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| **Invitation to Tender****For****Primary School Student Engagement Programme****Tender Ref: HS2/626****Statement of Requirements** |
| 01 August 2016 |

1. **Background information**
	1. [High Speed Two (HS2)](http://www.gov.uk/hs2) is the Government’s proposal for a new, high speed, north-south railway. The proposal is being taken forward in two phases: Phase One will connect London with Birmingham and the West Midlands, and Phase Two will extend the route to Manchester, Leeds and beyond.
	2. HS2 Ltd is the non-departmental public body responsible for developing and promoting this proposal.
	3. The Education Programme, active since 2013, is an integral element of HS2 Ltd’s broader approach to creating skills and employment opportunities. The Education Programme aims to educate and inform children, young adults, and their families about HS2 and the employment and training opportunities it will create and support.
	4. The HS2 Ltd Education Programme is a national programme which nevertheless has due consideration of specific local issues and needs along the route. It prioritises schools closest to the line of route, stations and depots, with a focus on schools that are in more deprived areas and score below average for educational attainment. It has so far delivered more than 35,000 hours of educational engagement to 30,000 students during the course of over 170 events.
	5. To date, the programme has engaged with secondary schools close to the route through a variety of activities – for example, careers education workshops, STEM Inspiration Days and the provision of curriculum resources. HS2 volunteers, known as Education Ambassadors, support the activities wherever possible.
	6. In 2015, HS2 launched [HS2 World on Plotr](http://www.plotr.co.uk/hs2) which presents the diverse range of careers available in connection with HS2. This enabled our programme to reach an audience beyond those students engaged by the abovementioned activities.
	7. A more detailed overview of our current programme is available as a [government information paper](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/509183/G7_-_Education_Programme_v1.1.pdf). Information tailored for teachers is presented at [www.plotr.co.uk/hs2forteachers](http://www.plotr.co.uk/hs2forteachers).
	8. Given the levels of interest in the project nationwide, HS2 is particularly interested in developing a more scalable programme which can be accessed by students wherever they are located in the country. This is a key driver to create an online resource which is central to the planned primary school engagement programme.
2. **The need to engage primary school students**
	1. As recognised in the recently published [Transport and Infrastructure Skills Strategy](https://www.gov.uk/government/publications/transport-infrastructure-skills-strategy-building-sustainable-skills) there is an anticipated significant shortfall in skills of value to the Transport and Infrastructure sectors.
	2. To address this and plan for the long term, it is imperative that HS2 Ltd begins to reach out to primary school students, in particular those living and going to school close to the proposed line of route. This fits with Hs2 Ltd’s Education Programme aims of raising awareness of Science, Technology, Engineering and Maths (STEM), encouraging under-represented groups to join the industry and promote relevant career pathways. As part of our efforts to deliver the above, HS2 Ltd wish procure a supplier to create an online learning platform which will give access to the programme to a wide range of schools. The online platform will be supported by a series of short events delivered to schools along the line of route.
	3. The main objective of the programme will be for students in Key Stage 2 (aged 7-10) to develop an early understanding of the skills requirements and career opportunities connected with the HS2 project. HS2 Ltd currently have a contract for a similar programme for students in Key stage 3 (aged 11-14).
	4. Engagement with this earlier phase is important for a number of reasons. Firstly, more primary schools are affected by HS2’s construction than secondary schools. Having a clear programme aimed at primary schools makes it easier to engage productively with these. Secondly, students in this age range are a critical part of the talent pipeline who, given the right inspiration, can join the HS2 workforce well before completion of Phase 2 in 2033. Lastly, research by Network Rail ([Girls’ Perceptions of Engineering, 2015](https://www.networkrail.co.uk/news/2015/oct/new-approach-girls-engineering/)) suggests that interventions at the primary age can help to remove barriers. Girls in particular respond very positively when the social value of engineering is highlighted.
	5. The HS2 Ltd Education team have developed the basic premise for the activity which, using an online resource, will challenge the students to design the high speed railway of the future: considering for example both the inside of the train (i.e. the passenger experience), the outside of the train and potentially the wider railway itself and the community it exists within. The content of the activity should connect with and enhance the teaching of the primary curriculum across a range of subjects, in particular STEAM (Science, Technology, Engineering, Arts and Maths). The activity should exist within a context which explains and engages students with the concept of high speed rail and helps them to understand the planned HS2 railway.
	6. HS2 Ltd’s Education Ambassadors shall support the delivery of the programme where available
	7. It is proposed that the students’ feedback will be used in the development of the HS2 Service Prospectus. This sets out from the primary perspective of people, the service vision for travel on and use of HS2.
3. **Supplier profile**
	1. The successful supplier can be expected to bring a broad range of experience to the delivery of the Programme.
	* An understanding of school and teacher engagement and the specialist requirements of connecting with the existing curriculum;
	* Expertise in active engagement of students and delivery of multiple events throughout the academic year at the national level;
	* Ability to develop, deliver, maintain and continuously improve an online resource, based on an existing open technology platform which can engage students aged 7-10; and
	* Experience of delivering similar programmes, at the national level, for a large employer.

We welcome a collaborative approach and fully expect sub-contracted arrangements or joint ventures in order to bring together a team with the right mix of educational, event-related and technological expertise to develop a successful Programme.

1. **Specification overview**
	1. The following specification provides more details on the context in which the primary school student engagement programme exists within and the outcomes that HS2 Ltd requires. For the purposes of this specification:
* The Resource is the online resource.
* The Event is the delivery format in the school itself.
* The Programme is the combination of the above two, along with reporting, evaluation and continued maintenance and promotion.

* 1. The following diagram shows in visual form how the Programme is formed around the Resource.

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* 1. **Development and hosting of the online Resource (by December 2016)**
* The Supplier will develop an online Resource which encourages and enables Key Stage 2 (age 7-10) primary school students to conceptualise, design, engineer and create the train or railway of the future in a virtual environment.
* The Resource should be based on an existing open technology platform which is available to all schools (i.e. not limited to specific devices), and should continue to engage the students beyond the launch Event, with a competitive element, for example a scoring system or leader board which keeps them motivated and involved. Students should be able to share and view content created by the Resource.
* Prior context for high speed rail and High Speed 2 should be included in the learning experience, in particular in relation to the diversity of career opportunities (see [www.plotr.co.uk/hs2](http://www.plotr.co.uk/hs2)). The content will be mapped to the Key Stage 2 curriculum to enable classroom concepts to be linked to the industry context.
* The Resource will enable students to explore the design and passenger experience in particular, encouraging creativity – the A in STEAM (Science, Technology, Engineering, Arts and Maths) – and early employability skills, for example through teamworking in relation to job roles such as architect, engineer, builder, ecologist. It should be designed to effectively engage all students, with care taken to be inclusive towards female students and those with disabilities, from a BAME background or from different faith backgrounds. The Resource should conform as far as possible to [WCAG guidelines](https://www.w3.org/WAI/WCAG20/glance/) for web content accessibility (also known as AA standard).
* Different levels of access will be available within the Resource to students, teachers, the Supplier and the Employer. User access will be subject to agreement to terms. Information captured through the delivery of the Programme should be limited to contact details for the school and teacher, not for the students. Student information is strictly limited to anonymised data enabling the demographic profiling of the students – age, gender, school. Information gathered should only be used to support the Programme and HS2’s wider educational activity.
* It would be seen favourably if the Programme is accredited, for example through CREST Awards or another reputable scheme.
* As use of the Resource will be encouraged within the supply chain and wider industry, HS2 branding will be light-touch, however the Supplier will be expected to liaise with the Employer throughout to agree the design of the Resource and its content, and it should be coherent with the wider HS2 Ltd Education Programme as detailed in section 1.
* The Supplier will provide hosting, technical support and licensing/subscription as required to support the Resource and ensure its availability is as close to 100% as possible.
* The Resource should be designed to be scalable and to enable independent access by schools not targeted through this Programme, as well as use by the supply chain and wider industry. This should be considered in terms of capacity for hosting and technical support. It is preferred that licensing/subscription costs are kept to a minimum for schools outside the Programme in order to encourage this growth. Responses with low or no licensing costs will score more highly.
	1. **Development of Event format (by December 2016)**
	+ The Supplier will develop a short Event format (approx. 2 hours but flexible to accommodate the timetabling of different schools) which supports the launch of the Resource on-site in schools with one teacher and one class. The Supplier is not responsible for provision of computer resources to the school – the Resource must be available to use on existing systems owned by the school.
	+ As part of this engagement, the teacher should be briefed and introduced to the resource so that they can introduce it to the wider school. This could take place, for example, through a webinar prior to the Event or a self-accessed video tutorial, and should be supported by an online user guide. The Event should have defined objectives and outcomes, a clear start and finish, but encourage continued engagement with the Resource.
	+ The supplier will ensure sufficient in-house resource to deliver the Programme (with allowance made for back-up staff) and liaise with the Employer to arrange the support of HS2 Ltd’s Education Ambassadors (employee volunteers) where available.
	+ The supplier will be responsible for identifying the schools (a minimum of 60 schools per annum) in which the programme could be delivered along the route of both [Phase 1](https://www.gov.uk/government/publications/hs2-phase-one-plans-and-sections) and [Phase 2](https://www.gov.uk/government/collections/hs2-phase-two-from-the-west-midlands-to-leeds-and-manchester) of the HS2 network in line with HS2’s policy:

“HS2 Ltd wishes to target those communities and locations impacted greatest by the construction of HS2 and, in particular, those communities scoring highest in indices of multiple deprivation should be specifically targeted as priority areas for the delivery of HS2 Education Programme activities. “

* + The Employer’s project manager will support this process by providing advice and guidance on suitable schools. The Supplier shall be responsible for school liaison, booking, creating the itinerary of events as well as travelling to/from the events and transportation of equipment.
	1. **Delivery Year 1: Programme Development, Pilot and initial launch**
	+ The Supplier will develop the Resource and Event format (see above) according to an agreed plan, with weekly meetings/conference calls and monthly review points at which the Supplier will report formally on progress. **(September 2016 – December 2016)**
	+ The Supplier will pilot the Programme (Resource and Event) with a minimum of three primary schools, refining both aspects of the Programme according to feedback from the students, teachers, project manager and other stakeholders. A final Resource and Event format will be agreed with the Employer. **(January 2017 – February 2017)**
	+ The supplier will launch the Resource through the agreed Event format at a minimum of 25 schools with up to 30 students each during the remainder of the 2016/17 academic year. **(March 2017 – July 2017)**
	+ An end of year review takes place to evaluate the success of the programme against proposed outcomes (including number of events delivered; number of students and teachers engaged; availability of Resource; technical support; access to data and dashboard). **(August 2017)**
	1. **Delivery Year 2: Full launch of Programme (September 2017 – July 2018)**
	+ If successful following the end-of-year review, the supplier will continue to promote the Resource through the agreed Event format at a minimum of 60 schools with up to 30 students each during the 2017/18 academic year, and also action reasonable recommendations resulting from the report. An end of year review takes place to evaluate the success of the programme against proposed outcomes (including number of events delivered; number of students and teachers engaged; availability of Resource; technical support; access to data and dashboard). **(August 2018)**
	1. **Year 3: Continued roll-out (September 2018 – July 2019)**
* If successful following an end-of-year review, the supplier will continue to promote the Resource through the agreed Event format at a minimum of 60 schools with up to 30 students each during the 2018/19 academic year, and also action reasonable recommendations resulting from the report. Following a final end of year report, the 3-year contract is completed.
	1. **Project Management, planning and reporting**
* Having identified a Project Manager, the Supplier will produce, agree and maintain an overall plan for the Programme i.e. to develop and subsequently deliver the Resource and the Event. This plan shall be submitted in draft to HS2 Ltd contracts manager and the final version shall be agreed before final sign off. **(Signed off by mid-October 2016)**
* The Supplier will produce and agree with the Employer a format for reporting on the Programme (both in terms of access to the Resource and Event delivery in schools). An instant user feedback mechanism should also be incorporated into the Resource. **(By November 2016)**
* The Supplier will capture quantitative and qualitative outcomes from each event, which will build into monthly summary evaluation reports in Year 1; and termly evaluation reports in Years 2 and 3. Information provided should include:
	+ - Event locations, key contact, numbers of students and teachers engaged, demographics
		- Evaluation of event delivery and impact, to include but not limited to:
* student’s views of STEM, HS2 before and after
* teacher’s views of the successes of event format, engagement level of students, commitment to further use of Resource
* These reports should also include quotes, photographs and case studies where possible which can be used in marketing and press collateral. An end of year review will provide a summary report and recommendations of changes to be made in the coming year.
* Additionally, usage of the online resource should be reported back on a monthly basis, including:
	+ - Number of users – schools, teachers, students
		- Number of teams
		- Duration and level of activity by user
		- Examples of student work.
	+ The Employer should also have independent access to the Resource and a data dashboard reflecting this information, with an option to export information.
	1. **Health and safety risk**
* Number of health & safety incidents arising in connection with the Services is kept as low as reasonably practicable. All staff involved in delivery in schools should be DBS-checked.
	1. **Online security**
* Safeguarding of the students in terms of engagement with the online Resource is paramount and all suitable measures must be taken to ensure the environment is secure. The supplier should comply as far as possible with [Cloud Security Principles](https://www.gov.uk/government/publications/cloud-service-security-principles/cloud-service-security-principles) and the [‘Digital by Default’](https://www.gov.uk/service-manual/digital-by-default) service standard set by Government.
	1. **Data Protection**
* The Supplier should have the appropriate information management and security posture that enables the fair, lawful and secure processing of data and hosting of users generally. Data must be protected in line with current legislation and the Supplier should commit to preparing for [General Data Protection Regulation (GDPR)](https://ico.org.uk/media/for-organisations/documents/1624219/preparing-for-the-gdpr-12-steps.pdf) (enforced from 2018). Data is to be hosted within the EEA (European Economic Area). The Supplier will support the ongoing completion of a privacy impact assessment, and agreed to adhere to all HS2 Ltd and DfT Information and Cyber Security related policies and requirements.
	1. **General**
	+ The Supplier will develop promotional channels and basic materials to encourage wider access to the resource by schools who are not identified as priorities for Event delivery: for example through social media, cross-promotion and web presence.
	+ The Supplier will be responsible for the provision of any additional equipment and small prizes (e.g. badges or stickers) that are required to support the Resource and the Event.
1. **Invoicing**
	1. The organisation’s project manager will provide invoices where work has been completed for that period. During the development and pilot stages (September 2016 – February 2017) these should be provide monthly. Subsequent to this, invoicing is to take place quarterly. The invoice should be agreed between the nominated point of contacts before being formally submitted to HS2 Ltd. Attached to the invoice should be:
* A summary of work and tasks completed in the period
* A breakdown of the resource/time/cost split by task.
* Any monthly reports submitted during the period.
1. **Ownership of IPR**
	1. The position on intellectual property rights will depend on the winning Supplier’s solution. The default position is that all intellectual property rights, except where bespoke software and/or rights are developed for HS2 Ltd, are owned by the Supplier and licensed to HS2 Ltd on irrevocable, royalty free terms with an ability for HS2 Ltd to sub-licence such software and/or rights.
	2. Where the Supplier develops bespoke software and/or rights for HS2 Ltd in connection with this contract, then the Supplier acknowledges and accepts that it will agree to market standard escrow terms with HS2 Ltd (at the same time as signature of this contract) for the retention of the relevant source code. The intention behind such an escrow agreement is to ensure HS2 Ltd’s continued provision of the events/services after this contract has expired.
2. **The On-line Resource and Service Provisions**
	1. HS2 Ltd expects the on-line resource to be available within school hours (8.30am to 3.30pm), although access beyond these hours is required due to the potential for use by students during after-school clubs and at home, as well as access by HS2 Ltd.
	2. Any routine maintenance of the on-line resource must be scheduled outside the above-defined school hours and be agreed with HS2 Ltd to ensure that disruption is minimal.
	3. The supplier must respond to any technical issues or unexpected downtime within 4 hours and alert the HS2 Contract Manager to the issue. A fix is expected within 8 hours, however if this is not possible HS2 and the user must be advised of the expected fix time. HS2 and users must be communicated with throughout.
3. **Performance Measures and Monitoring**
	1. As well as monthly and termly reports, an end of year review takes place to evaluate the success of the programme against proposed outcomes, summarising monthly and termly reports and showing performance against key measures **(in August 2017; August 2018; and August 2019).**

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| Deliverables | Monitor | KPI |
| Number of events delivered | 25 events (Year 1) | >90% |
| Number of events delivered | 60 events (Year 2) | >90% |
| Number of events delivered | 60 events (Year 3) | >90% |
| Resource uptime | 99% during school hours; 95% outside school hours (8.30am to 3.30pm) | >99%>95% |
| Technical support for incidents | * automated reply within 15 minutes
* triaged response within 4 hours
* Resolution within 8 hours
* Resolution within 16 hours
 | 100%>99%>95%100% |
| Technical support for service requests (SR) | * automated reply within 15 minutes
* triaged response within 4 hours
* SR fulfilment according to SLA
 | >100%>99%>99% |
| Access to data and dashboard | Available during office hours (Mon-Fri 9am-5pm) | >99% |

* 1. The HS2 Ltd Contracts Manager together with the supplier will agree performance measures for the next contract period at the end of the contract year.
1. **Timetable**
	1. The following timetable provides you with the key milestones for HS2 Ltd contract deliverables.

| **Key Deliverables** | **Outputs** | **Date or Frequency** |
| --- | --- | --- |
| Contract start up meeting with HS2 Ltd | Face-to-face meeting | September 2016 |
| Programme plan signed off | Plan illustrating key milestones, resources, outputs and task ownership | Mid-October 2016 |
| Contract update meetings with HS2 Ltd | Meetings | Weekly by telephone or face-to-face (during development and pilot phase to February 2017) |
| Progress reviews | Report illustrating progress against plan in developing and piloting the Resource and Event format | Monthly (during development and piloting phases) |
| Development of reporting format | Dashboard or other mechanism for reporting on the Resource and Events | By November 2016 |
| Development of initial Resource | Online platform | By December 2016 |
| Development of initial Event format | Event outline and materials | By December 2016 |
| Completion of pilot phase | Piloting of Resource and Event format in a small number of primary schools | January 2017 – February 2017 |
| Programme launch: Year 1 | Delivery of Programme in a minimum of 25 schools | March 2017 – July 2017 |
| Programme evaluation | Evaluation report on Resource usage and Event delivery | Monthly throughout, following launch |
| End of Year review | Evaluation report including recommendations | By August 2017 |
| Delivery Year 2: full launch of programme | Delivery of Programme in a minimum of 60 schools  | September 2017 – July 2018 |
| End of Year Review | Evaluation report including recommendations | By August 2018 |
| Year 3: continued roll-out | Delivery of Programme in a minimum of 60 schools | September 2018 – July 2019 |
| Invoicing | Monthly during development and piloting; quarterly afterwards | Monthly (August 2016 – February 2017)Quarterly (March 2017 onwards) |