



# Transport Infrastructure Skills Strategy



Above: Andrew Boagey CMILT is Chair, Railways Engineers' Forum

Andrew Boagey CMILT, Chair, Railway Engineers' Forum, on behalf of CILT, discusses the recently published Transport Infrastructure Skills Strategy and finds it a refreshing read.

The Railway Engineers' Forum includes representatives from the leading professional institutions in the UK rail industry. We have been reviewing the implications of the Transport Infrastructure Skills Strategy, recently published by the Department for Transport (DfT). In this article, I will take you through the main parts of the strategy and add some comments on the implications, particularly for the rail sector, of this important and wide-ranging document.

It really is a must-read for business development directors and HR directors alike. If, like me, you tend to start out reading Government documents with healthy scepticism, you may be in for a surprise. I ended this particular document and found myself grinning like the Cheshire Cat.

If you thought that apprenticeships were all about sweeping up school-leavers into orange overalls and safety goggles, think again. This strategy has productivity implications across the sector. It includes detailed plans for engagement with teachers and primary-school-age children, informing and gently encouraging an appreciation of the transport sector and engineering in particular. It includes plans for upskilling the existing workforce. It includes new degree apprenticeships that can encourage innovation and support professional behaviours that some of us feared may never return to an industry

that also relies so heavily on its safety and quality ethos to retain public trust and confidence.

Establishing a clear target of 30,000 transport apprenticeships by 2020 is a useful objective and shows a significant commitment. Two-thirds of these are expected to be in rail. Not all apprentices are school-leavers. There is a wide variety of apprenticeships now that, under newer and broader definitions, simply combine work, skills training and study towards a qualification. Employers and educational establishments take responsibility for delivering the training element. Apprenticeships typically last between one year and four years. That offers a very broad range of options for the industry to embrace.

In case you missed it, the introduction of degree apprenticeships by the Government in May 2015 was, in my view, a game-changer. It can support upskilling for those already in the industry, many of whom have perceived restrictions in their ability to access certain rungs of the corporate ladder, or to achieve chartered engineer status. The strategy explains that this relatively new model will combine further and higher education, giving apprentices the opportunity to attain Bachelor and Masters degree qualifications, so it is welcome back to the thick and thin sandwich courses from which many engineers benefited in the 1980s.

**AUTHOR**

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**SECTOR HIGHLIGHTS**



The strategy recognises that the transport sector, and rail in particular, needs to attract top talent from all areas of the country and has to get better at providing opportunity and access to create a more diverse workforce. There are plenty of details about how we can all 'get with the programme' and encourage new entrants, retention and upskilling, with coverage of the entire sector: constructors, product suppliers and engineering consultants, as well as the larger public sector bodies.

The National Skills Academy for Rail (NSAR) has estimated that 10,000 to 15,000 of the existing workforce will need some upskilling and the intention is that higher level apprenticeships, degree apprenticeships and others linked to Masters degrees will provide a multichannel framework for the existing workforce. They will allow staff to learn new principles and gain the workplace application experience to engage with new technologies. This, in my view, will really support our aspiration to develop the professional rail workforce who have experience in maintenance, operations and enhancements into a real force in the wider international railway project market.

There are plans to develop new standards for apprenticeships within the sector using trailblazer organisations, and professional institutions are being given plenty of opportunities to particulate in this development work, as well as credit for the initiatives that have already been developed, such as mentoring programmes.

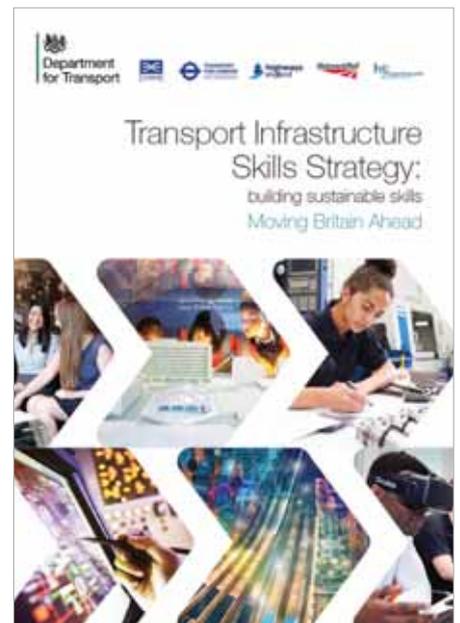
We know that the rail industry in particular has suffered over the years from a reduction in the talent pool. Early retirement, lack of career mobility and paucity of opportunity has led to a loss of expertise, with real consequences for our ability to deliver. According to the NSAR, less than one-fifth of rail employees are under 30, and nearly half are over 45, compared to the economy as a whole with 24% and 42% respectively. There is a similar story of an ageing workforce elsewhere in the transport sector. We also know that we need to continue to make sustainable efficiency gains in the industry. Here we have the opportunity to address this through a concerted programme to upskill the existing workforce, moving away from assessment-based instruction to an investment in real training.

The Skills Strategy offers support for engineering programmes targeted at teachers and primary-school-age children, as well as those involved with secondary education. The development of strong career pathways for young people, as well as joiners from other sectors, is to be supported by funding.

I promised a few lines for the business development directors amongst you. Across Government, there is an anticipated infrastructure investment pipeline of £411 billion from 2015/16 onwards. The sheer scale of this investment has evidently driven an equally ambitious Strategy for Skills; but who actually pays for what is, after all, human resource development?

The answer in the strategy is clear. This plan will be similar to that piloted by TfL's Supplier Skill Team, which will be rolled out across DfT programmes. Each contract above £10 million must have a skills section in its procurement strategy, which will consider the workforce element of the contract and its ability to support apprenticeships. It is intended that the targets will be stretching. One apprenticeship to every £3 million-£5 million contract value for the majority of infrastructure projects, or a percentage headcount of 2.5% apprenticeships a year may be applied in some cases. In case you missed it, in his budget in July 2015, the Chancellor announced that an apprenticeship levy would be introduced in 2017 for large employers. The rate of the levy was announced in the November 2015 Spending Review as 0.5% of payroll. Employers will receive an allowance of £15,000 to offset against their levy payment, which means that it will only be paid by organisations with a payroll over £3 million.

We have seen unprecedented growth in rail over recent years. Now we have to grow capacity on the network without disrupting passengers. This requires engineering and operating skills, the use of modern technology and innovation, as well as a workforce with a commitment to safety and engineering excellence. Railway engineering and operations offer inclusive and rewarding careers. By supporting skills within the industry and by engaging with professional institutions, the Government has shown that it is determined to play an active role in ensuring that our railways are a safe, reliable and efficient mode of transport in the 21st Century.



Above: Andrew Boagey claims the recently published Transport Infrastructure Skills Strategy document is a must-read for business development directors and HR directors alike

This is the best thing I have read since the Egan Report, in 1998. *Rethinking Construction* made quite an impression on the industry and recommended such relatively radical solutions as partnership and collaborative working that have proved their value over time. Let us hope this report achieves the same lasting impact.

### About the Railway Engineers' Forum

The Railway Engineer's Forum has been established by the leading professional institutions associated with the UK rail industry. It encourages professional development and best practice between members as well as organising conferences, seminars, lectures, training, information services, publications and statements of policy to Government and other regulatory bodies. CILT is responsible for chairing and providing the secretariat to the forum until July 2017. Website: [www.theref.org.uk](http://www.theref.org.uk)



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