



Cegelec
Solutions & Services

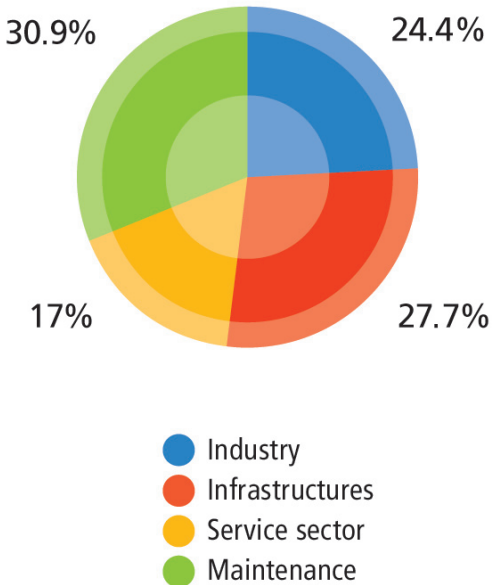
Cegelec is an integrated global worldwide group, providing technological services and solutions in five areas:

- Energy, Electricity
- Automation, Instrumentation and Control
- Information and Communication Technologies
- HVAC, Mechanics
- Maintenance and Services

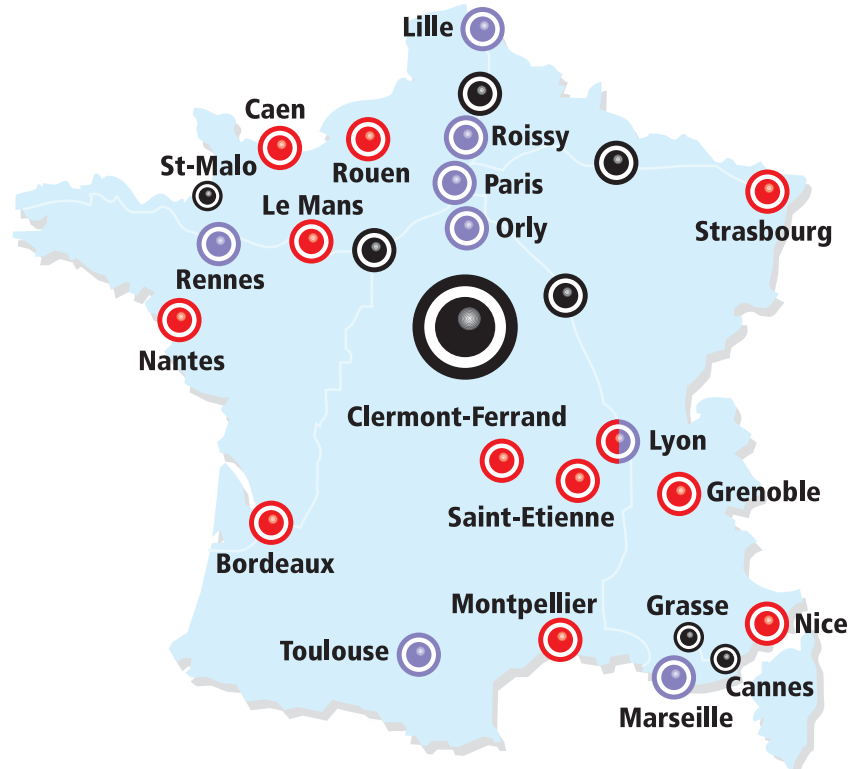
The group is established in more than 30 countries, operates in some 50 countries across the world, and enjoys a very prominent local presence, in particular with its some 120 establishments in France.



SALES BY SECTOR



- ANNUAL TURNOVER : **2.9 BILLION €**
- ORDERS : **2.8 BILLION €**
- EBIT : **112.2 MILLION €**
- STAFF: **26,000 PEOPLE**



● Railway references ● Metro references ● Tramway references



Cegelec Transport

Cegelec is **a specialist in the area of rail transportation infrastructures**, from the installation of traction power supply and operating systems to the creation of turnkey integrated systems. It participates in the development of railway and urban transport infrastructures in Europe and throughout the world, in close collaboration with its customers and partners.

The Group capitalises on its expertise in a specialised department, Cegelec Transport, which is entirely dedicated to transport infrastructures. This competence centre applies its expertise to electrification, signalling, low-voltage systems, and ventilation.



- Global and innovative solutions for railways, tramways and subways
- A dedicated team for design, installation and maintenance
- Methodological know-how to suit every situation and the requirement to work on lines in operation
- 30 years of experience in the management of transport projects, in France and internationally





Electrification

2000 km of lines electrified in the past ten years!

Cegelec Transport offers its many international customers its 30-years experience with the French railway operator SNCF, whether on regional lines or for the new high-speed lines. Cegelec is also a major player in the electrification of tramways and subways. 16 French cities and a large number of urban or inter-city networks have been equipped by Cegelec Transport, in Europe and all over the world.

- Power-feeding and traction substations
- Catenary and overhead contact lines
- Sectioning and protection
- Low-voltage supply
- SCADA (Supervisory Control and Data Acquisition)



- Cegelec Transport delivers the whole spectrum of technical competencies, from design to installation and maintenance.
- Independent from equipment suppliers, Cegelec Transport offers a wide range of electrification solutions that best suit the needs of its customers (voltages, power feeding, principles of sectioning, architecture, sub-stations in shelters, etc.)
- Thanks to its experience of working on lines in operation, Cegelec is able to guarantee to its customers continuous operation during the construction process.

References



French TGV system

Cegelec is a top-ranking partner in the areas of high-speed travel and remodelling of the French railway system; it has most recently been awarded contracts for electrification of the "TGV est line" (eastern high-speed train). The SNCF and the RFF have also once again entrusted Cegelec with a project that requires even more advanced technical expertise and total control of lead times. Its cooperation with the SNCF, for 30 years now, is still on the right track!



Moroccan railways

A strengthened local subsidiary and an in-depth experience of standards and international projects have led Cegelec Transport to electrify

400 km of track on behalf of Moroccan railways. With the confidence of this success, Cegelec Transport is now regularly selected by the ONCF for its electrification works.



Turin metro system

Thanks to its methodological know-how in electrical power-feeding, and suitable mobilisation, Cegelec

Transport enabled the Turin

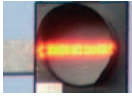
VAL (automatic light vehicle project) to successfully cross the finishing line of the 2006 Winter Olympic Games.



Rotterdam tramway

For the regional express railway (RER) system of RandstadRail in the Netherlands, a very constraining site layout led

Cegelec to deliver 14 electric power-feeding substations in the form of shelters that were tested and ready to use. A very innovative "plug & play" solution!

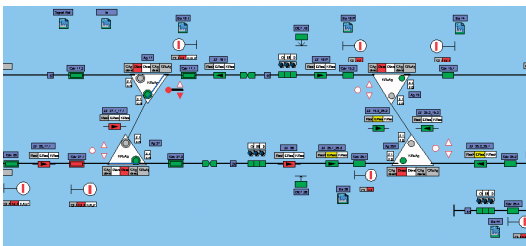


Signalling

Cegelec Transport designs and installs signalling systems for urban transport networks in order to ensure maximum fluidity to the traffic. The solutions it offers are flexible and perfectly suited to the needs of the urban operators. Above all, they respond to the objectives of safety and availability. Two determining and indispensable words!

- Relay interlocking
- Safety computer-based interlocking
- Traffic detection
- Points control and monitoring
- Traffic signals and automatic stopping

Cegelec Transport has brought together a strengthened team dedicated to signalling systems. Its experts have successfully commissioned a variety of interlocking standards and systems in urban transport networks.



In order to offer its customers systems perfectly suited to their needs, Cegelec Transport innovates constantly:

- Tramway signalling systems controlling level crossings
- Safe detection of tyred traffic (SIL4)

References



Paris metro

On behalf of the RATP, a transport operator of world renown, Cegelec Transport is installing crossing control on the existing interlockings.

This improvement is synonymous with reinforced functionality for the operator.



Clermont-Ferrand tramway

A European first at Clermont-Ferrand, Cegelec Transport has installed the SIL4 (Safety Integrity Level 4) standard on a tyred tramway system. This original approach was inspired by railway systems, for which the design teams were mobilised!

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Lyon tramway

Cegelec Transport has long been a partner of SYTRAL and has been awarded the totality of the electromechanical activities of the Lyon LEA tramway, the first ring road, high-speed tramway in France to control the level crossing protected by barriers.

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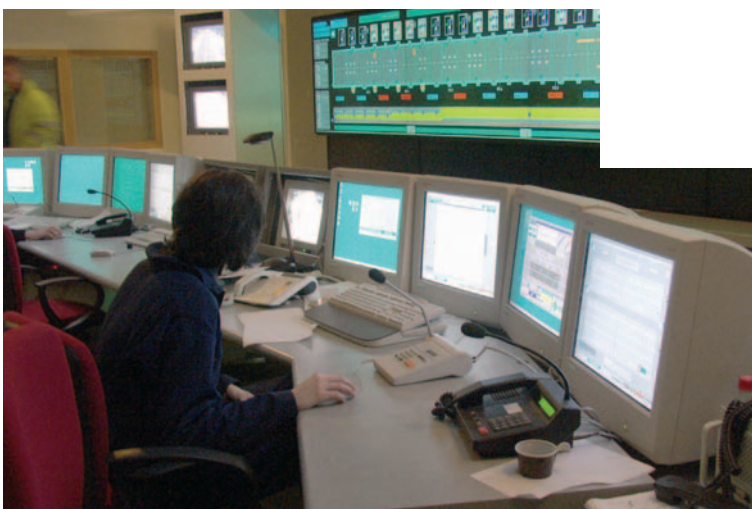
Low-voltage systems and ventilation

Cegelec Transport commits itself alongside its customers, **ensuring them total control over their transport infrastructure** as well as simple and efficient system operation.

By means of the field networks and the centralised control rooms, all necessary controls and feedback are placed at the disposal of the operators. Cegelec Transport also assumes responsibility for the electromechanical equipment, ensuring passengers' comfort and safety, whether in stations or tunnels.

- **Centralised technical management**
- **SCADA and control room**
- **Closed-circuit TV systems, telephony, public address, radio systems**
- **Telecommunication systems**
- **Passenger information systems**
- **Ventilation, air conditioning, smoke exhaust**

The "facilities" solutions of Cegelec Transport cover a broad range of transport infrastructure requirements, including communication, surveillance, safety, security, passenger comfort, etc. Cegelec Transport provides its customers with a complete offer and takes responsibility for ready-to-use solutions.



References



Paris tramway

For the new Parisian tramway line, Cegelec Transport is integrating, on behalf of the RATP, supervision systems with extended operating features

that include centralised technical control, video-surveillance and public address systems.



Singapore metro

For the Singapore Circle Line, Cegelec Transport installed electrical distribution, station and tunnel ventilation, air-conditioning systems and

smoke exhaust.



Mont-Blanc tunnel

During the renovation of the Mont-Blanc tunnel, the experts of Cegelec Transport provided a complete safety system in only 11 months.

The supervision (SCADA) and signalling systems developed by Cegelec were able to meet the strict requirements of the European Union and the challenges Prime Contractors and operators are confronted with today.



Solutions & Services

Cegelec Transport

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