

Video Analytics Success in Critical Infrastructures: Transport Networks

Success of Video Analytics in Transport Networks

Like any critical installation, public transport infrastructures require an effective perimeter security system that can provide full coverage with maximum accuracy



Early detection of intruders is paramount, as is detecting any suspicious objects to prevent terrorist attacks.

In addition, tunnels, railway lines, train and metro stations and their parking areas are susceptible to threats that can endanger the normal functioning of urban communication networks, negatively affecting the entire population.

At DAVANTIS, we are experts in managing perimeter security in critical infrastructures. Our video analytics systems have been endorsed and certified by competent security agencies, so we have been collaborating with perimeter security of important critical facilities for years.

Communications and transport networks are no exception. We understand the complexities of this industry

and have designed specific features to effectively meet all types of requirements by adapting to various environments.

Terrorism, theft and graffiti

Railway networks cover long distances, crossing all kinds of land, sparsely populated areas, tunnels and locations that become magnets for protesters and criminal activity.

Detecting trespassers in these areas is important to avoid unwanted interference with the tracks that endangers the normal operation of overland and underground trains, whether by objects interfering with the tracks, groups of people or terrorism.

Our intelligent video analysis systems can detect people and objects over long distances and in adverse

situations (poor lighting, rain, snow, etc.). In addition, we use deep learning algorithms to merge appearance and movement for more efficient detection and false alarm management. This leads to better levels of protection and a drastic reduction in false alarms.

At the same time, stations and parking areas require well-designed perimeter security measures to detect signs of criminal activity, theft or vandalism on the premises. One important factor at railway and underground stations is the need for early detection of graffiti "artists" who damage wagons and machinery. In addition, installations must be protected from theft of all types, including cables, tools, machinery and other property.

These situations highlight the importance of investing in effective perimeter solutions



since they can prevent the unwanted intrusion of people, objects and vehicles.

Artificial Intelligence for Security

Video analytics is your best ally for effectively managing perimeter security. Our deep learning-based technology ensures maximum coverage and full integration with different alarm management platforms (CRA, VMS and PSIM) to enable real-time access to images when an intrusion is detected.

This integration allows the CRAs and the Control Centres to analyse and assess each event detected to define action protocols while reducing operational costs. In other words, sending alarms to the Control Centre makes it possible to react in just a few seconds in the event of real

alarms, stopping the nuisance of false alarms.

Early detection improves security in all types of assets in difficult situations with complete cost control because ensuring maximum coverage without the need to implement physical security systems. DFUSION video analysis features intelligent anti-tamper systems that trigger technical alarms in case of attempts to tamper with CCTV cameras at public transport facilities.

Video analytics is the technology of choice for controlling communication and transport network facilities. They offer unrivalled accuracy, detecting intruders and tampering fast, and deterrent protocols can be configured to keep unwanted visitors out of highly critical sites.

Transport networks protected by DAVANTIS video analytics

DAVANTIS has managed perimeter security at national and international transport networks for many years. Our smart video analytics system achieves high efficiency and precision in critical infrastructures through deep learning algorithms and **total integration and adaptability**.

Internationally endorsed by the United Kingdom's Centre for the Protection of National Infrastructure (CPNI), DAVANTIS' efficient, high-quality solutions are supported by a team of video analytics and critical infrastructure security experts, who are ready to advise and assist in all phases of installation and maintenance.

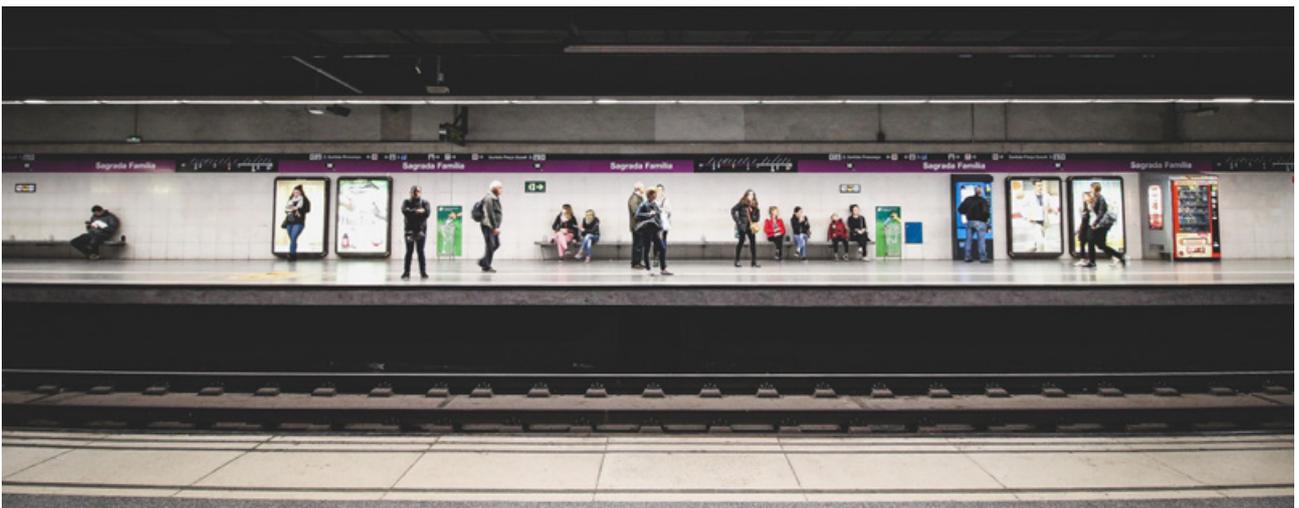
CPNI[®]

Centre for the Protection
of National Infrastructure

TMB Barcelona

Spain

TMB is the main public transport operator in Catalonia. Its communications network includes bus, tram and underground/metro transport services. To provide correct mobility in its activity area, TMB has installed our video analysis systems to ensure safety in its stations, vehicles parks (wagons and buses), car parks and surroundings. Furthermore, the need to catch graffiti "artists" in repair and maintenance areas is a priority when managing the security of the entire complex against terrorist attacks, pickpockets and other incidents. This has led to the implementation of our video analysis technology in full integration with its centralised surveillance systems.



TMB. Transports Metropolitans
de Barcelona

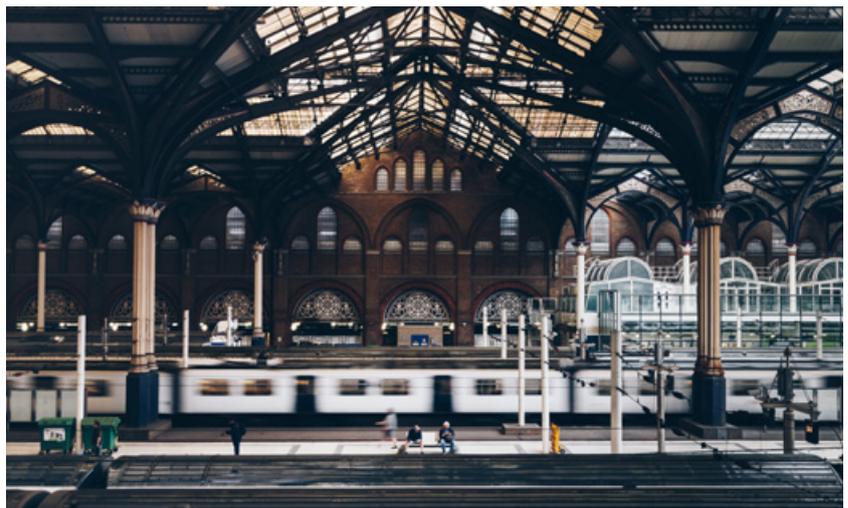


UK Railway stations

United Kingdom

The UK rail network has our video analysis systems at all stations and in the surroundings to ensure maximum safety for passengers and infrastructure. The need to protect train stations from terrorist attacks prompted the installation of our CPNI certified deep learning technology. Like all critical infrastructures, security requirements have focused on maximum coverage, early detection of people, vehicles and objects, and the need to reduce false alarms.

United Kingdom rail network



Eurotunnel

France

The Eurotunnel company in France uses DAVANTIS video analysis technology to manage and control the French side of the tunnel. The infrastructure has 70 thermal cameras and eleven servers that give a high level of protection to entrances and surrounding installations. In addition, the need for a 24/7 security system and full integration into the alarm management platform has enabled our perimeter security systems to provide maximum efficiency in security detection and control.



Eurotunnel,
France-United Kingdom

El Pertus tunnel

Spain

This railway tunnel links France and Spain under the Eastern Pyrenees and allows hundreds of high-speed journeys between Perpignan and Figueres. The Pertus tunnel links high-speed trains from both countries, the AVE (Spain) and the TGV (France), guaranteeing streamlined, direct travel. It has a dual orifice feature for maximum security and access management and a tamper management system, and early intruder detection in the surroundings.



High-speed journeys between
Perpignan and Figueres



RENFE

Spain

This company is Spain's nationwide operator for rail mobility of passengers and goods. Its commitment to safety and efficiency has led to the installation of DAVANTIS video analysis systems in its stations and railway network for integral perimeter security and control. Its main objective has been to stop graffiti "artists" at stations and stop vandalism on the premises and wagons. In light of our technology's accuracy and coverage potential, the system has been expanded to address other needs related to theft, terrorist attacks, and parking control.

RENFE stations





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