Railway Pro Technology and Services Forum

Innovating with Smart Railway Infrastructure
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DESTinationRAIL

Decision Support Tool for Rail Infrastructure Managers
What is the DESTinationRAIL Project

- Horizon 2020 funded
- Runs for 3 years from May 2015 to April 2018
- Looking at reducing Infrastructure Costs
- Delivers practical solutions
Project Aim

The aim of DESTination RAIL is to provide solutions for a number of problems faced by EU infrastructure managers.

Novel techniques for identifying, analysing and remediating critical rail infrastructure will be developed.
Objectives

These solutions will be implemented using a decision support tool, which allows rail infrastructure managers to make rational investment choices, based on reliable data.
Project Organisation

• Work Package 1; FIND
  How do we locate and identify risky assets before they fail?
  Using a combination of remote monitoring and expert judgement

• Work Package 2; ANALYSE
  How do we determine the real-time safety of existing infrastructure?
  ANALYSE - Using advanced models updated using monitoring data
Project Organisation

- **Work Package 3 CLASSIFY**
  How do we determine the level of safety and assign scarce resources? 
  CLASSIFY – Risk management, as an interdisciplinary infrastructure management tool.

- **Work Package 4 TREAT**
  How do we choose the optimal rehabilitation technique? 
  TREAT - Construction Techniques assessed through Probabilistic Whole Life Cycle Model

- **Work Package 5 Dissemination and Exploitation**
- **Work Package 6 Project Management**
Identification of Infrastructure Problems

- Establishment of a database of key issues facing infrastructure managers
- How to identify “hot spots” for possible future problems
- Monitoring of Switches and Crossings
- Monitoring of earthworks
- Monitoring of Structures
How to Identify; FIND “hot spots”
Monitoring of Switches and Crossings

DESTination RAIL
Decision Support Tool for Rail Infrastructure
EU Project No. 636285
Monitoring of Earthworks
Monitoring of Structures
Summary

• The project is moving from the first phase which is “Find” to the second phase “Analyse.”

• Results from this work will be reviewed to see what improvements can be made to detecting problems before they occur.

• This work will also feed into the Decision Support Tool model.

• The project is on course to deliver a tool which will help Infrastructure Managers to optimise work.
Thank You for you attention

Michael Robson, Member of the Executive Board
DESTinationRAIL
www.destinationrail.eu