**OpticTrainDetection**

**Optical and Acousto-optic Sensor Technology for Railway-Applications**

**Funding:** European (Horizon 2020)
**Duration:** Oct 2014 - Mar 2015
**Status:** Complete
**Total project cost:** €71,429
**EU contribution:** €50,000

**Call for proposal:** H2020-SMEINST-1-2014
**CORDIS RCN:** 194736

**Objectives:**

Frauscher Sensortechnik GmbH is a technology and market leader in the area of inductive sensor technology solutions (40% global market share). For its further development we are continuously innovating our product portfolio.

The presented project aims at the development and commercialisation of optic sensor technology (Fibre Bragg Grating, Distributed Acoustic Sensors) in the railway application. The new technology should complement state-of-the-art inductive sensor technology which shows some limitations (electromagnetic interference with magnetic rail brakes, high costs due to expensive cable connections etc.).

Within the proposed feasibility study a technical, economical and regulatory assessment will be conducted in order to establish a business plan. It will be the basis for an innovation project (phase 2 of the SME-instrument) during 2015/2016.

The commercial exploitation of the development will be ensured by a worldwide presence of Frauscher Sensortechnik GmbH (Headquarter in Austria) in the form of subsidiaries (Poland, India, Brazil, CIS, UK). With the new technology a continuous growth of the company will be possible. A total market volume of 14 billion EUR in the area of signalling and safety infrastructure on railways is an attractive argument to invest into this innovation project. The innovation will allow FRAUSCHER to grow further and faster in the upcoming years.

**Parent Programmes:**
**H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport**

**Institute type:** Public institution
**Institute name:** European Commission
**Funding type:** Public (EU)

**Lead Organisation:**

Frauscher Sensortechnik GmbH

**Address:**
Gewerbestrasse 1
4774 St. Marienkirchen
Austria
EU Contribution: €50,000

Technologies:
- Condition monitoring
- Sensor condition monitoring system

Development phase: Research/Invention

STRIA Roadmaps: Infrastructure
Transport mode: Rail transport
Transport sectors: Passenger transport, Freight transport
Transport policies: Other specified
Geo-spatial type: Other