## UNLOCKING INNOVATION IN PUBLIC PROCUREMENT: A PRACTICAL GUIDE TO PRE-MARKET ENGAGEMENT

How to utilise Preliminary Market
Engagement to effectively drive innovation
through the procurement process





### **FOREWORD**



Rikesh Shah, Connected Place Catapult Head of Innovation Procurement Empowerment Centre (IPEC)

"The UK public sector spends over £380bn annually with private sector. The way these contracts are brought to market has the power to generate new ideas and ways of working, improving productivity, service outcomes, and policy goals like the net zero transition.

The Innovation Procurement Empowerment Centre aims to help central and local government teams adopt innovative procurement tools. Through best practices, training, and networking opportunities, it equips leaders to foster a culture of market innovation, supports practitioners in achieving mission-focused outcomes, and upskills a diverse supply chain - from start-ups to corporates - to deliver quicker, better, and more cost-effective outcomes.

Pre-market engagement is key to finding innovative solutions to problems. Partnering with Gardiner & Theobald, I hope this publication serves as a useful guide for colleagues, helping bring new products and services to market that lead to better outcomes."

"Engaging the market in advance of a procurement will help inform a client's thinking with that of the supply chain's. It is after all the supply chain, and in particular SMEs, that will deliver innovation, so why wouldn't you want to hear from them before you finalise the approach to packaging, contracting and risk in order to get the most out of the organisations charged with delivering your demand.

An informed client and supply chain will provide market intelligence on how best to realise the value benefits for your investment and engaging the market early will maximise the opportunity to realise your aims successfully.

The incoming Procurement Act is an opportunity to engage the supply chain early to drive innovative outcomes through the procurement process."



John Mead, Gardiner & Theobald LLP, Partner - Supply Chain Management



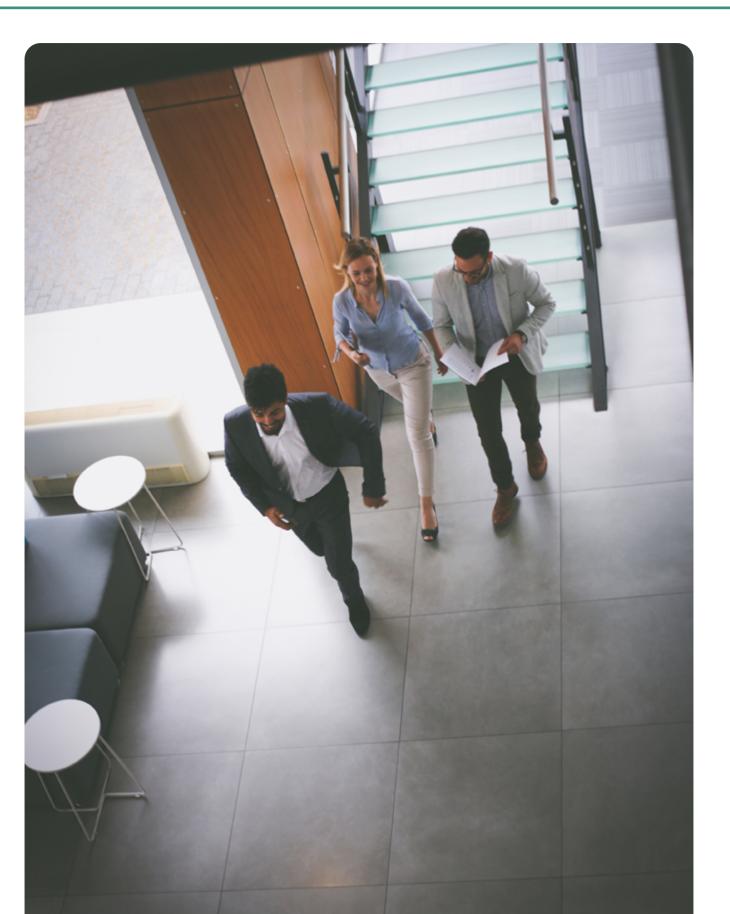
### INTRODUCTION

Public procurement is a cornerstone of the UK economy, with the public sector spending approximately £380 billion annually on goods, services, and works from the private sector. Notably, local governments account for £70 billion of this expenditure, representing a substantial proportion over the supply chain's capacity. Managing the supply chain to drive greater innovation through this spend is much needed.

Despite the significant potential of public procurement to drive strategic innovative outcomes, this mechanism remains underexploited as a catalyst for innovation. The UK Government's Innovation Strategy highlights a "low appetite for risk and experimentation" in public procurement, attributed to the prevailing culture, expertise, and incentive structure within the public sector.

Consequently, UK public procurement is often characterised by procedures that over-specify requirements, leaving little room for innovative solutions, and by selection criteria focused primarily on the commercial offering over the technical.

As technology continues to advance at a rapid pace, it is vital that public authorities are aware of these advancements to deliver effective innovative outcomes for the public. Barriers to entry are continually being lowered as these technological advancements are diversifying the supply chain, offering a greater opportunity to Small, Medium size Enterprises (SMEs) to commercialise their service offerings. Public authorities must embrace this diversification of the supplier base; Preliminary Market Engagement emergesas a key tenet to identify these suppliers to foster innovative outcomes through the procurement process.



Furthermore, the new Labour Government manifesto emphasises Mission Focused Procurements that aim to support innovation, which underscores the need for a shift in procurement practices. Their policy also extends to reform procurement rules to give SMEs greater access to public sector contracts.

This document serves to illuminate
Preliminary Market Engagement as an
enabler to support in such mandates whilst
acknowledging the incoming Procurement
Act that aims to simplify the Procurement
Process and increase transparency.

### The aims of this document are threefold:

- 1. to demonstrate the importance of becoming an Informed Client, capable of understanding and leveraging market and supply dynamics to drive more innovative outcomes.
- 2. showcase how Preliminary Market Engagement can diversify the public sector's supplier base,
- 3. and reveal how Preliminary Market Engagement can capture innovative solutions the market is developing to achieve better, sustainable outcomes for the public, Unlocking Innovation 4 in Public Procurement

### PROGUREMENT ACT 2023

The Cabinet Office have noted that the incoming Procurement Act will provide procurement teams across the public sector greater commercial freedom and flexibility, enabling them to design procurement processes that better meet their specific needs and foster innovation.

The Act aims to make public procurement more accessible to small businesses and social enterprises, ensuring a more competitive and diverse marketplace is accessible. Below are the key benefits of the Act\* as described by the Crown Commercial Office¹ which offer an avenue to facilitate greater innovation.

### **Key Benefits of the Act to facilitate greater Innovation:**



Cutting red tape and supporting innovation



Improving transparency
by creating a fully
open and transparent
system with everyone
having access to public
procurement data



Simplifying the process of working with the public sector, supporting more SMEs to bid for contracts

Figure 1: Benefits of Procurement Act 2023 to facilitate Innovation

A key facet of the new Act is the emphasis on Preliminary Market Engagement which will act as the initial conduit to the supply market. Whilst the provisions in the Public Contracts Regulations 2015 are similar to the 2023 Act, a key difference is in the obligations of the Pre-Procurement notices. These Pre-Procurement notices are introduced to enhance transparency to the supply market of an upcoming procurement.

\*The Procurement Act has been pushed back to Feb 2025, and the implementation of the legislation may be subject to change

Notice	Description	Mandatory?
Pipeline Notice	A notice providing a view of all upcoming procurements over £2m for the next 18 months under the authority.	Yes – if the Procurement body expects to exceed a total spend of £100m annually.
Preliminary Market Engagement	A notice stating that a contracting authority intends to initiate preliminary market discussions.	Yes, if the Contracting Authority has undertaken, or intends to undertake any Market Engagement. An explanation needs to be included within the Tender Notice if a Pre-Market Engagement Notice has not been published.
Planned Procurement Notice	A notice announcing the contracting authority's plan to release a tender notice.	No, however it is optional and best practice, and qualifying Planned Procurement Notices can reduce tender timescales (if published at least 40 days but not more than 12 months before the day on which the tender notice is published)



<sup>1</sup> How to prepare for the Procurement Act 2023 - Procurement Essentials - CCS (crowncommercial.gov.uk)

## BECOMING AN INFORMED CLIENT OF CHOICE

An Informed Client within the procurement realm is enabled by having an internal capability that is responsible for articulating a problem statement to the external supply market and ensuring the successful delivery of outcomes.

This involves ensuring the Procurement function is fully appraised and informed of supply market dynamics, the market players, and the market's capacity and capability to effectively deliver the procurement to maximise value to the customer. This includes understanding advances in technologies, products and services while also seeking new innovative solutions.

There are several enablers that contribute to a Public Sector Procurement function becoming an Informed Client, which are noted in Figure 2. Key activities of these enablers are also identified, providing a suite of tools that clients can use to position themselves as an Informed Client.



Figure 2: Becoming an Informed Client

## NAVIGATING PRELIMINARY MARKET ENGAGEMENT

The "What", "Why" and "How" of delivering
Preliminary Market Engagement

### What is Preliminary Market Engagement?

"Preliminary Market Engagement under the Procurement Act 2023 takes place before the publication of a Tender or Transparency Notice and helps contracting authorities and the market prepare for the procurement. This engagement is of particular importance under the Act, where contracting authorities have significant flexibility to design and tailor their competitive procurement procedures. However, this engagement must be conducted in a way that does not give a supplier unfair advantage or distort competition."

Procurement Act 2023 – Guidance: Preliminary Market Engagement

Preliminary Market Engagement (PME) best practice is now supported in legislation across government. We broadly split PME into two types, 'Strategic' and 'Tactical'.

Strategic PME does not pertain to a particular procurement activity, rather it

aims to promote the client as an attractive entity to do business with. The Strategic PME objectives noted below will warm up supply chains and cast the net across the market to help to identify suppliers that will provide insight and knowledge for the delivery of innovative solutions.

### **Strategic PME Objectives:**

- Ensure the supply chain is both informed of the buying entity's strategic outcomes, including timelines and value requirements. Communicate the Mission, Vision and Values of the buying entity to the supply chain.
- Communicate that the client values innovation and encourages cutting-edge solutions rather than focussing on traditional approaches.
- Demonstrate to the market that the buying entity is seeking to be informed by the experts from the entire supplier ecosystem, regardless of whether a contractual relationship already exists.

- Incentivise innovation to leverage mutual business advantages for both buyer and supplier through transparency, engagement and lowering the barriers to entry.
- Articulate how the buying entity does business and why working with the client should be attractive to the supply chain.
- Gauge overall supply chain appetite and readiness to deliver their future pipeline of work.
- Facilitate opening up supply chain opportunities to new entrants, Small Medium Enterprises (SMEs) and Voluntary Community and Social Enterprise (VCSEs) to build a diverse supply chain and lower barriers to entry.
- Ensure the supply chain knows when, where and how to access the opportunity.



### Case Study: NHS New Hospital Programme (NHP)

The NHP is a marquee infrastructure and healthcare programme for the UK. NHP undertook extensive Strategic PME to signal the opportunity to the market and maintain supply chain appetite. NHP have successfully promoted themselves as an informed client to drive Tactical PME through the following mechanisms:

- 150+ market engagement events
- Production of a Supplier Guide downloaded more than 13,200 times
- Sharing of a Commercial Pipeline downloaded more than 15,000 times
- More than 18,210 enquires through their mailbox
- 1,322 suppliers registered to participate in Tactical Market Engagement, of which 78% were SMEs.

Tactical PME is concerned with the engagement for a particular procurement, either at a Contract or Framework level. It aims to gain supply chain feedback to better shape a Procurement Strategy and better define the buying entity's requirements whilst alerting suppliers of an emerging opportunity.

It should be noted that Tactical PME should be proportionate to the value, complexity or the technical solutions that are being sought from the market. The Tactical PME objectives noted below will engage supply chains against a specific requirement to facilitate an innovative solution being adopted.

### **Tactical PME Objectives:**

- Ensure the supply chain has the awareness and knowledge of the specific requirement.
- Sufficiently communicate the requirement to the supply chain to gain feedback on the approach.
- Develop an understanding of the 'art of the possible' and be open-minded. Allow the supply chain to challenge the buyers on approach and requirements with alternative solutions.
- Develop strong competition for the requirement to ensure value for money and minimise the risk of having to re-tender.

- Proactively assess supplier appetite, capability and capacity from a diverse range of suppliers from the broadest market sample possible.
- Identify areas of risk / opportunity which may require Market Shaping in advance of procurement to drive innovation.
- Refine requirements as needed to identify new potential solutions and maximise supply chain appetite.
- Ensure 'no surprises' during the Procurement phase by leaving sufficient time in the procurement timetable to test and de-risk innovative ideas before formally going to tender.



## WHY USE PRELIMINARY MARKET ENGAGEMENT TO DRIVE INNOVATION?

PME is a powerful tool for fostering innovation during procurement. By engaging with the market early in the procurement process, public sector buyers can unlock a wealth of creative solutions and drive value for money. PME can help procurement officials understand the market, refine their requirements, and ensure better outcomes.

The table to the right demonstrates why using PME appropriately will support in delivering innovative outcomes for public sector buyers.



Using PME as a lever to drive Innovation	Benefits
Identifying Unmet Needs	<ul> <li>Discovering hidden potential: By engaging with suppliers, buyers can identify unmet needs and challenges that they may not have considered.</li> <li>Stimulating new ideas: Suppliers can offer fresh perspectives and insights into potential solutions.</li> </ul>
Accessing New Technologies	<ul> <li>Early access to innovation: PME allows buyers to discover cutting-edge technologies and solutions that are not yet widely available. PME also encourages investment in R&amp;D as buyers share their pipelines of work.</li> <li>Exploring emerging markets: Engaging with suppliers can help identify new and emerging markets with innovative, disruptive offerings.</li> </ul>
Building a 'Client of Choice' reputation	Trust and collaboration: PME helps build trust and collaboration between buyers and suppliers to enable innovation.
Accessing New Markets and Sectors	<ul> <li>Lessons Learnt: Gaining Learnings from Experience from other sectors and markets that may be applicable. Engaging suppliers from various industries can introduce innovative practices and technologies not previously considered in your sector. Learning from innovative practices in other industries and adapting them to your needs.</li> <li>Diversification: Diversification of supplier base that will result in a wider pool of innovation sources.</li> </ul>
Informed Decision Making	<ul> <li>Procurement Decisions: PME will provide greater insight in making strategic procurement decisions, ensuring 'no surprises' during the tender stage.</li> <li>Tailored Approach: Adapt procurement processes based on feedback to better meet objectives.</li> </ul>
Risk Mitigation	Risk Identification: PME will help identify and mitigate risk ahead of the formal procurement process to encourage innovation.
Fostering a Culture of Innovation early	<ul> <li>Continuous Improvement: PME fosters an environment where suppliers continuously strive to innovate. A culture of future proofing and thinking about solutions in a modular manner.</li> <li>Supporting Creative Thinking: Engaging with new suppliers who challenge the status quo and bring creative solutions.</li> </ul>
Collaboration	<ul> <li>Cross-Sector Collaboration: Engaging with peer organisations will provide lessons learnt on how best buyers have developed their approaches to accessing innovation.</li> <li>Diversity of thought: Gaining a diversity of thought to create new value.</li> </ul>

## HOW TO USE PRELIMINARY MARKET ENGAGEMENT AND PROCUREMENT TO DRIVE INNOVATION

Undertaking PME can often be seen as a risk straddling the tightrope of public sector regulation. However, new mandates from the Procurement Act 2023 will facilitate greater transparency through the use of notices offering greater legislative support to deliver PME. The use of these notices can increase the visibility of the emerging opportunity to suppliers, however more creative activities exist to drive innovation through Procurement. This section will provide an overview of how best to engage the market to foster innovation using Procurement as the vehicle. It should be noted that buyers should consider the appropriate time to issue a notice and the moment a buyer seeks to engage about a specific procurement, a Preliminary Market Engagement Notice should be released.

### Strategic PME

Strategic PME is not tied to a specific procurement activity; rather, it focuses on positioning the buying entity as an informed client while attracting the right supply chain to meet its future needs. Strategic PME should be done either at central level across an entire procurement function, a portfolio level across several discrete categories, or at a category level across several discrete contracts.

### **Strategic PME Activities**

Strategic PME is concerned with marketing the buying entity to the supply chain. In order to achieve market penetration and raise awareness of the buying entity amongst target supply chains, the following activities can be utilised:

### Cast the Net far and wide

Create a central registration form with supplier details and their area of expertise, perhaps through your Procurement Portal, increasing your supplier pool.

### Ensure Visbillity of Opportunities

Publish a Pipeline on a regular basis using a Pipeline PIN. Forward visibility will help suppliers plan for upcoming procurements.

### Promote Collaboration

Engage Industry
Bodies (Trade and
Industry Bodies,
Catapults, CrossGovt Agencies) to
build alliances.
Drive upcoming
Procurement
Pipelines through
these channels

### Market Yourself

Develop a Market
Presence through
launching events,
speak at Conferences,
and utilising Social
Media to promote
opportunities

### Make yourself easy to do business with

Produce a Supplier
Guide, demystifying
procurement
processes and
notifying the supply
chainchain on how
best to engage with
you, to develop a
diverse supply chain.

### Ensure Regular Communication

Share a Supply
Chain Bulletin,
notifying suppliers
of upcoming
procurements
and the latest
developments.

### Benchmark and Improve

Gain Supply Chain feedback using a Client of Choice survey, baselining how easy you are to do business with. Act upon this feedback.

### Leverage Existing suppliers

Develop a Supplier
Relationship
Management
approach to drive
innovation for in-flight
contracts. Gain
feedback on your
Strategic approach
to Procurement in
facilitating Innovation.

Effective Strategic PME will ensure greater supply chain appetite and capability for the Procurements of discrete requirements. The supply chain will be engaged in the buyer's ambition and notified of opportunities well in advance of the formal tender process allowing them to fully gear up and respond to the opportunity.

This approach will also allow the buyer to gauge supplier readiness to deliver specific requirements in an innovative manner and develop a channel of communication to facilitate supplier development up to the point at which the buyer enters a regulated procurement.

### **Tactical PME**

Innovative Outcomes

Tactical PME focuses on engagement specific to a particular procurement, whether at a contract or framework level. Undertaking effective Tactical PME will ensure the desired outcomes of the Procurement are achieved. This section will demonstrate how best to promote the procurement and utilise specific mechanisms to inform your procurement strategy. Importantly, these mechanisms also allow buyers to identify a diverse range of suppliers that often will be the gatekeepers of innovative solutions, whilst maintaining fairness and transparency.

### A Proportionate Approach to Tactical PME

A proportionate approach to PME should be taken based upon the value and the innovative outcomes the buying entity is looking to procure. Figure 3 can be used to make an assessment on whether the value of the procurement vs. the drive for an innovative outcome might substantiate PME.

The correct combination of PME mechanisms is critical in ensuring the effort and resource required is proportionate to the Procurement to deliver the desired outcomes. A suite of mechanisms are highlighted to the right which can be considered.

### High mandate for Innovation, low Value

Best to be assessed on a case-by-case basis. Analysis on Innovation/ Cost basis. Choose a suitable combination of PME mechanisms

### Low mandate for Innovation, low Value

Very low need for extensive PME, the benefit realised is highly unlikely to be outweighed by PME effort

### High mandate for Innovation, high Value

Very likely to realise substantial benefits which outweigh the time and effort in PME

### or High mandate for alue Innovation, high Value

Best to be assessed on a case-by-case basis. Analysis on Innovation/ Cost basis. Choose a suitable combination of PME mechanisms

### Value

Figure 3 PME Assessment Matrix for Innovative Outcomes

### **Notices**

Mandatory Requirement to publish a Notice through the Find a Tender service.

### **Industry Event**

Showcase upcoming opportunity to prospective suppliers. Chance to share scope and requirements and for suppliers to ask questions.

### Market Sounding Questionnaire

Survey to suppliers
(identified either via PINs
or impartial Industry
Body) to determine
appetite, capacity of
delivering innovative
solutions.

### 1-2-1 Supplier Sessions

Supplier meetings to gain greater clarity of their innovative offerings and how they would deliver the requirement in detail.

### Engage Academia and Industry Bodies

Engage wider bodies to explore the most innovative solutions. Utilise Industry Bodies to cascade Notices and facilitate wider engagement with their members.

### Innovation Collaboration Hubs

Establish Roundtables and Working Groups with the supply chain and peer-organisations to experiment with new ideas, technologies and processes.

### Business Networks and Local Enterprise Partnerships

Leverage Business
Chambers of Commerce
and Local Enterprise
Partnerships and share
Notices to their members.

### Utilise Wider Opportunity Platforms

Brokerage platforms such a CompeteFor enable SMEs to register interest in contract opportunities linked to public sector buying organisations.

### Social Media

Leverage your professional networks to share and cascade the opportunity far and wide.

### **PME Plan**

Following the assessment of how much PME is required, a PME plan should be produced including the key procurement dates, the PME mechanisms identified in the assessment, the problem statement that requires market feedback (including a concept / detailed scope), the identified target market and the routes to engage that market.

### Delivering the Tactical Preliminary Market Engagement

Supplier Facing Guidance	Internal Facing Guidance
Ensure specifications shared with suppliers are clear and outcome-focused	Produce a logic statement of how the suppliers that will be engaged have been selected for audit purposes
Ensure the supply chain is aware that the PME stage does not form part of a formal procurement process at this stage	Brief all internal stakeholders involved in the PME of the 'Lines to Take' and what should not be disclosed
Ensure all Face-to-Face PME follows a structured agenda so that it can be replicated with other suppliers	Ensure all engagement with suppliers is recorded and minutes are produced wherever needed
Ensure all suppliers have access to the same information throughout the PME phase	Capture lessons learnt for future Market Engagement processes
Maintain consistent communication with the supply chain throughout the PME. Any change or deviation from the published procurement strategy should be communicated with sufficient time for the market to adjust. Failing to do so will erode goodwill and the buying authority's reputation.	Ensure colleagues are informed of the conversations had to date with the suppliers in question
Be mindful of Intellectual Property when engaging with suppliers	Ensure all internal stakeholders are briefed of the upcoming Market Engagement
Provide feedback to suppliers to keep them engaged	Produce documentation following the completion of each Tactical PME mechanism
Bank any suppliers that have approached you outside of any PME, as this may prove useful during the PME.	Ensure all internal stakeholders are aware of the procurement regulations and how they should (and shouldn't!) engage suppliers.

### Using PME feedback to shape the Procurement

The feedback from the supply chain from the PME will inform how best to approach the procurement. The new 2023 Procurement Act provides greater flexibility within the tender phase which buying authorities can leverage. The PME will provide the buying authority with a view of the innovative solutions available to them, alongside the appetite, capacity and capability of the supply chain. This will determine how best the buying authority should procure. The IPEC's Procuring Innovation Playbook outlines this in greater detail, however examples of how best to drive innovation through the new Procurement Act 2023 are outlined below:

### Competitive Flexible Procedure

Eliminates existing barriers to acquiring new and improved solutions, allowing contracting authorities the flexibility to find the optimal match between their specific needs and the best available market offerings. This can include R&D Prototyping with interim assessments and funding.

### Dynamic Markets (formerly DPS)

A dynamic market under the Procurement Act 2023 is a list of qualified suppliers. Dynamic markets are dynamic insofar as they must remain open to new suppliers to join at any time. They can drive innovation through procurement by creating a more flexible and responsive purchasing environment with continuous open market entry.

### **Innovation Accelerators**

An innovation accelerator is a programme, initiative, or environment designed to fast-track the development and implementation of new ideas, products, or technologies.

### Co-Innovation Partnerships

Utilise long-term partnerships with the private sector based on the mutual exchange of knowledge and expertise.

# Unlocking Innovation in Public Procureme **CASE STUDIES**

### **HS2 LTD ROLLING STOCK**

High Speed 2 Ltd (HS2) embarked on an ambitious project to procure over 50 high-speed trains capable of operating at 360 km/h (225 mph). These trains were not only required to meet the stringent journey time targets of the high-speed line but also designed to operate on the UK's restrictive loading gauge, allowing them to serve towns and cities beyond the high-speed rail network. However, HS2's environmental and technical targets made this a challenging procurement as it required enormous investment and innovation from the supply market to deliver against efficiency and sustainability.

Industry-leading requirements on capacity, noise reduction, energy efficiency and reliability also necessitated a period of market engagement to "sell" the opportunity, build an appropriate commercial model, refine the technical requirements and influence suppliers' product development curves to shape the market to HS2.

The team began this in 2014, three years before procurement start date, to develop the approach in collaboration with industry, whilst maintaining the highest standards of integrity, ethical behaviours and equal treatment of all potential suppliers globally.

The majority of the world's proven high-speed trains in operation derive from only a handful of product platforms and suppliers, so the team had to build interest in a complex, concentrated market, in order to secure production capacity in what could be perceived as a high-risk project. There was an opportunity for 'blank canvas' thinking, incorporating the best in global rail technology and whole-system design (given it is rare for the railway infrastructure and train fleet to be designed in tandem), based around an exemplary passenger service.



Preliminary Market Engagement focused on refining the output-based specification, ensuring it was challenging but achievable. This helped align suppliers' product development roadmaps with HS2's long-term goals for energy efficiency, noise reduction, and carbon minimisation. The engagement allowed HS2 to drive innovation in the following area:

- Sustainability: HS2 trains were the first in the world to achieve the British Standards Institute's PAS 2080 global accreditation for carbon management. During the design process, HS2 worked with suppliers to optimise the weight of the train's car body, wheelsets, and cabling, and to maximise the use of recycled and recyclable materials. This made the trains less carbon-intensive than any other high-speed train in design, production, or operation today.
- Energy efficiency: HS2 trains benefited from extensive efforts to reduce energy consumption. This included advancements in aerodynamics, such as the train's dynamically efficient underside, and highly efficient traction systems and electric motors, all designed to reduce energy demand.
- Noise reduction: Hitachi Rail's pioneering low-noise pantograph, originally developed in Japan, was incorporated into the design, making HS2 trains some of the quietest high-speed trains in the world.
- Increased capacity: HS2 trains were designed to be 15% lighter and offer 30% more seating capacity than comparable high-speed trains in Europe, such as the Italian ETR1000.



### TFL AVAS SYSTEM

Transport for London (TfL) is committed to achieving the Vision Zero goal of zero fatalities or serious injuries on London's roads by 2041. A key element of this strategy is ensuring that no one is killed on or by a bus by 2030. The Bus Safety Standard (BSS) launched in 2018 mandates the use of safer buses and technologies to protect vulnerable road users (VRUs) such as pedestrians, cyclists, and those with disabilities.

One of the key safety technologies included in the BSS is the Acoustic Vehicle Alerting System (AVAS). AVAS ensures that quiet-running buses, such as electric, hybrid, and hydrogen buses, are audible to VRUs in busy city environments. Since 2019, TfL has required AVAS on all new buses entering service in London. In line with global safety standards, the AVAS implementation in London has exceeded the requirements of the United Nations Economic Commission of Europe (UNECE) Regulation 138, which mandates AVAS for electric and hybrid vehicles.

However, the existing fleet of quiet-running buses, manufactured before 2019, lacked AVAS technology. To further the Vision Zero targets, TfL identified the need to retrofit AVAS systems onto these buses, ensuring comprehensive coverage across its fleet.

TfL initiated a Pre Market Engagement process to identify organisations capable of developing or providing AVAS retrofit systems. This project sought to explore market readiness and foster innovation in AVAS solutions that meet or exceed TfL's performance specifications. A key focus was on responsive AVAS systems that adjust the volume based on bus location, minimising noise pollution while maintaining safety.



TfL used a Market Sounding Questionnaire (MSQ) to drive the engagement process. This approach facilitated collaboration with potential suppliers early in the procurement cycle, enabling TfL to identify innovative solutions while ensuring compliance with regulatory requirements. Suppliers were required to provide a comprehensive set of documents, including technical specifications, test methodologies, and certifications. This enabled TfL to evaluate the readiness of each potential AVAS system to meet safety and technical requirements. Suppliers were asked to prototype the solution and work collaboratively with the end-users (VRUs) to ensure the solution was appropriate. Since 2019 AVAS has been required on all new buses entering the fleet as part of the Bus Safety Standard. There are currently 1,109 buses fitted with AVAS (November 2023 figures) through the Bus Safety Standard.

TfL's world-leading Bus Safety Programme, which AVAS is a key component of, is already delivering the greatest reduction in the number of people killed or seriously injured per journey of any road-based mode of transport. The Bus Safety Standard, which sets out the standards required for new buses in the capital's fleet, is at the heart of this programme and is leading the international bus industry in requiring physical and technological safety improvements. TfL has now reached the milestone of more than 1,000 buses in London's fleet meeting the standard.

Good progress has been made as the number of people killed in collisions involving London buses in 2022 reduced by 65 per cent against TfL's 2005-09 baseline, compared to an overall reduction across all transport modes on London's roads of 52 per cent. The number of people seriously injured has reduced by 54 per cent, compared to an overall reduction across all transport modes on London's roads of 38 per cent.





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