

# CASE STUDY

## SCS JV leverages ALICE to drive £2M savings on HS2's London Tunnels

 London, United Kingdom

 Infrastructure

Skanska, Costain, and STRABAG, three prominent European general contractors, joined forces in a collaborative venture known as SCS JV to optimize the construction of the London tunnels of HS2, a national high-speed railway linking London, Birmingham and the north of the country.

“

The savings of both time and money that we've identified with this initial work on SCS East has been significant, and we're now looking forward to expanding our use of ALICE to other portions of the project.”



**Andrew Irwin**  
Construction Manager, Costain Group

### The Challenge

Three major European general contractors – Skanska, Costain, and STRABAG – formed a joint venture, SCS JV, to optimize the construction of the London tunnels of HS2, a national high-speed railway linking London, Birmingham and the north of the country. The HS2 network will ultimately carry more than 30 million travelers each year. SCS JV is constructing 13 miles of twin-bore tunnels on the HS2 route, terminating at Euston station in central London.

The company has divided its tunnels work into three areas – west, central, and east – and in its initial work with ALICE, SCS JV has focused on the east area, where HS2 emerges from the tunnels on its final 0.6-mile route to Euston station.


In its first work with ALICE, the question at hand for SCS JV was: could it use ALICE to find efficient sequencing options to enable an earlier construction start for the Euston cavern shaft, which provides critical access to the main tunnels that lead to Euston station.

### The Solution

Through “what-if” analysis with ALICE, the SCS JV team was able to identify a number of ways to resequence and improve the build time for the pre-shaft sinking activities. Changing when they would construct the spoil conveyor, which would remove soil from the excavation and work area, was one such important influencer of the schedule.

# CASE STUDY

## SCS JV leverages ALICE to drive £2M savings on HS2's London Tunnels

 London, United Kingdom

 Infrastructure

SCS JV also determined that they could save time and improve efficiency by having concurrent workforce teams constructing activities to the cavern headhouse base slab, and key milestones, which would enable construction of the cavern shaft earlier than planned.

### The Result

With the ALICE platform, the SCS JV team was able to trim the build time for the shaft by 86 working days, a savings worth £2M in associated overhead expenses.

“Construction optioneering with ALICE has enabled us to quickly and effectively explore alternative ways to build,” said Andy Irwin, SCL Agent at SCS JV. “The savings of both time and money that we’ve identified with this initial work on SCS East has been significant, and we’re now looking forward to expanding our use of ALICE to other portions of the project.”



For more information, or to book a demo, please visit:  
[www.alicetechnologies.com](http://www.alicetechnologies.com)

