



ENOTRAC successfully completes energy study for the 'Grand Paris Express' Metro line

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The project

'Grand Paris' (Greater Paris) is the name of an initiative launched by former French President Nicolas Sarkozy for "a new global plan for the Paris metropolitan region". It has led to a new transportation master plan for the Paris region and to plans to develop several areas around Paris. The project includes €32.6 billion of public investment, 200 km of new metro lines and 72 new stations. All metro lines are scheduled to be operational by 2030.

ENOTRAC's scope



SGP (Société du Grand Paris) is the state-owned company set up to design and map out the overall plan and infrastructure projects, which make up the Grand Paris transport network. It is responsible for: building lines, fixed facilities and structures; building and developing stations, including interconnections; purchasing rolling stock designed to travel on these infrastructures.

In 2012, SGP commissioned ENOTRAC to perform an energy study for the new Metro lines, the 'Grand Paris Express'. The study identified in a first step the main parameters which would influence the energy consumption and determined by means of simulations the potential savings from individual measures, including energy storage, inverting substations, driving style, train composition and waiting time, acceleration and deceleration and electrical brake settings.

In a second step, SGP engaged ENOTRAC in 2013 to simulate some new scenarios and parameters. The extended scope of work also considered the optimisation of the energy exchange between trains and an economic sensitivity analysis for judiciously-located energy storage or inverting substations, thus consolidating the findings of the first study.

ENOTRAC experience

ENOTRAC is a world-leading specialist engineering consultancy with expertise in electrification/energy/EMC engineering rolling stock, system assurance and asset management. Our team of specialist engineers have successfully delivered over 600 technical assignments in over 20 countries across 4 continents.