Getting it right, together

With organisations across the rail industry moving ahead in their Project i-TRACE journey, now is not the time to be left behind.

If 2019 was the year to get on board, and 2020 was the year to get moving, by 2021 the train has clearly departed the Project i-TRACE station. The project to introduce barcodes across the rail industry has already taken significant steps, with some operators now including GS1 compliance in new contracts and contract extensions with existing suppliers.

The Project i-TRACE journey is broken up into several stations. So far, businesses should have progressed through the first four; project overview, rail guideline, supplier workshop, and business case.

“Suppliers to the rail industry should now have left station 5: join GS1 so they can start assigning globally unique identifiers to parts, components, and assets,” said Michiel Ruighaver, senior account manager - freight, logistics and industrial sectors at GS1.

While all members of the rail industry will be on their individual Project i-TRACE journey, they are not alone. An array of online resources is available through the GS1 website, including free webinars, self-paced video tutorials, and dedicated rail industry training sessions. In addition, GS1 staff are there to assist along the way.

All these tools are there for suppliers to meet the requirements of operators who are increasingly encouraging if not mandating compliance with GS1. At a recent webinar, operators from around Australia outlined their expectations when it came to supplier compliance. Tony Annetts, associate director supply chain at Sydney Trains, put it most definitively, highlighting that, “We are not going to enter into a contract or an extension of a contract if you are not on the i-TRACE journey. As much as we can, we are going to find someone who is going to play in this space because it is our future.”

The message from other operators was also clear, with organisations such as V/Line having brought their warehouses and depots in line with Project i-TRACE compliant barcodes and identification throughout.

For major operators, the opportunity to achieve end to end traceability offered by barcodes with unique identifiers is essential. Not only does the GS1 process standardise data between suppliers, contractors, operators, and others, but it enables operators to move towards the digitalisation of the rail industry.

With over $100 billion being invested in rail over the next 10 years, operators have indicated it is crucial to get everyone on the same page from the start and set up the industry for future success. Transformational changes are not going to be possible without barcoding.

Laying the building blocks of barcoding on the materials being put in place over the next 10 years sets the industry up well for benefits in the future years.

Ruighaver concurred, noting that barcodes provide a baseline for future industry developments.

“The unique identification of parts, components and assets is the foundation for improved inventory management, predictive maintenance, asset management and traceability. Operators are relying on manufacturers to mark their parts and components with GS1 globally unique identification at the time of manufacture,” he said.

The benefits of moving forward on this process will also flow through to suppliers. The open nature of the GS1 standards means that investment now is future proofed, with suppliers not locked into a particular type of technology. In addition, with GS1 being a global standard recognised by ISO, suppliers that sell products into multiple industries will have their unique identifiers recognised across their customer-base and throughout the supply chain. For example, a major steel manufacturer which supplies to a rail clip manufacturer both implemented GS1 standards on their products. Now, instead of following manual or paper-based processes, material identification is digitised and automated to track and trace product efficiently, saving time and money.

With the next stages of the Project i-TRACE journey involving decisions on matching virtual data to physical products, suppliers can be assured that there is a solution that will suit them.

“The manufacturers of parts, components and assets are best suited to determine what data should be encoded into the barcodes to support their customers across the supply chain,” said Ruighaver. “For example, a manufacturer of a weld kit needs to not only identify the item but also encode the expiry date as this is critical information for their customers. A manufacturer of a rail spike would not encode an expiry date on the box but would encode the batch it belongs to, in the event of a possible recall.”

Those taking the next steps on their Project i-TRACE journey can also know that the standards have been globally tried and tested, and is business as usual practice in fields such as retail, healthcare, and transport.

“GS1 has been assisting industries for over 45 years to improve business and supply chain processes across many industries,” said Ruighaver. “Subsequently, the rail industry benefits from the experience of other industries and can use what has already been developed and hit the ground running. No need to re-invent the wheel.”

Barcodes will enable traceability and the further digitalisation of rail.