

# Discover a new level of public transport security

Central surveillance in real time



Time	Location	Incident	Remarks
6:55	Station	Violence	Solved
7:06	Bus	Accident	
7:08	Metro	Track access	
7:15	Crossing	Metal theft	High
7:21	Depot	Graffiti	
7:34	Metro	Track access	

## The right decision. For every incident.

Handling multiple challenges in a diverse and dispersed transit system

When your public transit system spans a busy urban center, a wide range of incidents can happen – and sometimes seemingly all at once. At any given moment you could face violence at a station, critical injuries near moving vehicles, metal theft near some rails, vandalism at a depot and more. Yet, deciding whether or how to respond isn't always easy – especially if the information that reaches the alarm central is vague.

Our network video solutions can handle it all – giving you crystal clear surveillance video in real time – so you can confidently and efficiently handle any challenge to keep your passengers, staff and property safe.



An efficient surveillance system helps you detect potential security threats and quickly decide on the best course of action.

# The right decision. For increased security and better business.

At Axis, we understand the complexity of what you're facing every minute of every day. It's all about making the right decisions to safeguard precious lives and property.

Axis network video solutions enable a complete, central surveillance system that covers your whole transit system – from stations, depots and infrastructure to rolling stock. Smart tools like sharable live video, HDTV image quality, thermal imaging and automatic alerts make sure nothing escapes your attention.

## Deterring troublemakers and attracting passengers

Not only can you detect and handle any incident as it happens, but you also have the benefit of the system's deterring effect on crime.

Everything works together to help you ensure your passengers experience the same high level of service and security throughout their ride. Day and night.

- > Improved actual and perceived security
- > Reduced costs for vandalism and metal theft
- > Minimized service disruptions



# The right decision. To stay one step ahead.

Ensuring a safe and secure transit system depends on you staying one step ahead. Axis helps you do just that with real-time surveillance to stay on top of everything today, and scalable, future-proof solutions to help you prepare for tomorrow.

## From forensic to real-time security

While transit authorities have traditionally used video surveillance systems forensically, watching recorded video after an incident to find out what really happened, Axis network video solutions enable a big leap to real-time security. You're connected with every camera in real time so you can efficiently detect, prioritize and respond to incidents as they occur.

## Scalable and future-proof for total flexibility

We're committed to helping you build a smart and lasting surveillance system. For example, you can start with local trains or buses and a number of stations and gradually add more to build your ultimate vision for total system integration.

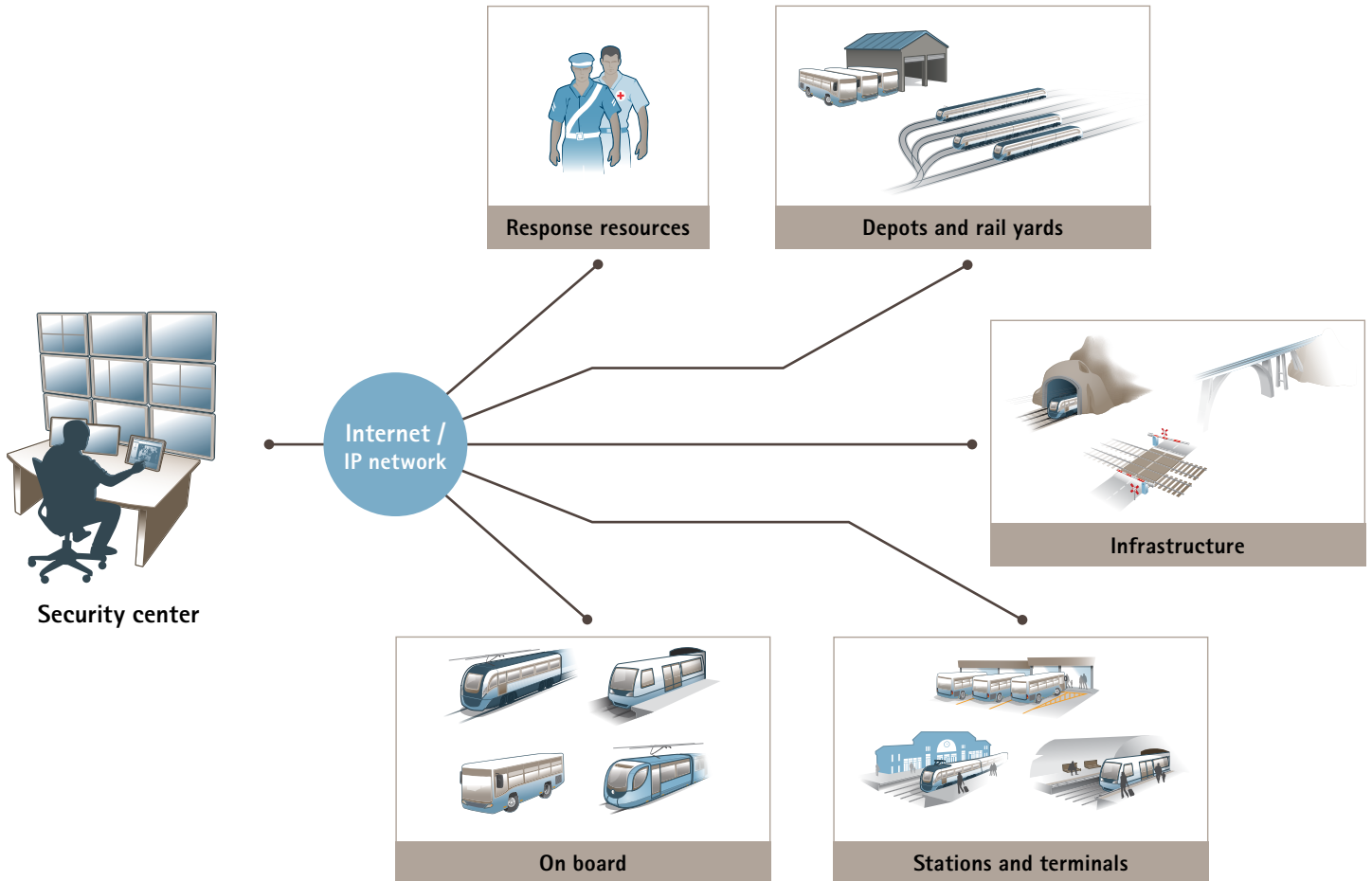
And with Axis video encoders, you can even connect your existing analog cameras to the network – protecting the investments you've already made.

Axis' world-leading range of network video products are based on open standards, ensuring easy integration with other IP-based systems and all major video management providers. This means you can choose to implement exactly what fits your needs and budget now, while positioning yourself to take advantage of new, advanced features in the future.

How it works

# Central surveillance for total security

Axis offers solutions to meet the unique challenges throughout your whole transit system. Your security center is connected to every node with live video – even wirelessly from rolling stock. Plus, you can share real-time video with police and other first responders to ensure quick and appropriate response.



## The right decisions every step of the way

### Immediate detection

With automatic alerts, you can immediately detect trouble – from unauthorized access to camera tampering – anywhere in your transit system. Axis systems easily integrate with fire-, gas- and smoke-detection systems, staff panic buttons and passenger emergency phones.

### Correct evaluation and prioritization

Clear, live video with HDTV quality from all cameras gives you the advantage you need to make the right decision as soon as you get an alert. With Axis partner software, you can also set pre-defined action lists, helping security operators sort and prioritize multiple incidents simultaneously – setting things up for quick, correct responses.

# Products to fit every part of your transit system

The various parts of your transit system present specific surveillance needs and requirements. To help you meet every circumstance, Axis brings you an extensive range of network video products with relevant approvals for use exactly where you need them. In addition to the products listed below, Axis offers video encoders to enable a cost-efficient migration from existing analog systems.



## AXIS P13 Series

Robust, fixed network cameras with superb video quality and up to 5-megapixel resolution. Perfect for monitoring stations, terminals and platforms.



## AXIS P33 Series

Indoor and outdoor-ready fixed domes, featuring up to 5-megapixel resolution and vandal-resistant versions. Suitable for station areas, entrances and exits.



## AXIS Q16 Series

Exceptional performance in low-light conditions. Based on Axis' unique Lightfinder technology.



## AXIS Q60 Series

High-speed domes with up to 35x optical zoom for impressive detail in the most demanding surveillance applications. Exceptional coverage for large areas.



## AXIS Q19 Thermal Camera Series

Detects people, vehicles and incidents in complete darkness and difficult light conditions. Ideal for monitoring tunnels, rail infrastructure and areas exposed to vandalism, graffiti and metal theft.



## AXIS M31-R Series

Cameras developed specifically for onboard use to withstand tough conditions on board.

### Fast and appropriate response

With the ability to clearly monitor every situation in real-time, you can work quickly, adjusting your response appropriately if the situation changes. Axis makes it easy to share live video from all nodes with other stakeholders such as police, security guards, authorities and first responders – even to mobile devices – to optimize their response.

### Efficient investigation

Once you've handled the immediate needs of an incident, Axis helps facilitate investigations and positive identification with HDTV video quality that offers an extraordinary level of detail and can be viewed over and over again without losing image quality.



## Discover some of Axis' leading-edge solutions for network video surveillance

### Greater coverage – fewer cameras

With HDTV, Axis brings you sharper images and better color fidelity than analog solutions. Whatever your need, HDTV does it better – covering larger scenes at a given number of pixels per area and providing at least three times better resolution than analog CCTV for extraordinary detail that facilitates positive identification in investigations.

### Thermal and low-light cameras

Axis thermal network cameras allow you to detect and act on suspicious activity 24/7. By visualizing the heat radiating from people and objects, these cameras enable you to see through complete darkness, smoke and other challenging conditions. You can also benefit from our low-light camera series based on Axis Lightfinder technology, which maintains colors even in very dark conditions to enable recognition and identification.

### Video intelligence for efficient surveillance and business analytics

Axis cameras come with a number of intelligent video applications to help you increase surveillance efficiency, including motion/audio detection and tampering alarms with automatic alerts. The cameras are also open for downloadable partner applications such as passenger counting, object tracking and cross line detection – helping you stay one step ahead of incidents to improve both security and business.

### Axis Corridor Format™

The unique Axis Corridor Format allows you to efficiently monitor areas with a vertical rather than horizontal orientation – minimizing bandwidth and storage use. This capability is ideal for many scenes within a transit system, including tunnels, rail platforms, escalators and on board rolling stock.

View of four analog cameras



View of one HDTV camera



What do you need to see? For a wide overview, one HDTV camera covers a larger scene than four 4CIF analog cameras. Or, for those areas where you need extreme detail, HDTV provides exceptional resolution.

# Proven in some of the busiest public transit systems in the world

## Belgium (Stations)

Belgium has one of Europe's densest and most modern rail networks. The SNCB Group transports more than 200 million passengers each year.



*"I remain convinced that the presence of cameras contributes to an increased sense of security in passengers and personnel. At the psychological level, they're invaluable."*

Hendrik Vanderkimpen, Director of Corporate Security, SNCB Group

## Madrid, Spain (Buses)

With 2,100 buses operating 365 days a year, 24 hours a day, Madrid transports more than 425 million passengers each year in a 3,618-kilometer bus net.



*"We were very impressed by the capabilities of the Axis cameras. They provided the best image quality and...we haven't had a single issue with the cameras so far, despite the high number of units in use."*

Iñigo Rodríguez-Rovira Rodríguez, Security Manager, La Empresa Municipal de Transportes de Madrid (EMT)

## Munich, Germany (Trains)

MVG provides one of the most modern transit systems in the world. More than 500 million passengers travel every year via bus, tram and subway lines.



*"In addition to the preventative aspect – i.e., the curbing of crime – video surveillance also makes an indispensable contribution to the criminal investigation and identification of perpetrators."*

Harald Pickert, Head of Crime Division, Police Headquarters, Munich

## Stockholm, Sweden (Stations and buses)

Storstockholm's Lokaltrafik AB (SL) transports over 700,000 passengers daily, by bus, commuter trains and subway.



*"The surveillance system and the security project have been positive changes for us. It has given us more return than we had predicted."*

Stefan Danielsson, Project Manager for SL's Security Project

## About Axis Communications

As the market leader in network video, Axis is leading the way to a smarter, safer, more secure world — driving the shift from analog to digital video surveillance. Offering network video solutions for professional installations, Axis' products and solutions are based on an innovative, open technology platform.

Axis has more than 1,000 dedicated employees in 40 locations around the world and cooperates with partners covering 179 countries. Founded in 1984, Axis is a Sweden-based IT company listed on NASDAQ OMX Stockholm under the ticker AXIS. For more information about Axis, please visit our website [www.axis.com](http://www.axis.com)