



# Innovation is crucial

## Working safely on the Wessex Route.

**I**t is a well-publicised fact that one of the Government's recent priorities has been a push to improve the UK's rail infrastructure. Among the problems is widespread overcrowding in trains. Several schemes have already been implemented in an attempt to solve this problem, introducing longer trains and making a range of improvements to rolling stock. However, equally vital improvements to other parts of the rail infrastructure, such as adding and extending station platforms, are often made at a much slower pace.

When these improvements are made high priority by Network Rail, not only must they be commissioned quickly and efficiently, measures must be taken at the same time to ensure older infrastructure is not incompatible with improved trains. Ultimately, all works are undertaken for the benefit of the end user - the passenger - which means keeping disruption to normal service to an absolute minimum.

The key to success is efficiency - in planning, surveying, designing, commissioning and delivering works. That's why the Global Infrastructure Group - which offers turnkey solutions delivered by an in-house team of specialists - is in high demand.

The worldwide infrastructure group of companies consists of UK Principal Contractor Global Rail Construction Ltd, Irish-based Global Rail Services Ltd and Australian-based Global Rail Australia Pty Ltd (plus GRA Networks, a subsidiary, operating in both Ireland and Australia).

With Network Rail setting out extensive plans to lengthen both trains and platforms on its Wessex route, stations where platform lengthening is unviable, automatic

selective door opening (ASDO) provides an effective alternative solution.

UK-based Global Rail Construction has a proven track record in providing a fully managed service in a live railway environment. Its point of difference over many of its competitors lies in its deep-rooted understanding of the UK network's requirements, the need for meticulous planning and collaborative co-ordination.

On the Wessex route, Global Rail Construction fully managed and delivered a project to plan, survey,

install and commission Hima-Sella's Tracklink III System. This is a radio frequency identification (RFID)-based technology, which uses the UHF radio frequency band. The component parts of the system are a train-mounted receiver and antenna or antennae, along with infrastructure mounted tags or beacons.

This project saw Global Rail Construction installing beacons, as well as recovering existing beacons for refurbishment and reuse, all under SMT conditions. The technology employed by the team includes the use of ASDO, which has improved the Wessex route by comparing the length of the train with the length of the platform; a signal is then sent to the driver so that only the correct numbers of doors on the platform side are opened.

Systems like these are fundamental to the safety and efficiency of the UK's fast-developing railway, and

## Signalling engineers at work.



Global Infrastructure Group's highly experienced engineers and project managers ensure that these emerging technologies can be utilised quickly in order to keep the UK's railways operational.

South West Trains, operating on Network Rail's Wessex route, has begun a £65 million programme to roll-out a total of 250 new carriages by 2018 to lengthen their trains, providing 30 per cent more space for passengers.

### The UK and beyond

Global Infrastructure Group is an international collective of trading companies whose design and build services fall under the banner of 'infrastructure contracting'. Its broad specialism comprises civil engineering and building, signalling, telecoms and mechanical, electrical and power solutions within a number of core industries.

Too often the group was classed as a rail specialist. However, with overseas operations in Australia and Ireland engaging in other industrial, commercial and domestic sectors in addition to rail including multi-utilities, telecoms, energy and general construction, it was felt the business brand needed more breadth. The launch of the Global Infrastructure Group's new brand and website are a sign of its intention to leverage on its considerable 500+ years of combined infrastructure experience, with recent successes such as on the Wessex route showing how it employs innovation to add real value for its clients.

The UK arm of the group is now in its fifteenth year and is going from strength to strength. Having been awarded a Principal Contractors Licence in 2014, it operates not only on Network Rail's infrastructure, but also with TfL on London Underground's infrastructure, where it has enjoyed great success in the last year.

For joint owners Marco Lombardelli and Ivan Holloway, the message following the rebranding of the company is business as usual - using the collective strength of the group of companies under the 'Global' banner to the advantage of the worldwide rail industry.

### Innovation in safety

As the rail industry is one of the most safety-critical in the world, Global Rail Construction has developed its Safety Coaches initiative to ensure all staff are engaged with its safety culture, and are acutely aware of the company's safety objectives and performance criteria.

Safety Coaches are front line employees that act as the 'voice' and 'face' of the organisation. They are engaged and empowered to promote a culture of safety across all projects and provide the continued growth of their safety leadership team, being the pinnacle of everything that is at the heart of the business.

The initiative includes the following actions:

- » Monthly global safety engagement meetings - in which operatives come together to discuss all issues and concerns that affect their project in particular and the business as a whole;
- » 'Safety Chats' - informal safety discussions between the site supervisor and the project team directly working on their project;
- » Top five risks - to help identify potential risks and controls during the construction phase of projects;
- » Valued opportunities - at project commencement, staff are motivated to work with PMs and the



QSE department to identify innovations and good practices that would help improve health, safety and environmental performances of the project and also share across other projects within the business and the wider Group.

As a consequence of the Safety Coaches initiative, Global Rail Construction has seen a reduction in the number of incidents and accidents, while the reporting of close calls has increased through operational teams proactively taking ownership and responsibility.

Safety Coaches is one example of how the Global Infrastructure Group takes care of its employees, ensuring both safety and proactivity are part of their working culture. Perhaps this is why so many of its 400 employees have worked for the company for a large number of years.

Innovation employed on the track, underpinned by an all-encompassing approach to safety, is now ensuring Network Rail's huge investment in the improvement of the UK's railways is starting to see real results. Rail services providers which show they can add value through innovative and safe working will continue to prosper as the rail industry looks forward to a new golden age. ●

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