Appendix

ST Engineering's Showcase at Singapore Urban Mobility Week 2026

Highlights

- **AURA Metro Operational Intelligence Platform**
  AURA transforms metro operational data into explainable, actionable intelligence, helping operators understand incidents, predict failures, make faster decisions, and respond through governed workflows.

  By combining real-time operational data, historical records and domain knowledge, AURA helps operators understand current conditions, identify probable causes, assess operational impact and determine the next best course of action. It continuously analyses live operational data to detect anomalies and identify emerging risks, enabling intervention before issues escalate into service disruptions. Through a shared operational view, evidence-based recommendations and explainable insights, AURA supports coordinated responses across systems and teams. This enables faster, better-informed decision-making, contributing to a safer, more reliable and efficient metro network.

  Deployed within the operator's local environment instead of on a public cloud, AURA keeps sensitive operational data within the operator's controlled network. This reduces exposure to external cybersecurity threats while supporting applicable cybersecurity and data-governance requirements.

  Key benefits:
  - Earlier risk detection and improved resilience through proactive identification of operational and asset issues
  - Faster incident response and resolution through intelligent event correlation, prioritisation and engineering knowledge
  - Better operational coordination across systems and teams, improving response effectiveness

- **Emergency Vehicle Priority, enabled by AGIL® Smart Junction**
  The Emergency Vehicle Priority (EVP) application uses real-time vehicle location data to simultaneously coordinate traffic signals across multiple junctions along an emergency vehicle's route, creating a continuous priority green wave corridor for swifter and more efficient emergency response. The application uses a GPS-enabled mobile device and does not require additional roadside infrastructure, reducing deployment complexity and costs.

  AGIL® Smart Junction is an AI-powered adaptive traffic management solution that optimises traffic flow across signalised intersections in real time. Combining edge intelligence, open architecture and centralised management, it helps reduce congestion,

improve journey reliability and modernise traffic operations without costly infrastructure upgrades.

Key benefits:
- Improved emergency response time
- Improved traffic flow and reduced congestion
- Seamless integration with reduced deployment and lifecycle costs

- **Independent Platform Screen Door (IPSD)**
  The Independent Platform Screen Door (IPSD) is an innovative next-generation platform screen door (PSD) solution designed to enhance passenger safety while significantly simplifying system deployment. Unlike conventional solutions that require extensive integration with train signalling systems, IPSD utilises advanced sensing technology to accurately detect train positioning and automatically synchronise PSD operations with train doors.

  Featuring a fully integrated control and power system housed within the PSD facade, IPSD offers a compact, space-efficient design that is particularly well suited for stations with physical and infrastructure constraints. Developed for brownfield upgrades and driver-operated metro networks, IPSD enables operators to improve platform safety while reducing implementation complexity, project costs and maintenance requirements.

  Key benefits:
  - Lower deployment costs without the need for complex signalling system integration
  - Simplified installation for brownfield and space-constrained rail environments
  - Faster deployment with minimal impact on existing rail operations

- **Enhanced AGIL® Pay**
  The enhanced AGIL® Pay mobility payments suite enables seamless, contactless travel through an account-based ticketing ecosystem. Through ultra-wideband (UWB) technology, biometric palm recognition and AI-powered analytics, AGIL Pay delivers secure, convenient payments while providing operators with insights into transport ridership, revenue and network performance. It comprises:

  - **AGIL Hands-free Pay** uses UWB technology to allow commuters to pass through fare gates without tapping a card or mobile device, enabling a seamless and frictionless travel experience.
  - **AGIL Palm Pay** uses biometric palm recognition to provide secure and contactless fare payments, improving convenience while enhancing security.
  - **AGIL Pay AI** transforms payment and mobility data into actionable insights, helping operators optimise services, improve revenue visibility and make faster, data-driven decisions.

Key benefits:
- Seamless, convenient passenger journeys
- Faster passenger throughput at fare gates
- Revenue protection through secure passenger authentication

Smart Metro Solutions

- **Rail Passenger Information System Cybershield**
  Rail Passenger Information System (PIS) Cybershield is an operational cybersecurity solution that protects and monitors passenger information systems across rail fleets. Combining a Secure Network Gateway with an AI-assisted user platform, it provides operators with a unified, real-time view across hundreds of trains to detect and correlate cyber threats and operational anomalies, investigate unusual activities and recommend actions to maintain secure and reliable operations.

  Key benefits:
  - Unified, real-time fleet-wide visibility across PIS assets and onboard systems
  - Faster threat detection, investigation and incident resolution through AI-assisted analysis
  - Secure communications and network protection

- **FieldDART GenAI Diagnostic Tool**
  FieldDART is an AI-powered diagnostic tool that helps maintenance teams quickly and accurately identify and resolve equipment faults. Through a mobile device, technicians can describe an issue using natural language, with FieldDART recommending possible causes and step-by-step troubleshooting workflows. This helps improve diagnostic accuracy and maintenance productivity, reducing downtime and the need for domain specialists.

  Key benefits:
  - Quicker fault detection and more accurate resolution
  - Reduced equipment and service downtime
  - Improved maintenance productivity and streamlined reporting

Intelligent Transport Solutions

- **AGIL® Autonomous Vehicle Fleet Management System**
  The AGIL® Autonomous Vehicle (AV) Fleet Management System is a centralised platform for managing and orchestrating multiple AV fleets across different manufacturers. It provides real-time fleet monitoring and control, autonomous scheduling and route optimisation to improve fleet utilisation, reliability and operational efficiency. AI-assisted alerts highlight issues such as vehicle malfunctions, low battery levels and route deviations, while coordinated incident management and recovery support safer, more responsive and scalable autonomous transport operations.

Key benefits:
- Simplified management and orchestration of multi-brand AV fleets
- Enhanced operational visibility, efficiency and fleet utilisation
- Supports scalable autonomous transport operations

- **Bus Asset Intelligence System**
  The Bus Asset Intelligence System connects engineering, operational and maintenance data into a unified view of every bus asset across its entire lifecycle. A Digital Asset Passport is created for each bus, consolidating design specifications, engineering documentation, inspection records and maintenance history into a single source that provides end-to-end visibility and traceability across manufacturers, transport authorities and maintenance teams. Its AI-assisted insights support troubleshooting and predictive maintenance, helping improve reliability, optimise maintenance and enable more informed asset management.

  Key benefits:
  - Full asset traceability across design, operations and maintenance
  - Quicker issue diagnosis and resolution
  - More effective maintenance, improved asset reliability and reduced downtime

- **GoParkin™ Smart Car Park Suite**
  The GoParkin™ Smart Car Park Suite integrates parking, EV charging and digital payments on a unified platform, delivering convenience to both motorists and car park operators. Its latest features include a parking guidance system using both ultrasonic sensors and VPGS cameras at parking lots for more accurate vehicle detection, and in-car park dynamic signage that provides motorists with information on real-time traffic conditions on nearby roads. Together with its existing features, these enhancements deliver an improved motorist experience.

  For operators, the platform provides real-time asset and operational visibility, supports cost-effective deployment and uses data insights to improve maintenance, asset utilisation and uptime.

  Key benefits:
  - Enhanced motorist experience
  - Improved operational efficiency
  - Operational insights that optimise asset utilisation and support future planning

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