

Supply Chain Sustainability School Project Case Study

Client: SCS JV Project Title: Supply Chain Improvement Programme

Dates undertaken, from/to: July 2022 to March 2023 inclusive. Project Manager & Team: Dyanne van de Wijdeven & Bill Marshall

The Task

The SCSjv (Skanska Costain Strabag Joint Venture) has been engaged to carry out and complete the construction of thirteen (13) miles of twin-bore tunnels on the HS2 route, from West Ruislip to its southern terminus at Euston, otherwise known as the HS2 London Tunnels. The project has been divided into three geographical areas, namely west, central and east, with a dedicated construction team responsible for each respective area. A fourth team oversees and manages related logistics, with corporate functions included with an enabling functions team.

Through the Supply Chain Improvement Programme, procurement support was offered to drive cost efficiencies. The focus areas for these efficiencies were identified through an initial collaborative workshop where SCSjv stakeholders and suppliers were brought together to discuss current opportunities and challenges and share best practice. This resulted in two specific focus areas, namely:

- 1. Idling reduction (non-operated and operated plant) Identifying causes of idling, determining how these can be reduced, and who should be involved.
- 2. PPE (Personal Protective Equipment) Identifying cost saving opportunities in the PPE ordering and delivery process and materialising these through the framework agreement.

The Action

Idling reduction

To reduce idling effectively, it is imperative to understand what underlying factors cause idling and how any of these can be overcome. These insights were gained in two ways, a collaborative workshop with internal stakeholders and suppliers, and a survey for those on-site and off-site around their views on idling, what causes it and how idling can be overcome.

The collaborative workshop with suppliers and SCSjv stakeholders was organised to brainstorm together on three key themes identified in the initial collaborative workshop: data-driven decision-making, plant specifications and behavioural change.

The findings from the workshops offered a range of idling causes and idling reduction challenges: behavioural causes (as described in the survey section below), plant sustainability innovations, working conditions, data collection and data insights distribution. These in turn formed the basis for the survey and recommended actions.

The survey sought to gain insights from stakeholder groups across project areas and on sites, particularly on the behavioural topics of awareness, idling culture, presenteeism, comfortability, skills development, individual recognition, knowledge of plant, and feeling accountable.

The three stakeholder groups surveyed were:



Plant operatives	Individuals whose day-to-day activities involve operating plant or equipment on site.
SCS on-site	Individuals on site whose day-to-day activities do not involve operating their own plant, such as works managers and site supervisors.
SCS off-site	Individuals who are not expected to be on-site daily, such as the environmental team.

The insights from the workshop and survey, alongside conversations with the Environment & Sustainability team (E&S team), resulted in a set of recommended actions that were embedded into the SCSjv Idling Reduction Action Plan 2023.

PPE

In July 2022, discussions commenced, and meetings were set up to examine the provision of PPE and how it might be more effectively and efficiently procured by the SCS JV. This included a structured and formal 'Kick-Off' meeting on the 11th July. In addition to the SCSjv staff taking part, those contributing to the discussions and meetings included the incumbent supplier and potential new suppliers. These activities had been preceded by a prequalification process, the issuing of Invitations to Tender (ITT) by SCSjv and the submission of written proposals and tender responses by those selected to participate in the tendering process.

The ultimate goal of the exercise was to place a 'framework agreement' against which PPE could be purchased at pre-agreed rates and prices, on a 'call-off' basis, with two suppliers and a common pricing structure in place under which all three geographical areas of the project could be supplied going forward. The initial collaborative workshop, which involved the SCS Joint Venture staff and members of the supply chain, tasked the suppliers with sharing their view on sustainability and cost saving opportunities, the role they can play and what they would require from SCSjv to act on these opportunities.

A plan was drawn up to accelerate procurement activities, being:

- 1. Contact and (re)engage relevant stakeholders, internal and external.
- 2. Carry out a survey of Store Managers' issues, circulate the results to all relevant stakeholders and prioritise accordingly.
- 3. Secure supply chain's input and share relevant data with short-listed suppliers.
- 4. Facilitate and negotiate with suppliers to drive convergence of their respective tenders.
- 5. Set up meeting(s) of relevant stakeholders to address and agree any significant and/or outstanding issues.
- 6. Transpose negotiations into SCSjv GSA (General Supply Agreement) for execution by selected supplier(s) and SCSjv.
- 7. Agree performance metrics, respective supply relationship managers and formal commencement/start date of agreement.
- 8. Communicate agreement to relevant stakeholders, in particular SCSjv store managers responsible for managing PPE usage.

To help survey the issues and concerns of matter to the three respective Store Managers, a questionnaire was designed for them to complete, and the results analysed and circulated to relevant stakeholders as described above. Subsequently, a clear understanding of the two preferred suppliers'



proposals was captured, via various meetings and exchanges. To help drive convergence further, and the mutual agreement of operational processes and procedures, each supplier had been requested to share their proposals with the other. This approach was designed to identify both areas of similarity, which could be easily adopted, and areas of dissimilarity where solutions had to be agreed.

Following the broad agreement as to the scope of supply and 'deliverables', the next step was to identify a series of key performance indicators to enable the supply chain performance to be measured and monitored following execution of the agreed contract(s). Twelve KPIs were identified across five headings, consistent with the performance assessment process set out in the SCSjv General Supply Agreement, namely:

- 1. People and systems
- 2. Time
- 3. Commercial
- 4. Quality
- 5. Safety

Mutual agreement of the specific KPIs was agreed with the two potential supply chain partners, helping to further cement a cooperative and collaborative approach between all parties – with the option of more formerly embedding collaboration via a potential Service Level Agreement operating on a three-way basis.

The Outcome, Benefit and Lessons Learnt

Idling reduction

The SCSjv Idling Reduction Action Plan 2023 covers issues causing idling, challenges regarding idling reduction efforts, recommended actions to overcome these, and the roles and responsibilities of those involved in driving the reduction in idling.

The recommended actions are organised into three groups:

- 1) Plant action Actions that refer to the quality of the plant and equipment regarding sustainability and working conditions. For this we ask ourselves, are we sourcing the most sustainable options? The most effective options? And for those plant and equipment we have on-site, are these enabling anti-idling behaviour?
- 2) Data action Actions concerning the use of telematics to raise awareness of idling behaviours, monitor idling performance and inform decision making. Obstacles related to data and telematics have mainly been found in the data collection and insights distribution stages.
- 3) Behavioural action Actions that aim to improve factors that directly affect an individual's idling behaviour.

Within these recommended actions, procurement has been identified as responsible for all plant actions and part responsible for some of the data actions, as the idling data requires close collaboration with the plant suppliers. In particular, procurement has a role to play in the following activities:

- 1. Work with the most sustainable plant and equipment
- Establish process to continuously identify developments in the market.



- Determine and integrate minimum requirements for plant & equipment.
- Establish framework for continuous development with suppliers.
- Investigate the usability of alerts for unconscious idling.
- 2. Enable the highest standard of working conditions
- Develop operatives feedback reporting mechanism for comfortability and H&S issues.
- Integrate comfortability and H&S consideration into the procurement process.
- 3. Improve data collection
- Standardise data between suppliers.
- Establish a process to deal with missing and broken sensors.

In addition to the idling reduction plan document, a final workshop was delivered jointly with the SCSS consultant and the E&S team. Participants included suppliers, procurement and stakeholders that are on-site daily, such as site managers and operatives. The aim of the workshop was twofold, first to present the findings and recommended actions to all stakeholders, and second, to invite all stakeholders to discuss what these actions should entail and how these should be implemented and executed. This has kick-started the cross-functional conversations and marks the beginning of putting the actions within the Idling Reduction Action Plan into practice.

With the recommended actions in the idling reduction plan, SCSjv aims to achieve a 25% reduction in year-on-year idling for its onsite mobile plant and equipment. This would save the project approximately £250,801 in 2023.

PPE

In terms of the outcome for PPE, additional costs should be easier to avoid given the expected three-way collaboration and cooperation. As the new arrangements enable and encourage efficiencies, procurement commitments and agreements, and innovation.

Testimonial Quote for use on our Website and in Proposal documents, as appropriate

SCS would like to thank the CITB and Action Sustainability for their funding and expertise, respectively.

The SCIP enabled SCS to significantly increase our awareness and capability in two areas with significant cost and carbon impacts – plant idling and the supply of PPE.

Through collaborative workshops with our plant hire suppliers and site teams we now have a revised Idling Reduction Action Plan which we look forward to implement with an enthused set of stakeholders and suppliers.

Written by: Matthew Galvin, Supply Chain Manager (Sustainability)

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