

SIYTE for Criminal Activity in Rail



Cable theft costs the UK Rail Industry over £3.3m annually, causing over 69,000 minutes train delays in 2024. A single incident in 2024 caused 13,485 minutes of delay, costing £725,000.



Network Rail spend more than £3.5m per year removing graffiti. Additionally, graffiti and vandalism of carriages mean cause them to be taken out of service, sometimes at short notice impacting services.



Technology solutions for the detection of trespass are often challenged by false detections, with responders losing confidence in these systems and ignoring alerts.

Beyond Trespass: Utilising smart analytics to add context and remove false alerts, enabling responders to trust the system.

- **Sound Analytics (e.g. Graffiti and Breaking Glass) :** SIYTE can analyse sound as well as video, creating alerts and adding to intruders context such as glass breaking or spray cans in use.
- **Added Context & Detecting Vandalism:** SIYTE can add context to alerts, such as detecting PPE. SIYTE can also absorb sensor feeds such as tilt and vibration on assets to detect vandalism.
- **Removing False Alerts:** SIYTE re-analyses each detection using advanced models to ensure genuine trespass events. For example, it can detect if a person is seen through a train window and remove such false alerts.

All Criminal Activity starts with Trespass

Although there are thousands of cameras on the railway, the vast majority are not actively monitoring, being for evidence collection only.

SIYTE leverages advanced AI technology to analyse real-time CCTV from existing cameras, identifying potential trespassers and alerting appropriate responders. This system has been proven to work on the railway, with firm evidence of both detecting and reducing trespass.

- **Deterrent:** Trespass detection can be linked to automated announcements from speakers embedded in cameras or external speakers to deter trespassers.
- **Real-time Alerting:** SIYTE alerts stakeholders to events via SMS, Email or Mobile App), with redacted snapshots/videos, and can add context (e.g. wearing PPE).
- **Data Insights:** Logging and reporting of trespass events for analysis for better decision making (e.g. informing a business case for improved fencing).



REB Person by Door

