

PRESS RELEASE



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NGE SUBSIDIARY TSO SUCCESSFULLY COMMISSIONS ITS FIRST RAIL TELECOMS PROJECT, EXPANDING ITS GLOBAL RAIL SYSTEMS SOLUTIONS OFFER

Global rail player, TSO diversifies its activities and enters the rail telecoms market. Completed last October, its first network reference includes the installation and radio commissioning of GSM-R masts on the Revermont line in France for its client, SNCF Réseau. Capitalising on its rail signalling expertise, TSO developed an offer capable of covering the entire life cycle of rail telecoms infrastructures: engineering, design, project management, installation, commissioning and maintenance services for telecoms infrastructures both in tunnels and rail trackside environments.

New market

Until now, the on-site services offered by rail signalling specialist TSO SIGNALISATION ranged from civil and electrical engineering to the removal and installation of track and trackside equipment (HMT-accredited operations) and, more recently, all Mechanical Signalling Operations. In terms of design, its teams also offer production and checking services for all the associated working drawings.

The company now has the capability to carry out work on GSM-R trackside telecoms networks. GSM-R (Global System for Mobile communications - Railways) is a GSM-based wireless communication standard developed specifically for rail applications and communications. These new services also include working alongside mobile phone service providers on GSM-P (Global System for Mobile communications - Public) trackside installations, for which TSO SIGNALISATION offers these companies a turnkey installation service, from land searches to infrastructure supply.

These systems are designed to optimise telecoms links between train drivers and operators using optical fibre networks to provide the reliable, continuous and hazard-free long-distance service essential for rail safety.

First project successfully commissioned in France

In February 2021, the President of the Bourgogne Franche Comté Regional Council Marie-Guite Dufay and Sub-Prefect Joël Bourgeot officially opened the first GSM-R mast installed by TSO SIGNALISATION teams for their client SNCF Réseau on the Revermont line. This line is the region's second-busiest rail link, connecting Besançon to Lyon via the Jura Mountains. The project followed the regional council's decision to invest long term in a scalable high-performance technology, rather than a traditional bypass upgrade.

A total of 13 pylons spaced at between 6 and 9 kilometres have been installed to ensure that train drivers have continual uninterrupted contact with control centres, which in turn improves safety, quality of service and punctuality.

All stages of this project were carried out by TSO SIGNALISATION:

- Technical design studies
- Civil engineering: tower bases and concrete platforms for control systems and utilities
- Installation of active hardware (radio-frequency and support equipment)
- Pylon erection
- Antenna installation
- Hardware cabling
- Line measurement, testing and commissioning

This successful first project outcome gives TSO SIGNALISATION the confidence to expand this new range of essential services.

Key figures

- 6 months of on-site work
- 13 pylons erected
- 1 tunnel work team

ABOUT TSO: Building on 95 years of experience in France and internationally, TSO puts its expertise to work on rail infrastructures and systems (rail network construction, replacement and maintenance, electrification and catenary upgrading, topography and rail software development, rail safety, etc.). In its commitment to innovation, TSO focuses its research on delivering improvements that combine quality with service efficiency and personnel safety. The development of synergies between TSO specialist sectors and the complementary disciplines of NGE allows the Group to offer a comprehensive package of products and services to its markets.

Find out more at <https://tso.fr>

ABOUT NGE GROUP: In France and around the world, the teams of NGE serve communities, regions and countries by designing, constructing and refurbishing infrastructures and buildings. The expertise and team working skills of the Group's more than 16,000 men and women give them the confidence to embrace and anticipate the changing nature of the jobs they do, and work closely with their customers. Reporting annual revenue of €2.8 billion, NGE is an independent French civil engineering company involved in the construction of major infrastructure projects, urban development programs and local development schemes in 17 countries.

Find out more at <https://nge.fr>

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