



HIGH SPEED TWO PHASE ONE INFORMATION PAPER

G8: NATIONAL COLLEGE FOR HIGH SPEED RAIL

This paper outlines the vision and focus of the National College for High Speed rail (NCHSR) and how it will address the skills needs of HS2 and the wider rail industry.

It will be of particular interest to those potentially affected by the Government's proposals for high speed rail.

This paper was prepared in relation to the promotion of the Bill for Phase One of the scheme which is now enacted. Although the contents were maintained and updated as considered appropriate during the passage of the Bill (including shortly prior to the enactment of the Bill in February 2017) the contents are now historic and are no longer maintained.

. If you have any queries about this paper or about how it might apply to you, please contact the HS2 Helpdesk in the first instance.

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G8: National College for High Speed Rail

1. Introduction

- 1.1. High Speed Two (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.
- 1.2. HS2 Ltd is the non-departmental public body responsible for developing and promoting these proposals. The company works to a Development Agreement made with the Secretary of State for Transport.
- 1.3. In November 2013, HS2 Ltd deposited a hybrid Bill¹ with Parliament to seek powers for the construction and operation of Phase One of HS2 (sometimes referred to as 'the Proposed Scheme'). The Bill is the culmination of nearly six years of work, including an Environmental Impact Assessment (EIA), the results of which were reported in an Environmental Statement (ES) submitted alongside the Bill. The Secretary of State has also published draft Environmental Minimum Requirements (EMRs), which set out the environmental and sustainability commitments that will be observed in the construction of the Proposed Scheme.
- 1.4. The Bill is being promoted through Parliament by the Secretary of State for Transport (the 'Promoter'). The Secretary of State will also appoint a body responsible for delivering the Proposed Scheme under the powers granted by the Bill.
- 1.5. This body is known as the 'nominated undertaker'. There may well be more than one nominated undertaker – for example, HS2 Ltd could become the nominated undertaker for the main railway works, while Network Rail could become the nominated undertaker for works to an existing station such as Euston. But whoever they are, all nominated undertakers will be bound by the obligations contained in the Bill and the policies established in the EMRs.
- 1.6. These information papers have been produced to explain the commitments made in the Bill and the EMRs and how they will be applied to the design and construction of the Proposed Scheme. They also provide information about the Proposed Scheme itself, the powers contained in the Bill and how particular decisions about the project have been reached.

¹The High Speed Rail (London – West Midlands) Bill, hereafter 'the Bill'.

2. Vision

- 2.1.** This information paper outlines the vision and focus of the National College for High Speed Rail (NCHSR) and how it will support HS2 in addressing skills needs in the supply chain. The NCHSR is an independent further education college incorporated under Section 16(1)(a) of the Higher and Further Education Act 1992.
- 2.2.** The vision for the NCHSR is to provide world-class training facilities that develop a highly skilled workforce needed by HS2 and meet the future needs of the wider rail industry. The college will deliver higher technical qualifications that attract a more diverse workforce to the rail sector. It will foster innovation, science and technology to transform the image of the rail industry.
- 2.3.** The college will offer cutting-edge technical and professional courses to learners aged 18 and over that are starting a career in rail infrastructure, looking to switch careers, or who are part of the existing workforce. The college will offer a viable, employment-focused alternative to university to produce a new, diverse generation of high-tech engineers and technicians; and teach them the wider skills they will need as rail professionals, such as problem solving, commercial awareness and the ability to lead and motivate.
- 2.4.** The NCHSR will deliver to a hub and spoke model. In practice, this means developing new training facilities that are not currently available in the UK, whilst maximising the use of existing industry-standard facilities through a network of providers.



Figure 1.1 Birmingham Campus

The skills challenge

- 2.5.** The demand for trained labour within the rail industry is driven by an ageing workforce and new railway infrastructure projects. It is anticipated that a quarter of all retirements between 2013 and 2017 will be of level 4 qualified labour. In projecting these figures, between 2017 and 2022 a further 11,400 people will be lost from the workforce, one-third of whom will be at level 4. This is further compounded by a wider range of infrastructure projects - relating to science, technology, engineering and mathematics - that will be competing for the same higher-skilled labour force. The ongoing investment in existing railway

infrastructure and major projects such as HS2 and Crossrail 2 will put a focus on new skill sets that do not exist within the market.

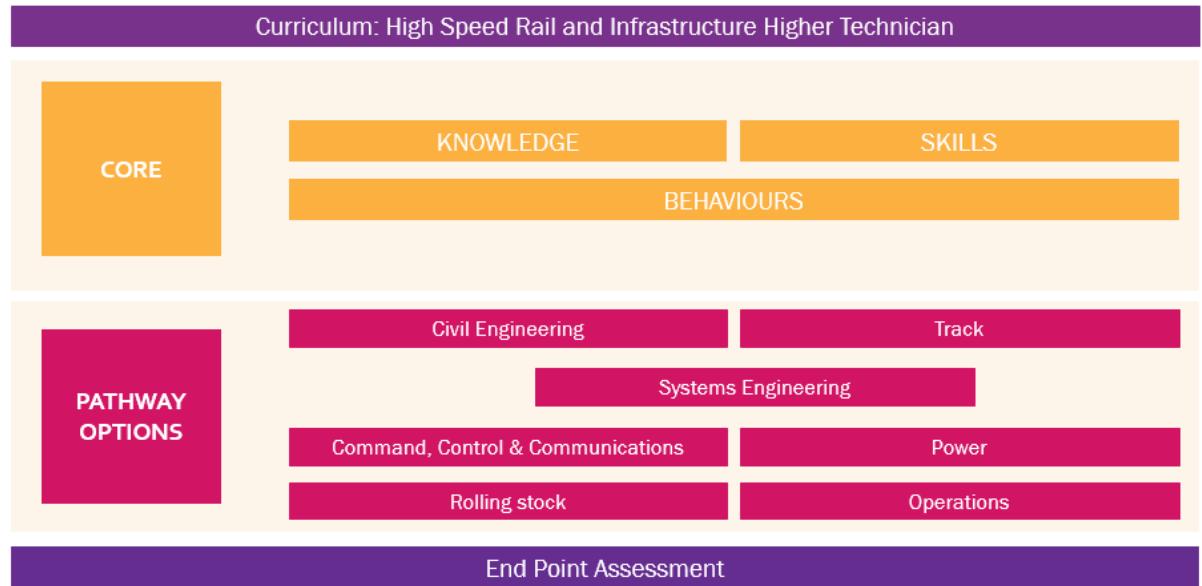
- 2.6. HS2 will require a greater proportion of workers with level 4 qualifications than are currently available in the industry. In comparison to other major railway infrastructure projects, HS2 will drive demand with the average monthly demand for level 4 qualified individuals being at 26% of the workforce, compared to 16% on the other projects. The workforce will require individuals with the appropriate highly technical skills, who will be expected to have the knowledge and understanding to work with the emerging and future technologies in the industry, such as digital signalling, high speed track and technologically advanced rolling stock.

Curriculum

- 2.7. Extensive consultation has taken place with a wide range of employers to support the college in developing a curriculum that addresses skills needs. The college will offer higher apprenticeships and higher national certificate (HNC) equivalents, starting at Level 4 (post A-level) with both full-time and part-time options. Shorter courses will also be available, as will continuous professional development units in a variety of disciplines. The college will also offer leadership & management courses tailored to the high speed rail industry.
- 2.8. Working in partnership with the college, a group of more than 30 employers have formed an Apprenticeship Trailblazer group to develop a new High Speed Rail and Infrastructure Higher Technician apprenticeship, which will be delivered at the college.
- 2.9. The curriculum will look to address skills, knowledge and personal attributes across the breadth of the high speed rail and transport infrastructure industries, so participants get a broad and deep understanding.
- 2.10. The curriculum will comprise a 12-week core that all learners must complete before progressing on to a specialist pathway. It will focus on the key attributes and knowledge needed, regardless of the specialist discipline followed, and will include aspects such as health, welfare, safety & security, service design, asset management, sustainability and project management. On completion of the core, a learner will select a specialist pathway to follow to achieve the detailed skill base and competency level needed for their individual job role.

2.11.

Figure 1.2 High Speed Rail and Infrastructure Higher Technician curriculum



- 2.12. The curriculum will be delivered through a blend of guided learning and project-based/virtual learning, so that soft skills are developed along with academic ability. Real project scenarios will be used to ensure learners are addressing issues that they are likely to come across within the workplace. Learners will also be expected to spend at least one-third of their training time at work placements to become accustomed to working practices.

Ensuring routes into employment

- 2.13. From the buildings it will occupy, to the curriculum delivered and wider services offered to learners and employers, the college is designed to ensure that individuals are employment-ready by the end of the course. This will be achieved by:
- every learner having an employer mentor during their time at the college;
 - industry experts coming to the college to teach and provide masterclasses to students and alumni;
 - a brokerage service being offered so that employers can fill vacancies from a pool of talent
 - learners being assisted into appropriate learning and training opportunities; and
 - ensuring that one-third of learners' time is spent in high-quality, assured work placements, and that the curriculum is delivered in a way that embeds workplace approaches.

Figure 1.4 Doncaster Campus



Timeline

- 2.14. On 14 January 2014 the Department for Business, Innovation and Skills announced plans for the NCHSR. The process and criteria for selecting the location of the college's main site were announced in March 2014. Birmingham and Doncaster were announced as successful locations in September 2014.
- 2.15. The college was incorporated in July 2015 and construction of the college buildings started in April 2016. The college's chief executive, Clair Mowbray, was appointed in October 2016. The college will officially open to learners in September 2017.

More information

- 2.16. More information on the NCHSR can be found at www.nchsr.ac.uk
- 2.17. More detail on the Bill and related documents can be found at www.gov.uk/HS2