# Attachment 3
## Management Responses – No further action required

*The following recommendations were completed since the last update in November 2025 and are closed as of this March 11, 2026 report.*

### Section 7.2.6 Power Supplies

i. **UITP Recommendation**
TTC should ensure that a detailed asset renewal plan is prepared for their power supply systems and their UPS back-up systems for both streetcar and subway operations. If this is not already done, there should also be an operating plan in case of the failure of a system. The plan should include procedures for automation of the changeover from active supplies to back-up supplies in the case of failure.

ii. **TTC Management Response Update**
SOGR renewal plans exist for all TTC power supply and power back-up systems. Emergency protocols and evacuation plans are also in place. In the event of an outage, the emergency power system continues automatically to supply power to essential services (well beyond legislative requirements) including emergency and evacuation lighting, emergency trip (ET) control cabinets, emergency tunnel lighting, emergency ventilation equipment and communication nodes.

### Section 7.2.8 Streetcar Failures

i. **UITP Recommendation**
Reliable products must be specified during the procurement phase. Specifications including reliability requirements should be included in specifications at component level to minimize failure risks that affect operations. During the specifications period, Line Replaceable Unit (LRU) can define either component level or board level or rack level. All reliability targets and requirements can be defined based on LRU.

The technical team should define reliability targets for each product/LRU considering market availability. Compliance units should be involved in the process in case of non-compliance with the requirements. Process and penalties should be defined in product specifications or in the commercial specifications.

ii. **TTC Management Response Update**
TTC's rail vehicle procurements specify vehicle level reliability targets whereby reliability performance is stipulated, typically by Mean Distance Between Failures for streetcars, and Mean Distance Between Train Delays for subway. Contractual remedies for reliability non-performance are present in the form of liquidated damages.

While LRU's do not contain specific reliability targets, they are covered by standard warranty and latent defect clauses in the commercial terms. However, TTC will continue to examine opportunities to expand the use of specific reliability targets for the sub-system level and related remedies for future procurements, while considering industry best practices, TTC operational feedback and market feasibility, recognizing that some suppliers may be averse to the risk of meeting reliability targets at the LRU level.

**Section 7.4.1 Opportunity to establish centralized guidelines to enhance data quality governance**

**i. UITP Recommendation**

Establish a centralized governing body to define a set of MMS procedures to align the data across different departments.

- Asset registration (Mandatory, required, optional)
- Location hierarchy
- Asset classification
- Asset ID, name, date, work group, failure class
- Rules for exemption
- Levels of user right to change the data in the system

**ii. TTC Management Response Update**

The TTC has established EAM as the centralized governing body for asset data procedures and requirements. As part of the Asset Management Maturity Roadmap, EAM has adopted an asset data framework that consists of an asset hierarchy, data information strategy, asset information policy, and asset register with standardized mandatory data requirements to support good asset management.

**Section 7.5.7 Assets Master Data**

**i. UITP Recommendation**

MMS appears to be widely adopted across the TTC, though its usage is not yet consistent or fully optimized. Some departments continue to rely on Excel spreadsheets or alternative software systems, which can lead to fragmentation in asset data and processes. To support a more integrated and data-driven approach, management should promote TTC-wide adoption of MMS and develop a strategy to harmonize the setup of master and condition data across all asset classes.

As this process evolves, a governance structure should be established to address, among other key elements:

- Asset Master Data
- Asset hierarchy
- Standardization of asset information, e.g. Defect catalogue
- Standardization of process to install restricted speed zones

**ii. TTC Management Response Update**

TTC has established a governance structure for the enterprise adoption of MMS in compliance with the asset information policy and strategy.

*Recommendations 7.2.1 and 7.6.6 were previously reported as closed in November 2025, and no changes have occurred since that update.*