



Shrewsbury – Crewe Modular Re-signalling Pilot

Project

Shrewsbury – Crewe Modular Re-signalling Pilot

Client

UK Department for Transport

Location

London, UK

Start Date

2008

End Date

2013

Duration

60 months

Contract Value

£29m

Services Provided

Signalling, train control & telecoms, systems integration, programme management

Background

This is a research and development scheme for the pilot of modular signalling technology on the Shrewsbury – Crewe route section.

The scheme will be delivered as a type 'B' scheme. It will demonstrate compliance with signalling engineering principles and standards or seek derogations against those standards.

Modular signalling is to provide a cost-effective means of attaining Office of Rail Regulator (ORR) efficiency targets and will achieve significant cost savings for the delivery of type B signalling renewals.

It enables simplified scheme development processes, standardised delivery methods, reduced track access requirements and fewer staging works.



Scope of Works

The key outputs of this project were:

- ▶ re-signalling the Shrewsbury – Crewe Route
 - ▶ transferring control from seven mechanical signal boxes on the route to a new control desk at the South Wales Control Centre (SWCC) in Cardiff
 - ▶ renewing of five level crossings on the route to Manual Control Barrier Obstacle Detectors (MCB OD), including new barrier machines
 - ▶ utilising the Fixed Telecommunications Network (FTN) as the main backbone for the signalling transmission between site locations and the control in Cardiff
- ▶ installing a new 240v power supply system
 - ▶ introducing a range of new products onto railway infrastructure, including a new signalling interlocking system, train detection axle counters, Automatic Warning System (AWS) equipment, light weight signals, equipment housings – all of which are designed to simplify installation processes and reduce future maintainability.

Key Project Outputs

The main objective of the project was to provide a new cost-effective signalling renewal system for use on secondary routes.

The pilot paved the way for future schemes to use a completed Modular Signalling Handbook.

This handbook will contain the methodology of how to plan, design, install and commission future schemes to a suite of standards built up from the two pilot schemes.