Rail industry – full steam ahead?

Ben Mullard and Jennifer Webb of Beale & Company examine the burgeoning and fast changing railway projects market, where a new stress on collaborative working is bringing alliancing contracts to the fore. The drive towards the use of Building Information Modelling is also having an impact.

The rail industry is seeing substantial investment and change which has the potential to bring exciting opportunities to all those involved. In March 2014, the government announced a £38 billion spending plan for Control Period 5 (CP5) demonstrating a healthy commitment to investment in the rail industry. This £38 billion plan focuses on upgrades and investments across the network and is in addition to spending on other major projects, such as Crossrail and HS2.

The industry is seeing an increased emphasis on collaborative working, encouraged by the increased use of Building Information Modelling (BIM) and the government’s drive towards the widespread adoption of BIM by 2016.

However, the rail industry is also in a state of flux. Network Rail has recently undergone reclassification as a central government body, bringing significant debt to the national balance sheet and the potential for changes to the management of the industry. In addition, the emergence of new technologies may bring significant advances but also additional challenges and competition for the industry.

This article takes a look at these potential changes in light of our recent discussions with key figures from across the rail sector, including client representatives, consultants and contractors.

KEY POINTS:
- Government has announced a £38 billion spending plan for Control Period 5 (CP5)
- There is also vast investment planned on other major projects, including Crossrail and HS2, as well as substantial other opportunities worldwide
- Network Rail was reclassified as a public sector body on 1 September 2014, bringing significant additional debt to the national balance sheet
- There has been a general move to increased collaborative working on rail projects, especially with the use of Building Information Modelling (BIM)
- Network Rail is increasing its use of alliancing contracts, with the first ever ‘pure construction alliance’ being utilised on the Stafford Area Improvements Programme

Investment and opportunities

In March 2014, the government announced the spending and investment plan for Control Period 5 (CP5) demonstrating a healthy commitment to investment in the rail industry. This £38 billion plan focuses on upgrades and investments across the network and is in addition to spending on other major projects, such as Crossrail and HS2.

Whilst the first piece of track for Crossrail has reportedly been laid, Crossrail is not set to open until 2018 with an estimated total spend of £14.8 billion. Crossrail is expected to shorten journeys across London and ease congestion. Similarly, HS2, the new high-speed rail linking northern UK cities with London and ultimately with the Europe-wide high-speed network, has a projected cost of almost £43 billion and offers continued investment to the industry over the years to come; the first trains are expected to pass along the tracks in 2026.
Whilst there are significant opportunities for companies in the UK (HS2 will reportedly be the biggest infrastructure project in Europe), the government is also pushing for increased activity by UK companies in rail development globally. Upcoming opportunities include the proposed high-speed rail linking Moscow and Beijing (reportedly more than three times longer than the world’s current longest high-speed rail) and the proposed Delhi-Chennai high-speed train (which would be the world’s second longest bullet train line).

Industry view
Whilst the industry welcomes commitment to investment and there is recognition that the use of control periods helps smooth out spending, there remain concerns that there can be a lull in activity between control periods. One solution would be for this gap to be ‘plugged’ through the use of contracts bridging these control periods, together with the use of longer term framework arrangements, such as those seen in the water industry.

There are also concerns that resources, and particularly those of a specialist nature, may be overstretched in fulfilling work under CP5 as well as peaks in demand from other major projects. This would only be made worse if resources were further spread on overseas projects, and the industry remains to be convinced of the benefits to them and the UK economy which could be realised from such opportunities.

Collaborative working and BIM
We are seeing the increase in collaborative working across the infrastructure sector (including water and roads) being replicated and even led by the rail industry. This is, in part, due to government strategies including Construction 2025 which encourages ‘early contractor engagement’ and ‘collaboration with suppliers’, as well as initiatives such as the government policy that all centrally procured projects will use BIM by 2016.

A recent study by HS2 found that BIM is a realistic and achievable goal for HS2. HS2’s Head of Management Systems, speaking in an HS2 press release on this study, recognises the collaborative potential of BIM, saying:

‘BIM offers a unique opportunity for our whole supply chain to work collaboratively to find the best solutions for HS2 as a whole and to share crucial information on design data, stakeholder interactions and asset information before, during and after construction’.

The British Standards Institution reports that Network Rail itself became the first organisation in the rail industry to implement and gain certification to the collaborative business relationships standard BS11000. This has encouraged a number of other key industry players to gain accreditation and it is thought that in this way, collaborative working will be absorbed down the supply chain. Neill Carruthers, Head of Contracting Strategy, Infrastructure Products at Network Rail, has reported on the successes of BS11000 in a BSI Case Study paper, stating:

‘[t]he requirement to focus on continual improvement and demonstrating value through the collaboration rather than only meeting the project outputs has helped to create a focus on the effectiveness of the relationship for our project teams and its overall contribution to success.’

Making significant headway in the use of collaborative working in the rail sector, the industry recently saw the first ever ‘pure construction alliance’ with the Stafford Area Improvements Programme announced on 25 February 2013, a major project on which Beale & Company advised one of the participants. At the heart of this approach is a ‘no blame’ culture where all alliance members are equally responsible and decisions are to be made on a ‘best for project’ basis. Liabilities and profits are shared between alliance members on a ‘pain share’ and ‘gain share’ basis. The Alliance Manger for the Stafford Area Improvements Programme is reported to have commented:

‘we wanted to push the boundaries and develop a “one project, one organisation” mentality, removing the barriers associated with traditional contracting.’

Reports suggest that the alliancing structure will result in the project coming in both under budget and ahead of time.

Industry view
Although many companies are ready and able to embrace collaborative working, further work will be required to overcome some of the barriers and to engage the whole supply chain. In addition, it is a matter of proportionality; for example, ‘pure’ alliancing may only be appropriate on more complex projects. However, in all circumstances, transparency and
alignment of parties’ objectives are recognised as key constituents of successful collaboration.

Whilst the general advantages of BIM are widely recognised, BIM needs to become more accessible to the supply chain before its full potential can be realised. BIM is often left until too late in the project for this to happen; further development is needed to ensure that BIM produces usable information as opposed to just technical data.

**Reclassification of Network Rail**

On 1 September 2014 Network Rail was reclassified as a public sector body. This change in classification from the private to the public sector followed a decision by the Office for National Statistics (ONS) resulting from changes in EU guidance. A key factor leading to the reclassification was the government’s risk exposure in relation to Network Rail. ONS’s considerations included the fact that Network Rail’s debt is guaranteed by the Department for Transport and that the government has a statutory obligation to protect the interests of rail users (e.g., having to take action if Network Rail collapsed).

Some commentators have likened the move to renationalisation ‘by the back door’ and prior to reclassification there were concerns that public spending and investment could be affected, especially given the added debt that would be brought to the national balance sheet. However, Network Rail has sought to alleviate concerns and refers to the reclassification as ‘a statistical decision’. The Memorandum of Understanding between Network Rail and the Department for Transport on the subject states that the decision:

‘will not affect the Government’s commitment to the railways or its plans for investment, including both its existing rail investment strategy for 2014–2019 and HS2.’

However, the Memorandum goes on to state that the

‘Government’s general approach to this reclassification is therefore only to make changes where they are required: to satisfy Government and Parliamentary budgeting and accountability requirements; or justified to deliver value for money’.

This has the potential to result in amendments to investment plans, where justified in the government’s view.

**Industry view**

Prior to the reclassification, there was already significant scope for the government to exercise control over Network Rail and the industry; the change from a private to a public sector body may not, in practice, have a significant effect. However, it is expected that by April 2015, Network Rail will be subject to Freedom of Information Requests under the *Freedom of Information Act 2000*, and this is likely to bring increased public scrutiny, which ultimately can only be a good thing for consumers and suppliers alike.

**New technology**

The rail industry will have many new demands to satisfy in the future and technology will play a large part in meeting these.

We have recently seen the introduction of contactless payment on the London Underground network and future ideas include the removal of ticket barriers entirely, and the increased use of driverless trains. Such far-reaching developments in technology will need to be considered carefully at the design stage of future projects; for example, HS2 is being procured now but designs will need to accommodate the technological advances of 2026, when the first high-speed trains are due to run.

The Mayor of London recently published a consultation titled ‘London Infrastructure Plan 2050’, addressing some of the demands likely to arise in the coming decades; a report on the consultation is expected in early 2015. One significant challenge will be the projected increase in customer demand, with London predicted to have a population of 11.3 million by 2050.

Rail industry participants will need to stay one step ahead in the innovative race to meet new demands.

**Conclusion – fire up the engines?**

The government’s continued investment in the rail industry, together with opportunities to be part of innovative procurement methods, such as alliancing, have the potential to unlock significant opportunities. Technology will also be an important factor in this development, and the industry will need to ensure that benefits can be realised throughout the supply chain.

With the sheer amount of investment and world-class projects on which to develop skills, and the chance to develop working relationships and alliances with other industry specialists at home and abroad, the future of the UK rail industry is an exciting prospect. CL