

UPHOLDING ETHICAL BUSINESS AND ROBUST GOVERNANCE PRACTICES

Integrity, transparency and accountability form the foundation of our organisation. We uphold the highest standards of governance to ensure ethical practices and long-term trust with all stakeholders.



2025 AWARDS AND ACHIEVEMENTS

Corporate Governance and Business Integrity SINGAPORE CORPORATE AWARDS 2025

- Best Risk Management Award (Gold)
- Best Annual Report Award (Gold)
- Best Investor Relations Award (Silver)

SIAS INVESTORS' CHOICE AWARDS 2025

- Singapore Corporate Governance Award

Responsible Supply Chain and Partnership ISO37001:2016 ANTI BRIBERY

- Rail Business

ISO44001:2017 COLLABORATIVE BUSINESS RELATIONSHIP

- Rail Business

R&D, Technology and Innovation ASIAN EXPERIENCE AWARDS BY ASIAN BUSINESS REVIEW

- Singapore Digital Experience of the Year – Transportation

ISO27001:2022 INFORMATION SECURITY MANAGEMENT

- Rail Business

Cybersecurity, Data Governance and Privacy DATA PROTECTION TRUSTMARK - INFOCOMM MEDIA DEVELOPMENT AUTHORITY

- Bus Business
- Rail Business

PUBLIC TRANSPORT SAFETY AND SECURITY AWARD

- Star Award (Special Commendation) - Cybersecurity and Phishing Campaign

Risk Management ISO22301:2019 BUSINESS CONTINUITY MANAGEMENT SYSTEM

- Bus Business
- Rail Business

Asset Protection and Security ISO 55001:2014 ASSET MANAGEMENT SYSTEM

- Bus Business
- Rail Business

ISO 9001:2015 QUALITY MANAGEMENT SYSTEMS

- Bus Business
- Rail Business



Corporate
Governance and
Business Integrity



Responsible
Supply Chain and
Partnership



R&D, Technology
and Innovation



Cybersecurity,
Data Governance
and Privacy



Asset Protection
and Security

CORPORATE GOVERNANCE AND BUSINESS INTEGRITY

Ensuring a high level of corporate governance and upholding a culture of integrity and ethical conduct throughout our organisation.

Strong governance and integrity are the cornerstones of our business. We are committed to upholding the highest standards of accountability, transparency and ethical conduct across all our operations. Guided by robust frameworks and policies, we ensure compliance with regulations, adopt a zero-tolerance approach to corruption and bribery, and proactively manage risks. These principles safeguard trust, strengthen resilience and enable us to deliver safe and reliable transport services for our stakeholders.

CORPORATE GOVERNANCE

The Board stewards long-term value and sustainable growth by ensuring strong governance and integrity, setting strategic direction, overseeing the Group's business and risks and holding management accountable for performance. Directors exercise independent judgment, act in good faith and advance the best interests of the Company and its stakeholders.

Ensuring Fair and Transparent Board Appointments

The Board's Nomination and Remuneration Committee (NRC) ensures that Board composition and succession are merit-based while maintaining balance and diversity in skills, experience, age and gender. Candidates are evaluated for expertise in environmental stewardship, diversity, equity and inclusion, cybersecurity, corporate governance and regulatory frameworks, as well as experience across labour, government and business to support tripartism. Please refer to page 51 of our [Annual Report 2025](#), for information on board competencies.

Directors are appointed through a fair and transparent process overseen by the NRC, which conducts evaluations, independence reviews and conflict-of-interest checks. If potential conflicts arise during the appointment or re-appointment process—such as matters involving the Chairman's remuneration or re-election—the Chairman steps aside, and the remaining Directors select a peer to lead the discussion.

Shareholders may raise concerns regarding director appointments or independence through established avenues, including the independent whistleblowing channel directed to the Chair of the Audit and Risk Committee.

As at the end of 2025, female representation at the Board level stood at 33.3%, exceeding the target set by Singapore's Council for Board Diversity. Of the Company's 11 Directors, six are independent, surpassing the requirements under the SGX Listing Rules and the Monetary Authority of Singapore's Code of Corporate Governance. Please refer to our [Annual Report 2025](#) for more information.

Monitoring Board Performance

All Directors undergo an independent annual performance assessment led by the NRC, which evaluates Board effectiveness and individual contributions. Assessment criteria includes meeting attendance, domain expertise, contribution to discussions, maintenance of independence, strategic networks and participation in corporate initiatives.

ETHICAL BUSINESS AND GOVERNANCE

**CORPORATE GOVERNANCE
AND BUSINESS INTEGRITY****Sustainable and Service Quality**

The SSQC is responsible for annually reviewing and approving SBS Transit's Sustainability Report, which includes our materiality assessment, identification and assessment of climate-related risks and opportunities, and performance against established targets. Our sustainability targets are reviewed annually and agreed upon during SSQC's quarterly meetings. SBS Transit's Senior Management provides the SSQC with quarterly reports on the organisation's ESG material topics, including updates of ESG strategy, policy developments and performance achievements. Any significant concerns are escalated for discussion at the Board meetings.

ESG targets, including climate-related objectives, are embedded within Senior Management's compensation structure and constitute 25% of the annual Balanced Scorecard. Within this ESG component, 6% of total remuneration is specifically linked to climate performance indicators, including reductions in Scope 1 and 2 emissions, Solar PV capacity additions and improvements in energy-efficiency performance.

The SSQC's effectiveness is assessed based on its impact on improving:

- Delivery of the sustainability strategy, including materiality assessment outcomes
- Compliance with policies and alignment with applicable laws and regulations
- Commitment and resourcing to achieve stated outcomes and reported targets

The Board meets quarterly to review SBS Transit's economic, environmental and social impacts, including due diligence processes. The Chairs of the ARC and SSQC report to the Board and seek endorsement of policies and initiatives prior to implementation.

In 2025, no critical concerns were identified. Accordingly, no critical concerns were raised to the Board.

Ensuring Effective ESG Oversight Through Board Training

To ensure our Directors possess sustainability expertise relevant to our operations, all Directors have completed a foundational "ESG Essentials" module under our Board Training Programme. We supplement this with ad hoc topical briefings to keep the Board informed of emerging developments and regulatory expectations.

In addition, a customised Board training workshop was conducted covering global sustainability trends, regulatory developments across key markets and the evolving sustainability reporting landscape in Singapore. The session included a deep dive into IFRS S1 and S2 requirements, the conceptual foundations for climate-related disclosures, and expectations relating to governance, strategy, risk management and metrics and targets. Directors were further equipped with practical insights on value chain assessment, climate resilience and integrating sustainability risks and opportunities into organisational processes.

ETHICAL BUSINESS AND GOVERNANCE

**CORPORATE GOVERNANCE
AND BUSINESS INTEGRITY**

In 2025, SBS Transit was recognised for its strong governance practices and high-quality sustainability disclosures across multiple national award platforms. At the Singapore Corporate Awards, we clinched three prestigious accolades in the mid-cap category: Best Risk Management Award (Gold), Best Annual Report Award (Gold) and Best Investor Relations Award (Silver).



We continued to demonstrate leadership in transparency and disclosure, achieving a score of 97.2 points and ranking 20th in the 2025 Singapore Governance and Transparency Index — placing us within the top 5% of all listed companies assessed. These achievements highlight our ongoing commitment to accountability, openness and excellence in corporate governance and sustainability reporting.

**REGULATORY COMPLIANCE,
ANTI-CORRUPTION AND ANTI-BRIBERY**

We maintain zero tolerance for fraud and corruption. Our Code of Business Conduct sets mandatory standards for all employees and third parties acting on our behalf, including strict prohibitions on bribery, improper gifts or entertainment, and other unethical practices. Employees must avoid actual, potential or perceived conflict-of-interest, disclose them to supervisors, and recuse themselves from related decisions.

Anti-Corruption Processes

All employees complete annual Code of Business Conduct refresher training and submit a compliance declaration, including prompt disclosure of any investigations or charges by authorities. Suppliers must comply with our Supplier Code of Conduct. Any instance of fraud, corruption or non-compliance will result in termination of future engagements. Group Internal Audit conducts regular audits to verify the effectiveness of our Code and anti-corruption controls, and compliance with them.

In 2025, we recorded zero corruption incidents and no cases of dismissals or disciplinary action for non-compliance or unethical conduct. 100% of our employees completed the Code of Business Conduct training, and our anti-corruption policies and procedures have also been communicated to 100% of our 1,254 business partners.

Whistleblowing Policy

We provide confidential and accessible whistleblowing channels for reporting suspected financial improprieties or

improper conduct, ensuring protection against retaliation within legal limits. Reports can be submitted via the company intranet to the Chair of the ARC or the ComfortDelGro Group Chief Internal Audit Officer. All cases are promptly investigated, with the Group Chief Internal Audit Officer logging incidents and reporting them to the ARC. Our whistleblowing policy is publicly available on our website, and the SBS Transit Alert Line remains a secure channel for both internal and external stakeholders.

We prioritise whistleblower protection and enforce appropriate consequences for any breach, reinforcing our ethical standards and corporate integrity. We expect the highest standards of professionalism from all employees, and comply with all applicable anti-bribery and anti-corruption regulations. We also continually strengthen our internal controls and compliance measures to prevent misconduct.

In 2025, seven whistleblowing cases were reported through our whistleblowing channel to the ARC. Of these, three cases were assigned to Group Internal Audit for investigation, but the allegations were ultimately unsubstantiated. The remaining four cases involved non-compliance matters that resulted in no regulatory sanctions or fines, or involved legal operational issues that did not impinge on ethical standards or corporate integrity. These cases were subsequently investigated and resolved by management.

Conflict of Interest Policy

Employees must avoid actual, potential or perceived conflicts of interest, disclose them to their supervisors and recuse themselves from any related decisions. Our Conflict-of-Interest Policy promotes ethical conduct in all dealings:

- Gifts and entertainment: Solicitation is prohibited. Offering or accepting gifts or entertainment requires prior supervisor approval and must serve legitimate business objectives, comply with the law and meet Group standards.
- Mandatory declarations: New hires declare potential conflicts at onboarding; employees update declarations annually and whenever circumstances change. Staff involved in supplier onboarding, purchasing, tenders and awards receive reminders to declare.
- Procurement safeguards: Procurement staff make annual conflict declarations and must attend a Procurement Fraud Prevention and Detection workshop within their first two years. Immediate disclosure via the intranet is required if an actual, potential or perceived conflict arises.

In 2025, SBS Transit maintained full compliance with applicable laws and regulations, recording zero instances of non-compliance, including no sanctions, fines or legal actions related to anti-competitive behaviour, antitrust, monopoly legislation or environmental laws and regulations. For further details, please refer to Appendix 1: GRI Index, GRI 2-27, 206-1 and Appendix 2: SASB Index, SASB Rail Transportation TR-RA-520a.1.

ETHICAL BUSINESS AND GOVERNANCE
CORPORATE GOVERNANCE AND BUSINESS INTEGRITY

GRI 205-1

Operations Assessed for Risk Related to Corruption

Total number of operations	All
Total operations assessed for risks relating to corruption	All
Percentage of operations assessed for risks relating to corruption	100%

GRI 205-2

Communication and Training About Anti-Corruption Policies and Procedures

	GOVERNANCE BODY	SENIOR MANAGEMENT	MANAGEMENT	PROFESSIONALS	NON-EXECUTIVES
Total number of persons	9	71	202	782	8,572
Percentage that the organisation's anti-corruption policies and procedures have been communicated to	100%	100%	100%	100%	100%
Percentage that received training on anti-corruption	100%	100%	100%	100%	100%

RISK MANAGEMENT AND TRANSPARENCY

Effective risk management is integral to our strategy, enabling early identification, assessment and mitigation of threats to our operations and performance. Our framework explicitly integrates ESG considerations, including climate-related risks. Within our enterprise risk management framework, climate-related risks identified through screening and scenario analysis are assessed and rated using the same likelihood-impact criteria as other enterprise risks. Those with higher impact (e.g., expected financial effect >5% of our three-year average EBITDA) are prioritised on the risk register, monitored via key risk indicators and escalated as 'key risks' to the ARC/Board on a half-yearly basis, while the SSQC reviews high impact climate items every quarter. In 2025, we made no changes to our risk management processes, including sustainability and climate-related risk procedures, as they remained fit for purpose.

Effective risk management is embedded across SBS Transit through the management's Risk & Sustainability Steering Committee, chaired by the Group CEO. Working closely with all business units, the RSSC ensures consistent application of our Risk Management Framework and provides biannual enterprise risk updates to the ARC and the Board. Internal and External Auditors conduct regular reviews, with any non-compliance or control enhancement recommendations reported to the ARC.

Our approach is guided by three principles:

- Enterprise-wide risk awareness: Integrate risk management into daily operations, reinforced by management commitment, ongoing education, training and exercises.
- Clear ownership and accountability: Assign designated risk owners; managers at all levels are responsible for implementation, with Senior Management providing stewardship.
- Regular, proactive reviews: Update risk identification, assessment, mitigation controls and key risk indicators every six months to manage risks within our risk appetite.

Our process includes systematic risk screening across operations and the value chain - leveraging climate scenario analysis and value chain analysis (elaborated in the Sustainable Transition chapter) - to identify key and emerging risks. We update our risk inventory, prioritise climate-related risks alongside other enterprise risks, and develop targeted controls and action plans.

Risk inventories, indicators and adaptation/mitigation plans are reviewed and reported regularly in line with the Framework. Looking ahead, we will continue to strengthen our assessment and reporting, and advance mitigation and action plans to safeguard our operations, service delivery and financial performance.



RESPONSIBLE SUPPLY CHAIN AND PARTNERSHIP

Building a sustainable and ethical supply chain through responsible partnerships.

We are committed to advancing a sustainable and ethical supply chain built on transparency, compliance, social responsibility and environmental stewardship. Through robust procurement practices and close collaboration with partners, we uphold the highest standards of integrity across our operations.

To uphold these principles, we expect our supply chain partners to maintain the same standards of transparency, compliance, social responsibility and environmental stewardship. We actively manage procurement to ensure accountability through the following measures:

- **Supplier Code of Conduct:** All tenderers and suppliers are onboarded through our procurement system, which communicates our Supplier Code of Conduct and compliance expectations under applicable laws, regulations and policies. We engage only with suppliers that attest to, and demonstrate, adherence to these requirements.
- **ESG Assessment:** For Requests for Proposals with an award value above S\$500,000, suppliers must complete a mandatory ESG assessment. This evaluates their policies, achievements disclosures and flags any non-compliance with relevant ESG standards.
- **Supplier due diligence:** For suppliers and contractors performing work activities within our premises, we conduct enhanced due diligence focused on Workplace Safety and Health (WSH). This includes pre-qualification checks using WSH questionnaires, verification of safety certifications (such as bizSAFE Level 3 and above), competency assessments and review of historical WSH performance records. We maintain ongoing oversight through both scheduled and unannounced audits. Where gaps are identified, suppliers are required to implement Corrective Action Plans.

These measures reinforce responsible sourcing and alignment with our sustainability commitments.

In 2025, we engaged a total of 1,254 suppliers⁴⁰, all of whom were assessed using environmental and social criteria. We added 193 new suppliers to our procurement system, and in alignment with our Supplier Code of Conduct, 100% of them underwent screening based on environmental and social criteria.

One screened supplier was identified during routine checks to have significant potential and actual impacts. At the point of identification, contractual safeguards were already in place, and the impact did not occur within our premises or operations. We expedited the closure of works and have since removed the supplier from our supplier master. For details, see Appendix 1: GRI Index (GRI 308 and 414).

⁴⁰ Excluding legacy suppliers, all key suppliers onboarded in 2025 were fully compliant with the SBS Transit Supplier Code of Conduct.

R&D, TECHNOLOGY AND INNOVATION

Driving innovation in public transport through research, technology and strategic partnerships, supported by a culture of continuous improvement.

SBS Transit recognises the importance of being a progressive and forward-looking organisation in delivering reliable, safe and high-quality transport services for the commuters it serves. To support this, we collaborate with multi-sector industry partners to enhance operational efficiency and capabilities. By continuously exploring and adopting new technologies, SBS Transit seeks to future-proof its operations and meet evolving transport needs.

SBS Transit has established the Digital and AI Office to drive the organisation's digital transformation agenda ensuring all technology initiatives align with long-term strategic priorities. The division harnesses emerging technologies and Artificial Intelligence to enhance analytical capabilities and foster more intelligent, data-driven decision-making across the organisation to elevate the user experience and reinforce operational excellence, solidifying SBS Transit's position as an innovative leader in public transport.



The culture of innovation is fostered through our driv-E programme - a company-wide commitment to ongoing improvement and delivering safe, dependable journeys. The programme empowers employees to initiate and champion projects that enhance process excellence and strengthen operational performance.

Beyond driv-E we continue to advance our own home-grown innovations that enhance accessibility, operational efficiency and commuter experience.

Recent highlights include:

- SiLVia – AI-powered Sign Language Virtual Assistant that translates spoken and typed queries into sign language to support Deaf commuters. In 2025, SiLVia was recognised as one of three global winners at the Global Rail 2025 Innovation Awards, and will be adopted by Etihad Rail to integrate Emirati Sign Language into passenger information systems.
- AVATAR – Autonomous Robotic Train Inspector that uses sensors, cameras and video analytics to inspect train exteriors, interiors and undercarriage components. Inspection data is consolidated on a digital platform, enabling quicker identification of issues and improving inspection accuracy and efficiency while reducing manual workload for technicians.

ETHICAL BUSINESS AND GOVERNANCE

R&D, TECHNOLOGY AND INNOVATION

External Partnerships

We actively collaborate with our ecosystem of partners through strategic MOUs. In 2025, we signed 19 new MOUs to establish partnerships that drive innovation, foster joint research and accelerate the development of cutting-edge solutions. Key new partnerships include:

- Pinpoynt.ai – Co-creating an AI-driven mobility intelligence platform that leverages mobile data to generate real-time MRT crowd forecasts for smoother, more predictable journeys.
- TÜV Rheinland - Piloting energy-saving solutions such as solar-reflective bus-roof coatings to reduce thermal load and enhance cooling efficiency.
- Hitachi Rail - Collaborating on AI- and data-driven solutions to improve the performance and reliability of our automatic fare collection gates. The partnership will use fare system data to understand commuter movement trends, automate predictive maintenance and optimise station manpower planning for smoother journeys.

Autonomous Bus Deployment

In 2025, SBS Transit took a major step towards the future of public transport by entering the autonomous bus (AV) space. This milestone reflects the company's broader commitment to innovation and long-term readiness in a rapidly evolving urban transport landscape.

Working closely with the LTA, SBS Transit has supported the pilot deployment of autonomous buses on public services. Under this three-year pilot, six autonomous buses will be introduced on Bus Services 400 and 191 in the second half of 2026. These AV buses will operate alongside conventional, manned buses, supporting a hybrid fleet that allows for a phased rollout.

SBS Transit plays a central operational role in this pilot, supporting LTA through each phase of deployment. Active collaboration with LTA and the technology partners is expected across key areas, including defining operational concepts, validating AV bus capabilities, planning day-to-day operations and preparing the workforce for new roles. These roles include Safety Operators, Customer Service Officers, Remote Operators, Service Controllers and AV Bus Technicians.



Credits: LTA

This structured, phased approach enables stakeholders to progressively scale up AV bus operations. The transition will move from tested operations with Safety Operators to operations with Remote Operators once all systems and features have matured and been thoroughly tested, ensuring safety and service reliability. Collectively, the project underscores SBS Transit's long-term strategy of embracing digitalisation, automation and workforce transformation – strengthening our resilience and readiness in the face of evolving transport needs and manpower constraints.

CYBERSECURITY, DATA GOVERNANCE AND PRIVACY

Strengthening cyber resilience and data integrity across all operations.

Having close contact with millions of passengers daily, SBS Transit recognises importance of adhering to all laws governing the collection, use and disclosure of personal data, and we continually strengthen our capability to safeguard information, systems and assets.

STRENGTHENING CYBER PREPAREDNESS AND A SECURITY-FIRST CULTURE

Our cybersecurity governance spans both Information Technology (IT) and Operational Technology (OT), protecting the confidentiality, integrity and availability of our information and infrastructure. We adhere to leading local standards, including the Cybersecurity Amendment Act, the CSA Cybersecurity Code of Practice (Second Edition, Revision One) for Critical Information Infrastructure, LTA Code of Practice 8 and the Personal Data Protection Act.

As a Critical Information Infrastructure Organisation under the Cybersecurity Act 2018, we prioritise robust cyber-physical security, strong governance and system resilience across bus and rail operations. Our strategy, aligned with the Act and LTA guidance, integrates people, processes and technology to identify and mitigate IT and OT risks. We deploy advanced security technologies such as AI-driven anomaly detection and Zero Trust Architecture to enhance predictive threat mitigation and remote access protection.

We foster a security-first culture across the company through regular bulletins, briefings and specialised training on personal data protection and breach procedures. To validate our preparedness, we conduct cyber-range Red Team/Blue Team exercises annually to test our Cybersecurity Incident Management Procedures against CSA and LTA codes of practice. We also run four tabletop exercises annually for critical IT and OT systems, covering scenarios such as ransomware, website defacement, distributed denial-of-service attacks and major network failures. These exercises are complemented by participation in external national and sector-level drills.

Our commitment to data privacy was reinforced this year as SBS Transit remained the only public transport operator in Singapore to attain the IMDA Data Protection Trustmark for both Bus and Rail operations, recognising our PDPA-aligned practices and strong governance.

There were no major incidents of breaches and no substantiated complaints concerning breaches of customer privacy and losses of customer data.

We have consistently kept audit-identified non-conformities for our IT systems below 10%, and we intend to uphold the same standard for our OT systems moving forward. For more detailed information, please refer to Appendix 1: GRI Index, GRI 418-1.



ASSET PROTECTION AND SECURITY

Protecting critical assets with strong security and compliance standards.

As a public transport operator, we take full responsibility for safeguarding and securing the assets and infrastructure entrusted to us by LTA. Our asset management approach is underpinned by continuous performance monitoring and robust assurance activities.

While LTA owns the assets and infrastructure we operate, SBS Transit is responsible for their protection and security in day-to-day operations. We strengthen asset management through continuous performance monitoring and robust assurance activities.

Our Asset Management System Manual, reviewed annually, guides our measures and actions. This is supported by Asset Management Policies aligned with ISO 55001:2014 and our Asset Management and Safety and Health Policy, which set clear expectations and procedures for safeguarding assets.

We conduct regular internal audits, inspections and covert red-teaming exercises that simulate real-world intrusions to test our defences from an adversarial perspective. LTA also carries out external audits to verify that assets are maintained to required standards.

To ensure organisational readiness, all employees undergo our in-house Threat-Oriented Person Screening Integrated System (TOPSIS) programme, which strengthens situational awareness and enhances early detection of potential security threats. We achieved 100% completion of TOPSIS training in 2025, ensuring all employees are equipped to detect threats and safeguard our assets. We will continue to build security awareness among tenants and contractors, emphasising their role as vigilant partners and supplementary observers on our premises.

We also recognise outstanding vigilance through our Annual TOPSIS Awards for staff and contractors. Two staff members and three security officers were honoured for their alertness and prompt responses to potential security risks, reflecting our strong culture of shared responsibility in safeguarding our operations. This annual recognition reinforces collaboration, innovation and sustained commitment to keeping our transport network safe, secure and resilient.

We continue to deploy technologies that strengthen our security posture. Some key examples include:

- MARS, the AI-enabled, all-terrain robotic dog was on a proof-of-concept trial at Seletar Bus Depot in 2025. It is capable of detecting intrusions, signs of tampering and other anomalies through its high-definition imaging sensors and cameras.
- SENTINEL smart security platform, integrating feeds from mobile CCTVs and security robots to deliver real-time alerts for rapid incident response.

ETHICAL BUSINESS AND GOVERNANCE

**ASSET PROTECTION
AND SECURITY**

Strengthening Perimeter Security with Autonomous Robotic Patrols

To enhance after-hours surveillance and reduce reliance on manual patrols, the Mobile Autonomous Robotic Surveillance (MARS) system underwent a proof-of-concept trial at Seletar Bus Depot in 2025. Developed with Weston Robot, MARS is an AI-enabled, all-terrain robotic dog equipped with high-definition cameras and multi-modal sensors that enable it to detect intrusions, identify signs of tampering along the perimeter fence and flag unusual activity in real time.

Its four-legged design provides superior mobility, enabling it to navigate grass patches, kerbs, drains, staircases and other uneven terrain that are challenging for traditional wheeled robots. During the trial, security officers were able to monitor situations remotely through live video feeds streamed from the robot's onboard cameras.

The proof-of-concept yielded promising results in strengthening surveillance coverage and situational awareness, and we are assessing opportunities to extend MARS patrols to other depots as part of our ongoing security innovation efforts.

ETHICAL BUSINESS AND GOVERNANCE ASSET PROTECTION AND SECURITY

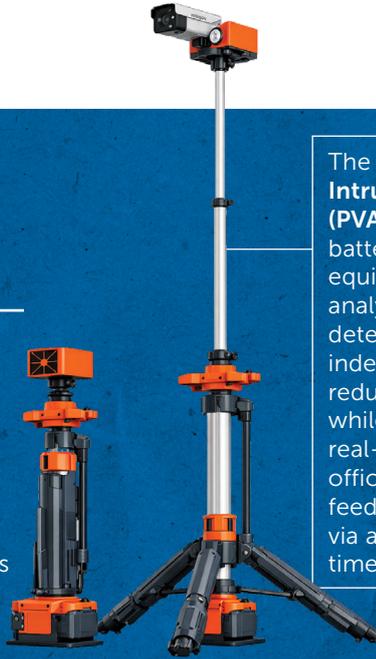
Enhancing Perimeter Security with Portable and Integrated Video Analytics Solutions

In 2025, we introduced two complementary solutions to strengthen perimeter security at our Rail Depots to address detection gaps at gates where the legacy setup and structure limited the effectiveness of sensor-based solutions, and where older sonar sensors had become unreliable.

The Video Intrusion Detection System integrates analytics into the analogue CCTV system to detect persons and vehicles encroaching into preset zones and to trigger real-time alarms to the guardhouse for rapid response. Following a successful proof-of-concept, the retrofit was extended to automate trespass detection at the vehicular exit and to operate the arm barrier for access control—enhancing gate security and enabling the redeployment of guards to other duties.

For CCTV networks that were not compatible for integration, we adopted an agile approach of deploying live analytics to improve situational awareness, refine alert thresholds and inform longer term system improvements. This trial also demonstrated rapid redeployment capability when construction along the perimeter increased intrusion risk.

The **Portable Video Analytic Intrusion Detection System (PVAIDS)** is a standalone, battery-operated camera equipped with built-in video analytics for intrusion detection. The system operates independently of other systems, reducing cybersecurity exposure while providing accurate real-time detection. Security officers can access live video feeds and receive intrusion alerts via a tablet interface, enabling timely verification and response.



PVAIDS portable camera being redeployed and set up at a new location to mitigate increased intrusion risk from nearby construction.

PVAIDS delivers rapid-deployment capability, as it requires no cabling, fixed power or integration with existing systems, enabling quick setup and fast redeployment across different terrain. When new construction activity along the depot perimeter introduced an elevated intrusion risk, a unit was rapidly redeployed to monitor the area, demonstrating its ability to provide instant protection where and when needed.

These solutions strengthen our compliance with regulatory reporting requirements by providing reliable detection and immediate alerts, even when site conditions change or temporary access points emerge.

The multi-pronged approach reflects our commitment to adopting practical, innovative and cyber-secure technologies that enhances perimeter surveillance, support operational readiness and ensure our depots remain safe and well protected.



PVAIDS workflow - monitoring, detection zone setup and live monitoring on a tablet.





OUR JOURNEY TOWARDS
A GREENER TOMORROW CONTINUES,
GUIDED BY OUR VISION AND PURPOSE,
STRENGTHENED BY OUR PARTNERSHIPS,
AND DRIVEN BY OUR COMMITMENT TO
SUSTAINABLE MOBILITY.