

View from the train

HS2 Ltd have commissioned Arup with AECOM to carry out an HS2 landmark and passenger experience study - analysing the potential for views of landscapes and recognisable landmarks along the Phase One route.

As part of this study a virtual reality simulation for a 10km stretch of HS2 has been produced - including as many of the railway features as possible (tunnels, noise barriers, cuttings and embankments). This study will inform future work to enhance the passenger's experience and orientation through the design of civil engineering structures, railway systems, landscape design, and art.

In August the HS2 Independent Design Panel met to view and discuss the virtual reality simulation. Whilst commending HS2 Ltd and Arup for developing this extremely valuable tool, the panel felt it showed that further work will be needed to create a passenger experience that meets the aspiration for HS2 to be a world class railway.

The panel identified several factors that could make the experience unpleasant and stressful, and recommended that the virtual reality simulation be shared with all relevant work streams to inform design development - from tunnels and embankments to carriages and digital applications.



Prof. Sadie Morgan, Tony Burton, Annie Coombs and Marie Bak Mortensen at a meeting to discuss the virtual reality simulation

The virtual reality simulation presents an excellent opportunity to engage with the Main Works Civil Contractor (MWCC) joint venture teams. The panel would encourage HS2 Ltd to work in partnership with the contractors, to develop radical and innovative solutions to create an outstanding passenger experience on Phase One.

The panel urged that the deficiencies in customer experience revealed by the virtual reality simulation be taken fully on board by HS2 Ltd, including its senior leadership, not least to influence strategic design decisions about Phase Two.

Design Panel activities August and September 2017

2

- Chair's review of HS2 Ltd responses to Design Panel recommendations with Tony Burton
- Kirsten Henson mentoring session on sustainability and the circular economy

Chair's reviews and mentoring

5

- Art strategy
- Phase One: virtual reality simulation
- Habitat creation
- Civil Common Design Elements
- Customer experience

Workshop reviews

4

- Washwood Heath Depot and National Infrastructure Control Centre
- Birmingham Interchange Station - design vision
- Curzon Street Station - commercialisation
- Euston Station - masterplanning

Full reviews

4

- August Design Panel Team Meeting attended by the chair, vice chair, secretariat and HS2 Ltd staff
- Quarterly HS2 Design Leadership Update Meeting with the Department for Transport
- September Design Panel Team Meeting
- Phase Two: HS2 Independent Design Panel remit

Governance meetings

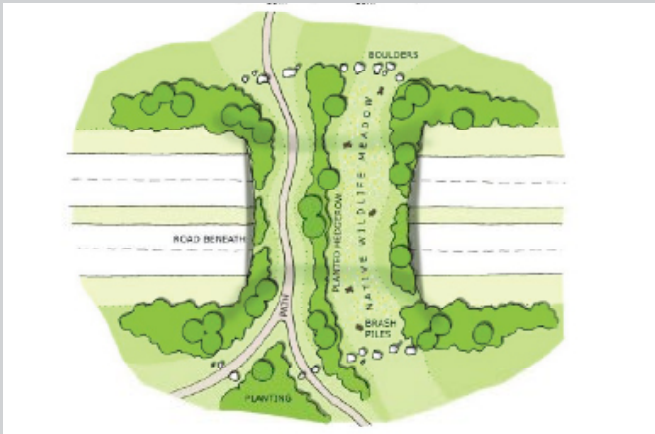


Diagram of a green bridge from an HS2 Independent Design Panel meeting to discuss on habitat creation



David Prys-Jones
Biodiversity Technical
Specialist, HS2 Ltd

David Prys-Jones

David Prys-Jones is a biodiversity technical specialist and joined HS2 Ltd one year ago. Prior to that, David worked for a large construction company where he devised and implemented a long-term biodiversity strategy to mitigate ecological risks and achieve enhancement for projects in urban environments.

As a member of the biodiversity team within HS2 Ltd's Technical Directorate, David's role involves ensuring that all phases of the project comply with recognised best practice and HS2 Ltd standards relating to ecology and biodiversity. This has included: working to secure route wide protected species licences; developing an approach to demonstrating 'no net loss' in biodiversity; and liaising with government and non-government bodies to ensure good working relationships are maintained during the Environmental Impact Assessment (EIA) process.

David has presented his work to the HS2 Independent Design Panel, at a meeting to discuss habitat creation.

Customer experience

In August the HS2 Independent Design Panel met to discuss HS2 Ltd's work in developing a series of rolling stock concept papers. These papers look at a variety of topics including accessibility, catering, and seat assurance. Whilst the panel made several suggestions to further develop the evolving concept papers - overall it found HS2 Ltd's aspirations exciting and compelling.

Habitat creation

The protection of existing habitats and the creation of new habitats is a key area of work for HS2 Ltd. There will be a need to both mitigate the impact of constructing the new railway, and harness the opportunity created by such a large scale project to deliver positive change.

In August the HS2 Independent Design Panel met to discuss HS2 Ltd's approach to ecology along the Phase One route, including habitat creation. HS2 Ltd gave a presentation on: the ecology communication strategy; the approach to stakeholder and community engagement; and a proposed HS2 woodland grant fund in partnership with the Forestry Commission.

The panel made a number of suggestions to help HS2 Ltd deliver the aims and ambitions set out in its biodiversity and ecology strategies. The panel emphasised that HS2 Ltd's approach to biodiversity must extend beyond regulatory requirements and establish new standards.

The panel encouraged HS2 Ltd to fully exploit the potential of community (and wider non-governmental organisation) engagement, with close co-operation between the HS2 Ltd biodiversity and community engagement teams. Robust strategies for the long term monitoring, management and maintenance of habitats created along the HS2 route will also be essential.



Frame Projects
Secretariat to the
HS2 Independent
Design Panel

**HS2 INDEPENDENT
DESIGN PANEL**