phase one have a net-zero carbon target.

## **Item 7 – HS2 Phase One and Phase Two Update**

The Chair welcomed Anthony Coumbe (HS2 Head of Environment, Phase One) to discuss HS2 Phase One and Phase 2a updates.

HS2 published the Annual Report last week (week of 15 July), which includes HS2's Environmental Sustainability Report and Corporate Plan. The Environmental Sustainability Report details how we are progressing with the benefits of the scheme, gives statistics on our waste minimisation and NRMM targets. The Corporate Plan sets out the KPIs we aim to achieve over the next three years, including reducing the carbon footprint and commitment to seeking no-net loss to biodiversity. Corporate KPIs looks at affordability, future contract procurement, legacy, maximising HS2's benefits, delivering service and environmental sustainability.

Phase 1 - Notice-to-Proceed date for Main Works Civil has moved to December 2019. The Enabling Works Contractor is continuing with the habitat establishment works, enabling works, vegetation clearance, exhumations and planting.

At Euston Station the tower cranes are up, demolition works have commenced. Exhumations at St James' Gardens are well advanced. Throughout Phase 1, a number of habitat creation sites have been established and are commencing translocation of species from the construction footprint to those sites. Interesting recent archaeological finds include an Anglo-Saxon house and a Neolithic arrow head. Pictorials of the Automatic People Mover (APM) linking the Interchange Station to the NEC, Birmingham International Station and Birmingham International Airport have been published and are available on the HS2 Webpage.

Phase 2a – progress continues with the first reading by House of Lords having commenced on 15-16 July. The House of Lords petitioning period has opened until mid-August and the Select Committee for the House of Lord will likely commence in September. HS2's aim to have Royal Asset by the end of the 2019 still

stands. An Early Environmental Works Contractor for Phase 2a have been procured. The aim is to commence Main Works for Phase 2a in 2021.

## **Item 8 – Planning Forum Feedback**

Anthony Coumbe (HS2 Head of Environment, Phase One) provided a Planning Forum update in the absence of Matt Dormer who was on leave:

- Phase 1 update was given by Mike Lyons (Area North Programme Director);
- HS2 has received some Local Authority feedback for proposed Construction Camps (e.g. construction compounds with temporary accommodation for site workers);
- There was a presentation explaining how with route-wide undertakings and assurances (U&As) are managed. A presentation on lorry-routes and EMR compliance was also given to Local Authorities;
- A presentation on Noise Barrier Common Design Elements was given and there is a plan to draft a Planning Forum Note (PFN 17) that will be issued to the EH Subgroup in the future;
- There was some discussion at Planning Forum about the scope of services that can be delivered as part of the SLA. The Chair clarified that any queries from members of the EH Subgroup in this regard should be directed through their Planning colleagues to the Planning Forum as the appropriate place for these issues to be raised and dealt with;
- There was a Community Engagement and Helpdesk Update;
- Planning Forum endorsed Planning Forum Note 16, subject to the agreement of the EH Subgroup. As the Note was only issued on the day of the EH Subgroup the group was asked to provide any further feedback to HS2 by the 2 August 2019 with a view to finalising the document;
- Planning Forum Note 17, noise barrier Common Design Element will be circulated to the EH Subgroup once ready.

**Action: Close out Planning Forum Note 16 by 2 August 2019. HS2 to circulate Planning Forum Note 17 once ready.**

## **Item 9 – Ongoing Construction and S61 Experience**

The Chair welcomed feedback from Local Authorities regarding the S61 experience and HS2 activities.

RH (AVDC) raised in response to discussions with Fusion (EWC) that the noise risk assessment methodology utilised for supporting a Statement of Intent is not fully applicable to rural areas (e.g. traffic management) and tends to overestimate the level of risk. The Chair believes that some rural sites would be better being assessed using SOIs. AC (HS2) suggested creating a bespoke risk assessment for rural areas, but it would need to be implemented route-wide and tested.

The Chair highlighted that the Compliant Data was high-level, and therefore, it is not possible to obtain more detail on the complaints without it becoming too onerous. HS2 stated that complaints, includes construction complaints, are documented in monthly reports but may not be able to release due to GDPR



issues. Concern was raised that Local Authority being made aware of complaints because the site are being assessed as low-risk and follow-up actions to address complaints are not being picked up.

**Action:** HS2 to arrange a short session with RH (AVDC) and SB (CDC/SBDC) to review the construction noise risk assessment template and revise if required for rural areas.

## **Item 9 – Forward Plan / Meeting Agenda Items**

Items for next meeting:

- A presentation was requested on how significant effects are derived for operational noise to increase understanding for Subgroup members when considering Schedule 17 Applications. Applicable case studies should be included where possible;
- A presentation on current dust management practices from one of the HS2 Enabling Works Contractors was requested.

## **Item 10 – Any Other Business**

The next EH Subgroup is scheduled for **Thursday 3<sup>rd</sup> October 2019**.

## **New Actions**

**Action 8A** – HS2 to circulate the Planning Forum Note 17 Noise Barrier Common Design Element to the EH Subgroup.

**Action 9A** – HS2 to arrange a short session with RH (AVDC) and SB (CDC/SBDC) to review the construction noise risk assessment template and revise if required for rural areas.