



CASE STUDY

Network Rail: Transitioning and growing one of the UK's largest engineering apprenticeship programmes



Industry:
Rail



Delivery:
Engineering apprenticeships



Client since:
2005

The Challenge

Network Rail runs, maintains and develops Britain's rail infrastructure. Every day they get four million people to their destination and thousands of tonnes of goods moved around the country.

In 2005 Network Rail approached Babcock International Group with a request to develop its apprenticeship programme for areas including Track, Signalling, Overhead Line, Telecommunications and Electrification and Plant apprentices.

Network Rail's previous maintenance apprenticeship programme was dispersed throughout the country and covered various aspects of engineering not specifically related to Network Rail's individual requirements. They wanted a training provider capable of delivering consistent and relevant training to all their engineering apprentices at one location to a uniformly successful standard.

From the outset Babcock's Advanced Engineering Apprenticeship programme was tailored to meet the specific needs of Network Rail's operations. As well as technical training, the programme was designed to instil Network Rail's lifesaving rules and behaviours which are considered vital to the company's success in developing a world-class workforce.

In 2015 this contract was extended for a further five years with the additional challenges of finding a new location to deliver the first year of the programme from, providing greater value and increasing annual apprentice numbers by 50%.

In 2017 with the introduction of the apprenticeship levy, Network Rail requested Babcock identify and convert current skills programmes into full apprenticeships. This would assist in maximising levy drawdown and support Network Rail in reaching its commitment to the Department for Transport (DfT) of over 800 new apprenticeship starts per year.



Challenges at a Glance

- Transition apprenticeship delivery to one new location without risk to learners
- Develop and deliver training specific to Network Rail's requirements that also meets the new Standards
- Meet Network Rail's commitment to Government of increasing apprentice numbers
- Deliver greater value from training

The Solution

Design & Delivery of Training

Babcock undertook a complete review and worked with Network Rail to identify the most beneficial location in the first instance; Westwood Training Centre near Coventry. This existing Network Rail Training Centre was repurposed to provide both a fit for purpose engineering academy and a location that was capable of underpinning the growth in apprenticeship starts.

Once the location was identified the Babcock team completely rewrote the existing year 1 programme to incorporate new material such as Business Improvement Techniques in order to meet Network Rail's requirement to provide an understanding of lean techniques within the apprenticeship. In addition the entire programme was moved from the old Framework to the new Trailblazer Standards.

In order to deliver the required 50% increase in Level 3 Engineering apprentice starts the programme was redesigned, in an innovative way, to allow two cohorts a year to start the programme compared to the more traditional single annual intake previously.

Continuous Improvement and Innovation

In order to achieve the increase in apprenticeship starts all learners were issued with a tablet device that linked directly to a new Learning Management System (LMS). This allowed content and assignments to be released to apprentices both whilst they were in the training centre and remotely. The LMS also enabled progression to be monitored by both the apprentices themselves and Babcock.

In order to support orientation to the programme and reinforce Network Rail's Life Saving Rules, a number of technology based innovations were implemented over a period of time. A 'Welcome to your Apprenticeship' eBook was developed by Babcock and made accessible via QR codes placed through the training centre. This eBook contains written content, videos, links and videoscribes specially created to support the programme.

To provide further safety training and following feedback from apprentices that the subject matter itself was rather dry, Babcock Learning Solutions created a Gamification app, running on the tablets, called 'The Journey to Safety'. This delivers a more stimulating, engaging and relevant environment for the apprentices to learn within. In order to complete the entire 'Journey' an apprentice needs to complete a minimum of 10 hours additional learning and enough content has been produced to enable the Journey to be completed 10 times without repetition.

In addition, as part of the skills programmes conversion a tablet-based simulation of two types of signalling boxes was developed to support learning, along with an introductory eBook.

Training Consultancy

In order to fulfil the commitment Network Rail made to the DfT of over 800 new apprentice starts, Babcock had to take a broader and more strategic role that went well beyond trusted training partner. Taking the role as Consultant to Network Rail's Training Strategy team, Babcock provided advice and guidance around funding, contracting models, conversion of skills programmes and maximisation of levy drawdown.

Working together Babcock and Network Rail Training Strategy initially identified three skills programmes for conversion to Level 2 and Level 4 apprenticeships. Each of these required a different contracting and subcontracting model underpinned by demonstrating a detailed understanding of the ESFA funding rules. Suitable and competent delivery partners for each programme were identified with Babcock assuming a lead provider status in each case.

The Outcome

The transition to the new location was completed on time, within budget and without any safety incidents. The new programme, meeting Trailblazer Standards, was completed at the same time and the September 2016 cohort was the first rail sector Standard to be delivered in the UK. The change to two cohorts per year has enabled Level 3 Engineering apprenticeship numbers to increase from circa 200 per annum previously to in excess of 300 per annum.

During 2017 and 2018 two skills programmes were converted to apprenticeships programmes. A new Level 2 Infrastructure Operator (Signals) was launched with over 250 apprentices commencing the new programme within the first nine months. Along with a new Level 4 Rail Engineer programme launched in 2018, the total number of apprenticeship starts is approaching 600 per annum, an increase of 300% from two years before.

Even with the considerable increase in apprenticeship starts, quality and success rates have further been improved with leading engineering sector performances in all areas: 96% completion rate (compared to 52% sector average) and 95% timely completion rate.



Outcomes at a Glance

- 20% reduction in total cost of training per apprentice
- 300% increase in apprenticeship starts per annum
- 96% completion and 95% timely completion rates
- 1000 apprentices on programme at any one time
- Relocation of apprenticeships to Coventry on time and budget
- Programmes redesigned to enable greater numbers and meeting of new Standards
- New technologies designed, developed and introduced:
 - › New LMS with learner analytics
 - › Gamification app to instil safety behaviours
 - › Tablets issued to all learners

"I am extremely grateful for the outstanding service Babcock has provided over the years but particularly in the collaborative and 'can do' approach to the move to Westwood. It bodes very well for the future. From my perspective, your team is to be congratulated for a job well done."

Guy Wilmshurst-Smith, Head of Network Rail Training