



# Metro Trains Sydney Asset Engineering Team Review

**Project**  
Asset Engineering Team Review

**Client**  
Metro Trains Sydney

**Location**  
Sydney, Australia

**Dates & Duration**  
2021 – 2022  
(4 Months)

**Services Provided**  
▶ Asset Management & Maintenance

## Background

In March 2020, Metro Trains Sydney (MTS) engaged Network Rail Consulting (NRC) to perform a review and provide recommendations on how to improve the maintenance element of Metro Trains Sydney's operations, and its maintenance contract for Sydney Metro Northwest.

In August 2021, NRC was requested to undertake a further independent review, focusing on the effectiveness and capability of the Asset Engineering business unit using NRC's March 2020 report as a baseline. This report sets out the findings and recommendations from this review.

## Scope of Works

The Terms of Reference required that the review provide Metro Trains Sydney management with insights that address the following questions:

- ▶ Is Asset Engineering appropriately resourced to deliver its activities?
- ▶ Are systems and processes adequate to fulfil the services requirements efficiently?
- ▶ Are day-to-day operations working in line with agreed maintenance targets as per the Asset Management Plan?
- ▶ Is the work expected of the in-house technicians and operational staff allocated efficiently, considering expected competencies of the roles and workloads?
- ▶ Is the level of information recorded and available to Asset Engineering sufficient to perform required analyses to understand underlying trends and cost drivers (both technical and commercial)?
- ▶ How does the organisation size and financial metrics compare to similar automated systems delivering asset engineering and maintenance services?

The scope of the review was to:

- ▶ Investigate and report on the current state of MTS' management of the Asset Engineering function of the project;
- ▶ Compare the findings of the 2020 March maintenance audit with the current operations to identify areas that still lag, and seek to identify further areas that require attention; and
- ▶ Report on the suitability, adequacy, and ability of current arrangements to successfully deliver the required business and operational outcomes considering business as usual (BAU) requirements, defect management/project close-out and the future City & Southwest (C&SW) start-up.

### Key Project Outputs

- ▶ Progressive work is taking place to bring the current operations in line to run a safe, performing, and efficient railway, but there are areas that require improvement to maintain this progress;
- ▶ Evidence that some areas within Asset Engineering require further improvements to optimise the current operations on the Northwest line. These areas cover contractual, resources and ownership for certain areas such as engineering and the skills and expertise to complete these tasks;
- ▶ Further work required to determine the link between management of the asset and maintenance of the asset;
- ▶ MTS should consider providing clear guidelines based on defined standards to maintain the current network and how C&SW will be maintained from day one of operations; and
- ▶ There is a requirement for some formality, governance, and structure across the required programme of change / improvement projects. In some instances, whilst there is a clear plan for the Northwest line, there is a need for all improvement projects to encompass the C&SW line as the project progresses into an operational and maintenance state.

### City & Southwest

- ▶ Further collaboration with the C&SW project is required specifically involving MTS Asset Engineering, to ensure that all O&M activities are considered and agreed as part of the franchise agreements. It is recommended that full integration with the newly introduced General Manager, City & Southwest and Programme Delivery and team will achieve the required level of collaboration; and
- ▶ At the current stage the C&SW project is at, MTS should review and consider the whole life cycle planning of the project, to ensure the asset is configured, and agreements are in place, enabling MTS to effectively manage and deliver to expectations.