

Introduction by Professor Sadie Morgan

In December we held the HS2 Independent Design Panel Annual Meeting. This included welcoming several new members who have recently joined the panel, and to introduce them to the work done to date on HS2.

Annual meeting key themes

At the Annual Meeting, I took the opportunity to reflect on some of the key themes which have emerged from panel discussions, and to consider how these could influence the next stage of HS2.

Design leadership

In 2015, HS2 Ltd published the HS2 Design Vision, setting out the role that design can play in making HS2 a catalyst for growth across Britain. This high level corporate commitment to design quality has been an important factor in decision making, and provides a basis for design leadership on the project.

The panel supports HS2 Ltd's design leadership by providing independent expert advice, and analysis of design challenges and opportunities. It reports on design matters to both HS2 Ltd's senior team, and the DfT.

The panel has encouraged HS2 Ltd to consider strengthening its design leadership through the appointment of a design champion at board level. This could help ensure there is a focus on design quality in board discussions, and lend weight to help solve problems.

Time to design

High speed rail entails huge technical challenges and requirements. The panel has welcomed HS2 Ltd's work to develop designs ahead of appointing delivery partners, to provide greater certainty on meeting those challenges and delivering design quality expectations. Examples include the Colne Valley Viaduct Specimen Design and the HS2 Customer Experience Vision.

The panel encourages HS2 Ltd to continue identifying opportunities to make the most of the time available to design.

Procurement

Procurement is fundamental to achieving design quality, and the panel has been consulted by HS2 Ltd in the production of several procurement strategies. Significant achievements to date include the procurement of station design teams and the delivery model for Phase 2a, which should help HS2 Ltd retain greater control over design quality.



Curzon Street Station (Grimshaws, WSP and Grants Associates), HS2 Ltd

As work continues, the panel encourages greater use of small and medium-sized enterprises in meaningful roles within the supply chain. It is also important that the Phase 2a delivery model is understood and embraced within the culture of HS2 Ltd.

Context integration

The panel has championed the value of context and urban integration work by HS2 Ltd. This type of thinking can help unlock the wider benefits of the HS2, including through working with stakeholders.

The panel welcomed the establishment of an Urban Integration Team, and the emergence of integration studies which have provided a forum for HS2 to engage with stakeholders and help identify the opportunities HS2 presents along the route.

It is important that this work feeds into other workstreams across HS2, as well as discussions about integration with other infrastructure projects – such as Northern Powerhouse Rail, or walking and cycling strategies.

For Phase 2b and 2a, there is also an opportunity for this work to frame design decisions on HS2 at an early stage – from the location of haulage routes to regeneration around stations.



Landscape-led design

The success of HS2 will depend in a large part on the landscapes it creates and enables along its route, and how this informs the design of buildings and structures. There are many good examples of this thinking, including Small Dean Viaduct (pictured above).

The Hybrid Bill process places an emphasis on technical engineering solutions and environmental impact, and is principally driven by a need to minimise and mitigate any impact of the railway. However, it is important that post-Hybrid Bill stage HS2 Ltd looks beyond its core remit, for example by embracing opportunities to deliver on the potential of a Green Corridor approach.

Sustainability

Awareness of the need for sustainable design has increased significantly since HS2 was conceived – both within the industry and the wider public. HS2 Ltd has made good progress in responding to these challenges. One example is the Western Valley Slopes, where the ALIGN team propose reintroduction of calcareous grassland using chalk cake made from stabilised chalk slurry

extracted during tunnelling. This is innovative and the ecological benefit of rewilding the area would represent an important achievement.

Given the scale of HS2 and the length of its programme, it is important that work continues to deliver on the aspiration to create ‘the most sustainable high-speed railway in the world’.

Community engagement

A key challenge of large infrastructure projects is identifying ways for the public to engage meaningfully.

The panel is a strong advocate for the HS2 Community Engagement strategy. It has seen examples of collaborative work with planning authorities and other stakeholders to unlock better solutions such as the public realm for Curzon Street Station and the landscape proposals for Birmingham and Fazeley Canal Viaduct.

It is important that HS2 Ltd builds on successes to date, and develops new and creative approaches to engaging with communities and stakeholders which can help to maximise the public benefit of HS2.

Looking ahead

In 2022, Phase One will continue to progress through detail design and construction stages. Phase 2a will begin scheme design stage, and the Phase 2b (Western Leg) Hybrid Bill process will begin. The West Coast Partner will continue to develop their passenger proposition for the operation of HS2 and, following their recent appointment, the train manufacturer will begin developing designs for HS2 trains.

It is important that HS2 Ltd continue to learn lessons and innovate, ensuring design quality is at the heart of decision making.

I would like to thank the panel for its contributions to date which have undoubtedly contributed to shaping the project, have re-affirmed the importance of design thinking, and have helped HS2 to register some significant achievements.



Frame Projects
Secretariat to the
HS2 Independent
Design Panel

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