

Digital Industry i-Track



PRODUCT LAUNCH

PARTNERS: ISA (France), France Rail Industry (France),
Forum Virium Helsinki (Finland)

i-Track



Connected tracks to ensure security

I-Track solves the problem of unknown failures of rail networks by the mean of connected sensors and intelligent algorithms. It provides fast and remote information about the health of the tracks, avoiding heavy inspection carried out by operators.

It is always difficult to have information of a failure on a rail network, especially if this network is large, and if this failure is a total breakage. I-Tracks uses sensors distributed on rails that provide an algorithm with information to determine whether maintenance needs to be carried out. Machine learning-based algorithms are able to improve themselves and offer increasingly reliable diagnostics over time.

This solution will provide enhanced safety and, above all, improved efficiency of rail network maintenance.



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Competitive Advantages

- Health monitoring system
- Connected sensors
- Long range inspection

Target Markets

- Rail network companies
- Urban transportation companies
- Rail maintenance companies

Status/ Traction

- Two pilots are installed in France and one is being set up in Helsinki,
- France Rail Industry is providing rail expertise
- Forum Virium Helsinki manage the Finnish pilot and the communication
- Institut de Soudure is designing and building the system

Road Map

2020

- Pilots will confirm the impact of the product on the maintenance efficiency

2021

- Systems will spread in France and in Europe. Business approach will address Africa and Asia.

2022

- i-Track will be widely installed on major networks

Leveraged Technologies

Ultrasonic connected sensors generate an acoustic guided wave propagating along the rail for hundreds of meters, it enables to monitor large scale of network with few sensors. Algorithms aggregate a huge amount of data and calculate the evolution of the signature of a given defect. This combination makes the product different from the competitors, both digital and physical approaches enable powerful and accurate diagnostic to engage an efficient repairing action

Contact



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i-Track

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EIT Digital supports entrepreneurial teams from research and business organisations in launching new startups and new products in agile 12-month projects called innovation activities. These activities are embedded in EIT Digital's European ecosystem and receive a financial co-investment to package their technology, sign up customers and attract investors.