

# HS2

# Supply chain FAQs

[www.hs2.org.uk](http://www.hs2.org.uk)



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# 1 What are we buying?

## 1.1 What are the main categories of procurement?

HS2 Ltd needs a full range of works, goods and services to deliver the programme. Please note that many of the largest direct, 'Tier 1' contracts for Phase One have been awarded or are expected to be by 2022. This means that the majority of contract opportunities are likely to be procured by our contractors and suppliers in the supply chain ('Tier 2' and below). For more information on how to access supply chain opportunities please refer to our [Supplier Guide](#).

The main supply chain categories we are focusing on to deliver during Phase One include:

- Civil Engineering (tunnels, surface route, earthworks, bridges)
- Railway Systems (track, power, signalling, telecoms, etc.)
- Design and Professional Services
- Stations
- Rolling Stock
- Corporate Services

For Phase Two the opportunities may include the following types of services:

- Ground Investigation Surveys
- Utility Diversions
- Design and Delivery Partner
- Professional Services
- Enabling Works
- Civil Engineering (tunnels, surface route, earthworks, bridges)
- Railway Systems
- Rolling Stock

Thousands of indirect supply chain opportunities will arise from our direct Tier 1 contracts. In order to gain sight of these opportunities, it is recommended to register on [CompeteFor](#) where indirect supply chain opportunities will be advertised. We also publish information on key indirect contracts within our supply chain on our website on our [indirect contract opportunities table](#) and encourage interested suppliers to get in touch using the contact details provided.

Further direct opportunities with HS2 Ltd will be published on [Contracts Finder](#), our online [contract opportunities table](#) and also on [Find a Tender Service \(FTS\)](#) where applicable.

## 1.2 What are the civil engineering opportunities?

### Phase One – Enabling Works Contracts (awarded)

The Enabling Works Contracts are being delivered by three Joint Venture enterprises:

- **CS JV (Costain, Skanska):** Area South (Greater London)
- **Fusion JV (Morgan Sindall, BAM Nuttall, Ferrovial Agroman):** Area Central
- **LM JV (Laing O'Rourke, Murphy):** Area North (West Midlands)

These contracts are expected to complete from the end of 2022. Any further Tier 2 opportunities for the Enabling Works Contracts can be found on [CompeteFor](#), although please note that the vast majority of subcontracts have now been awarded.

### **Phase One – Main Works Civils Contracts (awarded)**

The Main Works Civils Contracts are being delivered by four Joint Venture enterprises:

- **SCS JV (Skanska, Costain, Strabag):** Area South (Greater London)
- **Align JV (Bouygues, VolkerFitzpatrick, Sir Robert McAlpine):** Area Central
- **EKFB JV (Eiffage, Kier, Ferrovial Construction, BAM Nuttall):** Area Central
- **BBV JV (Balfour Beatty, Vinci):** Area North (West Midlands)

These contracts will continue to give rise to thousands of supply chain opportunities over the coming years.

All subcontract opportunities for the Main Works Civils Contracts can be found on [CompeteFor](#). Opportunities will comprise of a wide range of products and services for suppliers of all types and sizes. Examples include drainage, environmental works and services, fencing, general civils, earthworks, ground engineering, plant and tool hire, preliminaries and temporary work, site services, structures, design, tunnelling and utilities.

## **1.3 What are the railway systems opportunities?**

The HS2 Railway Systems have a critical role to play in supporting the seamless, dependable, and people-focused experience that HS2 must achieve for decades to come. Together, these contracts will underpin the success of the operational railway, which will have a maximum design speed of 360km/h and run up to 18 trains per hour per direction. The Railway Systems must be integrated, reliable and offer value-for-money, with 'built in' safety and flexibility that maximises the benefits of rapidly evolving technology.

The category comprises of 16 contracts, valued at over £3.5bn in total. The core disciplines include Track Systems, Overhead Catenary System, Tunnel and Lineside Mechanical & Electrical (M&E) Systems, HV Power Distribution, Operational Telecommunications, Control Command & Signalling and Traffic Management and the construction of the Washwood Heath Rolling Stock Depot and Network Integrated Control Centre (NICC).

Please see our [contract opportunities table](#) and search 'Railway Systems' under 'Category' for the latest. For a comprehensive overview of the scope of each contract, visit [www.hs2.org.uk/about-us/our-documents/railway-systems-contracts-scope-document-compendium-version/](http://www.hs2.org.uk/about-us/our-documents/railway-systems-contracts-scope-document-compendium-version/).

## **1.4 What are the design and professional services opportunities?**

### **Phase One – Engineering Delivery Partner (awarded)**

In 2016 we appointed Jacobs, Atkins and Sener Engineering as our Engineering Delivery Partner (EDP) to support the development of Phase One of the project. The EDP is

assisting HS2 Ltd with technical approvals, design verification and interdisciplinary design assurance as part of contract management.

## **1.5 What are the rolling stock opportunities?**

The rolling stock that operates on the HS2 infrastructure must be designed for the future passenger to ensure a seamless, accessible and dependable experience for decades to come. It must also meet our design and performance aspirations and the highest international standards for passenger experience, reliability, noise reduction, whole-life value and environmental sustainability, while maximising the opportunities for developing skills, employment and economic growth.

In December 2021 we awarded the rolling stock contract, a £2bn deal with Alstom/Hitachi JV to deliver a minimum of 54 high speed trains. In a major boost for UK manufacturing, the 225mph fleet will be built in factories in the UK supporting 2,500 jobs.

Vehicle body assembly and initial fit-out will be done at Hitachi's facility at Newton Aycliffe, County Durham. They are responsible for delivering the sealed carbody, cab and control systems, Heating, Ventilation, and Air Conditioning (HVAC), entrance systems, Train Control Management System (TCMS) and partial cabling.



The second stage of fit-out and testing will be done at Alstom's Derby factory. They are responsible for delivering the interior panelling, lighting, floor and covering, seats/tables, galley/catering, sanitary systems, braking system, bogies and traction motors. All bogies (which house the wheelsets) will be assembled and maintained in Crewe.

The rolling stock contract presents a significant opportunity for the supply chain at all levels, including UK suppliers and SMEs from various disciplines including; design, engineering, technology and customer experience, during the manufacturing, service entry and maintenance phases.

Please see our [contract opportunities table](#) and search 'Rolling Stock' under 'Category' for the latest. Subcontract opportunities for the Rolling Stock Contract can be found on [CompeteFor](#).

## **1.6 What are the corporate services opportunities?**

We need ongoing corporate and professional services for our day-to-day operations, ranging from legal advice and management consultancy to IT and creative services. Generally, anything that is not construction, railway systems or rolling stock is classified as corporate services.

All qualifying competitive procurement opportunities over £10,000 are advertised on [Contracts Finder](#) (and for higher value opportunities, also on [Find a Tender Service \(FTS\)](#)), with the tender process undertaken using the [HS2 Ltd eSourcing Portal](#). Our upcoming opportunities can be found on our [contract opportunities table](#).

We will use other existing government frameworks where these are appropriate, for example, our IT requirements are generally sourced via the Crown Commercial Services G-Cloud Frameworks or other [Crown Commercial Services frameworks](#) such as the Management Consultancy framework, Digital Outcomes & Specialists (DOS), Network Services and Technology Services, if appropriate for the requirement. For further information on these frameworks, and how to apply for these roles, visit the [Crown Commercial Services website](#).

## 2 How are we buying?

### 2.1 Where are contract opportunities advertised?

For direct procurement opportunities (i.e. opportunities with HS2 Ltd), details of live and forthcoming opportunities are published on:

- Our [contract opportunities table](#), as opportunities develop and when it is appropriate to do so; and
- [Find a Tender Service \(FTS\)](#), for higher value opportunities above the Public Procurement Regulation threshold as Contract Notices are published; and
- The UK Government's [Contracts Finder](#) for qualifying competitive opportunities over £10,000.

Indirect opportunities at Tier 2 level and below are communicated and advertised by our direct (HS2 Tier 1) suppliers via [CompeteFor](#), at HS2 'Meet the Contractor' events, trade body events and other Tier 1 contractor-led events. We also publish information on key indirect contracts within our supply chain on our website on our [indirect contract opportunities table](#) and encourage interested suppliers to get in touch using the contact details provided.

CompeteFor is an online brokerage service, which acts as a 'shop window' for all HS2 subcontract opportunities. Please ensure you register on [CompeteFor](#) and create or update your company's profile to receive the new opportunity alerts.

### 2.2 How is the tender process managed?

All HS2 Ltd tenders are run and managed via the [HS2 eSourcing Portal](#).

For subcontracts, our contractors each use their own e-sourcing portals to run their procurement processes.

### 2.3 Which forms of contract are typically used?

We are using the New Engineering Contract, third edition (NEC3) suite of contracts for most project requirements. The NEC3 is widely used across the construction sector, and engagement with the market has found that this form of contract is supported and understood by industry and promotes a collaborative approach.

Specifically, we typically use the Professional Service Contract (PSC) for consultancy services opportunities and the Engineering and Construction Contract (ECC) for the works contracts. However, NEC3 may not be suitable or appropriate in some cases, for example, the rolling stock contract(s). We will remain flexible in our choice and use of standard forms of contracts. For our Main Works Civil Contracts, we are using the NEC3 Option C (Target Cost) form of contract.

Corporate contracts will be let, in the majority of cases, under the Crown Commercial Service (CCS) Standard Terms and Conditions for Services.

## 2.4 How are requirements cascaded down the supply chain?

We seek consistency of contract terms throughout the supply chain, where appropriate, in order to ensure our suppliers can be broadly aligned in their objectives but without importing risk. We will mandate certain terms within our contracts to be cascaded through the supply chain, for example the use of open procurement tools such as [CompeteFor](#).

Where we use the NEC3 suite of contracts, we also promote the use of NEC3 for our Tier 1 suppliers' own subcontracts, the wording for which will be pre-approved for use on our contracts (provided that they are not unnecessarily or significantly amended). We expect a cascading of similar terms and conditions through our Tier 1 suppliers' contracts, particularly those provisions that relate to fair payment.

## 2.5 Which pre-qualification process is typically used?

We typically use a pre-qualification process based on Publicly Available Specification 91 (PAS91), as developed by the British Standards Institute (BSI) for our Tier 1 (direct) contracts. PAS91 is freely available from the BSI through the following link (registration is required to access the document): <http://shop.bsigroup.com/Navigate-by/PAS/PAS-91-2013/>.

HS2 Ltd is a 'utility company' as defined in the Utilities Contracts Regulations 2006 and 2016. As such, any procurement actions that are subject to the provisions of the regulations will be administered in compliance with them (or with any amendments or updates to the regulations that may be enacted prior to starting a procurement).

Our four Main Works Civils Contractors (MWCC) have introduced a [standardized pre-qualification \(PQ\) system](#) for subcontractors to streamline the process across their supply chains, reduce supplier costs and increase efficiency. This new Common Assessment Standard will ensure that bidders looking for work with our MWCCs that include Align JV, BBV JV, EKFB JV and SCS JV, will go through an identical pre-qualification process.

Developed as part of our 'Supply Chain Collaboration Hub' initiative, the contractors worked with two of the industry's largest representative trade bodies, [Build UK](#) and the [Civil Engineering Contractors Association](#) (CECA), and also through the High Speed Rail Group (HSRG), to agree the new system. For more information [please click here](#).

## 2.6 What is your view on joint ventures (JVs) and consortia?

We recognise that JVs and consortia may be essential for delivering the larger works packages and we welcome the establishment of appropriate JV and consortia. Compliant expressions of interest or PQQ applications received from JV and consortia will be treated on an equal basis to submissions from single-entity organisations.



# 3 Railway operations

## 3.1 What will it be like to travel on HS2?

We plan to deliver to our customers a level of journey experience that sets new global benchmarks for service excellence – resulting in a situation where passengers, and the wider communities that are served, take an ongoing pride in the service and spontaneously advocate travelling by HS2.

The first passengers will travel on HS2 between 2029 and 2033 – that’s still quite a long way off and we know that customer needs and expectations, as well as the technologies that enable delivery of services to meet those needs, will continue to evolve in the intervening period. However, we will work to the following principles:

- **Everything starts and ends with people.** The customer is at the heart of the service design.
- **The way that HS2 operates is simple and sensible.** Every effort must be made to reduce complexity, from the ticketing process, to where to find the toilets, to changing seats and how to move around the station.
- **Offering the choice and flexibility that people want.** We know that consumers of every type of service are demanding more control of their experiences, meaning greater choice of channels and individual touchpoints, whether self-guided or supported.
- **Zero carbon rail travel.** HS2 must be highly energy efficient and use zero carbon energy.

## 3.2 What does this mean for the supply of goods and services?

To be successful, the goods and services we procure must be:

- **Safe and secure.** Delivered by people whose passion for service delivery is matched by our commitment to their wellbeing.
- **Sustainable.** Compatible with our Net Zero Carbon Plan, in particular our objectives to halve carbon emissions by 2030 and achieve net zero carbon emissions from 2035.
- **Intuitive, personalised and easy to use.** The customer’s experience will be one of civilised calmness where they have placed well-founded trust in HS2 and its people to deliver.
- **Highly reliable.** The target is to average less than 30 seconds delay accrued on the HS2 infrastructure for any train (measured as a moving annual average) at any destination. All other aspects of the total journey also need to be delivered with corresponding levels of reliability.
- **Well-maintained.** The operational railway and its trains will need to be well-maintained in order to maximise the availability of the infrastructure or trains for customer services, especially as megatrend data confirms an increasing move towards a 24/7 economy.

- **Integrated.** Whilst HS2 is a system that will set new standards and generate national pride, it will integrate seamlessly with other transport operations to ensure customers are able to make the best choice for their overall journey.

### **3.3 How will the service offer be designed and delivered?**

Working in conjunction with the [West Coast Partner](#) (Avanti West Coast), the current operator for Intercity West Coast services and future operator of HS2, we are putting in place a 'service design' approach to continuously review and define what experience the customer should expect.

Together with our supply chain, we will be carrying out market research and finding out from a customer point of view what they expect the experience to be. We will look at the experience from an 'end-to-end' perspective, thinking about and integrating all parts of the journey including those parts not taken on the HS2 train or station, and considering the 'digital journey' that will be increasingly prominent in coming years.

Many elements of the customer experience will be supported by technology, processes and other innovations that do not currently exist or are at a low level of maturity. In these cases, we will apply the principle of 'last responsible moment' decision-making in determining final specifications for the detailed design of these elements – although engagement with the supply chain will be ongoing to ensure that there are no surprises.

### **3.4 Who will procure goods and services into operation?**

Whilst the start of commercial operations is still some way off, we are already planning to ensure that there is a smooth transition from the construction phase of the programme to operations. We (HS2 Ltd) are responsible for planning and delivering the HS2 infrastructure, and we are taking a whole-life value approach to the design, build, operation and maintenance of all elements.

In 2019, the government announced First Group and Trenitalia as the [West Coast Partner](#), the operator of the West Coast Main Line franchise who will also operate the first HS2 services. They will support the Department for Transport and HS2 Ltd to design, develop and operate world-class high-speed services.

## 4 Conflicts of interest

### 4.1 How are potential supplier conflicts of interest handled?

We define a conflict of interest as any situation where there is an actual, potential or perceived conflict, either commercially or professionally, between the interests or duties of HS2 Ltd and any party engaged (or in the process of being engaged) by HS2 Ltd.

Engagement may be either direct (i.e. a supplier or contractor) or indirect (i.e. a sub-contractor to a supplier). A conflict may also arise through HS2 Ltd employee spouses, partners, children and friends. It also extends to circumstances in which a conflict may be reasonably perceived to exist by either stakeholders of HS2 Ltd or a member of the general public. A conflict may also arise where a person or organisation may be in a position to misuse confidential information of HS2 Ltd to give unfair advantage to a bidder in a procurement.

A broader conflicts of interest definition and guidance can be found in the [HS2 Supplier Guide](#). We have put in place rules to ensure transparency is achieved in relation to managing conflict of interest matters, including convening a bi-monthly Conflicts of Interest Panel. The Conflicts of Interest Panel has a remit to review, make recommendations and decisions in relation to HS2 Ltd Conflicts of Interest. The management of the Panel is undertaken by Commercial Compliance, which is independent of any procurement process.

Many of the designers and consultants that are likely to provide advice to HS2 Ltd may also be engaged in advising our Tier 1 suppliers, leading to potential, perceived or actual conflicts of interest – some of which may be deemed unacceptable. We have a dedicated email address, [compliance@hs2.org.uk](mailto:compliance@hs2.org.uk), to allow reporting of potential, perceived or actual conflicts to the Commercial Compliance Manager(s). Suppliers of HS2 Ltd contractors should initially raise conflicts queries directly with their HS2 Ltd contract manager. We actively encourage suppliers to inform us if they believe a conflict of interest has occurred or may yet occur.

During an HS2 Ltd procurement, detailed conflict of interest information is provided to participating suppliers including definitions, declaration and management. All dialogue regarding conflict of interest matters must be communicated via the [HS2 eSourcing Portal](#).

All HS2 Ltd staff are trained in procurement processes, including compliance with the Probity Policy, which sets out the physical, behavioural and technology standards that all involved in the HS2 Ltd procurement process will adhere to, with particular emphasis on tender evaluation, where additional training is provided.

# 5 What is important to HS2?

## 5.1 What are the HS2 strategic goals?

The HS2 Programme has seven strategic goals that help to translate our vision and mission into more specific plans and activities. They are long-term goals, drawn from the business case for the programme, and shared by HS2 Ltd, DfT and other government departments. The seven strategic goals are that HS2 will:

- Be a catalyst for economic growth;
- Create a step change for rail capacity and connectivity;
- Deliver value for money to the taxpayer;
- Set new standards for customer experience;
- Foster skills and create and sustain employment opportunities;
- Set new standards for health, safety and security for the construction and operation of the railway; and
- Be good neighbours and protect the natural environment.

## 5.2 How are the strategic goals being implemented?

The strategic goals form the basis of contract-specific supplier scorecards. During procurement and delivery, we evaluate suppliers' performance against our strategic goals and against a number of criteria, weighted to reflect the contract requirements.

We have developed supplier scorecards to establish metrics for testing during delivery, while our 'enablers' are practical ways of working with our supply chain to assist in delivering value. They are written into our procedures and contracts with suppliers and reflected in the way we do business.

We also encourage our Tier 1 contractors to consider supplier scorecards when procuring their own suppliers and managing supplier performance. The measures reported in supplier scorecards will be aggregated and used by ourselves and DfT to report overall progress in delivering the benefits, or long-term outcomes, expected from the programme.

For further information about our supplier scorecard, view our [Supplier Guide](#).

# 6 The HS2 culture

## 6.1 What is the HS2 culture?

We believe that a high-performing culture underpins the successful delivery of our programme and the success of our role as a client to our supply chain. We value sustainability – be it environmental, social or economic. And not just in what we build but how we build it, by being innovative and working collaboratively.

Our values of leadership, respect, integrity and safety, combined with how we do things every day, sustainably, innovatively and collaboratively, form our culture.

- **Sustainability** means how we create a legacy for the UK from HS2 – in its broadest sense – socially, economically and environmentally.
- **Innovation** means how we create space for and support new solutions to deliver lasting benefits.
- **Collaboration** means how we work together across our supply chain to deliver this.

## 6.2 Do you expect suppliers to align themselves?

To work successfully with our supply chain, we are creating a shared vision of what we can achieve together, aligning our values so that we have a common understanding of how we do things from day to day. Having a shared culture will help us all create the maximum value for the programme.

We expect our supply chain to help build this shared culture throughout the life of their contracts. We also expect suppliers to live our values with us, and encourage behaviours demonstrating leadership, integrity, respect and safety in their staff and across their own supply chains.

## 6.3 What is the approach to business gifts and hospitality?

We recognise that giving and receiving of gifts and hospitality has a role in facilitating business practice and may be offered as part of a business relationship with existing or future stakeholders, etc. Providing or accepting occasional gifts or hospitality may be appropriate in certain circumstances. HS2 staff will generally have to decline the offer of any non-trivial gift (i.e. promotional items or items having no significant commercial value) and record the offer in our Gifts and Hospitality Register whether accepted or declined. Offers of hospitality may be considered by staff that are not carrying out a role in procurement or contract management, however will be declined if the organisation offering the hospitality is participating in a live procurement. A register of both received and declined gifts is continually maintained. When considering appropriateness, HS2 staff always think about the following:

- the intention behind the offer;
- the nature of the relationship between the offeror and HS2 Ltd;
- the value;



- its timing;
- (if HS2 Ltd was not a public body) whether the HS2 staff member would reciprocate the offer.

## **6.4 How is collaboration promoted across the supply chain?**

We are seeking business relationships that are formed by committed organisations to maximise joint performance, deliver mutual objectives and create additional value. This means working pro-actively with others in an integrated way, so we achieve truly shared goals, encourage innovation and sustainability, and make the best use of resources for efficient delivery of activities.

We have appointed Integrated Project Teams (IPTs) to maximise collaboration and have created a Supply Chain Collaboration Hub, led by our contractors, to look at strategic procurement opportunities, supply chain development opportunities and wider strategic efficiencies. We also have a range of financial and non-financial incentives aligned to the project objectives, while promoting and rewarding continuous improvement, with risk being apportioned fairly and appropriately.

# 7 Health and safety

## 7.1 What is HS2 Ltd's approach to health and safety?

Health and safety is all about caring for our collective workforce, our passengers and the public by creating an environment where no one gets hurt.

This is manifested by us:

- Making safety our first consideration;
- Acting now to mitigate risks wherever and whenever they occur;
- Speaking up and intervening if something is unsafe;
- Taking responsibility for our own and others' health, safety and wellbeing.

As part of our strategic approach we have identified seven areas, or themes, of activity – those areas where we believe we can make the most difference and where the greatest areas of risk lie. These are:

- Workforce safety;
- Public and neighbour safety;
- Occupational health and wellbeing;
- Safety by design;
- Safe supply chain management;
- Operations safety;
- SMART assurance.

## 7.2 Are CSCS cards required?

Yes – all personnel working on, or regularly visiting, our projects will be required to hold a Construction Skills Certification Scheme (CSCS) card of the appropriate level.

## 7.3 Do suppliers need to join Constructing Better Health?

We do not require the supply chain to be members of Constructing Better Health (CBH). We are committed to caring for our collective workforce, our passengers and the public by creating an environment where no one gets hurt. We think that CBH sets a great standard, but that we can go further to set new standards for Health and Safety in the construction of HS2.

We are developing minimum occupational health standards that suppliers will be required to comply with. We will also require suppliers to use a Safety Passport database on which certain occupational health information will be held.

## 7.4 Does HS2 Ltd have occupational health requirements?

Yes, we will set specific health requirements and approaches, such as health by design, along with controlled exposure (from working shift patterns through to potential exposure to carcinogens) and continuous monitoring requirements.

# 8 Innovation

## 8.1 What does innovation mean to HS2 Ltd?

Innovation is critical to the success of HS2. We will need to innovate in order to deliver against the strategic goals and objectives of the project. At HS2, innovation relates to delivering something differently to provide a benefit beyond that which could be considered industry best practice.

Innovations are not limited to technology and can be related to products, materials, people or processes/methods. We have developed an innovation strategy to maximise the potential benefits of innovation and to ensure risk is managed appropriately. This includes an innovation process that will provide the ability to crowd source suggestions, and ultimately develop, test and prototype ideas ahead of potentially selecting them for use in the project.

To find out more [please click here](#).

## 8.2 In which areas does HS2 Ltd want innovation?

We will use innovation to support and enable the delivery of a wide range of benefits, aligned to the strategic goals and objectives of the project. These have been split into six areas of innovation, namely:

- **Safety** – caring for our workforce, our passengers and the public, by creating an environment where no one gets hurt;
- **Robust operations** – ensuring reliability of rail operations whilst maximising the value of the network for its 120-year design life;
- **People/ passenger experience** – placing people at the heart of our design to set new standards in passenger experience and customer service;
- **Sustainability** – balancing social, economic and environmental priorities;
- **Design & aesthetics** – maximising the benefits of great design thinking and integrated solutions by using our three core design principles of people, place and time; and
- **Excellence in delivery/ construction** – driving value for money during construction whilst minimising disruption during the works.

Innovation will be used to deliver demonstrable improvements over what can be considered current best practice in each of these areas.

## 8.3 How are innovative ideas shared?

We have launched a cloud-based ideas management platform, The Innovation Hub, for all HS2 Ltd employees and Contracting Partners, to encourage collaboration around specific innovation challenges and to share good ideas for use on the project. To supplement this virtual collaboration space, innovation forums will be conducted to share emerging ideas and celebrate successes in innovation.

In 2020, we launched the [HS2 Accelerator Programme](#) in collaboration with the Connected Places Catapult and Innovation Birmingham.

#### **8.4 How is innovation encouraged?**

The procurement process will aim to identify management capabilities for innovation within potential supplier organisations and their supply chains. We will proactively source innovative solutions using a variety of collaborative mechanisms. Contractual arrangements will incentivise delivery of innovative ideas and their potential benefits whilst appropriately managing risk.

#### **8.5 Why is attracting innovative suppliers so important?**

Innovation is critical to the successful delivery of HS2. We want to encourage innovative suppliers to help deliver a world-class high-speed railway for the UK, drive value for money and help move the industry forward. We are interested in accessing expertise and capability from adjacent markets and targeting innovative companies, including SMEs, which will support the delivery of our strategic goals and objectives.

# 9 Sustainability

## 9.1 What does HS2 Ltd mean by sustainability?

Our vision is to be a catalyst for growth across Britain, to do more than just build and operate a rail network. We want to deliver social, environmental and economic benefits in the shorter and longer term. Our approach to sustainability is described in our publication [Transforming lives, building for the future](#). Our [Sustainability Policy](#) groups our work into five themes that support our vision and strategic goals.

These themes are:

1. Spreading the benefits: economic growth and community regeneration.
2. Opportunities for all: skills, employment and education.
3. Safe at heart: health, safety and wellbeing.
4. Respecting our surroundings: environmental protection and management.
5. Standing the test of time: design that is future proof.

Our [Environmental Sustainability Vision](#) is for HS2 to provide zero carbon rail travel for a cleaner, greener future. It sets out the steps we will take to achieve our targets as we build and operate the most sustainable high-speed railway in the world. The ambitious new targets are aimed at cutting carbon emissions and extending our plans for biodiversity gains across the route.

These targets are:

1. Cutting carbon emissions – see section 9.5 for details
2. Boosting nature recovery
  - Seek to achieve a 10% net gain in biodiversity on Phase 2b western leg
  - Secure biodiversity gains on Phase One and Phase 2a, moving beyond no net loss

## 9.2 What is expected of suppliers?

To be successful in achieving our sustainability goals and delivering the benefits, we need to work with like-minded suppliers and partners that share our values regarding sustainability. Suppliers must demonstrate their sustainability credentials in the tendering process and deliver against our sustainability requirements in the contract, and where possible to outperform these. During procurement and delivery, we evaluate suppliers' performance against our strategic goals, including sustainability. Our supplier scorecard sets out what is important to us, how we measure our progress and realise our vision.

We are a partner of the [Supply Chain Sustainability School](#). The School provides a free learning environment, focusing on 17 key topics of sustainability, as well as addressing topics in offsite, BIM, lean construction and management. Membership is free and signing up is easy. Membership gives access to thousands of learning resources and CPD-accredited content. The School also offers CPD training and networking events across the UK.



# 10 Environmental sustainability

## 10.1 What is HS2 Ltd's Environmental Policy and objectives?

Our [Environmental Policy](#) responds to the Sustainability Policy theme of “respecting our surroundings: environmental protection and management” and the project’s strategic goal of “creating an environmentally sustainable solution and being a good neighbour to local communities”.

The policy commits us to developing an exemplar project through seeking environmental enhancements and benefits and limiting negative impacts through the design, construction and operation of the railway.

The policy outlines five objective areas to guide how we manage our impacts, covering:

- **Green Corridor:** create a resilient green corridor for both nature and people, that will conserve and enhance habitats, seek to achieve biodiversity gains through partnership working while designing mitigation to integrate into the character of the landscape.
- **Climate change:** minimise the carbon footprint of HS2 towards a goal of net-zero carbon emissions, build a network that is climate resilient for the long term, and deliver zero carbon journeys from day one of operation.
- **Community Experience:** where reasonably practicable, minimise adverse impacts of HS2 construction and operation on people and the environment including effects from air pollution, flooding and noise and vibration.
- **Historic environment:** reduce harm to the historic environment and deliver a programme of heritage mitigation including knowledge creation through investigation, reporting, and engagement and archiving.
- **Responsible consumption and production:** promote circular economy principles, responsibly source and make efficient use of sustainable resources, reduce waste and maximise the proportion of material diverted from landfill.

Our supply chain partners have a key role in supporting HS2 in achieving these objectives.

By working to an Environmental Management System, we expect our Tier 1 contractors – and by extension, our supply chain – to help us achieve our environmental sustainability targets.

## 10.2 What are Environmental Minimum Requirements?

Our Environmental Minimum Requirements (EMRs) set out the high-level environmental commitments that the Government has entered into through the hybrid Bill process.

Our supply chain partners are required to work to our [Code of Construction Practice](#) and the mitigation measures described in the EMRs. Our EMRs also expect that we

identify measures to further reduce environmental impacts, and we will be looking to the supply chain for innovative approaches to this challenge.

### **10.3 What are suppliers required to report?**

Our suppliers are required to submit data on a number of environmental sustainability metrics including carbon footprint, waste, vehicle emissions and materials.

### **10.4 How is environmental sustainability measured?**

Data and evidence are collected on a wide range of sustainability criteria on a regular basis across the HS2 programme. The data is used to evaluate performance against targets, identify trends and provide insight on any opportunities for improvement.

It's important we measure our sustainability impacts, both positive and negative in an accurate and timely way, so we can act on the data accordingly and provide confidence to our stakeholders that the programme is being managed efficiently and effectively and delivering the intended benefits.

We expect our supply chain partners to contribute to our approach, by providing data and evidence that is right first time and adopting measures that improve sustainability.

### **10.5 What is HS2 Ltd doing about carbon emissions?**

HS2 is being designed and built to be the most sustainable high-speed railway of its kind in the world. The HS2 [Environmental Sustainability Vision](#) is for HS2 to provide zero carbon rail travel for a cleaner, greener future. Our vision for cutting carbon emissions includes:

- Zero carbon electricity to power the HS2 network;
- Carbon emissions from construction and operation eliminated or offset from 2035; and
- HS2 Ltd (as an organisation) achieving net zero carbon emissions from 2025.

The [HS2 Net Zero Carbon Plan](#) identifies our net zero carbon objectives and how we plan to get to net zero carbon in 2035 by:

- Cutting carbon emissions – to net zero – from sources HS2 owns or controls and indirect emissions from electricity production by 2025.
- Introducing our first diesel-free construction site in 2022 – and eliminating diesel on all construction sites by 2029.
- Reducing carbon emissions by 50% by 2030 compared to the baseline.
- Achieving a 50% reduction in carbon emissions from the production of concrete and steel by 2030 compared with 2021 levels.
- Reducing the carbon intensity of HGV movements by 11% by 2027 compared to 2020.

- Using 100% zero carbon electricity to power our trains, stations, depots and infrastructure – making journeys on HS2 zero carbon for emissions from ‘day one’.
- Offsetting residual carbon emissions that cannot be eliminated as HS2 is built, maintained and operated from 2035.

Our net zero carbon objectives cover emissions from our supply chain partners including: how materials are manufactured and construction work; the way the HS2 network is run – for example, how our stations and trains are operated; and the emissions we produce as a company, such as emissions from HS2 Ltd offices.

All our supply chain partners can play a key role in HS2 achieving net zero. We are building a culture in which we all think about ways to cut emissions and we will support new initiatives that allow us to hit our carbon targets. A commitment to net zero will be a condition of winning work on HS2 and we will also require our strategic suppliers to have verified science-based targets in place by 2025.

When designing and delivering HS2 our suppliers and partners are expected to eliminate and reduce carbon emissions; for example, through design optimisation, efficient operations and adopting low/zero carbon technologies, materials and services. We expect suppliers to reduce demand for energy where possible, be energy efficient by using modern up to date plant and equipment that is well maintained, and maximise the use of renewable energy sources, or where this is not feasible, use low carbon energy sources.

Tier 1 contractors are expected to have a carbon management system verified to PAS 2080: Carbon Management in Infrastructure. Product suppliers should produce Environmental Product Declarations (EPDs) for their products to quantify the carbon footprint and demonstrate the environmental credentials.

The move to net zero requires a collective endeavour. We recognise the importance of collaboration, particularly with our supply chain partners. We need to work with like-minded suppliers and partners to ensure supply chain objectives are in line with net zero carbon and we will link our net zero carbon objectives to the performance of suppliers and partners.

We are championing innovation in design and construction, and we will invest in innovation and form partnerships to support supply chain partners to use new technologies and speed up ways to cut carbon emissions in our supply chain.

More information on our journey to destination net zero 2035 can be found at: [www.hs2.org.uk/why/carbon/](http://www.hs2.org.uk/why/carbon/).

## **10.6 How do you define the circular economy?**

We have defined our approach to circular economy in the [HS2 circular economy principles](#) document. A circular economy approach is an alternative to the traditional linear economy (make, use, dispose) whereby resources are kept in use and at their highest value for as long as possible. It can therefore thrive in the long term by

decoupling economic growth and development from the consumption of finite resources and waste.

The circular economy is more than simply recycling; it involves looking at the entire life cycle of any process, creating and optimising value by reconsidering what might be seen as waste or system losses and identifying opportunities to achieve the best whole-life outcome.

We are asking that our suppliers identify and realise opportunities to embed the HS2 Circular Economy Principles throughout the delivery of the programme. Therefore, you should consider how what you offer can help us achieve these principles and articulate this when you are putting forward your proposition to us or others in our supply chain.

Some useful resources relating to the circular economy include:

- [Top Tips for Embedding Circular Economy Principles in the Construction Industry](#)
- [Building Blocks of a Circular Economy](#)
- [Circular Economy examples](#)
- [BS 8001:2017 Framework for implementing the principles of the circular economy in organizations](#)

## **10.7 How are materials responsibly sourced?**

We are committed to ensuring materials are responsibly sourced and efficiently used and that we maximise the proportion of material diverted from landfill and reduce waste production. As a supplier to HS2 if you provide materials to HS2, you must ensure they meet specified responsible sourcing standards and certifications and provide evidence. HS2 require that assurance of information provided is undertaken to validate that materials are responsibly sourced.

We encourage our suppliers to adopt the waste hierarchy, by avoiding waste being produced and ensuring it is responsibly managed for reuse, recycling or recovery in preference to landfill. HS2 have a Restricted Materials List that all suppliers should be aware of and ensure that restricted materials are not used in the construction of HS2 or where unavoidable risks are managed.

Some useful resources on responsible sourcing and waste include:

- [Action Programme for Responsible & Ethical Sourcing White Paper – 8 Pathways to best practice](#)
- [BES6001 Responsible Sourcing of Construction Products](#)
- [CARES Sustainable Constructional Steel Scheme](#)
- [UK Government Guidance for business trading in timber and timber-related products](#)
- [Aluminium Stewardship Initiative](#)
- [Responsible Steel Standard](#)
- [PAS 402:2013 – Waste resource management: specification for performance reporting](#)

# 11 Fair payment

## 11.1 What is HS2 Ltd's approach to fair payment?

Payment terms within our contracts will be aligned to UK government policy and will meet all statutory and mandatory requirements.

We are working to:

- Ensure prompt payment of the supply chain;
- Help protect suppliers – particularly SMEs – from poor payment practices; and
- Support adherence to the commitments in the Supply Chain Payment Charter.

Furthermore, we will monitor the payment performance of our Tier 1 suppliers to ensure that they adhere to the fair payment requirements in their agreements with us. We will agree payment terms with our supply chain on a case-by-case basis and we are committed to pay promptly and fairly. As a default, we commit to pay all suppliers within 30 days, in line with government guidelines. However, in certain circumstances, payment terms may be less than 30 days. For certain aspects of the project, we will specify payment terms that will flow down through sub-contracts to the entire supply chain

## 11.2 Does HS2 Ltd withhold retention from its Tier 1 suppliers?

We are committed to having no cash retentions and will cascade this requirement through the supply chain via our Tier 1 contracts.

## 11.3 How can suppliers raise a concern?

HS2 Ltd is committed to a working environment based on our four values of respect, leadership, integrity and safety. Everyone who works on the HS2 Project is responsible for reporting any concerns when they believe that something is wrong. HS2 Ltd seeks to maintain high standards of business behaviour and to act ethically and with integrity in everything we do. HS2 supply chain organisations are encouraged to raise an anonymous concern in confidence, using our HS2 'Speak Out' Line via either of the following two methods:

- Dial the freephone number within the UK: 0808 196 5847
- Report a concern via a [secure web-based reporting service](#)

We will accept reports direct from individual suppliers or made through the organisation's trade associations, if this is preferable.

## 11.4 Does HS2 Ltd audit payments through the supply chain?

For certain aspects of the project, e.g. for Tier 1 construction contracts, we ensure that the NEC3 contract wording – regarding right of audit of payment quantum and



performance – is included in all Tier 1 contracts, alongside a Key Performance Indicator to require regular reporting of adherence to payment terms down the supply chain.

### **11.5 Does HS2 Ltd use Project Bank Accounts (PBAs)?**

In 2020, we [announced the adoption](#) of Project Bank Accounts across key contracts on Phase One. The use of PBAs provides greater transparency of payments and allows more efficient payments to the supply chain.

# 12 Skills, employment and education

## 12.1 How are current and future skills shortages addressed?

Fostering skills and creating and sustaining employment opportunities is one of our seven strategic goals and is integral to our vision to be a catalyst for sustained and balanced growth across the UK.

We, along with the transport, engineering and infrastructure industry as a whole, are expecting to face a significant skills challenge in finding the required numbers of people with the type and level of skills needed. In addition to meeting our obligations through our supply chain, we are addressing this challenge through our support for a number of employment, skills and educational initiatives.

Even before young people begin professional training, we are working with them to improve skills and drive interest in transport infrastructure careers through the [HS2 Education Programme](#) (see more information about the education programme below).

The HS2 Job Brokerage Service has been established to support the supply chain. The benefit of which is an increased talent pool available to the programme via a mechanism which will enable more people from disadvantaged backgrounds, local people and young people to access the job opportunities created by the HS2 supply chain.

The HS2 Job Brokerage works with organisations called Job Brokerage Partners (JBPs). Job Brokerage Partners are local employment support organisations, whose primary objective is to support people into work. A [searchable jobs board](#) is hosted on the HS2 Ltd website, accessible to JBPs and jobseekers. The digital platform lists HS2 supply chain vacancies and is the mechanism by which Jobs Brokerage Partners become notified of vacancies.

## 12.2 What measures and targets are in place?

Employers throughout the supply chain need to invest in skills. For the companies that design and construct HS2, investing in the skills of their workforce will not be a discretionary activity.

Our successful contractors are required to meet Skills, Employment and Education (SEE) outputs for diverse groups, young people and local people. These outputs include: apprenticeships; unemployed people into work; work placements for those from disadvantaged groups; and schools' engagement.

We are aligned with Government's [Transport and Infrastructure Skills Strategy](#), and use procurement to drive skills development and deliver a significant increase in the number of apprenticeships right through our supply chain, setting ambitious targets using the most appropriate approach to achieve the highest number of apprenticeships.

## 12.3 How can we use HS2 to inspire more young people?

We are committed to stimulating interest in Science, Technology, Engineering and Mathematics (STEM) subjects to encourage more young people into transport and infrastructure related careers.

Our [Education Programme](#) works with schools and young people in regions that will benefit from the opportunities HS2 will create, through delivery of tailored STEM workshops and support for school careers activities, including workplace visits. We also aim to engage and inform young people across the country by developing online curriculum resources and careers information, which will enable teachers to deliver their own activities in the classroom. Through our education programme we aim to use HS2 to present a modern image for the transport infrastructure sector, one that is user-focused, technology-driven and engineering-led.

Children and young people can explore what interests them and understand how it relates to the opportunities available right across infrastructure in the UK and elsewhere. It provides them with a clear line of sight to possible careers and an understanding of the progression routes that will be available to them, as well as building essential skills that will help them into employment.

The programme is supported by 'Education Ambassadors': HS2 employees and representatives of the supply chain who are passionate about their profession and have volunteered to help attract the next generation. They support a range of activities with schools to help tell the story about the diversity of jobs and skills that are required to plan, build and operate HS2. To get involved, please email [skills@hs2.org.uk](mailto:skills@hs2.org.uk).

# 13 Equality, Diversity and Inclusion

## 13.1 Why does EDI matter?

EDI is part of the solution to resolving skills and talent shortages that currently exist in this sector. Evidence shows that organisations with a diverse workforce can help to nurture creativity, promote innovation and increase profitability.

For the infrastructure sector to compete with other sectors in attracting the best diverse talent, we need to ensure that the HS2 programme delivers exemplary industry-wide practices and standards. We want to work with our supply chain to build a stronger, more sustainable construction and rail industry.

## 13.2 What is the EDI expectation of the supply chain?

When organisations are contracted to carry out a public function on behalf of HS2 Ltd, it becomes their responsibility to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations in relation to the function being carried out. This means that the organisations we engage to deliver services on our behalf should be considering and implementing EDI as part of their decision-making processes and encouraging those in their supply chains to do the same.

Our requirements include:

- Removing barriers to inclusive recruitment practice;
- Developing a diverse base of suppliers;
- Monitoring and promoting workforce diversity;
- Delivering effective training opportunities;
- Using [CompeteFor](#) to advertise all appropriate subcontractor and supplier opportunities; and
- Advertising opportunities more widely via organisations which promote supply chain diversity such as [MSDUK](#), [SEUK](#) and [WEConnect](#).

## 13.3 What support is provided for suppliers?

We currently have a number of ways to support our supply chain to develop EDI practices. This includes the '[Shape of things to come](#)' and '[Get on board](#)' videos, signposting contractors to existing support, guidance and information on embedding EDI.

## 13.4 How does HS2 Ltd collaborate with awarded suppliers?

The EDI & SEE Supplier Communities Forum offers a great space for our Tier 1 suppliers to regularly share good practice, network and learn best ways to improve their performance in key areas of EDI activities. At this quarterly event hosted by our Tier 1 suppliers it's a great opportunity to share the work you are doing on EDI and SEE.

We will expect our Tier 1 suppliers to have attained an externally verified EDI accreditation within two year of been awarded a HS2 contract. We will actively support our suppliers to ensure that this is achieved.

### **13.5 What does HS2 Ltd expect from SMEs in terms of EDI?**

Good practice will be different for organisations of different sizes. For example, it would not be reasonable to expect a micro-sized business to adopt the same policies, procedures and practices as a medium-sized or large business.

However, as employment and EDI legislation that applies equally to all organisations regardless of size, there is a requirement that all organisations engaged by us will have developed and adopted the relevant and proportionate policies and practices, which will help them meet their responsibilities.

There are a number of free resources available that can assist SME/micro-businesses to meet our requirements, an example of which is the Supply Chain Sustainability School [Fairness, Inclusion and Respect \(FIR\) Toolkit](#).



# 14 Community engagement

## 14.1 Why is community engagement so important?

Planning and building HS2 will disrupt the lives of local people along the line of route. We will always try and do the right thing and reduce disruption as much as we can. By respecting people and respecting places we will tell communities what we're doing and when, let them know of any changes and if we get it wrong, we will listen and do our best to make it right.

Our success will depend on our ability to talk to local communities and act on what they tell us. Of course, we will not always be able to do what some people or groups want us to do. When this happens we will be open and transparent explaining why we cannot do it and what can be done instead.

## 14.2 What is the approach to community engagement?

The legacy of HS2 will depend on not only by what we deliver, but by the way in which we deliver it. We will demonstrate our values of Leadership, Respect, Integrity and Safety in the way we and our suppliers behave. We want everyone who works for HS2 – whether they are a member of staff, a contractor or a supplier to deliver the same high standards of behaviour every day, in line with our aim to respect people and places.

- **Leadership:** We will be transparent in our decision-making, and ensure we fully understand the impact of all our decisions. We will be open and accountable, and show we understand the needs and views of local communities. We will be collaborative and consistent in our engagement and communications.
- **Respect:** We will listen, build trust, minimise surprises and anticipate concerns and address them up front. We will create a sense of community ownership and awareness of feelings and opinions. We will respond to communities and stakeholders in a timely and accessible manner.
- **Integrity:** We will be open and honest when sharing information. If we are not able to make a requested change we will explain why. We will deliver on our promises and do so collaboratively. We will report on our discussions and consultations fairly.
- **Safety:** We will create safe environments and prioritise the health, safety and wellbeing of communities and our workforce. We will identify impacts and feed them back into the business.

## 14.3 What is HS2's Community Engagement Strategy (CES)?

The [Community Engagement Strategy](#), published in September 2017 and updated in October 2021, sets out how HS2 will respect people and respect places along the line of route and what this means for those who either live or work within the communities along the line of the new railway. The updated strategy sets out how we will inform, involve and respond to communities.

## 14.4 What must suppliers adhere to?

All of our employees, suppliers and their workers must adhere to the principles and requirements of our [Community Engagement Strategy](#), the [Code of Construction Practice](#) (CoCP) and the Community Engagement Framework. Whilst the CoCP and Community Engagement Framework comprise part of the approvals for Phase One of the programme, they also set the minimum standard required for all Phases.

The CoCP reflects best practice for major infrastructure schemes in the UK and places a range of responsibilities on its contractors to reduce the effects of construction. The CoCP covers everything from reducing site traffic and noise, to keeping residents informed of work plans, right down to keeping work sites tidy and litter-free.

The Community Engagement Framework has been written in line with the CoCP and supports any specific assurances given during the Parliamentary process to be applied by us, and which our contractors (and their subcontractors) must adhere to during the construction of the project. Our contractors provide on-the-ground community engagement teams and are required to produce Local Area Plans in line with the community engagement strategy.

# 15 Digital Engineering

## 15.1 What is Digital Engineering?

Digital Engineering, with Building Information Modelling (BIM), at its foundation is a process involving the collaborative production and management of our railway digital assets. Simply, Digital Engineering comprises two key components:

- Information Management - a set of standards, methods and procedures to provide a consistent collaborative approach to the production, management and delivery of project and asset information.
- Information Modelling – the exploitation of digital data to support data analysis, visualisation and reporting. Examples of Information Modelling may include the application of Digital Design (3D) to enhance Health and Safety and Carbon, Digital Scheduling (4D), Digital Estimating (5D), Digital Fabrication and greater information mobility.

The importance of Digital Engineering and the benefits it brings have been highlighted in several government reports, and as a result the Government Construction Strategy (published in 2011 and subsequently updated in 2016) mandated the use of BIM on all publicly procured projects from April 2016.

## 15.2 Why does HS2 want to achieve Digital Engineering capability?

We are committed to the use of Digital Engineering, to deliver a high speed, integrated and resilient railway. As an innovative organisation, we are harnessing the power of Digital Engineering to deliver value for money through the production and delivery of a Virtual Railway during design and construction with a view to handover a Digital Twin to operations and maintenance. This joins up all necessary data, which can be visualised and interrogated for different purposes using cutting edge technology.

## 15.3 What is our approach to implementing Digital Engineering?

The key long-term principles of our Digital Engineering approach are:

- **Leadership:** We are committed to being proactive in developing and delivering a world-class implementation of BIM, adopting a Digital Engineering approach across the organisation and our supply chain. We will work closely with professional institutions and engage with thought leaders across different industries to ensure best practice is being adopted and continually improved. We will actively promote trust, open communication and a collaborative culture working at a data-level across its organisation and throughout its supply chain.
- **Upskilling:** We recognise that significant parts of our supply chain require upskilling to meet the BIM requirements, and we are committed to support the improvement of supply chain capability by providing access to the right educational materials.

- **Futureproofing:** We have a duty to provide a digital legacy through the provision of a fully operational Digital Twin. To enable it to do this we will adopt a software-agnostic approach, ensuring that their supply chain can use the best and most appropriate tools for the job.

These will be underpinned by:

- Consistency and Integration
- Connectivity and Automation
- Governance and Interoperation

## 15.4 What level of BIM should suppliers comply with?

There are four levels of BIM compliance, as described below.

Level 0 BIM	Unmanaged computer aided design (CAD) including 2D drawings, and text with paper-based or electronic exchange of information, but without common standards and processes.
Level 1 BIM	Managed CAD, with the increasing introduction of spatial coordination, standardised structures, and formats as it moves towards Level 2 BIM. This may include 2D information and 3D information such as visualisations or concept development models. Level 1 can be described as 'Lonely BIM' as models are not shared between project team members.
Level 2 BIM	Managed 3D environment with data attached but created in separate discipline-based models. These separate models are assembled to form a federated model, but do not lose their identity or integrity. Data may include construction sequencing (4D) and cost (5D) information.
Level 3 BIM	A single collaborative, online, project model with construction sequencing (4D), cost (5D) and project lifecycle information (6D).

Since April 2016, the Government has required all construction suppliers of centrally procured projects to comply with BIM Level 2, therefore at HS2 this is the minimum level we require. In the longer term, we have an ambition to achieve BIM Level 3 as part of our Digital Twin programme.

At HS2, Level 2 means having:

- A consistent approach to data management;
- Clear contractual requirements for data procurement;
- Information models which provide reliable data for decision making;
- The exchange and management of multiple data sources in a common data environment;
- Connected data, which is efficiently accessed and interpreted; and
- Importantly, that we buy data over drawings.

Adopting BIM Level 2 is a journey that can only be achieved by working collaboratively with our supply chain and we appreciate everyone is not at the same stage of adoption. We will be expecting the most from our Tier 1 suppliers. As part of the procurement process and during delivery, Tier 1 suppliers will need to provide evidence of their own and their supply chains' capacity and capability to deliver BIM Level 2 in line with HS2 and industry BIM standards.

We expect Tier 1 suppliers to actively engage with their supply chains to help build BIM capability, making opportunities as widely available as possible. Smaller suppliers should collaborate with the firms they supply, to understand the implications and work together to plan how to deliver our BIM requirements.

Further information on how HS2 intends to implement BIM Level 2 is on our [BIM upskilling platform](#). This will continue to be updated as our approach to BIM matures and more detailed, project-specific requirements are provided.

If you have any questions about BIM and HS2, please email: [BIM@hs2.org.uk](mailto:BIM@hs2.org.uk).

## **15.5 How is BIM incorporated through the supply chain?**

It's important that we focus our attention on the supply chain as well as internally, to implement BIM consistently across the programme and unlock efficiencies. To achieve the capability internally, we have identified four key enablers: people, process, information and technology. We need to make sure people have the right set of skills, make sure we have established the right set of processes, make sure we have a clear and well-defined data architecture, and make sure we are using the right tools/systems to interrogate data more effectively.

Externally we need to ensure our data requirements are captured and consistently communicated through all our contracts. Through upskilling, we can help our supply chain achieve the required levels of capability and maturity, as set out in the [Construction Strategy](#).

## **15.6 How does HS2 Ltd collect standardised data through BIM?**

We will ensure efficient and accurate exchange of information across the whole project lifecycle through the use of a Common Data Environment (CDE) in line with the principles introduced in British Standard BS EN ISO 19650.

The CDE is a set of defined and managed procedures to ensure that appropriate data is shared, as a single instance, from multiple data sources. This collaborative environment is managed through specified controls, states and processes, which are outlined in HS2's CDE Strategy, with the information and data held and controlled within an integrated environment.

Further information on our CDE and the information process is available at [BIMUpskilling.com](http://BIMUpskilling.com). Contract specific details of the CDE Strategy will be made available as part of contract documentation.

## **15.7 Does HS2 Ltd dictate the use of a specific software?**

Our aim is to provide flexibility around the use of software platforms for our supply chain. We understand that flexibility in the use of preferred tools and systems mean improved smart thinking and innovation.

Therefore, a key aspect of our strategy focuses on adopting a data-centric and software agnostic approach through the development of open data standards.

## **15.8 What types of information and data does HS2 Ltd collect?**

We will require graphical representations of design and physical assets (i.e. 3D CAD data), geospatial representations of where our assets are located (i.e. GIS data), non-graphical asset attribution (i.e. alphanumerical data) and all related documentation (i.e. pdfs, reports) captured during the design and construction activities and those handed over at the end of construction to form a complete Asset Information Model.

The specific information requirements are determined by the type of contract that a supplier is working on and will be specified as part of the procurement documentation and through ongoing consultation and collaboration post contract award. Further information on the management process and our Employers BIM requirements is available at [BIMupskilling.com](http://BIMupskilling.com).

# 16 Project insurances

## 16.1 Does HS2 Ltd provide insurance cover for suppliers?

For the Main Works Civils Contracts (MWCCs) and their subcontracts let in 2017 or later, we have purchased an Owner Controlled Insurance Programme (OCIP), which provide the following insurance covers for all contractors and subcontractors through the supply chain - subject as always to the insurance policy limits of indemnity, excesses, exclusions and other terms and conditions:

- **Construction All Risks;** covering physical loss or damage to the works including anywhere within the Territorial Limits (United Kingdom, Channel Islands, Isle of Man and elsewhere in the European Union and European Economic Area, Turkey and Switzerland), including but not limited to, during the course of any transit (other than transit by air or sea except by roll on, roll off ferries), whilst at place of storage and accommodation, place of off-site fabrication and during all loading and unloading incidental thereto. However if an underlying supply contract has supplier responsible for the transit risk then such contractual allocation of risk and responsibility takes priority over HS2 insurance provided cover.
- **Public and Products Liability;** covering legal liability of HS2, contractor and subcontractors for injury or death to third parties or damage to third party property arising out of HS2 construction activities. The legal liability of other parties engaged in the carrying out of the Project including suppliers, architects, designers, surveyors and consulting engineers is insured but only in respect of their manual site activities.
- **Environmental Impairment Liability;** this policy covers HS2 and contractors/subcontractors costs for clean-up, bodily injury, property damage and biodiversity damage arising out of an unexpected and unintended pollution event for which they are legally liable. The legal liability of other parties engaged in the carrying out of the Project including suppliers, architects, designers, surveyors and consulting engineers is insured but only in respect of their manual site activities.
- **Terrorism;** covers physical loss or damage to the works arising out a terrorism event.

Please note that at present we provide no insurance cover for contractors and subcontractors working on contracts awarded prior to the MWCCs in 2017.

## 16.2 What insurances do suppliers need to hold?

Contractors and subcontractors working under Main Works Civils Contracts let in 2017 or later are required to procure and maintain the following insurances themselves, in line with the terms of their individual contracts:

- Professional indemnity insurance to the level stated in their contract, if stated in the contract.
- Property damage insurance in respect of their construction plant and equipment and temporary buildings belonging to or hired by them.



- Transit insurance for the transit to site of any materials destined for incorporation in the works, shipped from either outside the HS2 construction insurance territorial limits, namely from outside of the United Kingdom, Channel Islands, Isle of Man and elsewhere in the European Union and European Economic Area, Turkey and Switzerland or by method not covered by the HS2 insurance, which are transits by air or sea, or by method other than by roll-on, roll-off ferries.
- Public liability insurance for their off-site and non-construction-related risk exposures.
- Statutory insurances, such as Employers Liability and Motor insurances.

Please note that contractors and subcontractors working under contracts awarded prior to the award of the MWCCs will not have the benefit of the insurance covers that we have purchased, at present. They will therefore need to procure and arrange those further insurances in line with the terms of their individual contracts.

# What can you do now?



## View our supply chain resources

View the supply chain section of our website to see our latest contract opportunities, links to our supply chain map, supplier FAQs and case studies.

Visit [hs2.org.uk](https://hs2.org.uk)

Visit [hs2.org.uk/supply-chain](https://hs2.org.uk/supply-chain)



## Register to hear about HS2 contract opportunities

Register on Contracts Finder for direct opportunities:

[www.gov.uk/contracts-finder](https://www.gov.uk/contracts-finder)

Register on CompeteFor for indirect opportunities:

[www.competefor.com](https://www.competefor.com)



## Update your details, sign up to our supply chain bulletin and stay in touch

Send us your contact details, sign up to our supply chain bulletin and register to hear about possible future events or market engagement

[www.smartsurvey.co.uk/s/HS2supply/](https://www.smartsurvey.co.uk/s/HS2supply/)

Share your questions, comments and ideas by emailing HS2 Supply Chain Communications [scc@hs2.org.uk](mailto:scc@hs2.org.uk)

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