

# Project & Programme Management



## Background

At Network Rail the projects we undertake in Britain do more than just help people get around more easily; they're also of huge benefit to the country's long-term economic prosperity.

On average we complete some 2,000 projects a year worth over £4.5 billion across all our assets; track, signalling, electrification, telecommunications, building and civils.

We know how to keep the trains running during upgrades. And we are skilled in integrating multiple systems, old and new, so that they work together.

We'll provide you with an integrated team who will manage the planning, design, procurement, construction, operations and maintenance of your projects.

## The Challenge

These record levels of investment have coincided with increased expectations and targets from our customers, stakeholders and the UK government, which have demanded:

- ▶ increased capacity
- ▶ less disruption to the operational railway
- ▶ reduced costs & more cost certainty
- ▶ increased speed of implementation.

## How We Can Help

With access to over 3500 project managers, planners, engineers we are able to pass on our vast experience in managing a delivering complex projects in an operational environment through the various stages of the project lifecycle. We can tailor our support to meet your needs and help you with:

- ▶ client side delivery partnering
- ▶ client side project & programme management

- ▶ construction operations planning
- ▶ contract management, including procurement & financial management
- ▶ risk management
- ▶ stakeholder management
- ▶ operations, economic & financial appraisal
- ▶ project & design management
- ▶ feasibility design & options appraisal
- ▶ integrated design capability, including design standard review
- ▶ value engineering & management
- ▶ due diligence and technical audit of designs.

Our ability to work comprehensively on mass transit projects involving both technical and commercial expertise has been demonstrated on some of the most complex transport infrastructure projects, including Thameslink and Crossrail – currently Europe's largest civil engineering project.



## Thameslink

The Thameslink Programme will dramatically increase the number of people who can use the railway, providing benefits such as:

- ▶ increasing trains in each direction through central London by up to 300 % (peaking at up to 24 per hour)
- ▶ longer trains (12 coaches). An increase from a maximum of 8 at present.
- ▶ removing bottlenecks that delay trains, the worst at London Bridge station
- ▶ direct access to more destinations
- ▶ reduced crowding on the London Underground
- ▶ a new landmark station at Blackfriars in time for 2012
- ▶ a new fleet of trains and signalling and power systems to support them.

## Crossrail

Network Rail is responsible for the design, development and delivery of the parts of Crossrail that are on the existing network. Network Rail's scope of work includes:

- ▶ upgrading 70km of track
- ▶ redeveloping 27 stations
- ▶ renewing around 20 bridges
- ▶ removing around one million cubic metres of excavated material from the tunnel by rail.

In its completion Crossrail will deliver be able to accommodate up to 1,500 passengers and will add 10 % to London's overall rail capacity.

## European Rail Traffic Management System (ERTMS)

This tried and tested system will replace traditional railway signals with a computer display inside every train cab, reducing the costs of maintaining the railway, improving performance and enhancing safety.

It will offer a host of benefits to the railway and the application of its cab signalling component, the European Train Control System, ETCS, will spell the end for traditional signalling.

Installing ERTMS across the country as signalling becomes life-expired will save an estimated 40 per cent over conventional systems. Each train will run at an appropriate safe speed, allowing more trains onto the tracks. ERTMS will improve train performance and reduce energy consumption.