

## Interail - Development of a novel integrated inspection system for the accurate evaluation of the structural integrity of rails tracks

The European rail industry is showing signs of steady recovery after a long period of steady decline. The technological advances in train design have led to the manufacturing of faster, greener and more comfortable trains making rail transport a more attractive option for passengers compared to other modes of transport. The ever-growing need for society to utilise more environmentally friendly transportation policies is expected to underline the economic and societal role of rail transport further in achieving sustainable mobility across Europe in the following years.



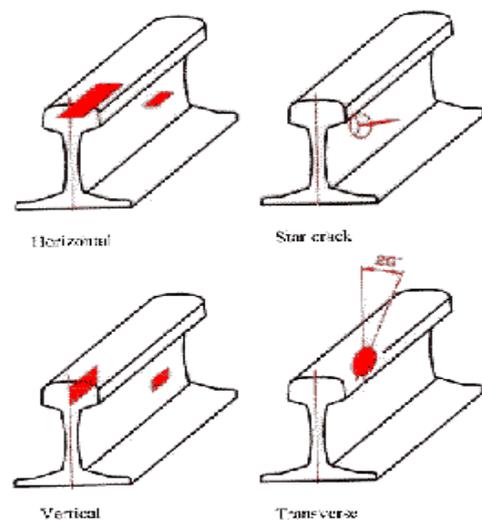
### Project objective

The European rail network is getting busier with trains travelling at higher speeds and carrying more passengers and heavier axle loads than ever before. The combination of these factors has put considerable pressure on the existing infrastructure, leading to increased demands for inspection and maintenance of rail assets. The expenditure for inspection and maintenance has thus grown over the last few years without being followed by a significant improvement of the industry's safety records.

A large proportion of all infrastructure-related accidents in the rail industry is due to rail failure. The continuous increase in train traffic, axle loads and speeds means that the failure of a rail section may result in very serious derailments, such as the one that took place in Hatfield, UK in 2000, causing loss of life, injuries, severe disruption to the operation of the network, unnecessary costs and loss of confidence in rail transport by the general public.

Interail seeks to practically eliminate rail failures by developing and successfully implementing an integrated high-speed system for the fast and reliable inspection of rail tracks. The application of the high-speed system will be complemented through the implementation of novel semi-automated testing equipment, which will be deployed for the verification and evaluation of the defects detected during high-speed inspection.

Rail Flaw Types



The novel integrated inspection technology developed in Interail will contribute significantly to the improvement of the efficiency and reliability of train travel. By supporting the strong growth of the European rail industry, Interail will assist the general economic growth of the EU which is tightly interconnected with the transport growth.

For further information, please visit the project website at [www.interailproject.eu](http://www.interailproject.eu).

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