

## Images that move the world.

In Geneva: Axis cameras provide information about the CEVA rail line project.



**Organization:**  
CEVA (Cornavin–Eaux-Vives–Annemasse rail link project)

**Location:**  
Geneva, Switzerland

**Industry segment:**  
Transportation

**Application:**  
Remote monitoring, safety and security

**Axis partner:**  
STVS, Geneva

### Mission

The planned Cornavin–Eaux-Vives–Annemasse rail link, abbreviated CEVA, closes a central gap between the French and the Swiss rail networks in the Swiss Canton of Geneva. Right from the start, the CEVA officials were responsible for fully informing the public about the construction site and the progress of the project. Therefore, a network of IP cameras from the world-leading supplier Axis Communications in partnership with Axis partner STVS was installed at all six construction sites of the CEVA route.

### Solution

As one of the IP video industry's early adopters, STVS was commissioned in 2012 for installation and maintenance of the IP camera network on the CEVA construction site as well as the creation of professional time-lapse videos. For this purpose, STVS installed AXIS P1347 and AXIS P1357 Network Cameras – the only models on the market to meet CEVA's requirements.

### Result

With the help of the Axis cameras, the progress of the construction site is continuously recorded. Depending on project status and need, clear time-lapse videos with high image quality are created for both internal use by CEVA and for communication with the public. CEVA officials can access the camera images at any time, enabling them to keep up to date on what is happening in the individual construction phases.



## The general public can follow the progress of the Geneva construction site online

### A new regional train network

By 2030, the agglomeration of bigger Geneva – divided into two Swiss cantons and two departments of the Rhône-Alpes region (France) – will host nearly one million inhabitants. The implementation of CEVA enables the operation of the train network in this region which connects 45 French and Swiss stations within 60 km around Geneva and Annemasse. The network has a total length of 230 km.

Since 2012, CEVA has been constructing this new regional train line. In addition to modern tracks, two bridges, two tunnels and five new stations will be built as part of this project worth one and a half billion Swiss francs led by the Canton of Geneva and Swiss Federal Railways (SBB). Many residents in the heart of the second-largest city in Switzerland will be directly affected through the years required for this major construction project. With regards to possible inconvenience for the residents, CEVA aims to be as transparent, timely and comprehensive as possible when it comes to informing the public about the construction and its progress via their website: [www.ceva.ch](http://www.ceva.ch).

### Live images from the construction site

To this end, IP cameras were installed at high vantage points at all six CEVA construction sites. The cameras would then regularly record the progress of the work and provide high-quality images for time-lapse videos. Project bidding was won by the Swiss company STVS, a longtime partner of Axis Communications, specialized in video surveillance solutions and hosting services for creating long-term and time-lapse videos.

For CEVA, the decisive factor was the AXIS P1347 and AXIS P1357 Network Cameras recommended by STVS satisfying all project requirements. One of the mandatory requirements was for the cameras to have network capability to ensure direct access to the images at any time. An additional requirement was related to image resolution – a high dpi value is required for the images to provide optimal print quality. However, durability and reliability were also of particular importance. Since the cameras had to be mounted on high poles and surrounding buildings to keep the entire project in focus, regular maintenance was practically impossible and the cameras had to be especially robust and durable. STVS also scored points for its special mountings for secure, weather-resistant installation of the cameras at a high altitude.

### Convincing HDTV quality

With the Axis cameras, the progress of the CEVA construction site has been continuously recorded since the beginning of 2012. Depending on project status and need, clear time-lapse videos with high image quality are created using STVS's market-leading video software Arqivis for internal use by CEVA and for communication with the public. The network cameras deliver HDTV quality and a resolution of 5 megapixels. Thus, they can cover a large area with a high level of image detail. A P-Iris ensures optimal image sharpness. Once installed, STVS can focus the cameras remotely. Featuring day/night function, the cameras provide high image quality even in low light.



## Moving images for everyone

STVS hosts the camera images and ensures that the CEVA officials always have access to them. STVS also prepares time-lapse videos as needed and makes them available to the various CEVA divisions online. In normal operating mode, the Axis cameras provide six images per hour. For special events, like the sliding of a bridge or shifting a train station, STVS can zoom in on the action by remote control and increase the frame rate.

Since January 2012, the Axis cameras have already captured more than 400,000 images of the CEVA construction site. Going forward, STVS plans to equip additional sections of the route with the new 4K cameras from Axis in order to provide even more detailed images from the construction sites.

## Partners

STVS - [www.arqivis.com](http://www.arqivis.com)

CEVA - [www.ceva.ch](http://www.ceva.ch)

**“We’re extremely pleased with the progress monitoring of the CEVA construction sites thanks to Axis IP cameras and video services from STVS. We get full benefit from the high quality of the cameras and their low maintenance cost. At the same time, the images and videos captured daily open up whole new possibilities for keeping the public informed in a targeted and timely manner.”**

**Caroline Monod,**  
**Communications Officer, CEVA.**



**“We’ve been working with Axis cameras for 10 years and consider them the best cameras on the market. They stand out for their excellent image quality and craftsmanship. In this project, the latter was essential since we need to climb poles up to 40 meters high to perform maintenance.”**

**Daniël van der Wal,**  
**Communications Officer, STVS.**

**CEVA**

**STVS**   
security · video · software

# About Axis Communications

Axis offers intelligent security solutions that enable a smarter, safer world. As the global market leader in network video, Axis is driving the industry by continually launching innovative network products based on an open platform - delivering high value to customers through a global partner network. Axis has long-term relationships with partners and provides them with knowledge and ground-breaking network products in existing and new markets.

Axis has more than 2,000 dedicated employees in more than 40 countries around the world, supported by a network of over 75,000 partners across 179 countries. Founded in 1984, Axis is a Sweden-based company listed on NASDAQ Stockholm under the ticker AXIS.

For more information about Axis, please visit our website [www.axis.com](http://www.axis.com).