

Rolling stock scope

Iain Smith
Director, Rolling Stock & Depots

HS2 Rolling Stock Industry Event
27th March 2017

www.gov.uk/hs2

What are we buying? When do we want it?

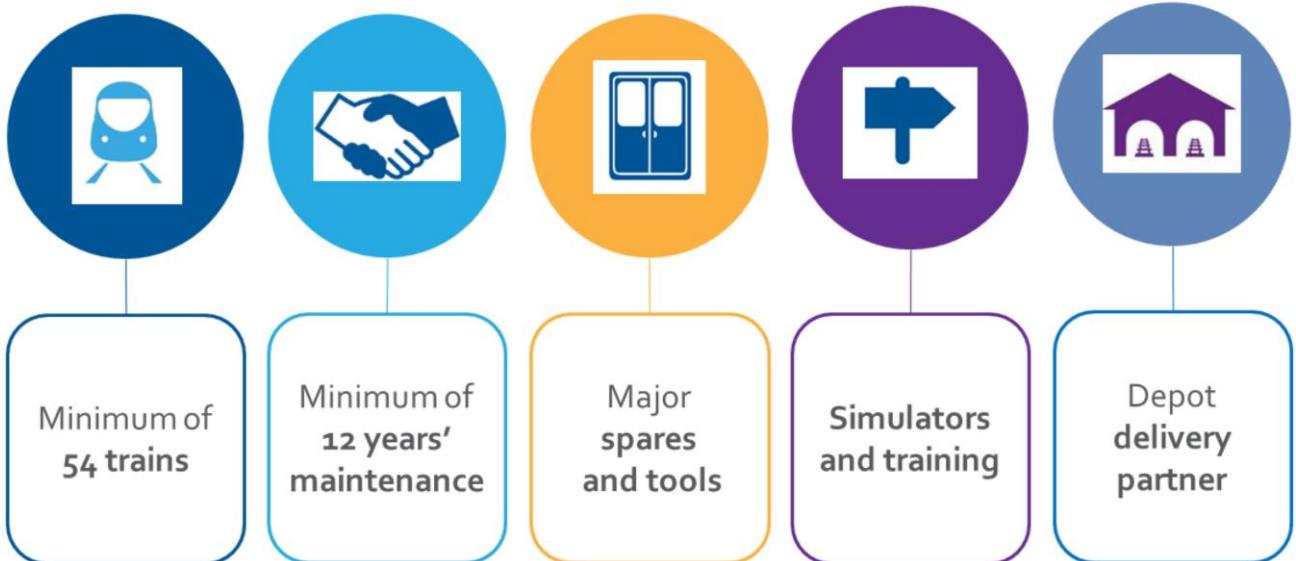
I'm Iain Smith and I'm **delighted** to be accountable for the Rolling Stock programme in HS2.

As you can imagine, I share the excitement of what we are about to do for this country and the determination to make the Rolling Stock deliver that promise.

As Beth said I want to take a few minutes to outline for you **exactly what we're looking to buy from you and when we need you to deliver it.**

We want you to share our excitement to be part of the team which makes this happen.

What we're buying



So to the ‘what’:

Obviously **trains** – we will be looking for a minimum of 54 trains to deliver the initial services.

Once we’ve finalised the service patterns for Phases 1 and 2a, some more of the same may be needed.

Options will not include the full Phase 2 fleets, which will be the subject of a second procurement.

We may introduce private finance at any time after contract award but until that time, HS2 will remain the owner of the trains.

We will also be looking for the manufacturer and their suppliers to **Maintain the fleet for at least the first 12 years, but with a promise to cover** the whole life of the train. This could be the start of a contract which will last until 2060!

This maintenance will include everything apart from daily servicing and cleaning, delivery of which will be a decision for the Operator.

As you would expect, we will want **major spares and tools** to help keep the fleet in service for our passengers.

We will also be looking for the necessary **driving simulators and training** so the Operator will be able to make full use of the trains.

And, last but certainly not least, we need **a delivery partner for the new high speed**

Depot, ensuring it is fit to support the trains in service.

The Washwood Heath Depot site is key to the construction of the main HS2 route.

We will therefore be building the Washwood Heath maintenance depot in close co-operation with the Rolling Stock manufacturer.

We do expect the manufacturer to fit out the Depot to their needs.



Minimum of 54 trains needed for initial fleet



This first batch of trains for HS2 will operate long into this century, the grandchildren of today's school children will ride on these trains.

Our first batch will need to be "**conventional-compatible**", in other words they can operate on the existing West Coast Mainline as well as our new high speed network.

7 out of 10 trains from Euston will move onto the conventional network to serve places like Stafford, Liverpool, Manchester, Preston and Glasgow.

We will be working with the West Coast Partner to develop the detailed services – when we have done that we might need more trains than the minimum of 54.

We will be asking for those options when we come to tender.

For later phases of HS2, we are likely to need over 100 more trains, which will be part of a separate procurement as I mentioned.

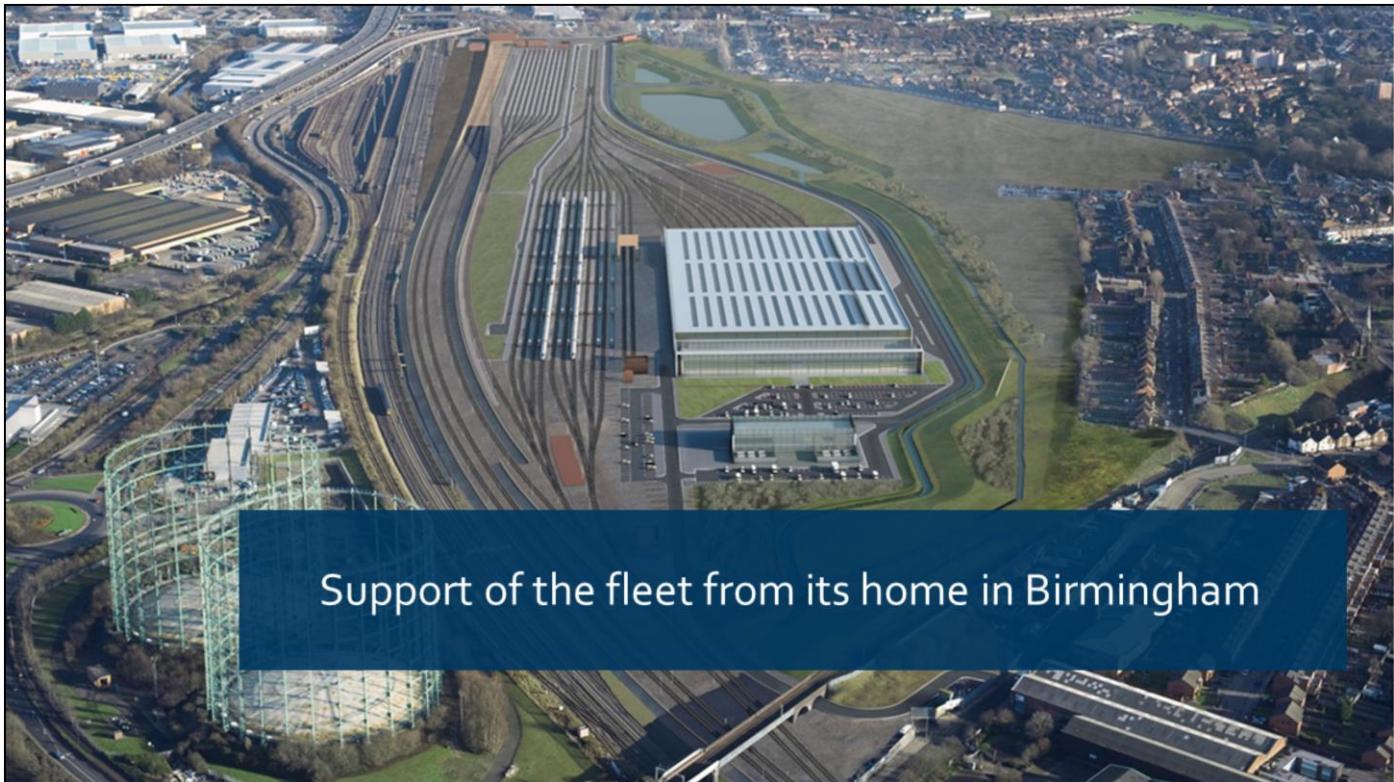
Despite the challenges of the "conventional-compatible" design these trains must be **high performance**. That means reliable, quiet and capable of delivering that step change in customer experience, which Chris has just been talking about.

This is a real challenge which will require the **best combination of innovation and proven technology**.

A favourite saying I've heard is "we need 2025 technology in 2026"

Not 2018 technology and not 2030 technology either.

That's something to be mindful of, and my colleague Tom will talk more about our technical requirements a little later.



Support of the fleet from its home in Birmingham

We're not just procuring trains – much like when you buy a new car these days – we want a wholesale support package to go with them.

We will be looking for the manufacturer and their suppliers to maintain this fleet and be very conscious of this in their design – after all the maintenance and energy costs over the life of the fleet will be a lot more than the up-front costs.

That means we will be requiring a full-life offer for maintenance of the trains and we will be evaluating on the basis of whole life costs and benefits, including for example, energy.

We will commit to the first 12 years of this whole life offer. We will be asking for strong commitments to availability for, and reliability in, service.

This is not just for the trains to keep moving but also for the passenger and crew facilities so that the passenger service offer can be consistently delivered.

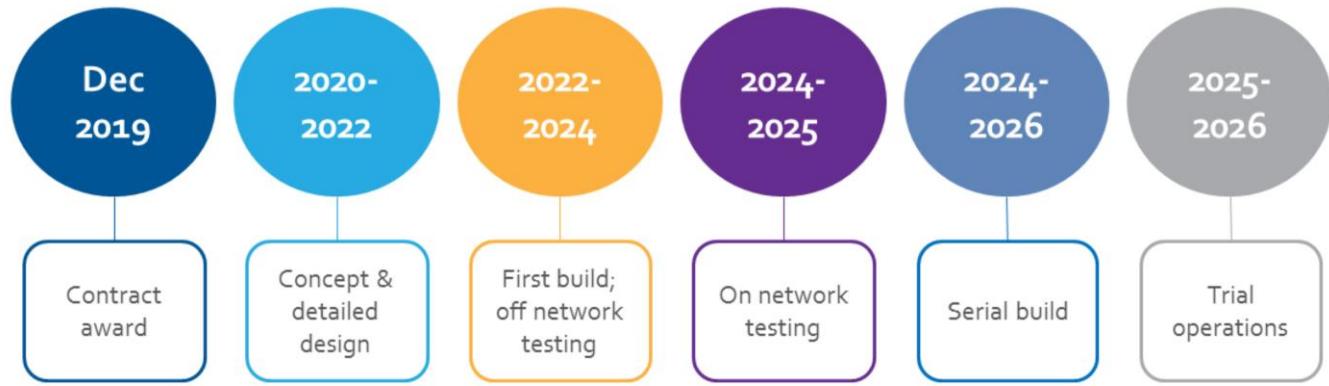
To go with all of this we will be procuring spares, tools and the support services the operation will need to be sustainable for the long term.

This will include things like operational simulators so that the crews are well trained in all scenarios, however rare. This training should minimise the use of real trains which should be out delivering the services to passengers.

Just like you, these trains need a home which is fit to care for these trains.

Together with the train manufacturer we will build a Depot at Washwood Heath in Birmingham which will become a hub for high speed rolling stock expertise in the UK.

Rolling stock timeline



Andy will talk about the procurement timetable a little later.

But here is the timetable we'll be working to once we've awarded the contract.

That's expected to happen in **Dec 2019**.

Award will be followed by an extensive concept and design period during which we will have to keep the lines of communication open to make sure we're fully integrated with the emerging design for the railway itself, the existing network and the service vision evolving with the **West Coast Partner**.

Once we've actually got a train to work with, we'll need to carry out extensive **off-network testing** to prove the capability and reliability of the design before we take anything onto the new high speed network or our conventional network for real.

We will also need the manufacturer and their suppliers to work with us as a key partner in helping us **test the new high-speed infrastructure** being built.

This will require extensive collaboration from early supply of systems into integration laboratories, to final testing at high speed.

Testing and validation on the conventional network will obviously be required too, a different but no less of a challenge.

Trial operations are expected to commence in 2025 before the first paying customers board an HS2 train on the High Speed network in December 2026.

HS2: the system integrator



To finish on scope and timing

We as HS2 are the systems integrator! We cannot outsource or absolve ourselves of that role.

However, we will need the Rolling Stock manufacturer, and their suppliers, to play a full part in this integration.

This will include support of endeavours such as the system integration laboratory that we're looking to develop.

And it's not just about technical integration and making it work.

We also have a **collective duty to take this opportunity to really deliver the step change in customer experience** that Chris has just been outlining.

I now want to bring in my colleague Tom, who will take you into a bit more detail on some of the key technical features we need to help us deliver what we've promised.

Rolling stock technical specification

Tom Williamson
Head of Rolling Stock Engineering

HS2 Rolling Stock Industry Event
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Thank you Iain, and thank you all for taking the time to come and meet us today to talk about what will undoubtedly be the most recognisable and talked about asset on our new railway.

The trains!

As Beth says, they will be the icon of HS2.

As Chris says, they will be the speed record breakers.

And for me... well they've been the sole focus of the last five years of my career.

Today is a landmark for me personally. When I joined HS2 soon after the Phase 1 route announcement in 2012, I hoped very much that I would be standing here today playing my part in the launch of the procurement.

And there are many landmark events still to come which I hope many of you will be sharing with us.

I truly believe this is an opportunity to work together on the most exciting project in the world.

More than just another rolling stock procurement

Capacity

Customer
experience

Environment

I'm here to explain the **technical solution** we are looking for in the rolling stock: the train we need to deliver our **strategic goals** and enable the **service vision** to be **transformed into reality**.

There are **two clear threads** to our thinking on the technical specification.
Firstly, that ultimately everything is driven by our **focus on the people** that will use and interact with HS2.

And secondly, that we will need to think **diligently** in terms of this being an **integrated railway** if we are to deliver **truly great outcomes**.

We're going to **need you to draw** on experience and expertise from a **broad range of backgrounds and industries** to deliver a railway that we can be **proud of for many years** to come.

This isn't **just another rolling stock procurement**

HS2 is **different** because...

- Of the huge **Capacity** we're looking to deliver
- That step change in **customer experience** we've been talking about
- And the **sustainability** promises we've made as part of the **Hybrid Bill** we've just got through parliament.

And of course, all of this has to be **integrated** together....

HS2 is all about Capacity – both on our new network and freeing it up on the existing lines.

- **18 train** per hour on the core – requires a **precise**, highly **repeatable** operation, **delivered through** technologies such as:

- **Automatic train operation** – proven technology, but a world-first for high-speed rail
- Consistently efficient **station dwells**, and
- High levels of **furnishable space** – enabling the high **seating** capacities we need, whilst retaining a good level of **comfort and facilities** on board and the **flexibility** to adapt this through the life of the fleet.

The design must be **inclusive and user focused**:

- Working with the **supply chain and partners**, we will work throughout to **understand user needs**.
- With a particular focus on **accessibility**, we will address the **stress-points** of existing travel for all our future customers.

And we take our responsibility to the **environment** very seriously:

- At a **local** level we must mitigate the **impact on our neighbours**, with a particular focus on reducing **noise**.
- Thinking more **globally**, we will limit the impact of the scheme for example by minimising **energy consumption**, using **materials** responsibly and reducing **waste** as far as practicable.
- We've made **environmental promises** as part of getting the first Hybrid Bill through parliament...
- ...if we break them, we will **let communities and the public down**, and may **jeopardise deemed planning consent to operate** the new railway as intended and we may not be able to get **Royal Assent for future phases**.

More than just another rolling stock procurement

Connectivity

World class operations

Value for money

Other strategic goals are highly relevant to the technical solution. These aren't to be forgotten.

They make HS2's trains **different from anything you might have worked on before**.

Connectivity:

- We've highlighted already that our journey times are best delivered by trains operating up to **360km/h**.
- But to deliver the journeys between the cities we serve, the trains need to travel on **the existing UK network** as well as our new network. That means they'll need to be **smaller** than most high speed trains elsewhere in the world in order to fit through all our **Victorian bridges and tunnels**.

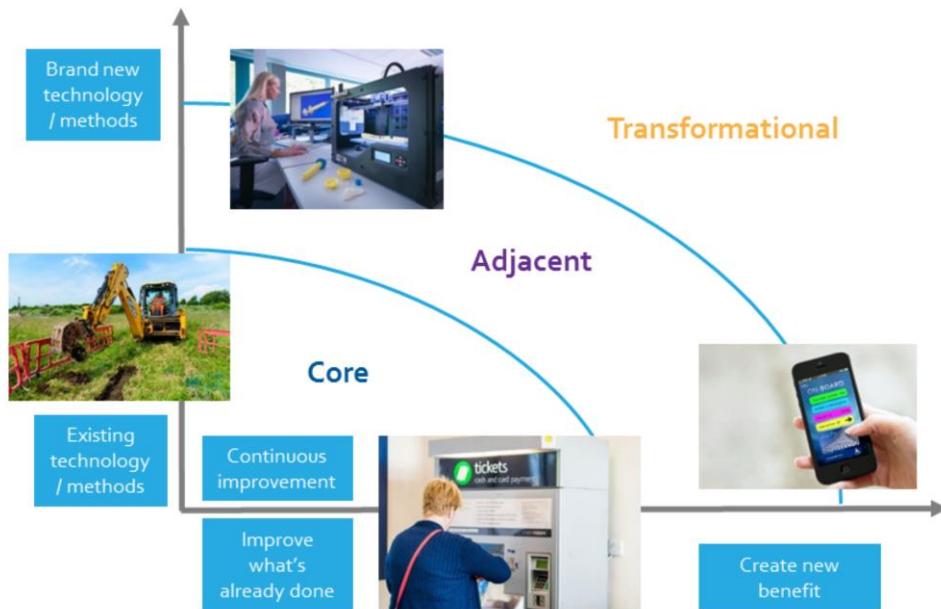
World class operation:

- Cannot achieve our goals without **a highly reliable system**.
- We will set **challenging but achievable targets** and the supply chain will need to **demonstrate the capability** of products before they are put into use. So while we **embrace innovation**, it must be delivered in a controlled manner, where all opportunities are taken to **demonstrate new products are fit for purpose** prior to their use on HS2.

And finally Value for money:

- We have to achieve all this, while delivering value for money **for the UK's taxpayers**,
- We must consider the railway as an **integrated whole**, throughout its life – which will last well into **the next century and perhaps even beyond**.
- Seeking solutions that deliver the best possible **total outcome** and maximising the **opportunity** presented by a **new system**

Innovation: going beyond best practice



Delivering **world class trains** which **achieve** all the things I've just been talking about **will be impossible without innovation**.

We know our **requirements are achievable**, but recognise **many are challenging**.

But there are **significant opportunities** to be taken advantage of, also.

We don't want to work with suppliers who will only look to deliver the bare minimum that we're asking for.

We need partners who want to **exceed our objectives where value can be added...**

...working with us, our other **partners** and the **wider supply chain** to deliver that **future proofed, truly integrated system, on time and within budget**.

That's how we'll be able to **realise** all the **other benefits we've promised**.

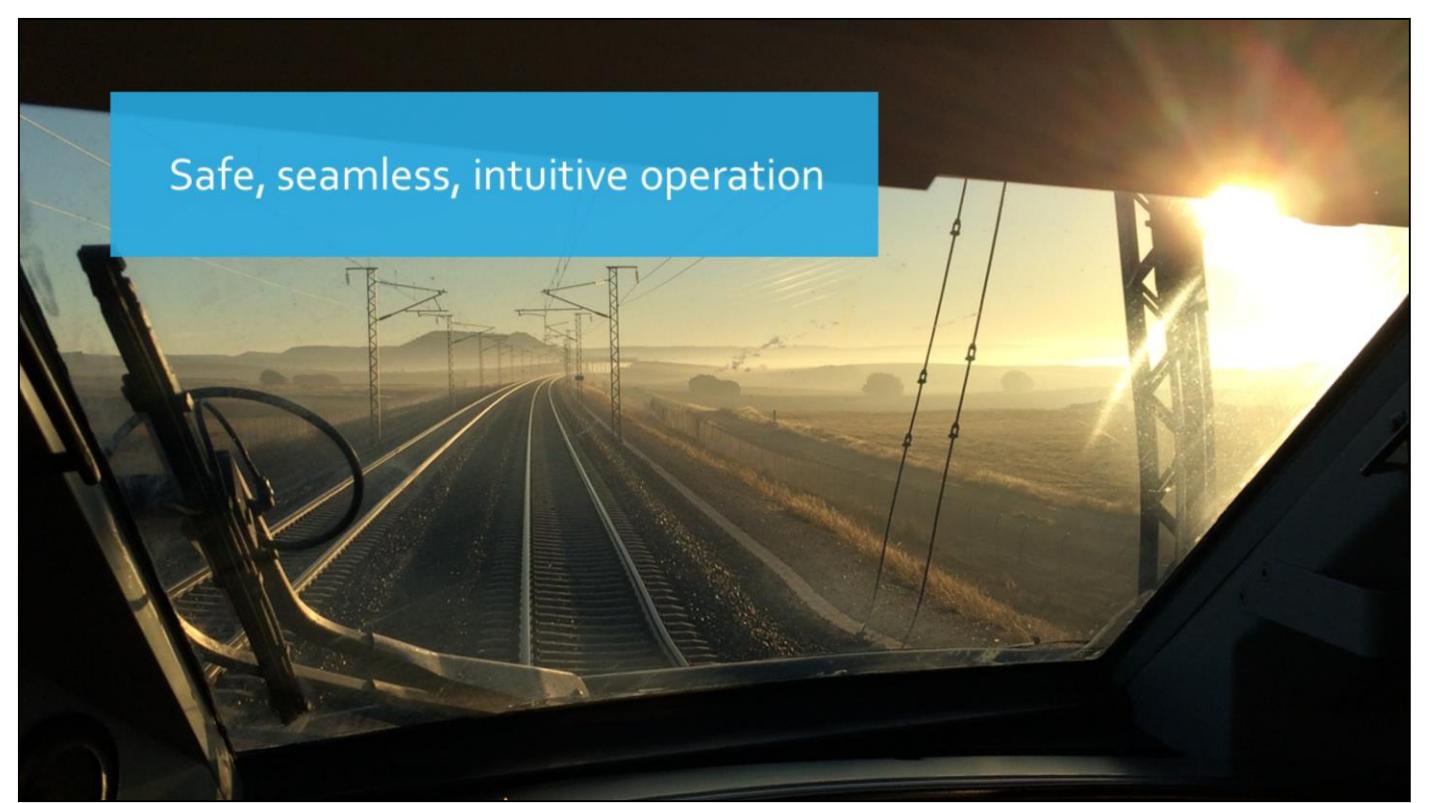
As Beth said at the beginning, **we love new ideas**...The **railway** has always been an **innovative industry**, but has also been highly constrained by legacy and structure. HS2 is the opportunity to take a giant leap.

For us, **innovation** means doing something that goes **beyond best practice**; Whether that be in **design, manufacture, or operations**

Refining what's already done and **continuously improving** after that is what we call **core innovation**. But where it's **appropriate and possible** we're also looking to **stretch towards the transformational**. That's how you create **new technologies**, new methods, new benefits and **timeless design – on a budget!**

So you're going to have to **prove how innovative you are** to win contracts. And the **contracts themselves will help**, which **Andy** will outline in more detail in a moment.

So where are the challenges and opportunities which require this innovation? I've got some examples.



Safe, seamless, intuitive operation

Robust and precise operation is essential to delivering the **capacity and customer experience** we've promised.

That means we're going to have to **automate our railway** in a way that hasn't been done before, certainly on high speed railways.

For example, trains will need to **split and join** on route, a process which currently takes **several minutes** and is **confusing for passengers** as trains stop and move multiple times.

Technology could allow **safe and seamless automation** of this process, saving valuable minutes and making the service more intuitive for our customers.

Dispatching trains from platforms is another area we are seeking to **improve**, supporting both the **safety** and **resilience** of our railway.

The system must **be simple and intuitive to all users, including staff**.

And **when disruptions** do occur, our **integrated system must support staff and travelling customers alike** so they have the **information they need to make the choices they want**.



And unsurprisingly we expect innovation to stretch to the **whole life considerations**.

This is where there are perhaps some of the **biggest opportunities, enabled by designing the railway as an integrated whole.**

There is a great opportunity for **integrated maintenance solutions** where trains **monitor infrastructure** and **infrastructure monitors trains**, with appropriate **data sharing**, focussed ultimately on getting the right **customer outcomes**.

We must design for **whole system maintainability**, and for the **whole life** of our assets.

We need rolling stock solutions that have the **least possible infrastructure impact** with the **lowest possible track damage** on both **HS2 and the existing rail networks**.

And the system must be **efficient** – for example by reducing the **cost** of operation through an **energy efficient**, total system design (**trains, infrastructure and operation** working together to **minimise energy** consumption).



User-focused design on board

On board our trains we know there are **many opportunities** to enhance the travelling experience. Realised by **aligning the design** with the **needs** of people using it.

Travelling on HS2 has to be **enjoyable**, and allow people to make **valuable use of their time**.

And this **isn't just the basics** – an **uninterrupted internet connection or telephone call** from station to station will be a **basic expectation by 2026**. We need your help to understand what technologies and capabilities will be required by our customers of the future.

We know travel **can also be stressful**. Some elements of train travel can **currently** be very **unpleasant**. There are potential **barriers** that cause '**pain points**' on journeys.

Train **toilets** are always criticised on **customer satisfaction surveys**, they are **cramped, inaccessible** to many users and **rarely feel clean**.

Train interiors can be too **hot**, too **cold**, too **noisy** and occasionally too **quiet**...

HS2 trains will spend a lot of time in **tunnels**. This has implications for **temperatures, noise** and the **pressure** people feel in their **ears** and the **lack** of a **view** could, if not well managed, **detract from the experience** and lead to people feeling **claustrophobic**.

All of these things could lead to people choosing **not to use HS2**. But a **good design** can and will overcome these challenges.

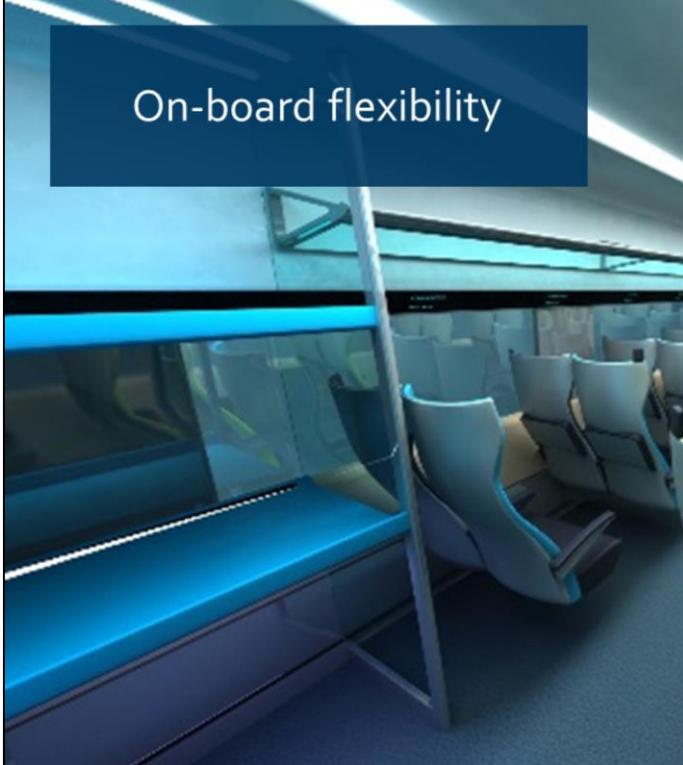
Provision of **useful information** will also be a key focus for HS2. As far as possible, it should be **timely and personalised** so that it addresses the **specific needs of individuals**. In **tunnels**, good information can help provide a **sense of place** and

reassure people that their journey is progressing to plan.

And perhaps **most importantly**, the design must be **inclusive**. **Everyone should feel welcome on HS2** as we find ways to **address the barriers that rail travel currently presents** to many individuals.

We **can't tell you** what our **customers will want and need in 2026**. So we **need your help** us to **discover** that. You will need to work with us in a **design process** that **presents ideas early**, allows **time for failure** while its **cheap** and delivers a **great end product for people to enjoy**.

On-board flexibility



The fleet is likely to be in operation until the **late 2050s**.

User **needs will change** during that time, **as will the use of the trains**.

Even on **day one**, the trains will need to be suited for journeys of anything from **45 minutes London to Birmingham** to over **3.5 hours to Scotland**.

And the design would ideally be adaptable to support changes in use during the week **or even during a single day**.

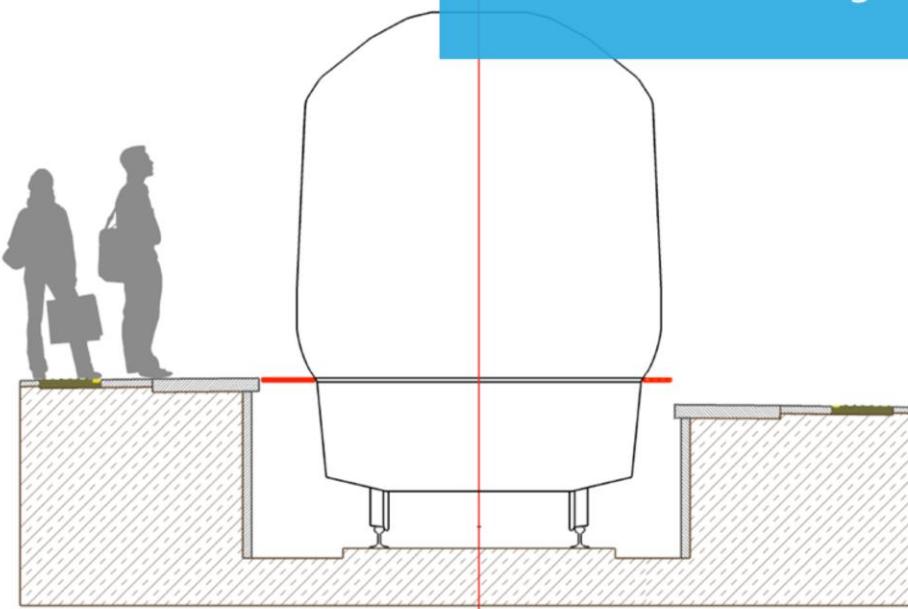
Spaces that can adapt to different **user needs** would contribute to delivering an **exceptional user-focused service**.

So how do we deliver spaces for **business travellers in the week** and for **families and groups of leisure travellers at weekends** or holidays?

How do we deliver the **right capacity for bulky luggage on a Sunday evening** without sacrificing **seats on Monday morning**?

These are the type of **challenges we need you to find solutions to**.

User-focused design outside

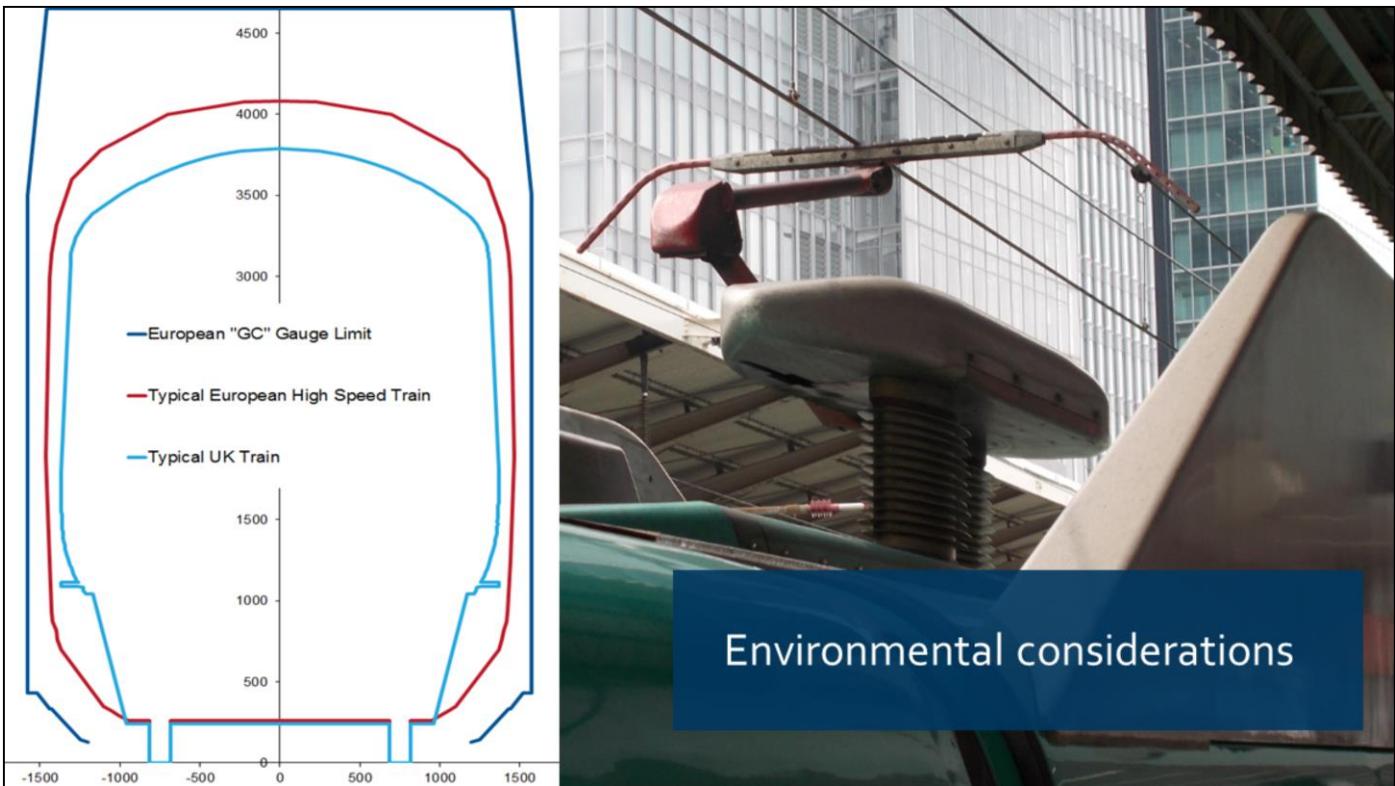


Another specific design challenge is the **platform-train interface**. Setting new standards in customer experience and inclusivity requires us to deliver a **step free route from street to seat**.

This will allow **everyone to take stress-free, spontaneous journeys** on HS2, without the need to **book ahead for assistance** or worry about travelling with **large luggage**. It'll also help out with some of our **shorter station dwell times**.

Getting this interface **perfect** is a **challenge**.

But **innovative** solutions can minimise and perhaps **eliminate steps and gaps**. We know it's feasible for **sensors and actuators** to position a train more **precisely at the platform edge** to ensure **anyone or anything with wheels** can board with little or no assistance, but we need to see this **put into practice, and proven** before we start our operation.



Here's my **last example** for you.

We've committed to **mitigating the noise emissions** of the railway as far as practicable.

Aerodynamic noise becomes a real problem **above 300km/h** and noise from **higher up on the train** doesn't tend to be contained by **noise barriers**.

Some **solutions exist elsewhere** in the world, like **the low-noise pantograph solution** you can see here from japan

But the **constrained gauge** of the conventional compatible trains makes **straightforward adoption of these measures difficult**, so alternatives need to be found.

There are **many areas of the design** where we are **convinced** that when the right expertise is brought together from across relevant industries, truly great solutions will be found.

People

Design for everyone to benefit and enjoy



Place

Design to create a sense of place



Time

Design to stand the test of time



I want to finish by talking a bit about **HS2's overarching Design Vision**.

It drives **design excellence** in every aspect of our project.

Delivering this vision is **essential** to achieving **HS2's social, economic and environmental potential**.

We've mentioned all these things already, **but by way of a conclusion...**

By designing for **people** the rolling stock will:

- Work **intuitively and effective** for everyone.

By designing for **place**:

- The rolling stock will be an **icon of British pride** – when it's seen **entering a station or speeding across the countryside**.
- And in itself, it will be an **enjoyable place to spend time**.

And we will know we are successful in **designing for time** when:

- The trains can be **adapted to future needs and emerging technologies**, considering that these trains will operate well **into the 2050s**.
- The experience demonstrates to customers how **their time has been valued**; and
- The time to design has been **productive and has delivered our aspirations**.

This is how we will be delivering the **world class trains that are critical to the success of HS2**.

You have heard there are **significant challenges, but also significant opportunities**.

We feel this is a unique moment in history, which requires suppliers that can

excel in overcoming the challenges, and capitalise on the opportunities.

Now I'm going to hand over to Andy Cross – who can **talk you through how you can become one of those suppliers.**

Rolling stock procurement

Andy Cross

Rolling Stock Procurement Director

HS2 Rolling Stock Industry Event

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You've heard from my colleagues about the scope and specification of what we're looking to buy and when we want it.

I'm here to talk about how we're going to buy it.

I'll cover...

- The commercial environment we have created.
- Our guiding principles for Rolling Stock Procurement.
- The processes we'll go through leading up to contract award, including pre-qualification, tender evaluation and award criteria.
- A little more detail about the packaging of the procurement.
- The timeline for the procurement.
- And how the contract will incentivise performance through the life of the contract.



Our philosophy: keep it simple, keep it fair

The Commercial Environment we have created at HS2 is driven by our philosophy – **keep it simple, keep it fair.**

We will be **Compliant with the Utilities Contracts Regulations 2016** and we will treat all applicants equally and without discrimination.

Our approach will be open, transparent and proportionate at all times.

Building on our progressive approach to market engagement to date, we're here today to share with you our proposed approach as early as possible.

Guided by these principles we will work to ensure we “**keep it simple and keep it fair**”.

Market engagement



As I've already mentioned, we've been carrying out an extensive market engagement programme, at an earlier stage and in a more comprehensive fashion than any previous project of this scale.

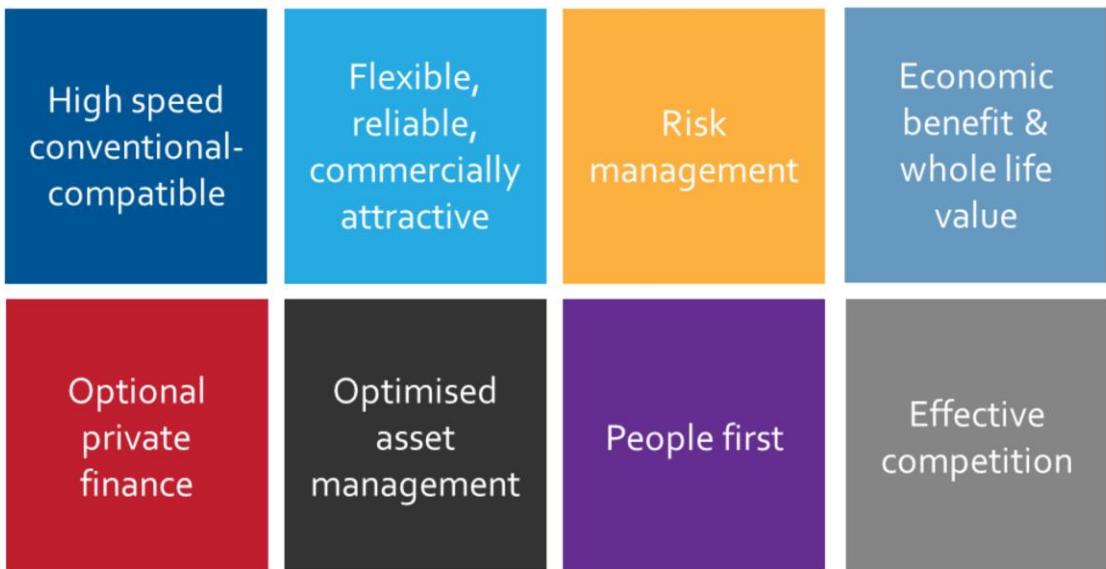
Our commercial and technical approach has been thoroughly market tested.

That's given us confidence that our approach is the right approach.

And it's important we thank all those who have contributed to this process.

So to those of you in the room today – thank you for your time and help.

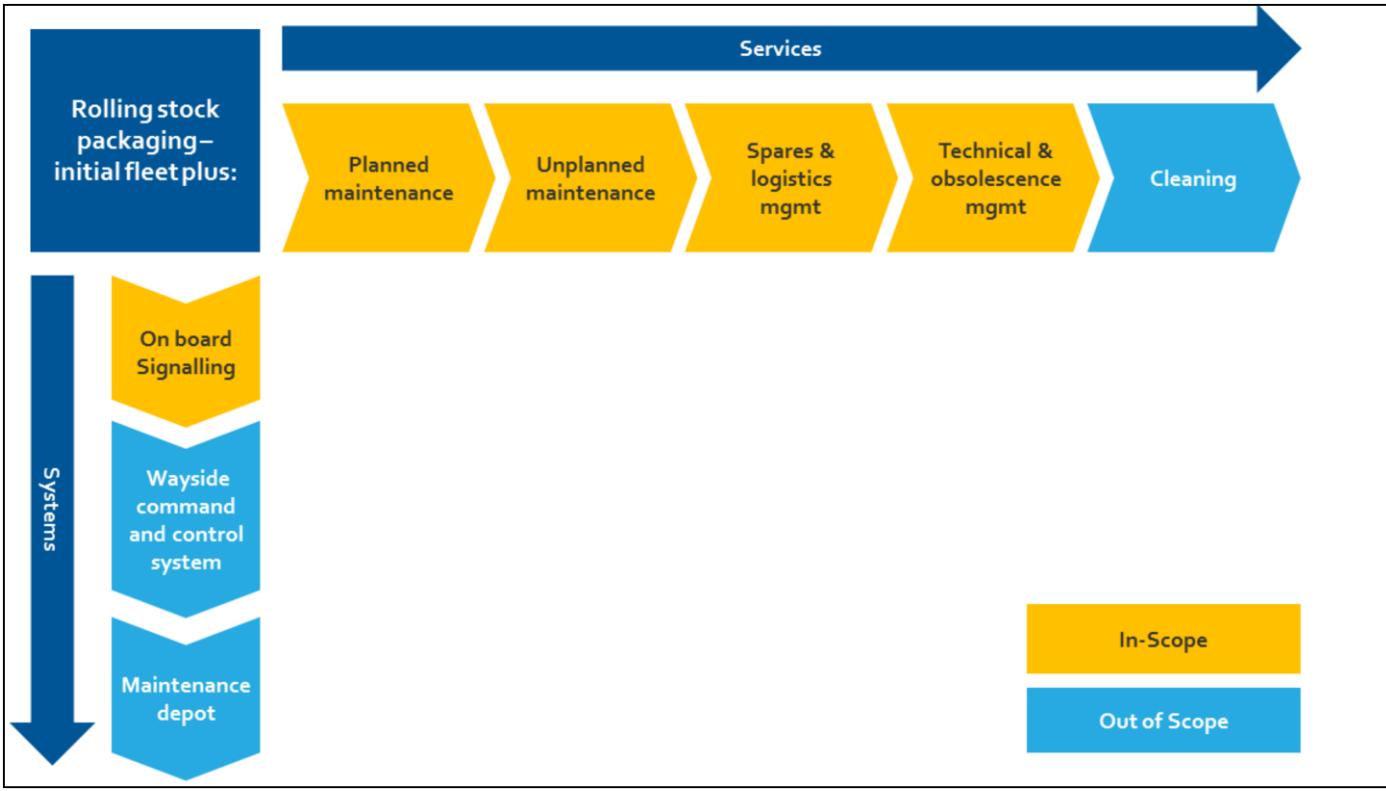
Procurement principles



I said I'd talk you through our procurement principles. These are closely linked to the strategic goals that Beth talked about earlier:

Here are the headlines..

- We will procure a new design of very high speed train capable of operating on both the conventional rail network and the new High Speed 2 network.
- To support an operational railway that is flexible, reliable and commercially attractive.
- Maintaining the flexibility to accommodate emerging technologies to improve the customer experience.
- We need to allocate risks appropriately between the parties.
- We will identify a partner who is financially robust and competent so we know they'll be there with us all the way to the end no matter what.
- To deliver a robust, successful procurement process which minimises risks to the programme and taxpayers.
- We must maximise the economic benefit of this investment we've been trusted with.
- Leaving the best possible legacy.
- And achieving the highest possible whole life value.
- We want to maintain the option for the introduction of private refinancing, but noting that no view has been taken on what timing or ownership strategy would be optimal.
- We will optimise the design and asset management regimes to deliver maximum reliability, minimum whole life costs and innovation to deliver whole life benefits.
- It must put the needs of our customers and our operational staff first to deliver an exemplary customer experience.
- And finally, our procurement must ensure an effective competition, while ensuring the decisions we make for Phase 1 don't limit or jeopardise Phase Two.



To go into a bit more detail on how we've packaged the additional systems and services into the contract...

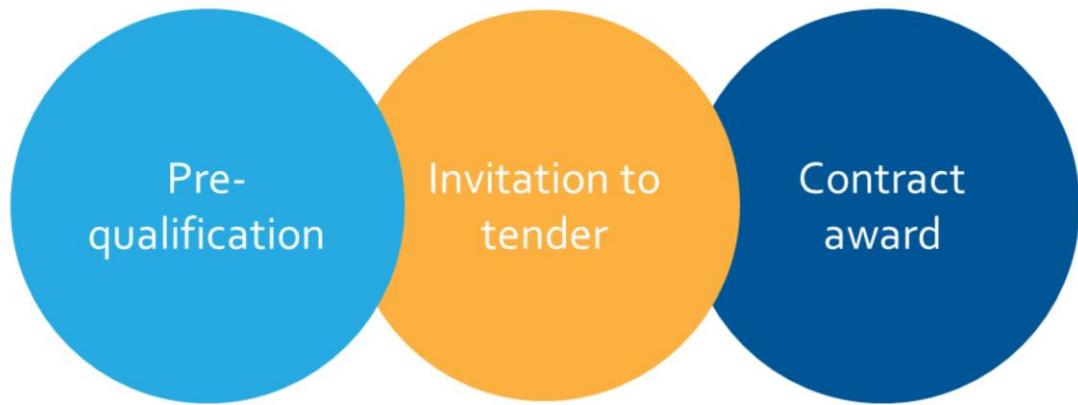
The initial order will include the core fleet and options for additional trains but will not include the Phase 2 fleets – these will be the subject of a future procurement.

The scope for the trains will include all on-board systems including signalling and ATO equipment, however the wayside signalling and control equipment for HS2 will be the subject of a separate Rail Systems procurement.

As Iain said, HS2 Ltd will build the Washwood Heath maintenance depot in close co-operation with the Rolling Stock manufacturer – the site is key to the construction of the main HS2 route and interfaces were too complex for alternative models. We will be looking for the manufacturer to fit out the Depot to suit their needs.

In terms of maintenance services, all is included with the exception of daily servicing and cleaning, delivery of which will be a decision for the Operator.

Procurement process



Coming to the procurement process, there will be three stages – Pre-qualification, Invitation to Tender and Contract Award.

Pre-qualification – will identify those applicants that have the capacity and capability to satisfy the requirements set out in the Contract Notice.

- This process will identify a shortlist of suitable applicants who will then be invited to tender and is designed to ensure that applicants demonstrate to us that they conduct their business ethically and responsibly (including with regard to health and safety, EDI, environmental matters, quality and risk management).
- In addition, we will test that applicants are of sound financial standing and are suitably experienced in the design, manufacture and maintenance of high speed passenger rolling stock.
- Responses will be assessed against a range of mandatory and discretionary pass/fail criteria and scored criteria. For the scored criteria a minimum acceptable threshold will be established for each individual question and for the overall score.
- We are looking for responses which clearly demonstrate Collaboration, Innovation and Contractual/Operational flexibility in their approach to Designing, Building and Maintaining high speed trains.
- Applicants that can provide evidence in these areas, in addition to the basic competence of building high speed trains, are more likely to be invited to tender, than those that do not.

- Our aim is to identify a shortlist of a minimum of 3 and a maximum of 5 bidders to ensure both a competitive bid and a manageable process.
- **Consortia applications are welcomed** – this may apply to entities who feel that they do not have the capacity or capability to address the size and scale of HS2 Ltd's requirement alone.
- So two or more entities may join together for the purposes of submitting an Expression of Interest. There's no requirement to form a single legal entity at the pre-qualification stage.
- If awarded the contract, each of the Parties to a Consortium shall be jointly and severally responsible for all obligations and liabilities under the Contract.

Invitation to Tender – will communicate the rolling stock requirements to the selected tenderers, setting out the information that the tenderers are required to submit with their proposals and the basis on which HS2 will evaluate responses and make its award decision.

We will design a comprehensive evaluation methodology which includes...

- An assessment of mandatory technical and commercial features that HS2 considers are fundamental to the successful delivery of the programme;
- An evaluation of submissions against our technical requirements;
- A deliverability assessment; and
- An assessment of whole life cost and benefits.

Only bids meeting the minimum requirements for each assessment stage will qualify for the next stage of evaluation.

In line with our commercial principles, a highly secure pre-qualification and tender process will be used to ensure integrity and fairness to all.

Finally Contract Award - The Award Criteria will be the most economically advantageous tender or **MEAT criteria**

Clear questions and scoring criteria will be set out in the ITT.

Procurement timeline



This is the timeline of that procurement process

We anticipate that the Contract Notice will be published in mid-April.

Based on that, 'Expressions of interest' are required at the end of June 2017, 10 weeks after publication of the Contract Notice.

HS2 will evaluate and determine a shortlist which will be announced in advance of ITT issue in April 2018.

We're allowing around six months to prepare and submit, with bids due in October 2018.

We'll be looking to provide a draft of our technical specification in advance of April next year to give you as long as possible to think about your responses.

HS2 will evaluate bids and determine who will be awarded the contract and is aiming to execute the Contracts by December 2019 in order to meet the design, construction and testing periods that I mentioned earlier, so that we can get going by 2026 as planned.

Material commercial principles



So the Pre-Qualification Pack (PQP) is the next step and it will set out the **Material Commercial Principles**.

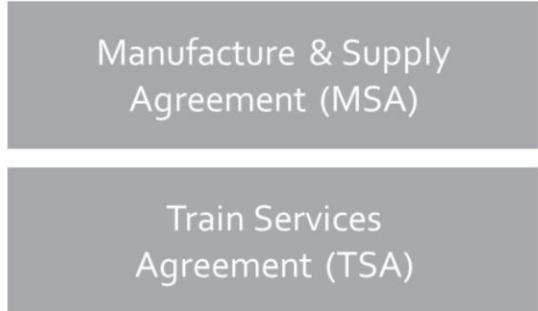
We need to create a contractual structure that will make the dream Chris Rayner outlined earlier become a reality, throughout the contract term.

To do this, we will be using a contract model that is:

1. Recognised by the market;
2. Places obligations and risks appropriately;
3. Retains the ability to flex to changing operational needs and supports future changes to operator, owner and finance structures; and which
4. Will ensure delivery of economic benefits and whole life value.

The HS2 contract model will take account of UK precedent transactions but will seek to avoid the perceived complexities and rigidities of the Thameslink and Intercity Express Project transactions, whilst retaining a number of the precedent risk transfer principles that are consistent with achieving the HS2 strategic goals.

Contract structure



The contract you'll be bidding for is split in two.

The contract structure chosen for the Train Manufacturing package is an MSA (Manufacture and Supply Agreement) and for the Train Maintenance package is a TSA (Train Service Agreement):

The structure recognises that there are responsibilities and risks for all the parties to the agreements:

- The Train Manufacturer & Maintainer;
- The Owner – which is HS2, but as I've mentioned already, we will retain the option to privately finance the rolling stock any time from contract award.
- and The Operator – which for now is also HS2 but the role will transfer to the West Coast Partnership franchisee at some future point.

Now, we've heard the word “innovation” a few times today.

So now I really want to get your attention on that subject.

And nothing gets attention like financial incentives.

We all understand the general requirement in business to innovate.

It makes commercial sense.

It provides new products to sell and export.

Which in turn provides advantages in the market place and new opportunities to grow.

But we recognise that we need to make it worthwhile for companies to innovate throughout the whole programme from design - to construction - to operation.

We need to make it worthwhile to think about whole life value, where benefits take years to be realised.

And we recognise that for smaller businesses, the up-front costs of bringing new ideas forward, testing them for viability, and commercialising them can be prohibitive.

That is why we are investigating mechanisms that allow us to share the proceeds of innovation through financial reward.

These could operate on a number of levels.

At the individual contract levels or across contracts, for instance.

And in a number of ways – such as benefit share mechanisms – we'll set out our proposals in the ITT.

But we want our contractors to benefit from bringing the innovation we need to deliver this project.

And deliver value for money for HS2 in the process.

HS2's strategic goals



I'll finish, as Beth started, on our strategic objectives.

As well as using these to guide our Procurement principles, we will continue use these goals and our scorecards, to monitor the performance of suppliers and to reward them accordingly.

And we need you to help us be a **Catalyst for growth** – that means considering how your tender can include small and medium sized businesses that may otherwise not get a chance to contribute to this great venture.

- We need you to help boost UK rail **Capacity and connectivity**
- To deliver **Value for money** to the UK taxpayer
- To set new standards in **Customer experience**
- To increase UK **Skills and employment**
- To demonstrate **World class standards** – for health, safety and wellbeing, as well as asset management and infrastructure maintenance
- And create an **Environmentally sustainable solution** that makes us a good neighbour for the communities we work and operate in

Thank you for your interest in us and this once-in-a-lifetime endeavour.

With that, I'll hand you back to Beth West

How to engage with HS2

Resources

Register

Questions

gov.uk/hs2

scc@hs2.org.uk

scc@hs2.org.uk

[Supplier Guide](#)

gov.uk/contracts-finder

[Supply Chain FAQs](#)

competefor.com

[Contract Opportunities Table](#)

If HS2 is to have a truly transformative impact, we need to create a **diverse supply chain** to help us achieve high levels of creativity and innovation.

So we're making engaging with HS2 simple - there are three things you can do today:

1. View our supply chain resources in the “business” section of our website
 - This will help you to fully understand the what, where, when and how of HS2.
 - We've made it easy for **smaller firms to identify** who is directly bidding for work on HS2 and who has been awarded contracts.
 - When we issue Invitations to Tender, we publish information on the companies that have been shortlisted. When we award a Tier 1 contract, we will publish the contact details for the supplier – so that other businesses can contact them directly to find out about opportunities in their supply chains.
2. Join our distribution list to hear about upcoming events
 - Simply email our **Supply Chain Communications** mailbox.
 - We also advertise all direct opportunities on **Contracts Finder**.
 - And our direct suppliers will be required to use **CompeteFor**, an electronic brokerage tool, **like a match.com** for the supply chain, to advertise all appropriate indirect opportunities. They are supporting us today and you will be able to find out more about this during the networking session.
3. Send us your questions by e-mailing our Supply Chain Team.

Thank you all for coming, my colleagues and I look forward to answering any questions you may have about today's event and our plans for rolling stock.