

## Conditioned collaboration

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Businesses working across UK rail infrastructure projects are forming new alliances and reaping the rewards from a strong SME network.

Network Rail is committed to achieving the government target of 33 per cent of its annual expenditure to be spent via small and medium-sized enterprises (SMEs) by 2022.

HS2 is aiming for 60 per cent of its supply chain to be with SME organisations. Currently, over 70 per cent of its contracts are with organisations that meet the criteria.

Since the 2016-17 financial year, Network Rail has increased its expenditure with SMEs and has stepped up the breadth and depth of its activity, recognising that SME engagement is a key part of the government's Industrial Strategy and the resultant Rail Sector Deal.

At the same time, businesses working across UK rail infrastructure projects are forming new alliances, and enhancing the nature of their collaborations, to take advantage of this stated commitment.

By taking the lead themselves, an increasing number of SMEs will go on to bid successfully for railway business, while creating a vibrant, healthy, innovative, competitive and diverse marketplace of suppliers in

the process.

The complex 24-month, £30 million Stevenage Turnback Project, delivered by rail infrastructure specialist and principal contractor, **Spencer Group**, is strong evidence of how collaborative relationships with SMEs can work effectively, in addition to bringing a highly adaptive and innovative approach to delivery.

The project was delivered a year ahead of the planned opening, due to the clear accountability and outstanding collaborative relationship formed between client Network Rail, **Spencer Group**, and a supply chain that included, amongst many others, Trackwork, Motion Rail, TICS Rail Signalling and Keltbray.

Also essential to the success of the project was early contractor involvement with these partners. This major capacity enhancement project saw the full design and build of a new Platform 5 and a 1.6-mile electrified turnback line, including alterations and improvements to the adjacent East Coast main line and the connecting Hertford loop.

The scheme, completed in August 2020, formed part of a £1.2 billion upgrade to modernise key parts of the East Coast main line to improve journeys and enable additional services between London, the North and Scotland.

### **Success through collaboration**

Joe Bennett, **Spencer Group**'s project director, said: "The success of this project was down to the collaboration between Network Rail, Spencer Group and the entire supply chain. We were all working to established objectives, agreed timescales, and going above and beyond to meet and exceed Network Rail's requirements.

"We all pulled together for the common goal of delivering the project for Network Rail and Govia Thameslink that would make a huge difference to the travelling public and freight companies. Phil Daniel, Network Rail's project manager, enabled a collaborative approach to work brilliantly and he was really positive throughout – he was great to do business with.

"Everybody involved bought into the same, positive 'can do' ethos and attitude in planning and delivery. Collectively, we led by example and shared our methodology with our supply chain partners.

"This strong leadership that was demonstrated on the project was supported by the professional approach of our supply chain partners and exceptional project execution from all involved. Working together in the way that we did has created a blueprint for success."

Trackwork delivered permanent way and signalling design, installation and commissioning works on the project. These included the construction of a 1,340-metre turnback siding to serve Platform 5, and the installation of an FVs 24 turnout unit, utilising a Kirow crane, to form a new mainline connection.

The company's in-house signalling division, TICS Rail Signalling, re-signalled the new line and upgraded the existing infrastructure including new location cases, cables, power changeovers, new signals, points, tracks, hot axle box detector, AWS, TPWS, panel changes and alterations to the existing GEC interlocking



to accept the new routes and functions over a three-mile leg.



## Early connections

Trackwork's operations director Bob Purshouse said: "We certainly welcomed the early contractor involvement, with [Spencer Group](#)'s senior project manager Martin Lewis assisting with the planning of the work. In our opinion this should be the model for future infrastructure projects, where we can bring our collective experience and knowledge together for best results.

"Speaking for the Trackwork delivery team, the project at times was fairly stressful, which you would of course expect for a high-profile scheme such as this. However, I do think that, as the works progressed, this became less so and it did feel very much that we were a single entity collaborating to satisfy the demands of the stakeholders.

"Post disruptive possessions, there was a high level of co-operation to make the installation of the actual turnback line fairly straightforward. This always had the potential to be extremely tricky, with multiple disciplines working in a congested and narrow site, within close proximity to the overhead line electrification (OLE) and adjacent lines open, and in full view of passengers.

"We now know and understand each other's requirements, abilities, expectations and shortcomings. Commercial differences are set aside when like-minded organisations are determined to deliver safely and

deliver well...together.” Motion Rail, which provides specialist railway communication services nationwide on Network Rail and London Overground infrastructure, provided a Fixed Telecommunications Network (FTN) relocation on the project.

### **Good example**

Emma Dymond, CEO of Motion Rail, said: “The Stevenage station project is a great example of Spencer Group engaging Motion, an SME and telecommunications specialist, from the start and the benefits of early contractor engagement.

“This enabled us to develop and deliver a truly collaborative solution to upgrade a key commuter station and accommodate a new enhanced timetable safely and ahead of programme.

“Developing the solution in collaboration with Spencer Group, and being awarded both telecommunication packages of work, allowed us to plan the work, allocate resources and procure equipment in advance, creating efficiencies. Although Motion was a subcontractor delivering specific packages of work, our workforce was included in Spencer Group’s deconflict whiteboard planning sessions and briefings at the start of each shift, creating a teamwork ethos from the outset and keeping everyone informed.

“Motion is proud to have supported Spencer Group deliver the high-profile Stevenage station project and, through working collaboratively, a trusted relationship has been built and developed to deliver other projects successfully.”

### **OLE work**

Keltbray is a specialist railway OLE contractor that was employed to undertake the OLE installation and commissioning works at Stevenage.

This included the introduction of Siemens SICAT equipment. This was the first main line installation of SICAT in the UK. The system is now being rolled out onto other projects including the Transpennine Route Upgrade project.

Motorised switches were also built and commissioned by Keltbray as part of the project, giving remote functionality of the overhead line switches feeding the new Platform 5.

Keltbray’s programme director Mark Wood said: “From early involvement in the staging and integration of the works through to the entry into service, a number of specialist contractors worked collaboratively to deliver the works. The main OLE stages delivered by Keltbray included headspan conversions and the core OLE commissioning event that utilised rare disruptive possessions along the East Coast main line.

“Integration and co-ordination of the overall works programme was led proficiently by Spencer Group, with a practical and focused approach that enabled key interfaces and collective objectives to drive out very detailed stage works.

“Significant closures of the East Coast main line, and the associated risk to restoring the operational

railway, meant the works were classed as the most critical along the network on the commissioning weekend in which they were undertaken.”

The pandemic led to site closure for one week, during which the site layout and working practices were revised to make them COVID-secure. Regular delivery team meetings were established to allow sharing and to incorporate best practice from other Network Rail sites.

### **Effective communication**

Open and collaborative planning sessions were held, so that everyone involved in the project had a clear understanding of delivery requirements, constraints, other operations on-site, third-party concerns and interests, and to align all parties to the delivery of the project.

These regular sessions allowed for planning and tracking, and provided confirmation that all actions were closed out, while a control room worked to help progress cross-organisational issues.

Spencer Group’s Joe Bennett added: “We have developed a really strong network of supply chain partners and, together, we can really deliver a range of fantastic projects.

“It is really important that we constantly review the way we operate with SMEs and work as hard as we can to work to engage and support smaller organisations and, in particular, new entrants to the market. As a business, we want to support sustainable relationships with SMEs, and build strong, long-term relationships that deliver significant value through a collaborative approach.”





*Photo credit: Spencer Group*