BOSCH
Invented for life

Creating a more secure world and new value for businesses

with Video analytics

Essential Video Analytics

Essential Video Analytics is the ideal analytics solution for small and medium businesses, large retail stores, commercial buildings, warehouses and logistics depots. It can be used for advanced intrusion detection (such as loitering alarms and identifying a person or object entering a pre-defined field), enforcing health and safety regulations such as no-parking zones, detecting blocked emergency exits or objects that have been left behind, and analyzing behavior in retail environments.

Intelligent Video Analytics

Intelligent Video Analytics offers the ultimate in built-in video analytics and is specifically designed for the most demanding environments. This state-of-the-art solution is ideal for mission-critical applications like perimeter protection of airports, critical infrastructures and government buildings, border patrol and traffic monitoring (e.g. wrong-way detection, traffic counts, and parked cars). Intelligent Video Analytics can do everything that Essential Video Analytics does.

It also has the unique ability to perform video content analysis over large distances and differentiate between genuine security events and known false triggers such as snow, wind (moving trees), rain, hail, and water reflections that can make video data more difficult to interpret. Cameras with Intelligent Video Analytics are also extremely resistant against shaking caused by punishing winds, city traffic or bicycles parked against the camera pole.

Camera Trainer

There is no 'one size fits all' when it comes to protecting people and property. That's why we've taken the next step with Camera Trainer. The more a video security camera can know and learn, the more accurately and application-specifically it can perform.
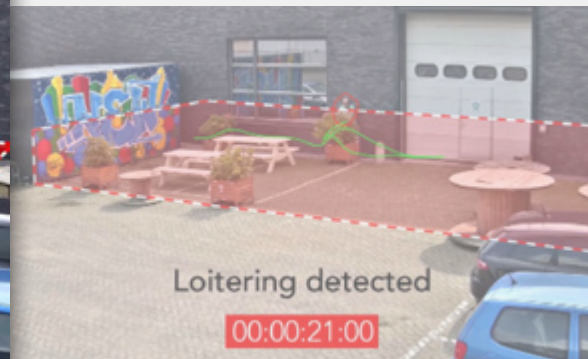
Start here

No-parking zones
(Essential Video Analytics)

Ensure cars never block critical areas by applying no-parking zones. Using no-parking zones, an alert will be triggered once a car is parked in a restricted area for too long.
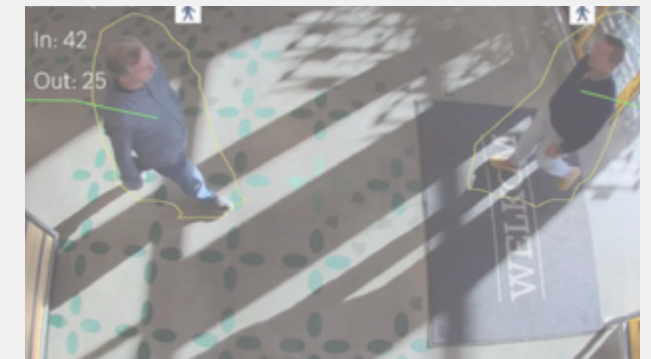
No-parking zones
(Essential Video Analytics)

Loitering detection
(Essential Video Analytics)

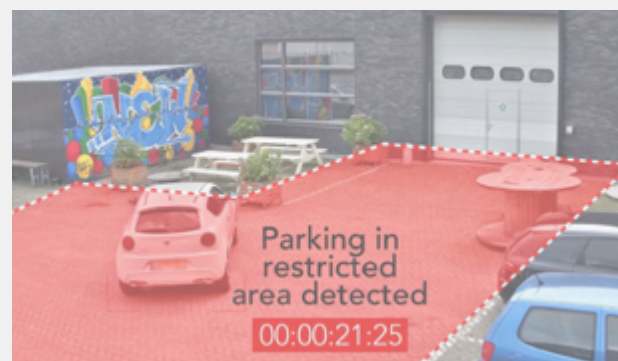**Left object detection**
(Essential Video Analytics)
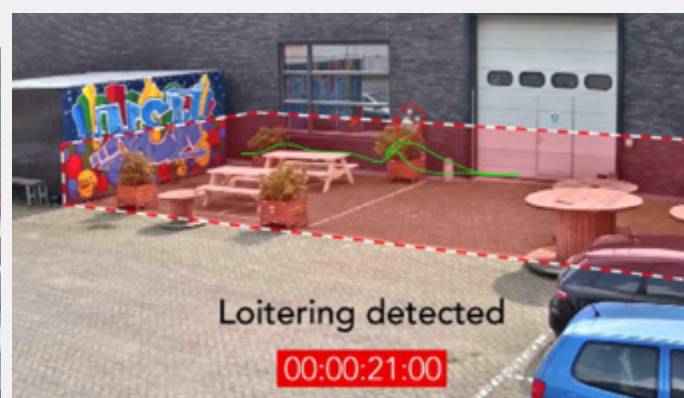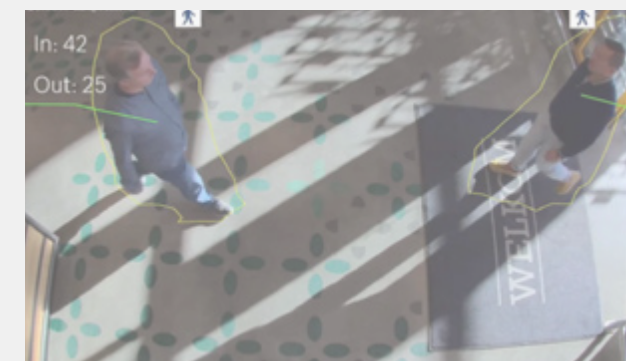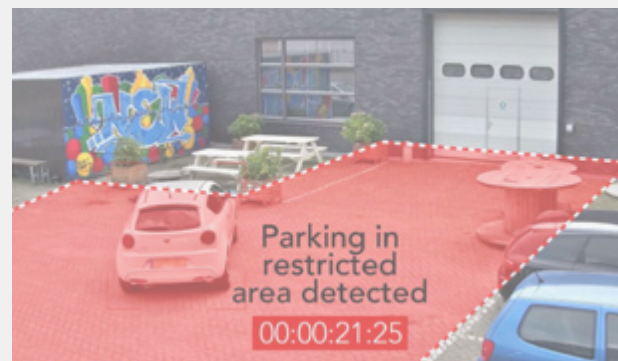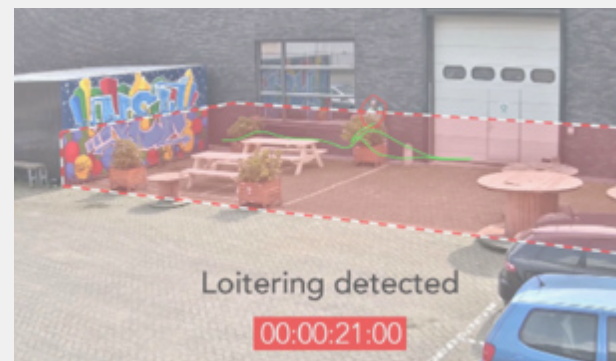
People counting
(Essential Video Analytics)

BOSCH
Invented for life

Loitering detection
(Essential Video Analytics)

There are areas around a premises where you don't want people loitering. And when it happens, it's important to receive an alert. That's when loitering detection proves to be effective:

Loitering detected
00:00:21:00

Parking in restricted area detected
00:00:21:25

No-parking zones
(Essential Video Analytics)

Loitering detected
00:00:21:00

Loitering detection
(Essential Video Analytics)

Left object detected
00:00:07:29

Left object detection
(Essential Video Analytics)

In: 42
Out: 25

People counting
(Essential Video Analytics)

Left object detection
(Essential Video Analytics)

Left objects can be potential threats to the safety and security. With left object detection, alerts are triggered on objects as soon as they are left behind for a certain amount of time:

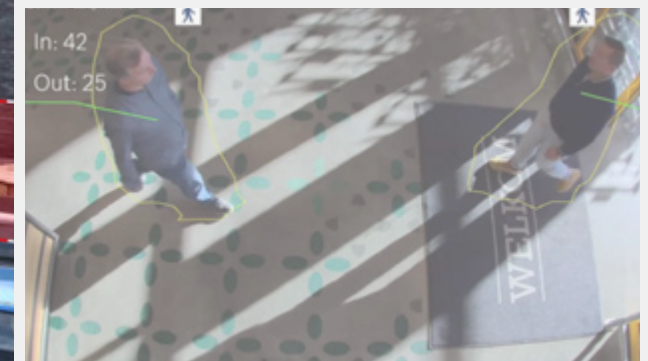**No-parking zones**
(Essential Video Analytics)

Loitering detection
(Essential Video Analytics)
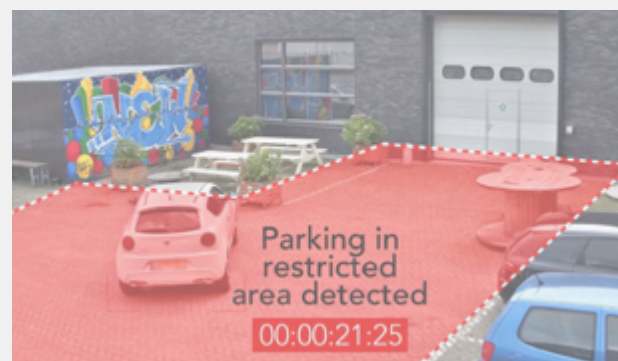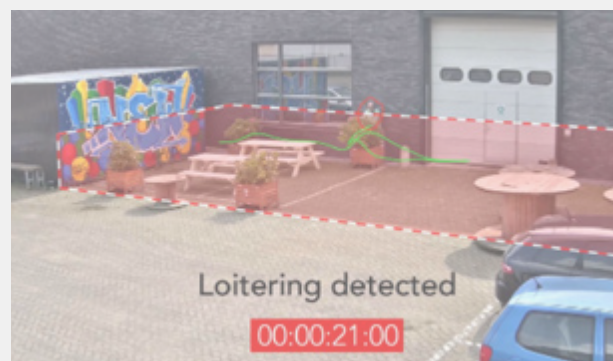
Left object detection
(Essential Video Analytics)

People counting
(Essential Video Analytics)

BOSCH
Invented for life

People counting
(Essential Video Analytics)

Next to safety and security, intelligence can also be used for business analytics such as people counting. This helps to analyze customer behavior.
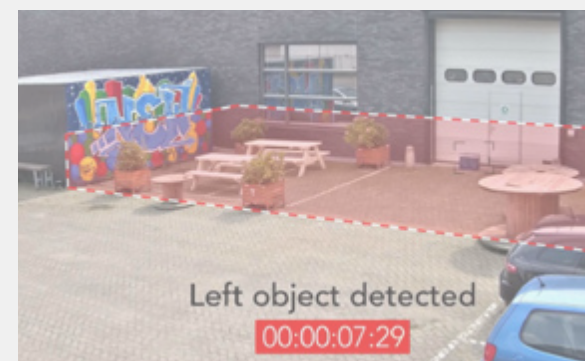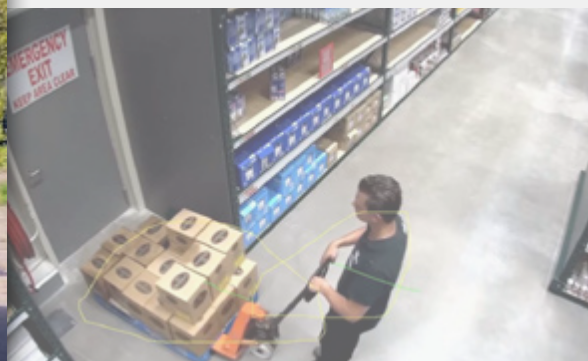

No-parking zones
(Essential Video Analytics)

Loitering detection
(Essential Video Analytics)

Left object detection
(Essential Video Analytics)

People counting
(Essential Video Analytics)

Perimeter protection
(Essential Video Analytics)

Video analytics takes perimeter protection to the next level. In this example, an alarm is triggered when someone climbs a fence, but it can also be done with the alarm rule "line crossing".

Perimeter protection
(Essential Video Analytics)

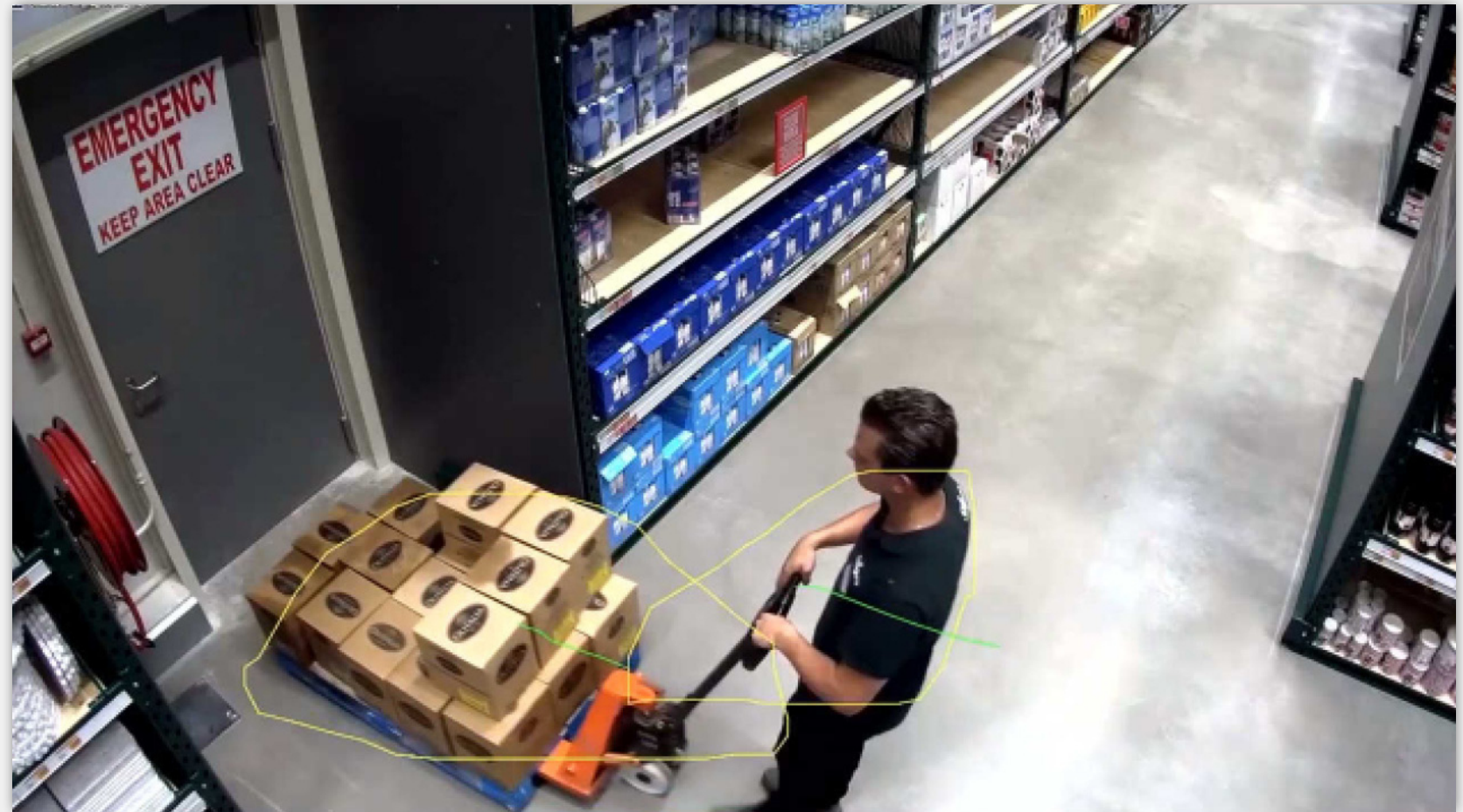**Blocked emergency exit 1**
(Essential Video Analytics)

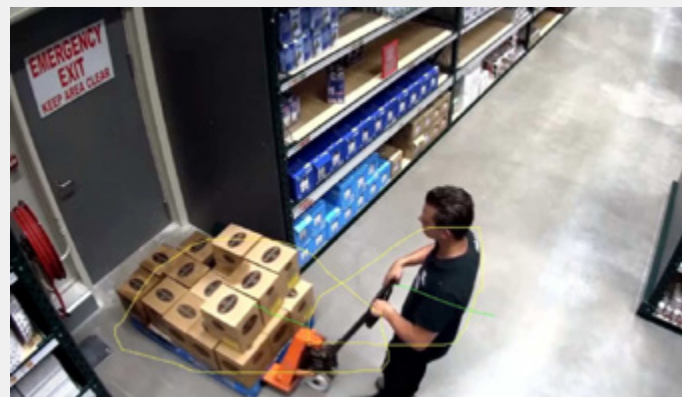**Blocked emergency exit 2**
(Essential Video Analytics)

Queuing notification
(Essential Video Analytics)

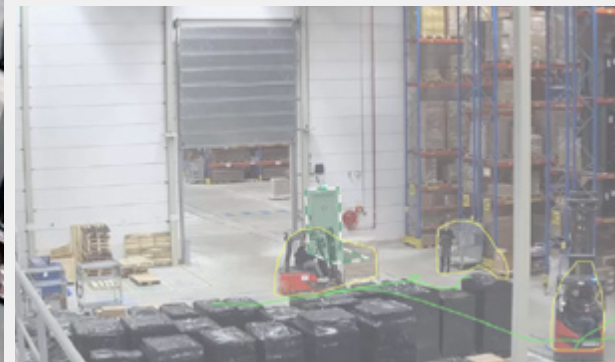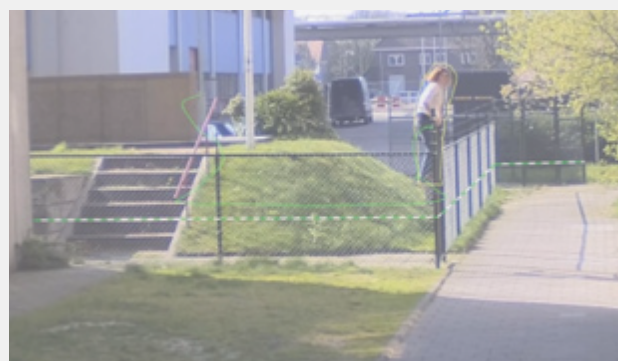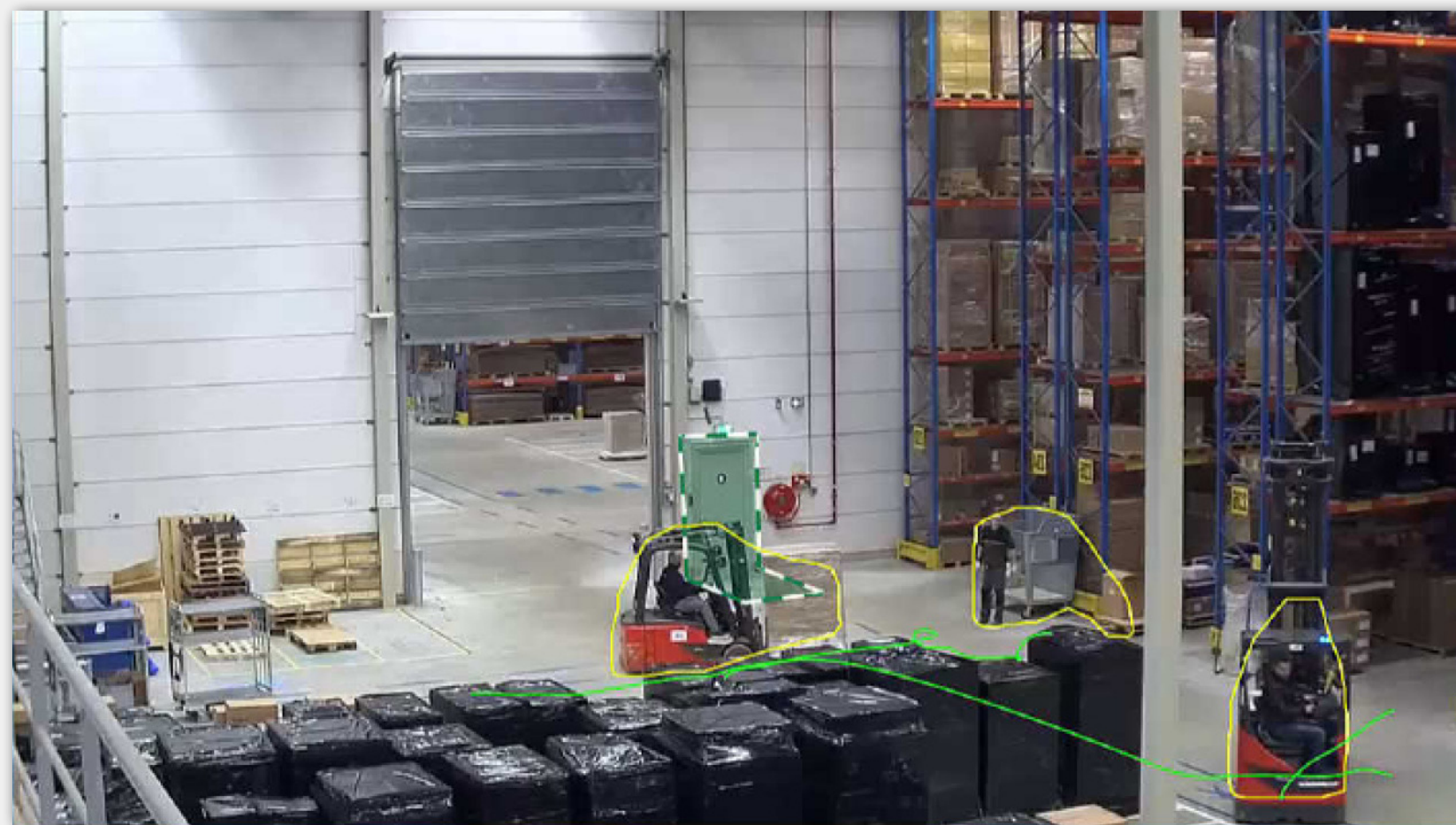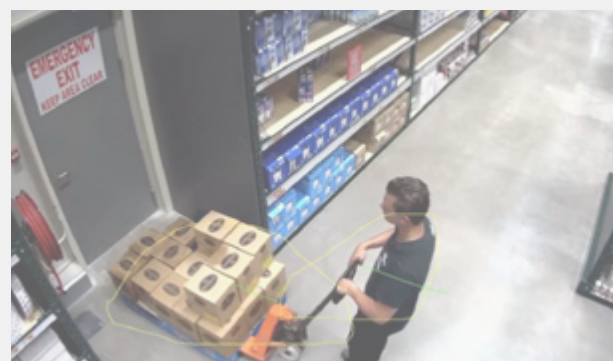# Blocked emergency exit 1
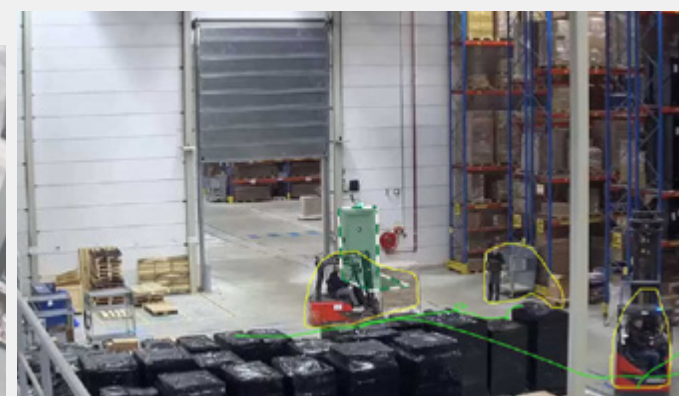(Essential Video Analytics)

Emergency exits should always be
accessible so if one is blocked, the issue
needs to be solved as soon as possible.
Video analytics enables you to do so by
triggering an alarm in case the emergency
exit is blocked by an object.

Perimeter protection
(Essential Video Analytics)

Blocked emergency exit 1
(Essential Video Analytics)

Blocked emergency exit 2
(Essential Video Analytics)

Queuing notification
(Essential Video Analytics)

BOSCH
Invented for life

Blocked emergency exit 2
(Essential Video Analytics)

Emergency exits should always be accessible so if one is blocked, the issue needs to be solved as soon as possible. Video analytics enables you to do so by triggering an alarm in case the emergency exit is blocked by an object.

Perimeter protection
(Essential Video Analytics)

Blocked emergency exit 1
(Essential Video Analytics)

Blocked emergency exit 2
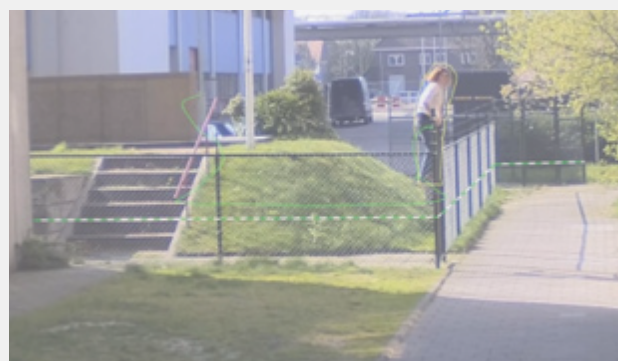(Essential Video Analytics)

Queuing notification
(Essential Video Analytics)
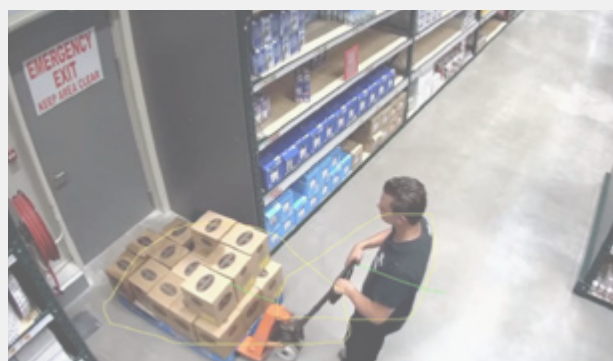
Queuing notification
(Essential Video Analytics)

While securing the cash register area to prevent 'sweet-hearting', metadata can also be used to trigger an alarm in case the number of people in a queue exceeds the pre-defined threshold.
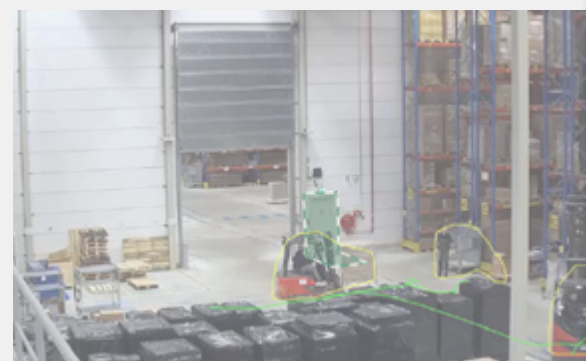
Perimeter protection
(Essential Video Analytics)

Blocked emergency exit 1
(Essential Video Analytics)

Blocked emergency exit 2
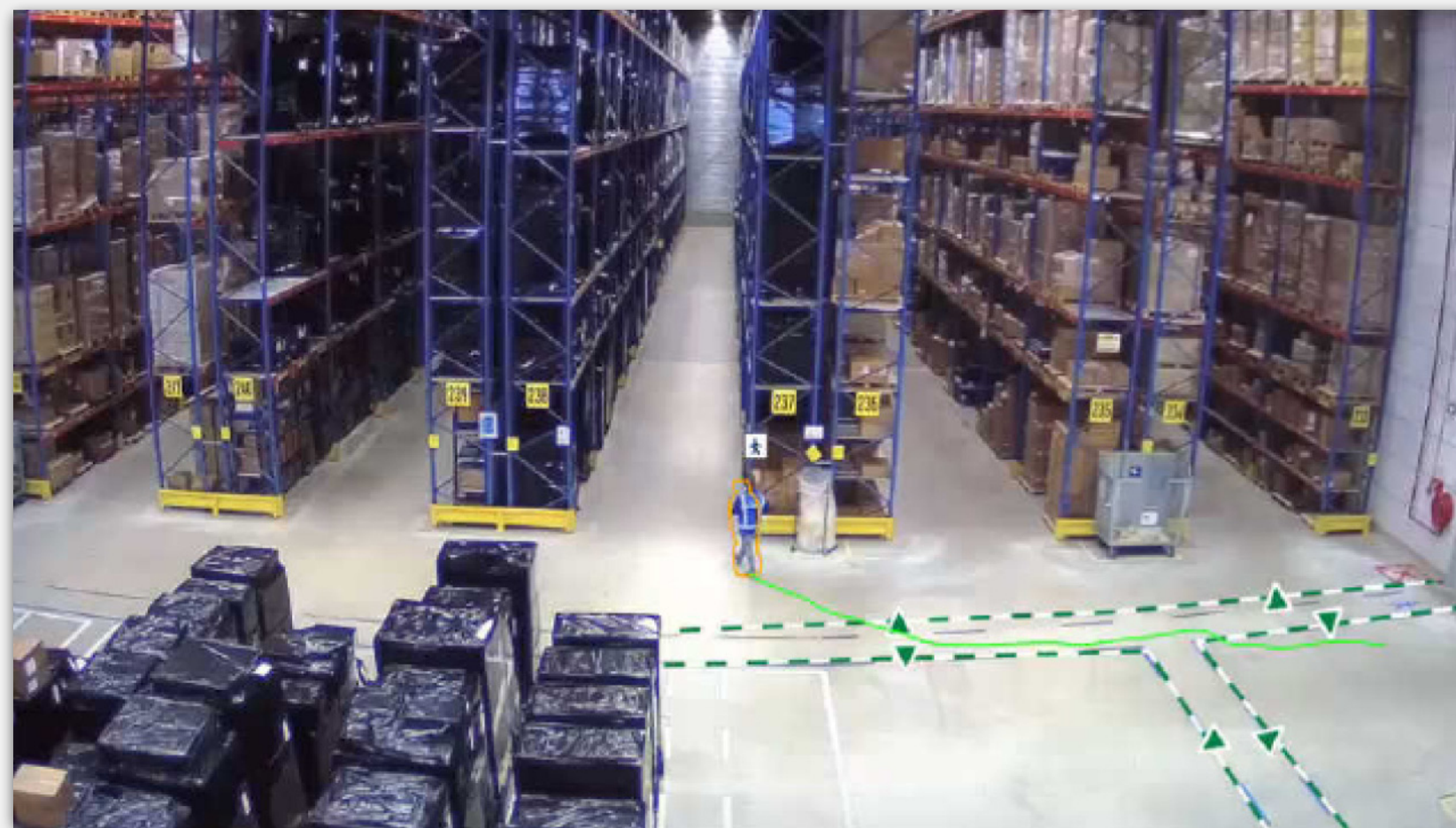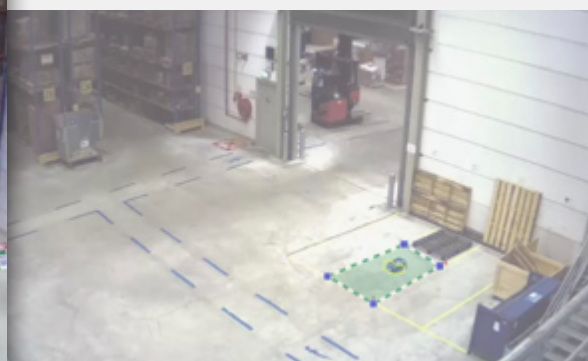(Essential Video Analytics)

Queuing notification
(Essential Video Analytics)

Deviate from path
(Essential Video Analytics)

In certain environments, such as a warehouse or factory, it's important that people do not deviate from dedicated paths, mainly to ensure safe and secure processes.
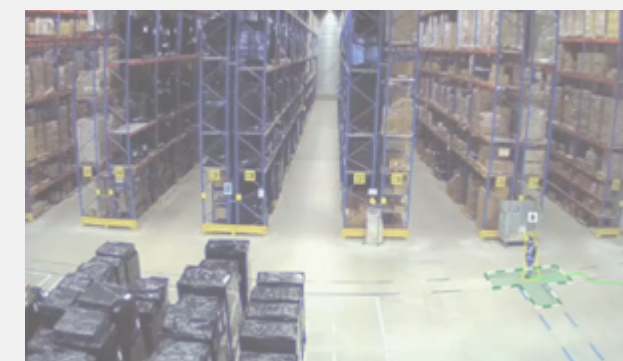
Deviate from path
(Essential Video Analytics)

Object in field
(Essential Video Analytics)

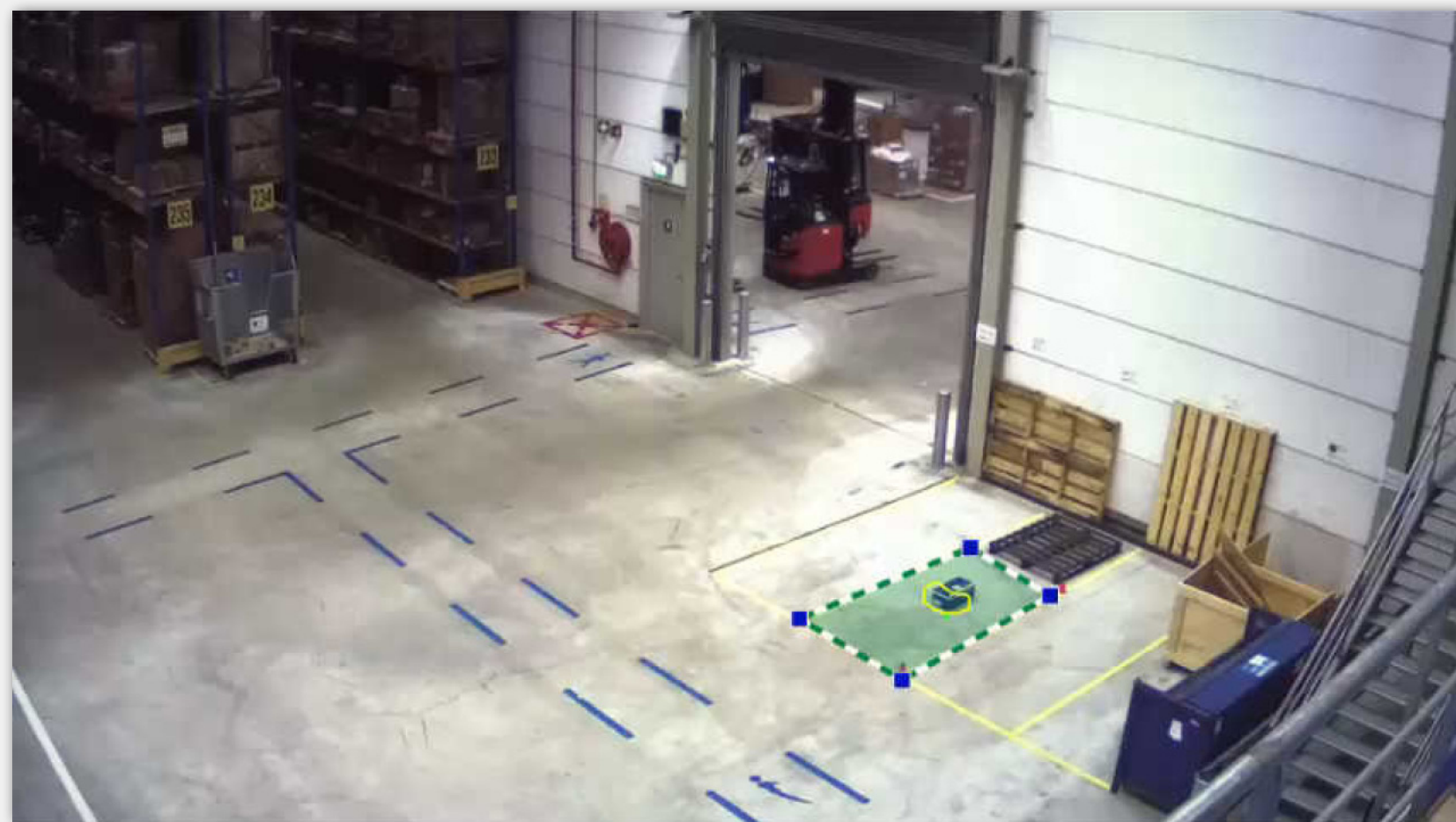**Removed object**
(Essential Video Analytics)

No-stop area
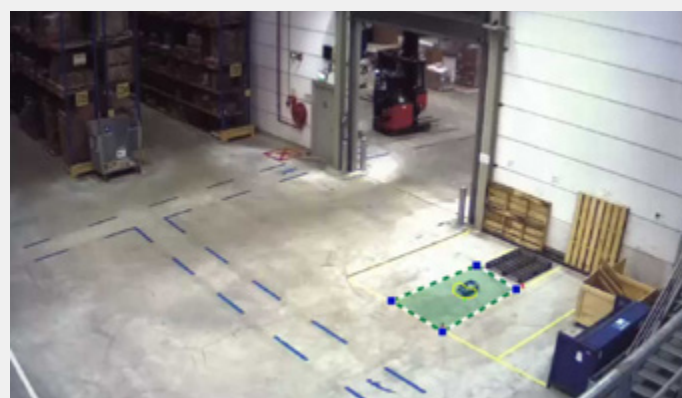(Essential Video Analytics)

Object in field
(Essential Video Analytics)

Just like having no-parking zones, there's also areas on a premises where there should be no objects at all. Our intelligent cameras can alert you in case something blocks a dedicated field which should be kept free.
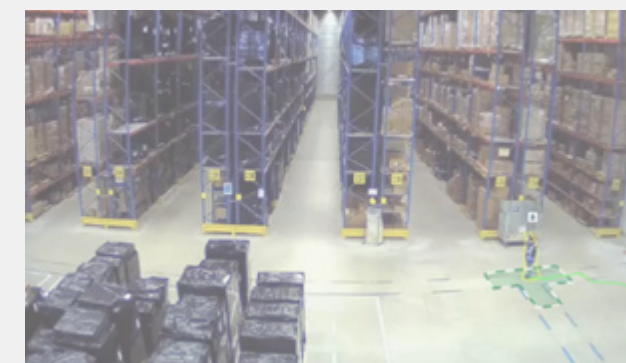
Deviate from path
(Essential Video Analytics)

Object in field
(Essential Video Analytics)

Removed object
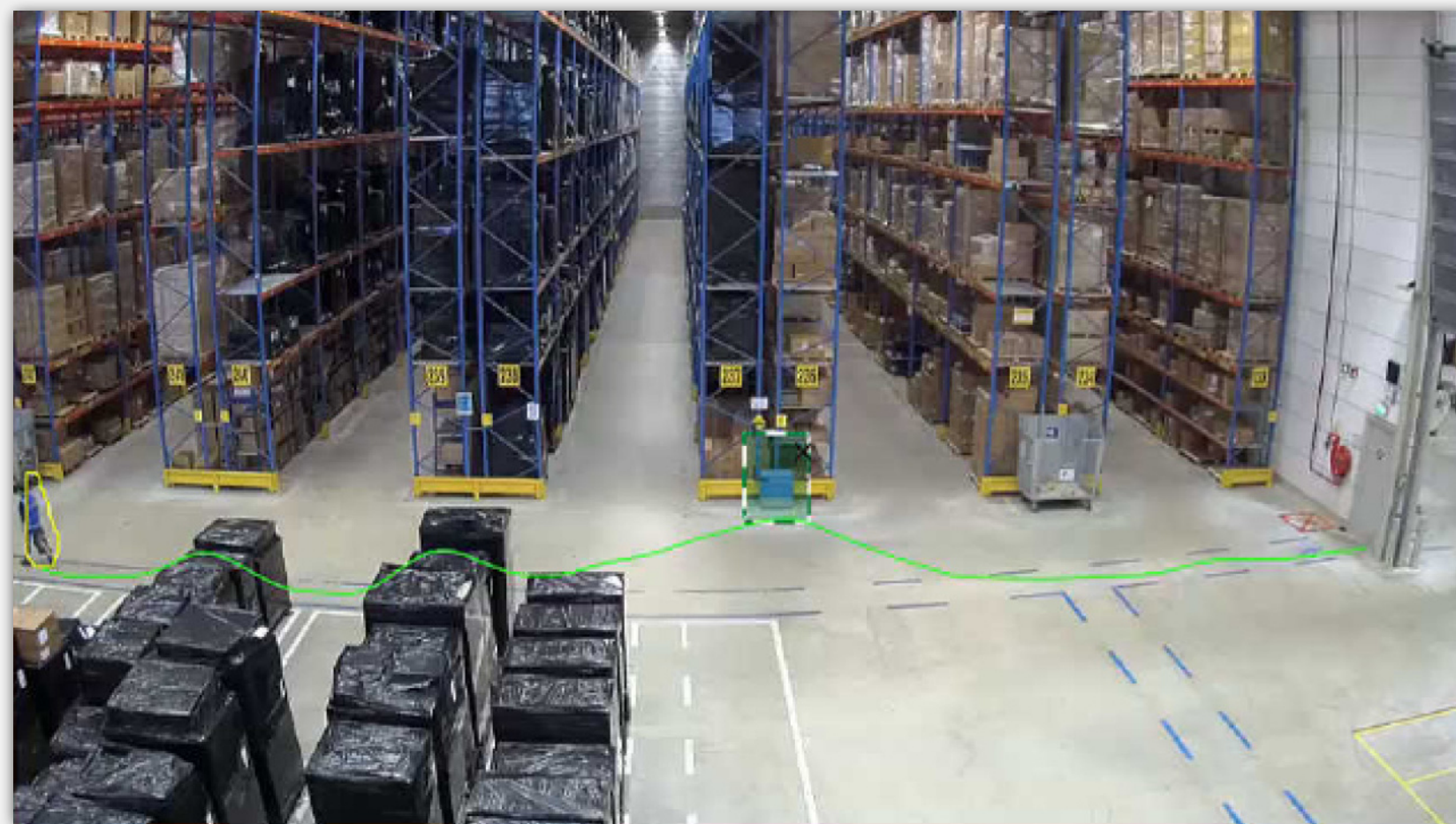(Essential Video Analytics)

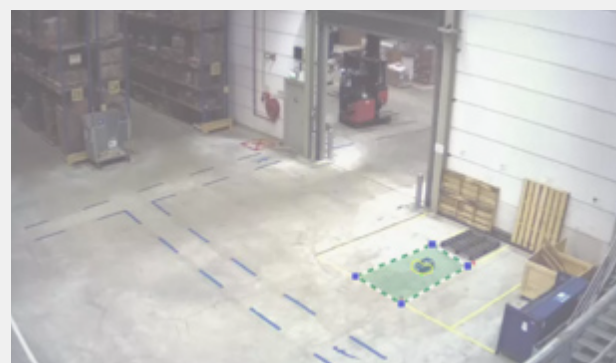**No-stop area**
(Essential Video Analytics)

Removed object

(Essential Video Analytics)

In contrast to being alerted when an object is left behind, alerts can also be necessary when an object is removed.
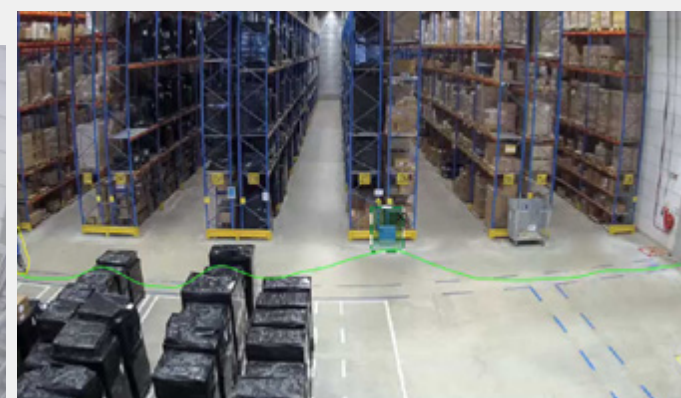
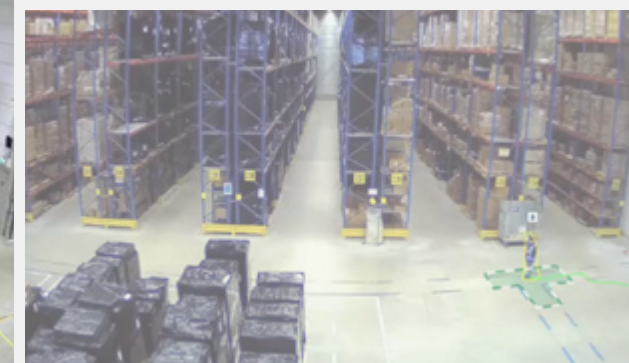**Deviate from path**
(Essential Video Analytics)

Object in field
(Essential Video Analytics)
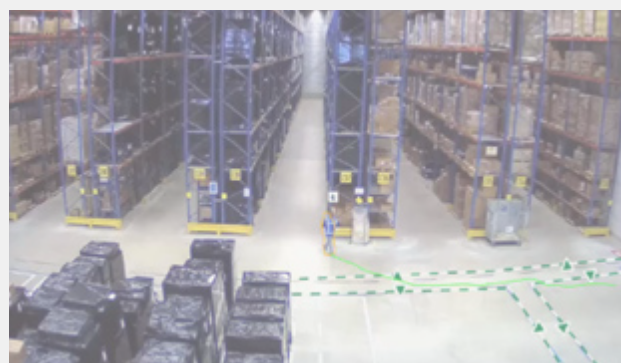
Removed object
(Essential Video Analytics)

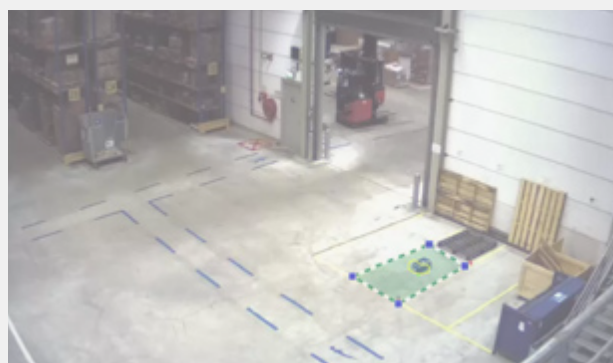**No-stop area**
(Essential Video Analytics)

No-stop area

(Essential Video Analytics)

At certain places it's key to keep traffic flowing, whether it's vehicles or people. By applying no-stop zones, alerts are triggered the moment such a rule is violated.
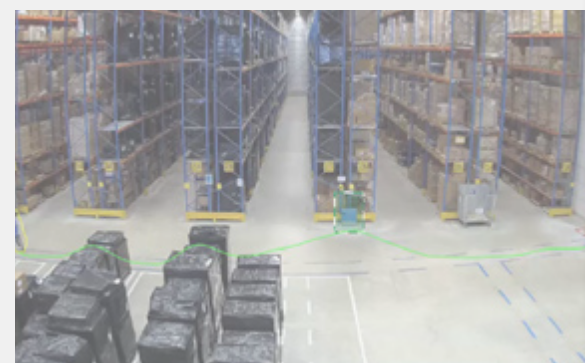
Deviate from path
(Essential Video Analytics)

Object in field
(Essential Video Analytics)

Removed object
(Essential Video Analytics)

No-stop area
(Essential Video Analytics)
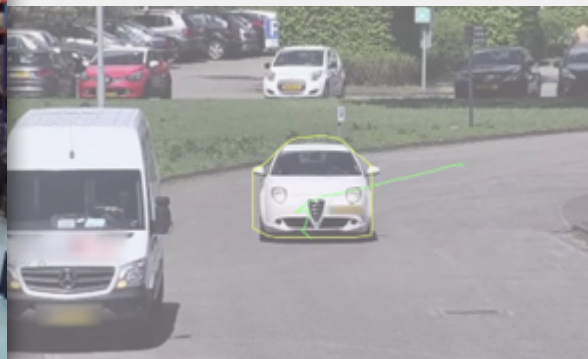
Wrong way detection
(Essential Video Analytics)

In one-way traffic lanes, it is key to detect vehicles moving in the wrong direction. With wrong way detection, an alert is triggered when this is occurring.

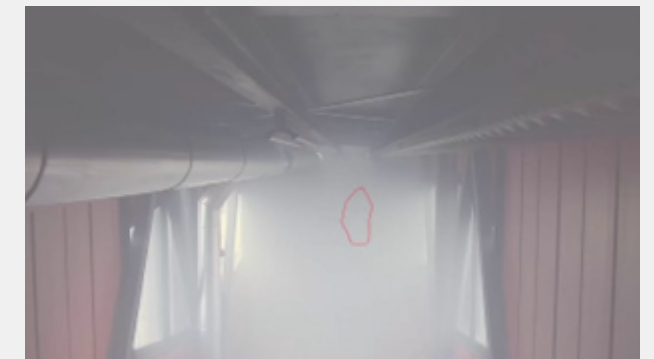
Wrong way detection
(Essential Video Analytics)

Intelligent Tracking
(Intelligent Video Analytics)

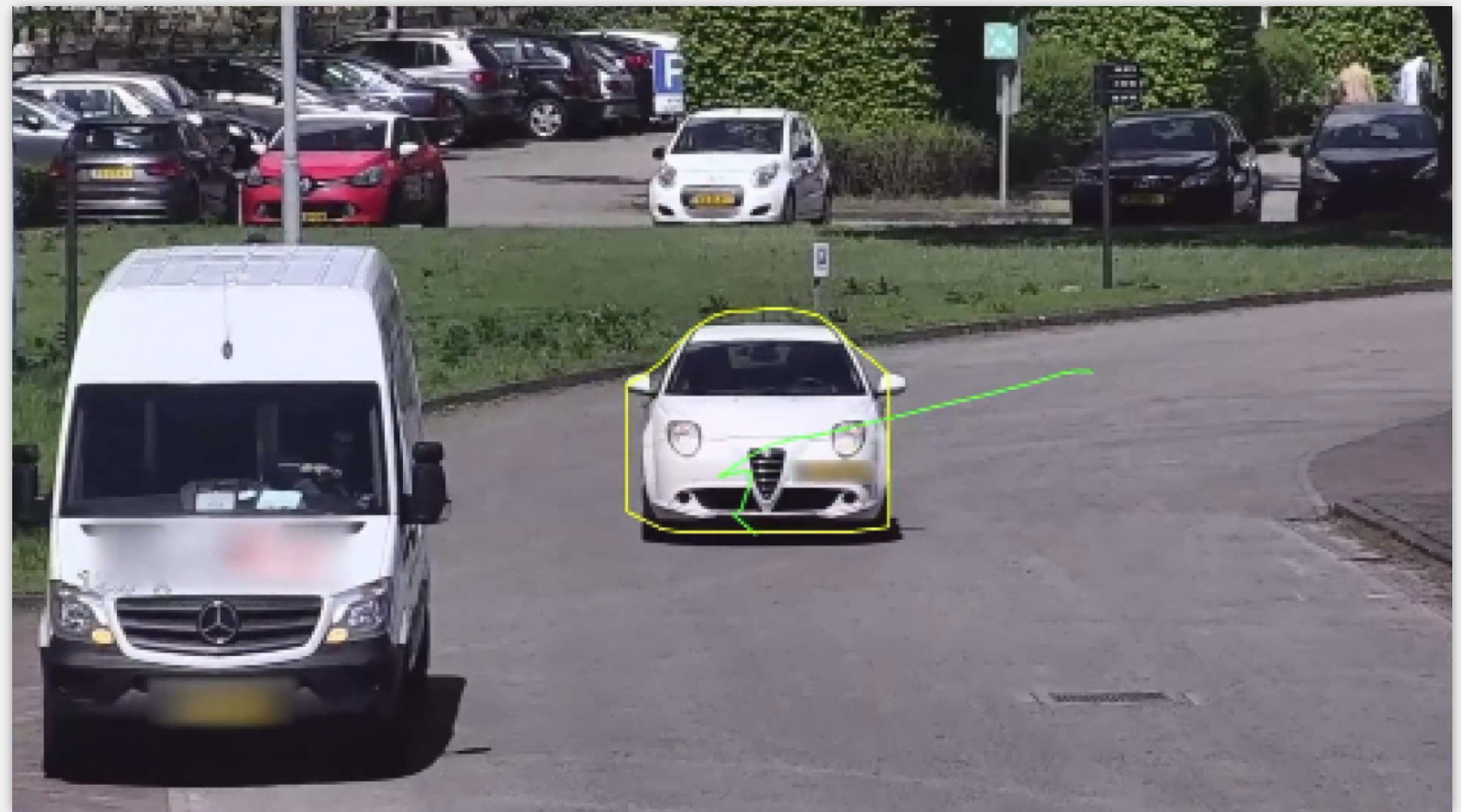**Analytics while moving**
(Intelligent Video Analytics)

Metadata fusion
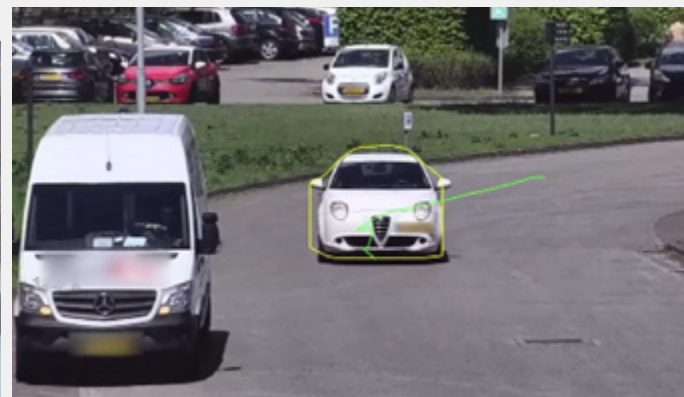(Intelligent Video Analytics)

Intelligent Tracking
(Intelligent Video Analytics)

Automatically track moving objects based on predefined alarm rules or by using a simple click to keep public spaces secure.
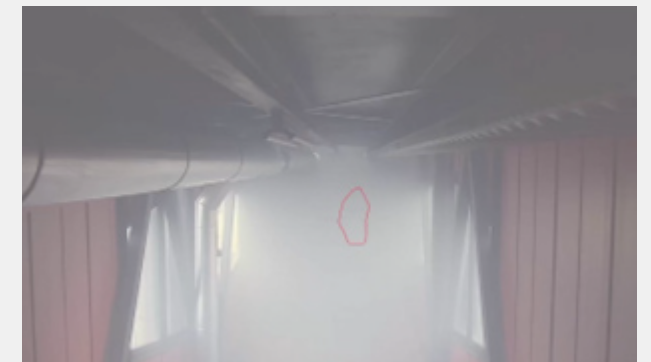
Wrong way detection
(Essential Video Analytics)

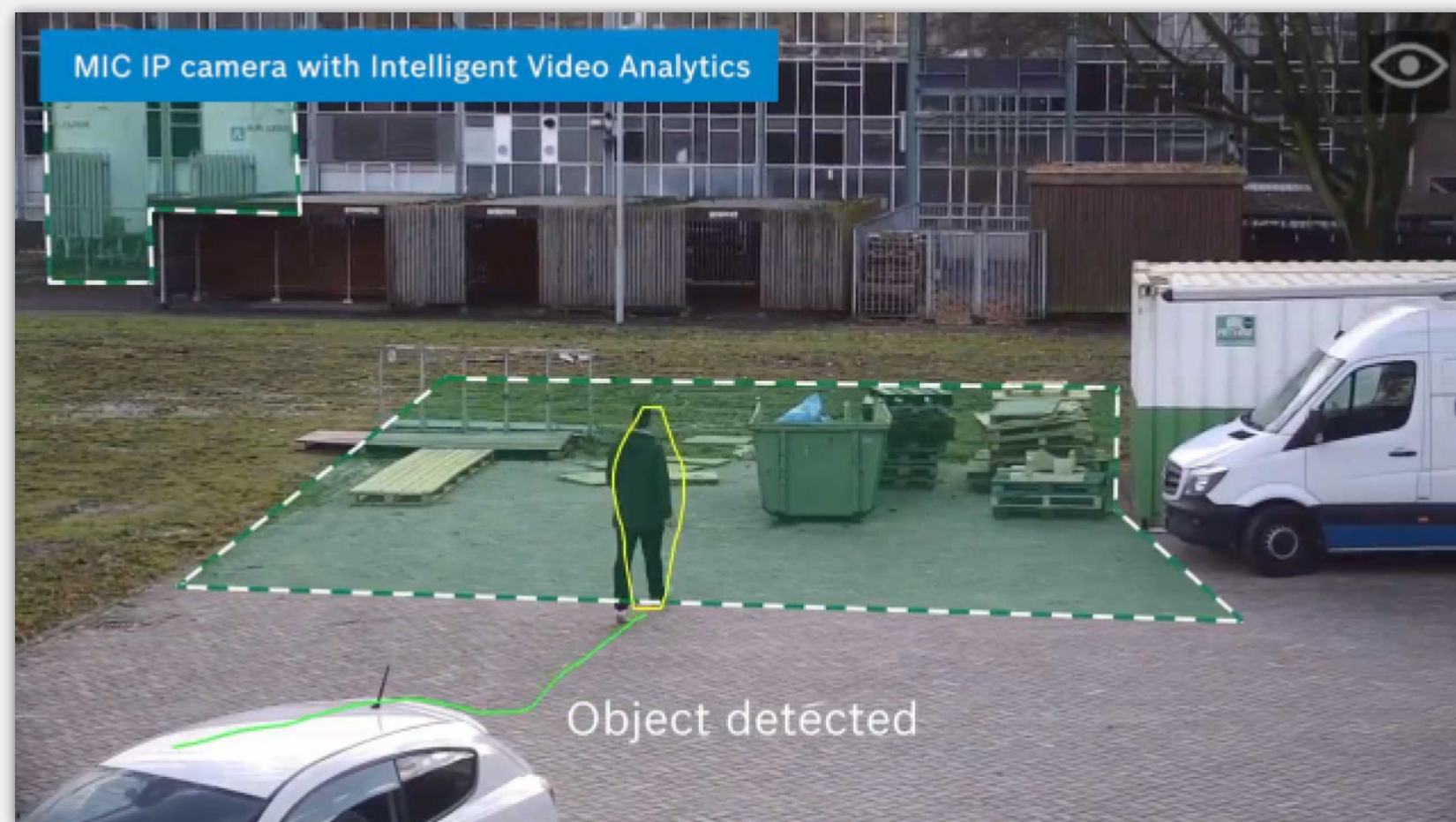**Intelligent Tracking**
(Intelligent Video Analytics)

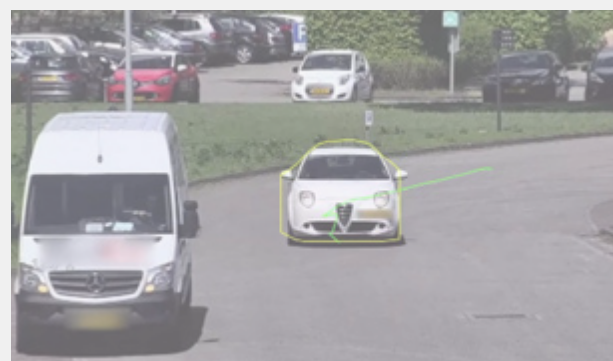**Analytics while moving**
(Intelligent Video Analytics)

Metadata fusion
(Intelligent Video Analytics)

Analytics while moving
(Intelligent Video Analytics)

With video analytics while moving, an operator is alerted, or the camera's Intelligent Tracking feature is triggered, the moment a moving object or person is detected while the MIC IP camera is panning, tilting or zooming.
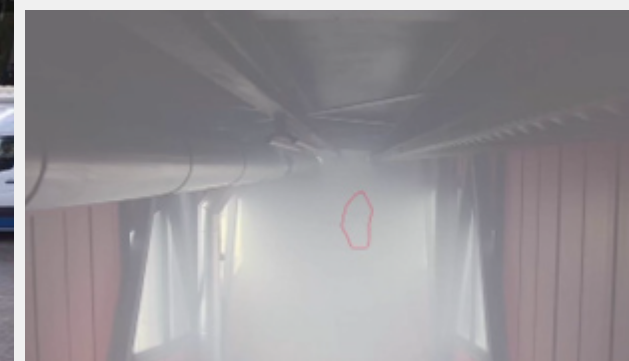
Wrong way detection
(Essential Video Analytics)

Intelligent Tracking
(Intelligent Video Analytics)

Analytics while moving
(Intelligent Video Analytics)

Metadata fusion
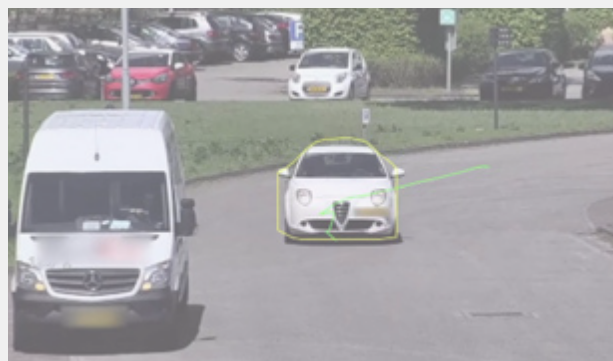(Intelligent Video Analytics)

Metadata fusion
(Intelligent Video Analytics)

With this technology, the metadata of the camera's built-in optical and thermal imager are fused, providing users with full situational awareness - regardless of whether it's the optical or thermal video stream that's being watched.

Wrong way detection
(Essential Video Analytics)

Intelligent Tracking
(Intelligent Video Analytics)

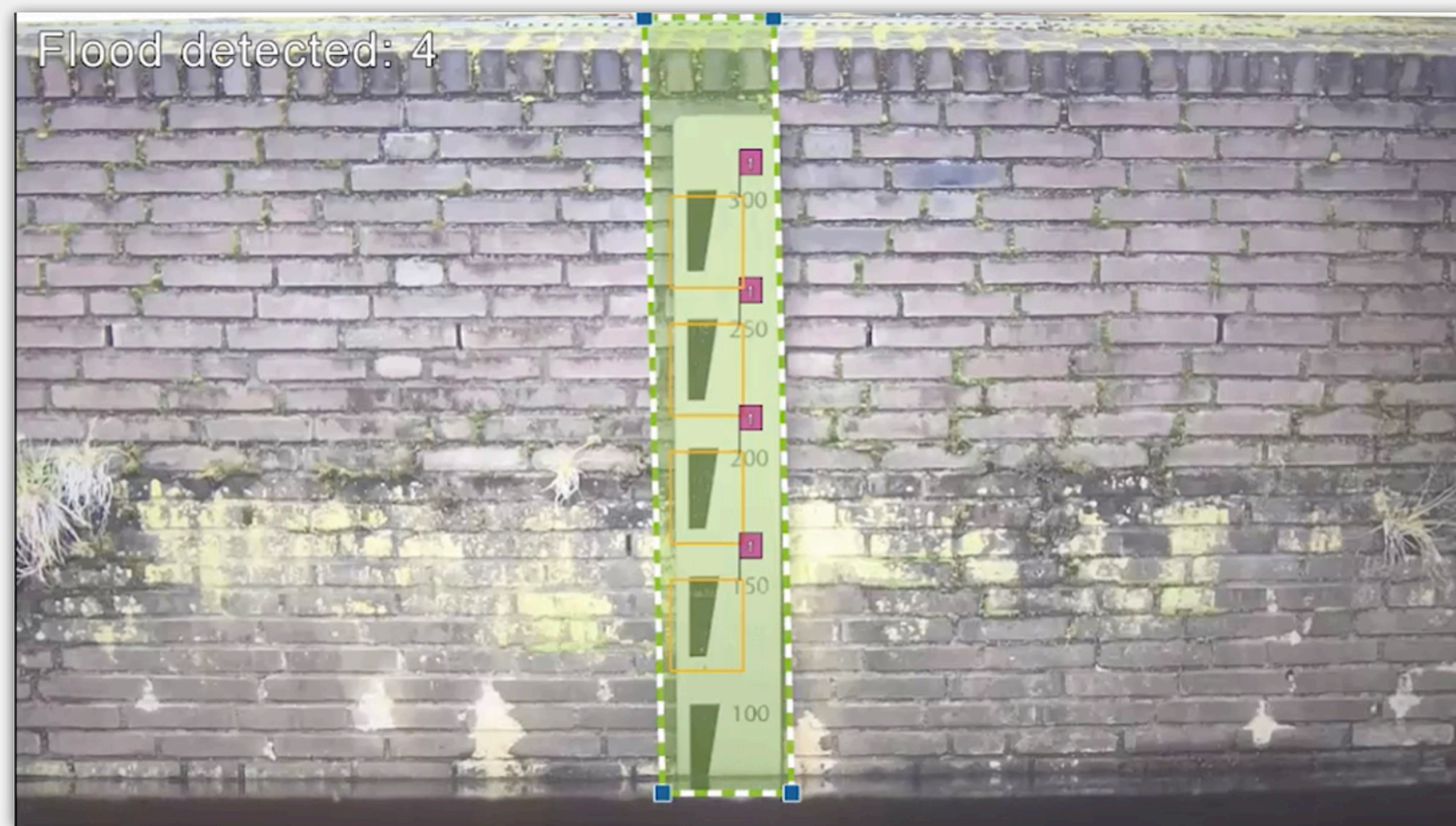**Analytics while moving**
(Intelligent Video Analytics)

Metadata fusion
(Intelligent Video Analytics)

Flood detection

(Intelligent Video Analytics –
Camera Trainer)

Camera Trainer allows early detection of
rising water levels, warning you about a
potential flood in time.

Flood detection
(Intelligent Video Analytics – Camera
Trainer)

Safety in warehouse
(Intelligent Video Analytics – Camera
Trainer)

Parking monitoring
(Intelligent Video Analytics – Camera
Trainer)

Railway crossing
(Intelligent Video Analytics – Camera
Trainer)

Safety in warehouse
(Intelligent Video Analytics – Camera Trainer)

Be alerted when safety regulations are neglected in a warehouse. A forklift and a pedestrian almost collide.
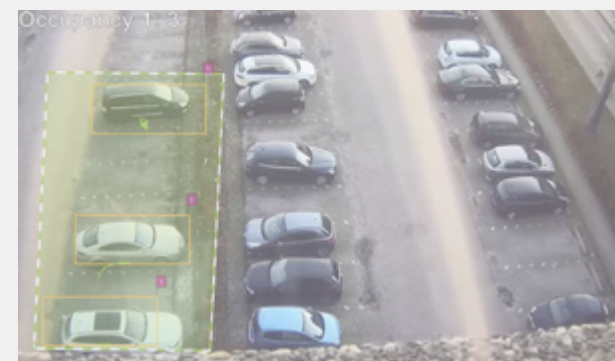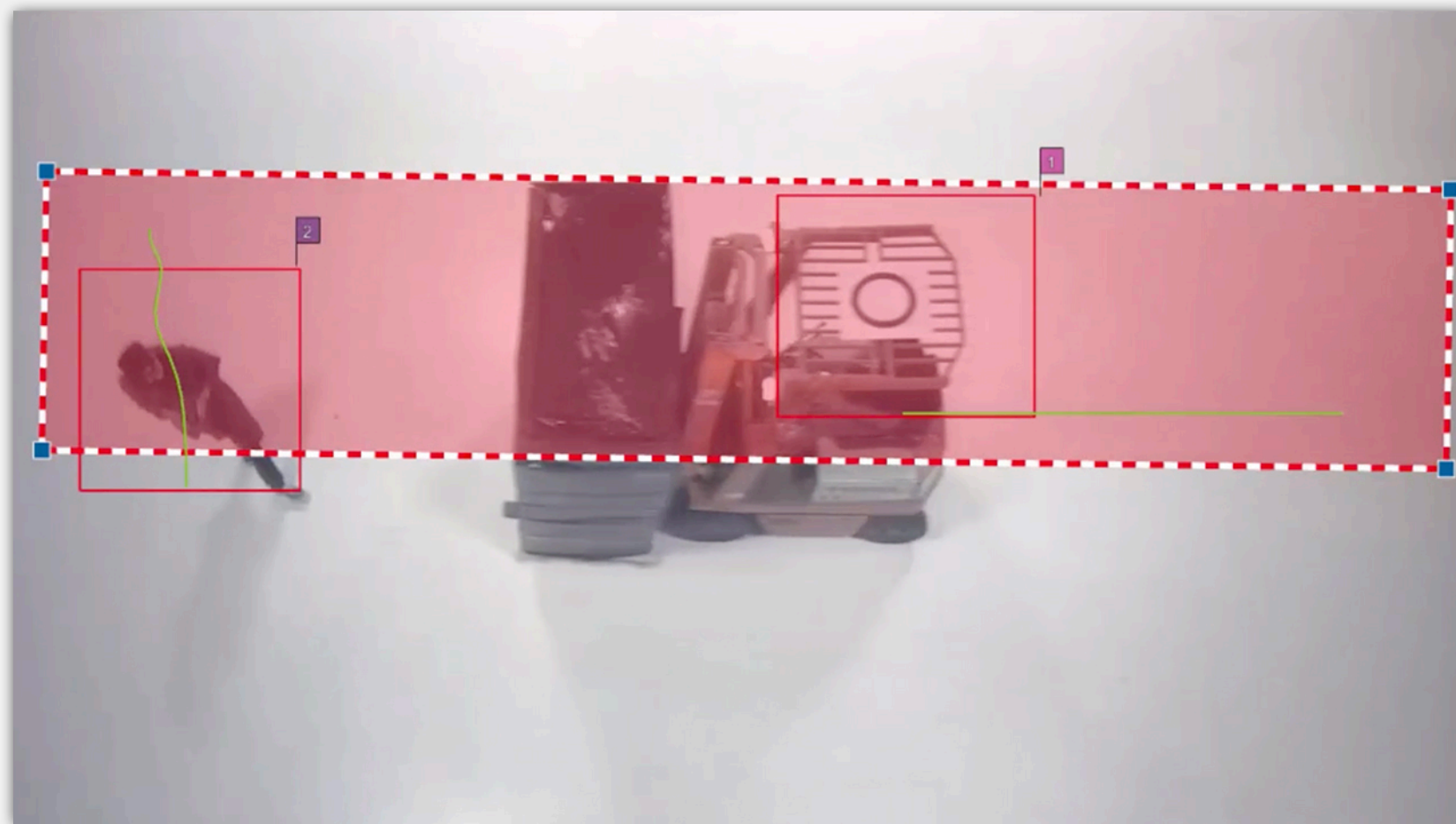
Flood detection
(Intelligent Video Analytics – Camera Trainer)

Safety in warehouse
(Intelligent Video Analytics – Camera Trainer)

Parking monitoring
(Intelligent Video Analytics – Camera Trainer)

Railway crossing
(Intelligent Video Analytics – Camera Trainer)

BOSCH
Invented for life

Parking monitoring
(Intelligent Video Analytics –
Camera Trainer)

Register occupancy of a parking area with
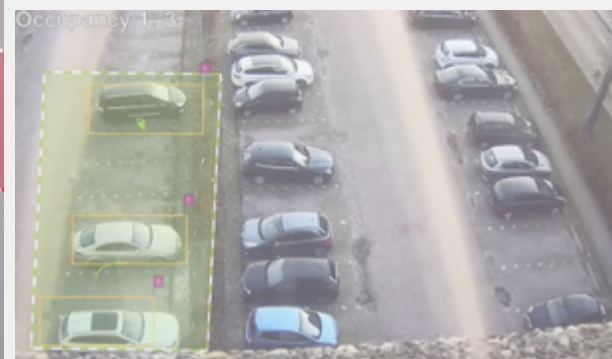Camera Trainer in real-time.

Flood detection
(Intelligent Video Analytics – Camera
Trainer)

Safety in warehouse
(Intelligent Video Analytics – Camera
Trainer)

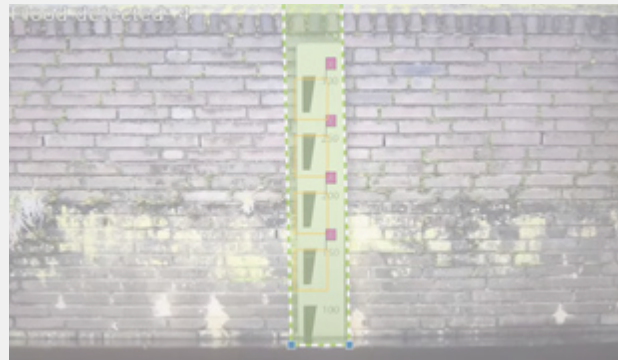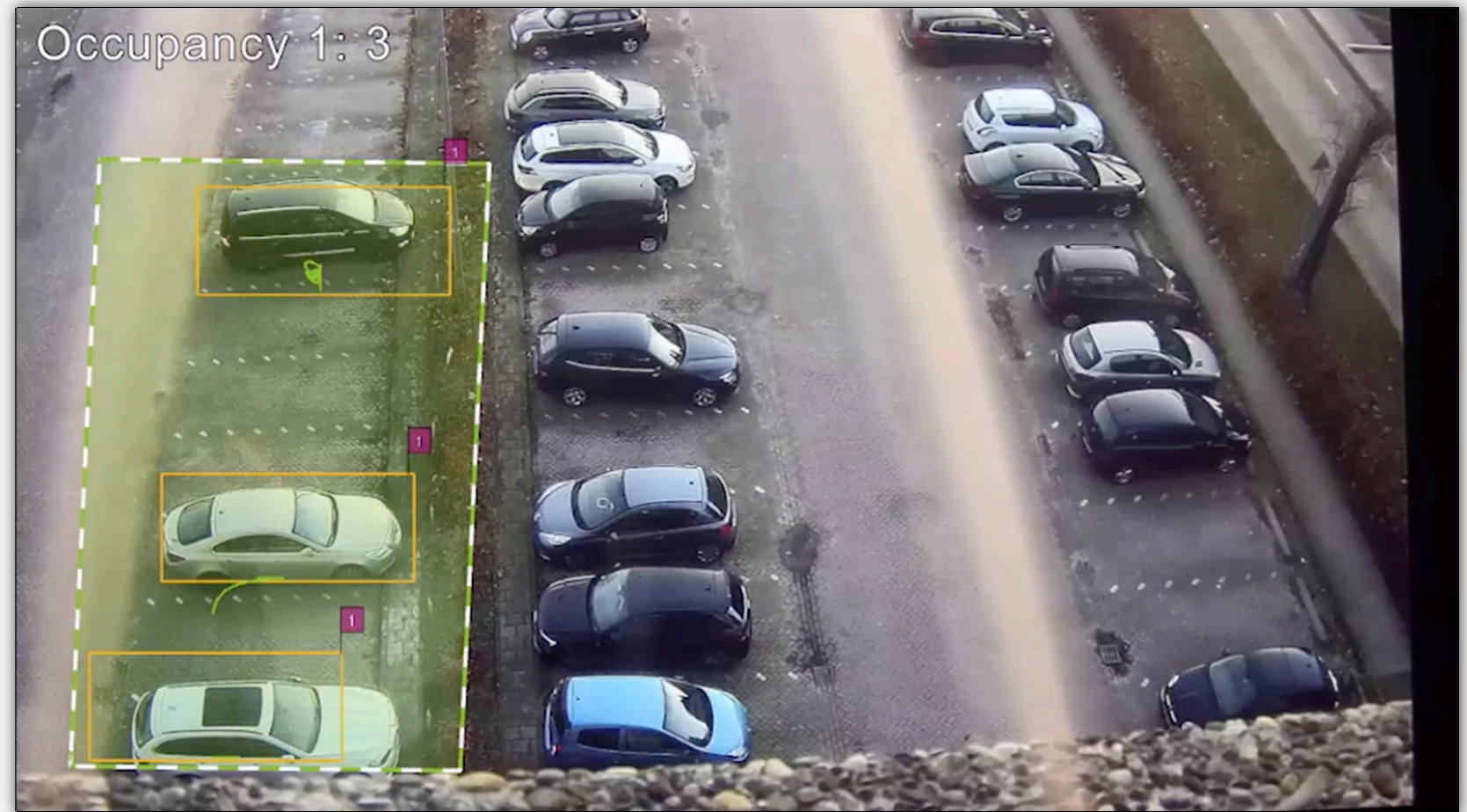**Parking monitoring**
(Intelligent Video Analytics – Camera
Trainer)

Railway crossing
(Intelligent Video Analytics – Camera
Trainer)

Railway crossing
(Intelligent Video Analytics – Camera Trainer)

Be alerted when railway signs are ignored with Camera Trainer. This allows you to take the right steps needed for the situation as all necessary information is available.

Note:The biker was added digitally afterwards to this video, and has never been in any danger.
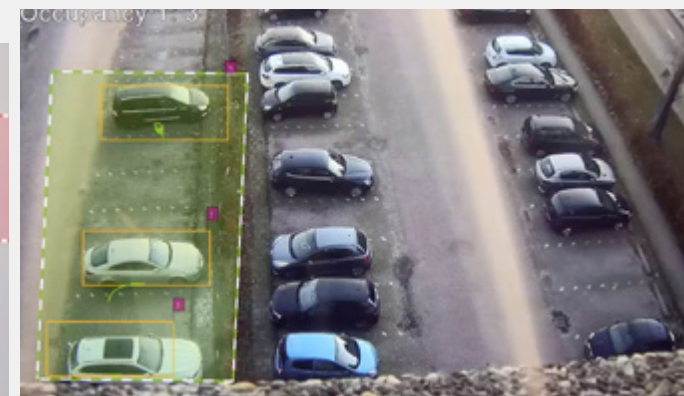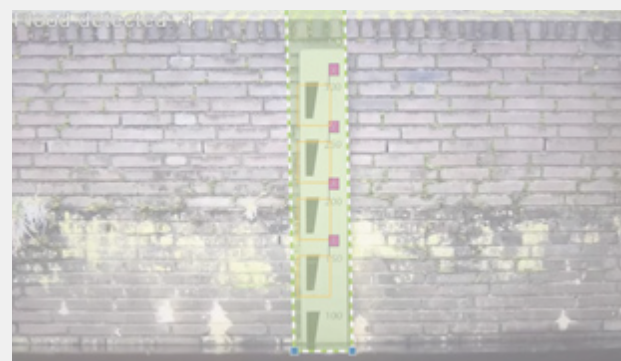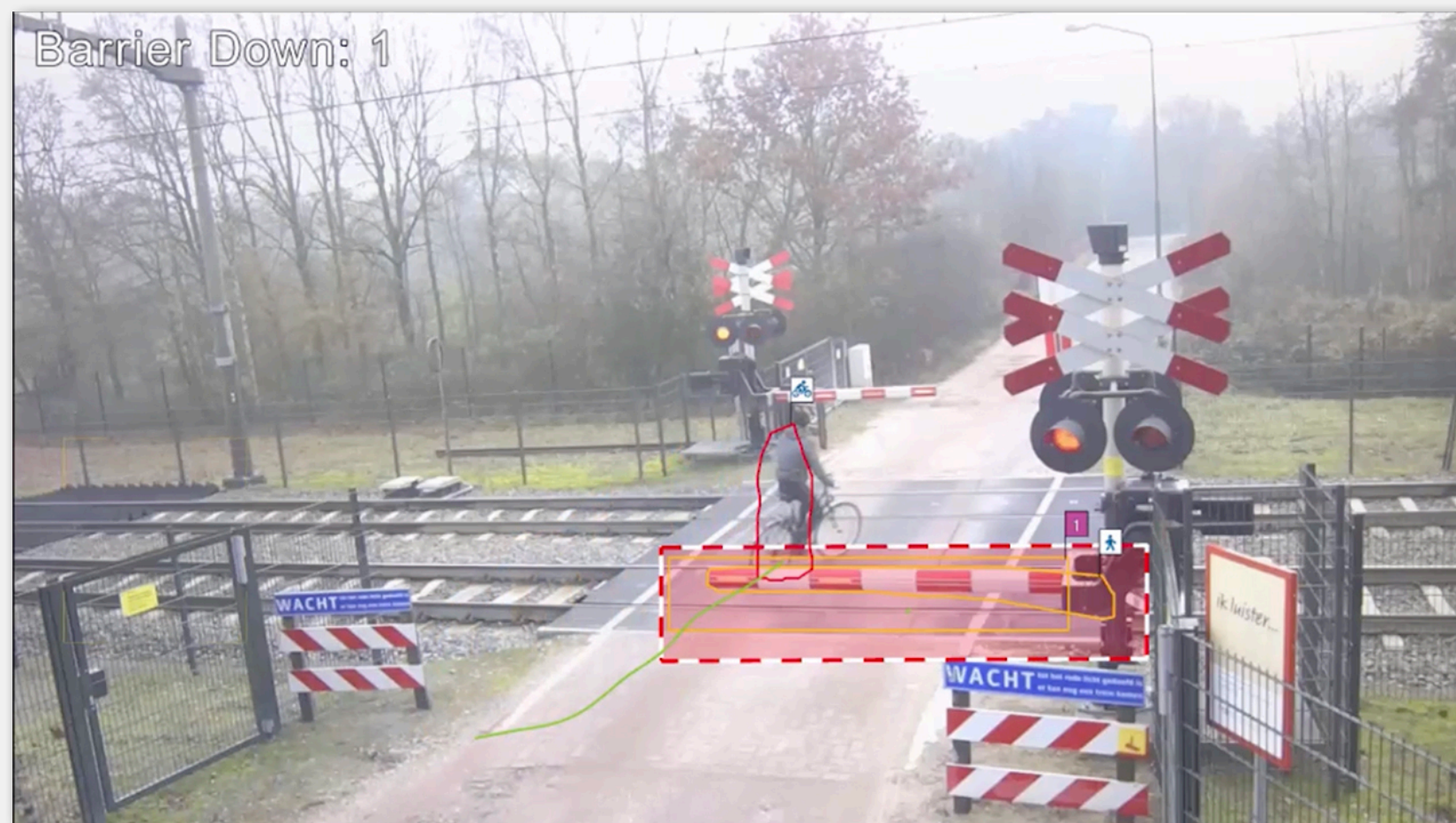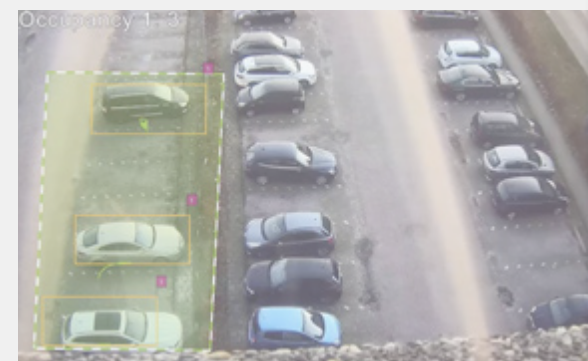

Flood detection
(Intelligent Video Analytics – Camera Trainer)

Safety in warehouse
(Intelligent Video Analytics – Camera Trainer)

Parking monitoring
(Intelligent Video Analytics – Camera Trainer)

Railway crossing
(Intelligent Video Analytics – Camera Trainer)

○○○○○●○

AVIOTEC
(Video based fire detection)

With the AVIOTEC camera from Bosch video-based fire detection is possible. Ensures early flame/smoke detection also in critical circumstances. Up to 8 IVA tasks can run in parallel.

Flame detection

IVA & Smoke detection

Smoke detection 1

Smoke detection 2

BOSCH
Invented for life

AVIOTEC
(Video based fire detection)

With the AVIOTEC camera from Bosch video-based fire detection is possible. Ensures early flame/smoke detection also in critical circumstances. Up to 8 IVA tasks can run in parallel.

Flame detection

IVA & Smoke detection

Smoke detection 1

Smoke detection 2

AVIOTEC
(Video based fire detection)

With the AVIOTEC camera from Bosch video-based fire detection is possible. Ensures early flame/smoke detection also in critical circumstances. Up to 8 IVA tasks can run in parallel.

Flame detection

IVA & Smoke detection

Smoke detection 1

Smoke detection 2

BOSCH
Invented for life
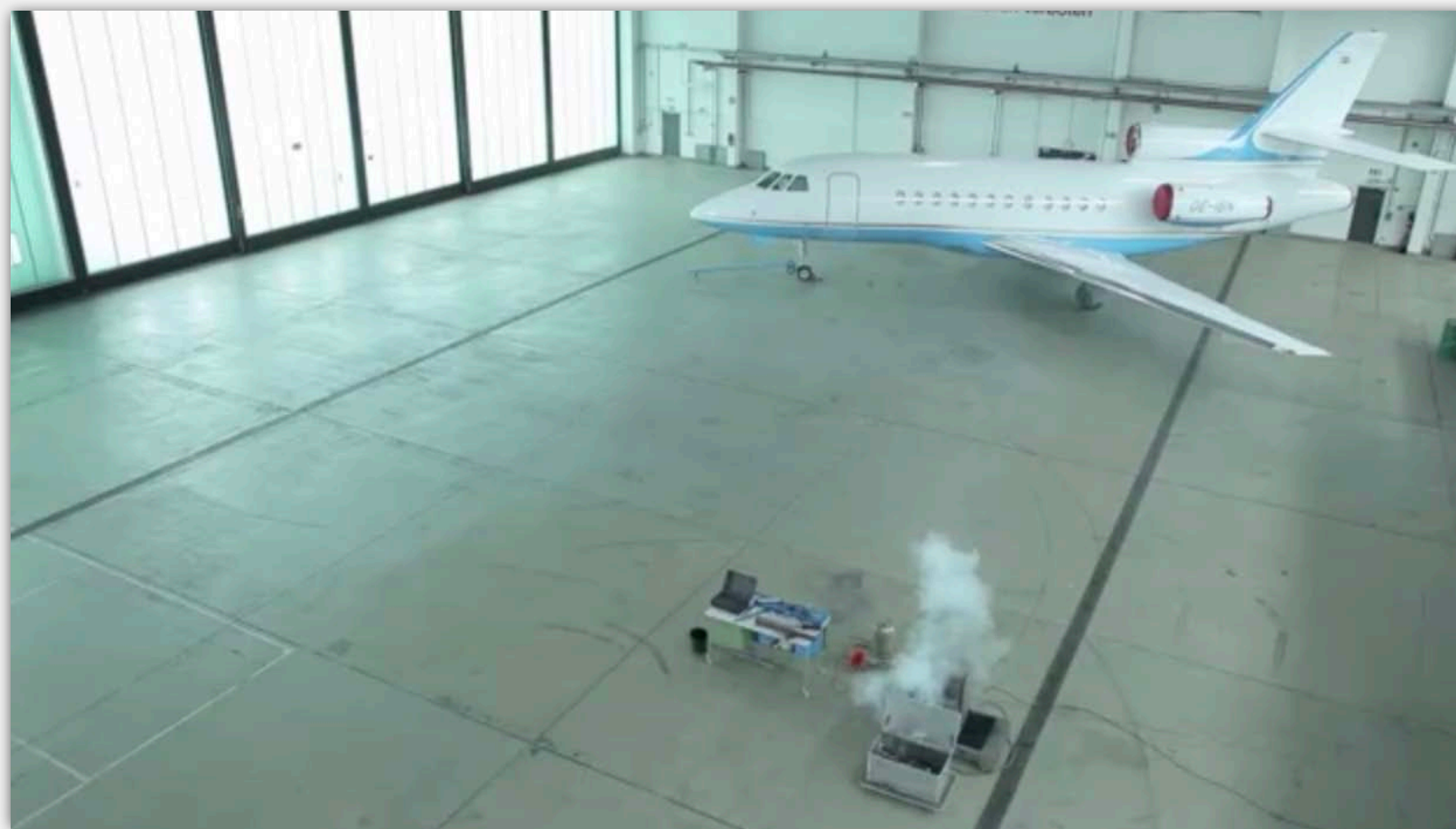
AVIOTEC
(Video based fire detection)

With the AVIOTEC camera from Bosch video-based fire detection is possible. Ensures early flame/smoke detection also in critical circumstances. Up to 8 IVA tasks can run in parallel.

Flame detection

IVA & Smoke detection

Smoke detection 1

Smoke detection 2