



SEA, South Europe Atlantic

Cavity detection along the route of the future South Europe Atlantic High Speed Line

Poitou-Charente & Aquitaine, France
Started in 2011, 36 months



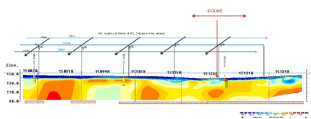
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The new South Europe Atlantic (SEA) railway line will allow high-speed TGV trains to reach Bordeaux from Paris in just over two hours at speeds faster than 300 km/h.

303 km of new track between Tours and Bordeaux has been designed & built by COSEA (CONstruction SEA), a JV led by Vinci Construction.

The total cost of the project is estimated at 7 billion euros. Part of the funding comes from a Public-Private Partnership in the form of a concession from The French railway network manager RFF, "Réseau Ferré de France". This is the first high speed line in France to benefit from this partnership model.



2

Before starting any construction, SOLDATA Geophysics is carrying out the geophysical survey for cavity detection along the project route. Several methods are used: GPR (Ground Penetrating Radar), ERT (Electrical Resistivity Tomography), Seismic Tomography, Microgravity. GPR measurements will again be performed after earth-moving.

3

The railway line is due to open in 2017 for a concession of 50 years and to transport 20 million passengers every year.

Since the majority of journeys between Northern Europe and the Iberian Peninsula takes the Atlantic route, the line is expected to be extended down to Toulouse and into Spain by 2020.

Legends

1. A TGV running at 300 km/h
2. The S.E.A. route
3. A geophysical output

Key figures

- GPR = 250 km
- ERT = 98 km
- Seismics = 5 km
- Electric Cylinder = 50 units
- MASW = 30 lines
- Electromagnetics = 7 750 pts
- Microgravity = 2 560 pts