

## EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

### CLIENT

CERN is the European Organization for Nuclear Research. It was founded in 1954 and sits astride the Franco-Swiss border near Geneva.

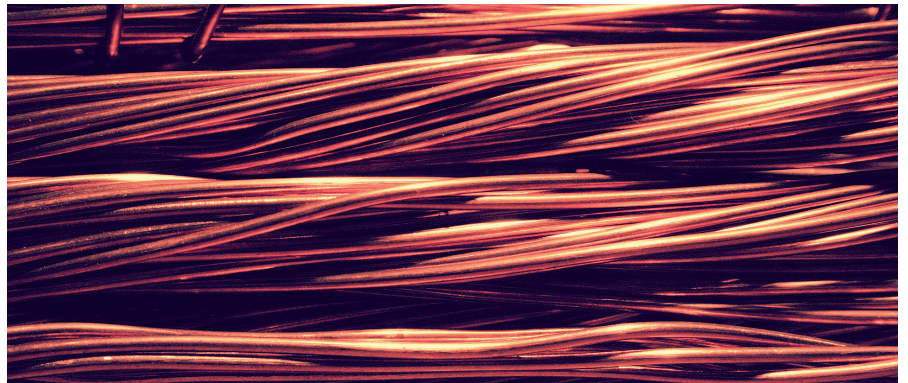
It is an example of international scientific collaboration and one of the world's most important research centres. CERN currently involves 22 member states, which fund the organization and participate in its decision-making bodies.

Security at the CERN is crucial, and so is protecting the critical installations around its perimeter. The facilities are located in both Swiss and French territory.

# 1. RELIABLE PROTECTION FOR AN INDUSTRIAL WAREHOUSE USED TO STORE COPPER COILS

## CUSTOMER REQUIREMENTS

Firstly, CERN needed to protect an important warehouse used to store sensitive material at high risk of theft. Copper is an extremely valuable commodity and its theft causes significant corporate losses. CERN also needed to ensure smooth operation of the warehouse to avoid unnecessary interruptions.

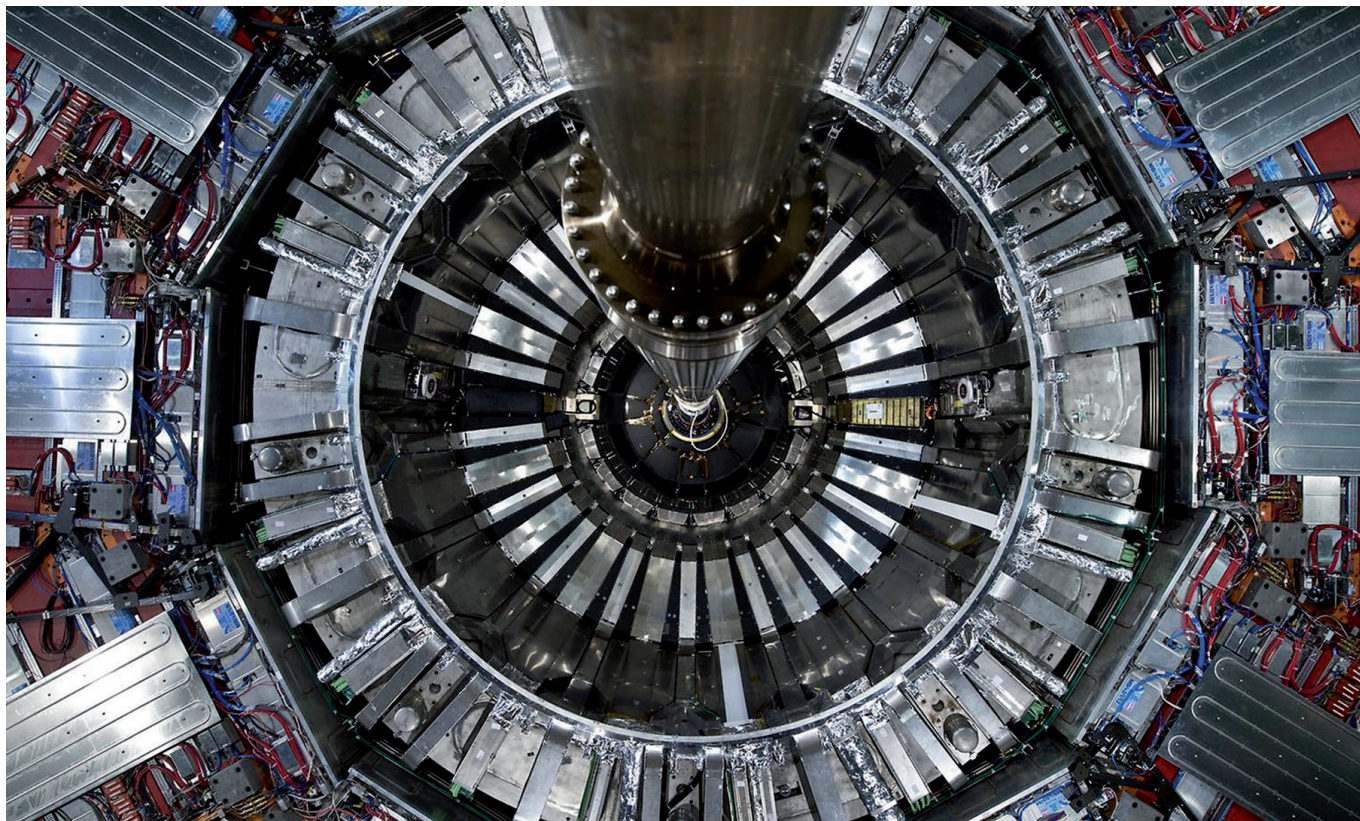


# 2. PROTECTION OF THE ELECTRICITY TRANSFORMER SUBSTATION

Secondly, CERN required maximum security for a critical infrastructure: an electricity transformer substation. The electricity supply needed to be secured to ensure that all facilities could operate under normal conditions. Numerous experiments and research projects are performed in the substation. The organisation also needed to protect staff and prevent unauthorized access and high electrical voltage risks.







## MAXIMUM SECURITY

**Warehouse: 7 thermal  
cameras with Daview S  
and Daview LR channels  
Substation: 8 thermal  
cameras and 2 PTZ  
with Daview S and  
Daview LR channels**

### SOLUTION

CERN entrusted the task of protecting its critical infrastructures to DAVANTIS video analytics.

### TECHNOLOGY

**1.** Seven thermal cameras were installed and integrated with the Milestone VMS in the copper coil warehouse, directly connected to the CERN security centre. Five of these cameras were equipped with DAVANTIS Daview S video analytics systems and two with long-range Daview IR channels. Our systems were also integrated with the CERN NTP to synchronise dates and time in all equipment.

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**This protected the entire storage area, as well as warehouse entrances and exits.**

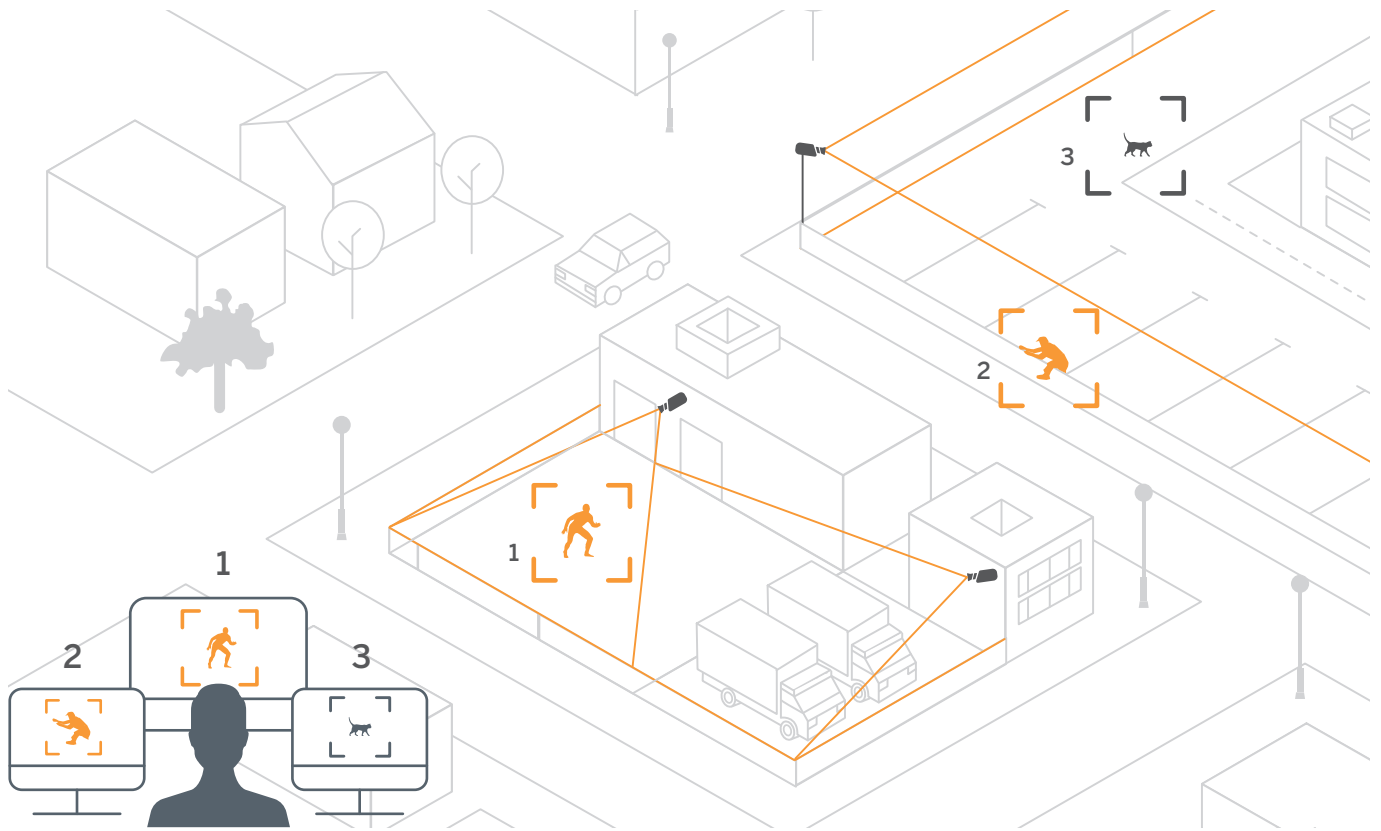
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**2.** Regarding the electricity transformation substation, a total of eight thermal cameras and two PTZ integrated with the Milestone VMS were integrated in the substation and connected directly to the CERN Security Centre. Six of the cameras were equipped with DAVANTIS Daview S video analytics systems and two with long-range Daview IR channels.

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**This enabled us to secure the perimeter and all entrances to the electrical substation, as well as ensuring supervision of sterile areas by staff both day and night.**

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**More efficient staff  
with fewer resources**

**‘ONCE THE  
INTRUSION HAS  
BEEN VERIFIED,  
THE SYSTEM  
ALLOWS TO  
REMOTELY  
ACTIVATE  
DISSUASIVE  
DEVICES’**

#### **BENEFITS FOR THE INSTALLER**

- Differentiation against the competition. The combination of technology and personnel provides a better solution than the proposals of the competition, which are usually based on having many security guards per shift.
- Higher margin of economical benefit. The sales margin for technology is normally higher than for personnel, providing a higher economical benefit for the installer.

#### **BENEFITS FOR THE END USER**

- Higher security. DAVANTIS video analytics automatically generate an alarm when an intrusion occurs, and the security personnel can react within seconds.
- Lower cost. It reduces the number of security guards needed to monitor the site.

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**We protected the warehouse from theft and prevented consequential stoppages due to lack of materials.**

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**In the case of the substation, we have prevented power outages and guaranteed protection and prevention of occupational and personal hazards.**

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