

# Building Rail's Digital Capability

## Project i-TRACE

### What is PROJECT i-TRACE?

Project i-TRACE will underpin Rail's Digital Future by providing the foundation upon which the rail industry can build its digital capabilities.

This industry-wide initiative will standardise the capture of data relating to all assets and materials in the rail industry. In doing so, it will help to improve efficiency, lower costs and deliver better customer service.

The Australasian Railway Association, along with GS1, are spearheading this initiative and working with industry to deliver this transformational initiative.

### Why i-TRACE?

- It provides critical building blocks upon which digital capabilities and automation of operational processes can be built - a common framework, using GS1 global data standards, to enhance the industry's digital footprint.
- The investment requirement is low, but the benefits are high with short, medium and long-term tangible and intangible outcomes.
- Having consistency of object identification will underpin automation initiatives as the industry moves towards greater digitalisation through the SmartRAIL project.
- It will allow for predictive maintenance by leveraging data analytics, machine learning, artificial intelligence as technologies continue to evolve over time. Having a good digital grounding will be critical to effectively exploiting these capabilities.

### Moving towards implementation

The ARA is committed to realising the benefits of improved digital capabilities and has an ambitious goal of rapid adoption in through extensive industry and government involvement.

Rapid implementation is critical to achieving the initiative's benefits, including:

- **Reduced ongoing costs by automating basic operational processes** - many are still manual
- **Improved cash flow** - free up unnecessary inventory holdings; move to just in time
- **Reduce costly write offs and waste**
- **Risk mitigation and management** - guarantee safety through detailed knowledge of asset condition - including all components and maintenance history
- **Reduce reliance on human knowledge** - this is not sustainable to support level of industry growth
- **Supports ISO 55000** - improve data quality (consistent and accurate) - today much of our data is captured manually and is incomplete
- **Improved network performance** - optimization of assets
- **Best practice across the industry with easily auditable processes and pro-active operations**

Are all achievable outcomes if the right foundations are laid

### Supporting national construction projects

Major rail infrastructure projects dominate federal and state infrastructure programs, with significant investments earmarked for a range of projects across the country, including Sydney Metro, Inland Rail, Gold Coast Light Rail, Cross River Rail, Perth Metronet, ACT Light Rail and Melbourne Airport Link.

Embedding i-TRACE in the early construction phases in these and other projects is critical to delivering cost benefits over the life cycle of the asset, and avoiding the need to retrofit foundational digital capabilities at a later stage.



### To find out more contact:

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