



# OECD Network of Economic Regulators.

**DESTinationRAIL**  
**Paris 10<sup>th</sup> April 2018**



**EUROPEAN COMMISSION**  
Innovation and Networks Executive Agency  
Director

**DESTination RAIL**  
**Decision Support Tool for Rail Infrastructure**  
EU Project No. 636285



# What Does an Infrastructure Manager Require



- Fundamental for an IM, what is the Infrastructure being asked to deliver now and in the future?
- Routes/National/European Network
- Capacity/Line Categorisation
- Asset Management, quality, safety, price
- How is it to be funded?

# Multi Annual Contracts



- Reduced unit cost and better LCC
- Track measurement and data recording use
- New materials
- Condition based not standards based
- Cheaper to solve an issue rather than continuously return to it

# 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



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# 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

# Areas Discussed Today



- Track Condition Monitoring, sub surface.
- Point and Crossing Monitoring
- Bridge Monitoring
- Earth Works Monitoring

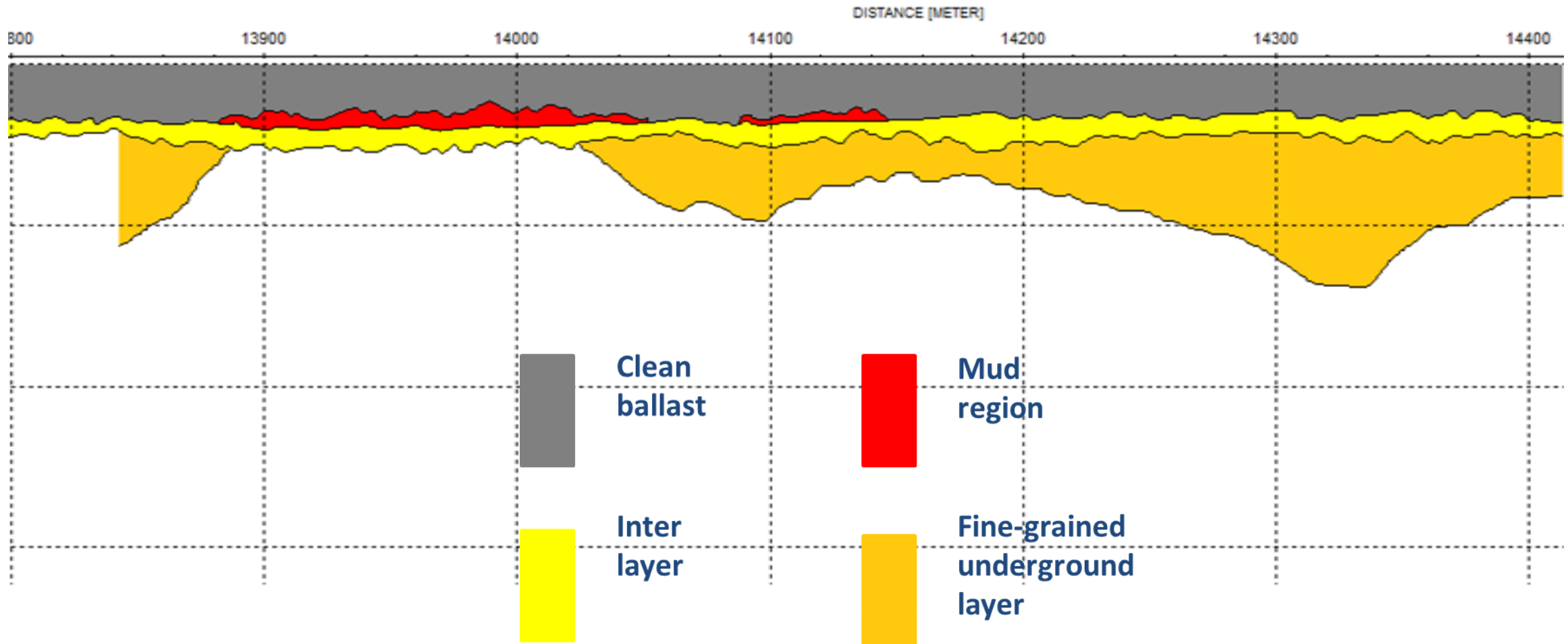




# Locating “Hot Spots” using GPR



# Results using GPR

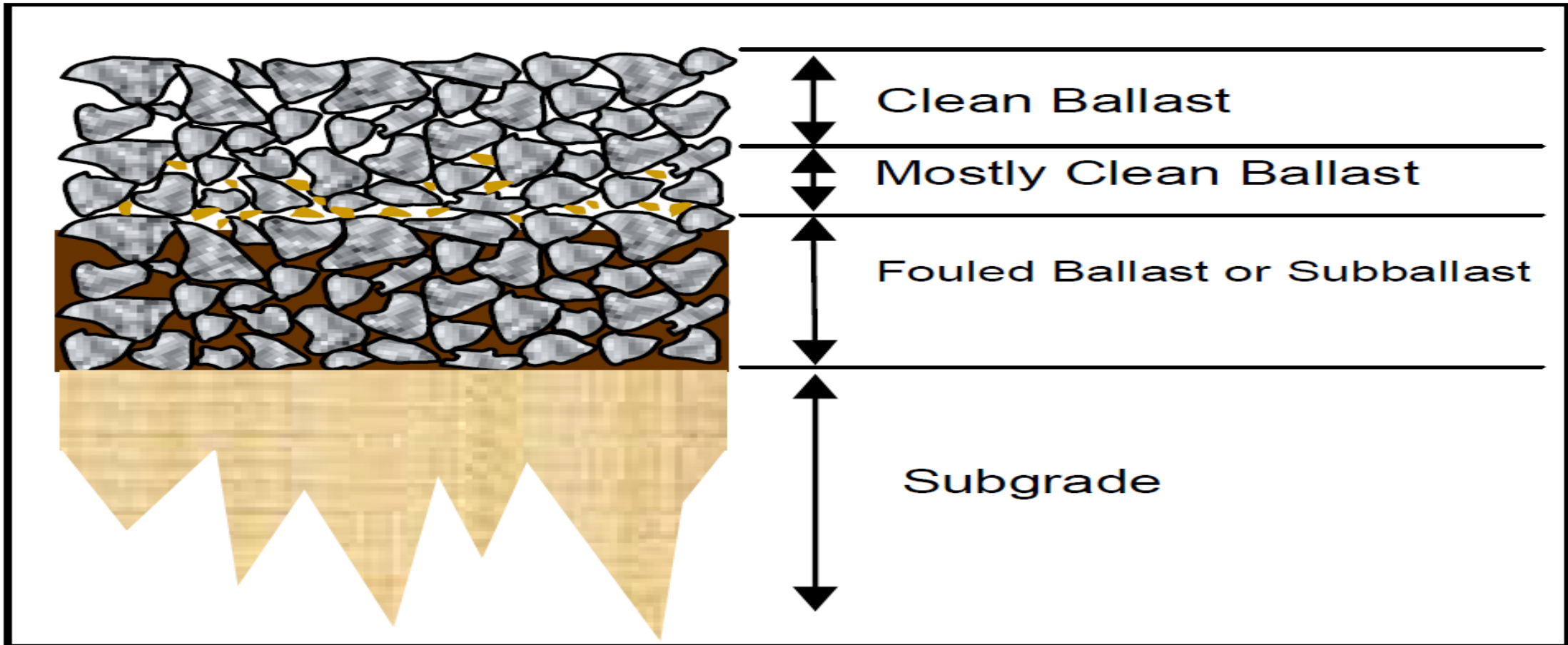


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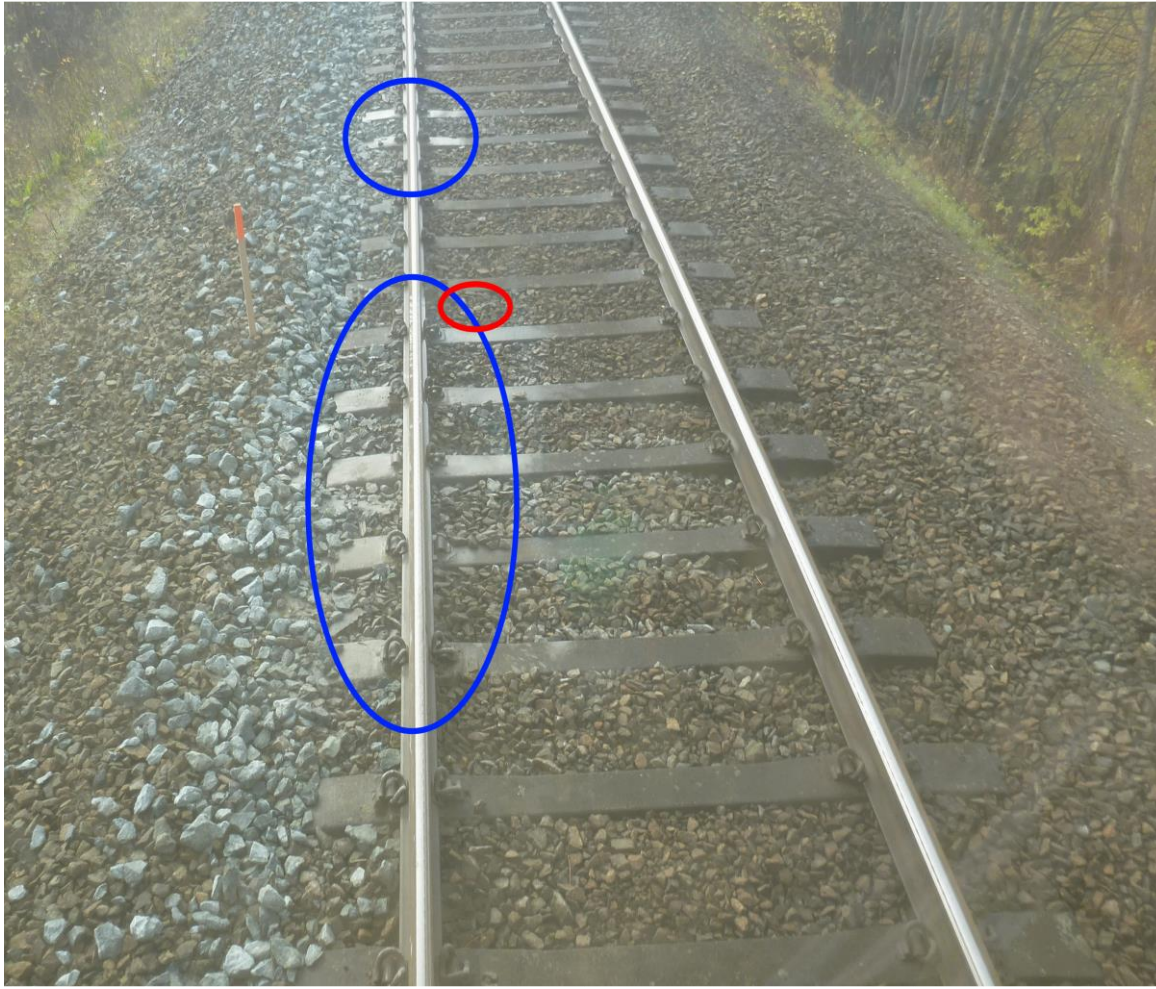


# Ballast Degradation





# Wet Spots





# Options for Track Renewal



- Ballast Cleaning
- Sleeper Renewal
- Rail Renewal
- Complete Renewal



# Monitoring of Track, Switches and Crossings



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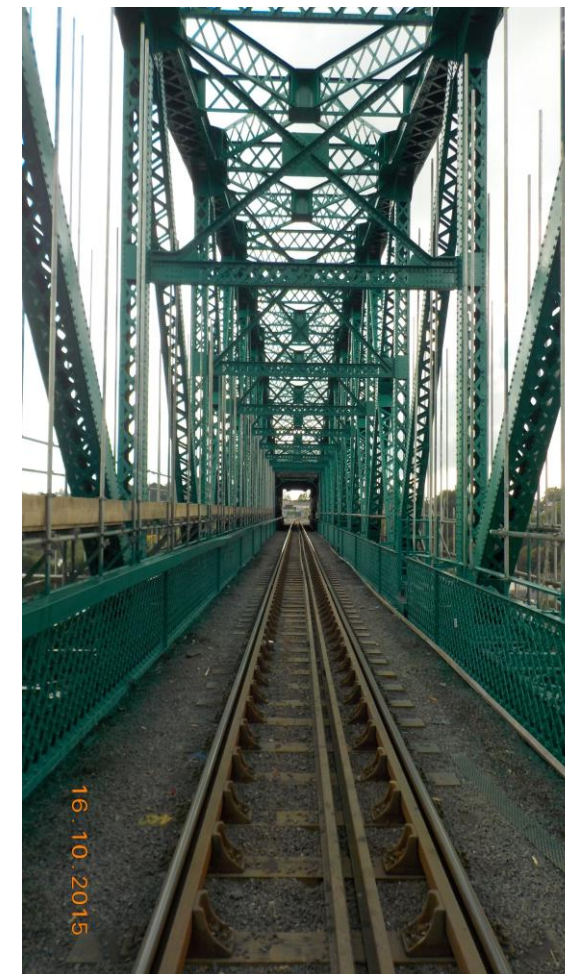
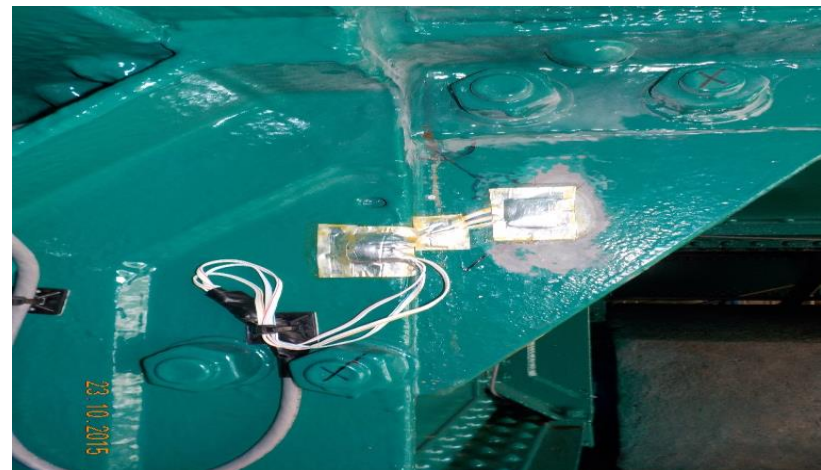




# Collecting and Analysing Data



10304849 Photo: © Peter Barrow Photography 17th October 2009 Tel: 045-401070



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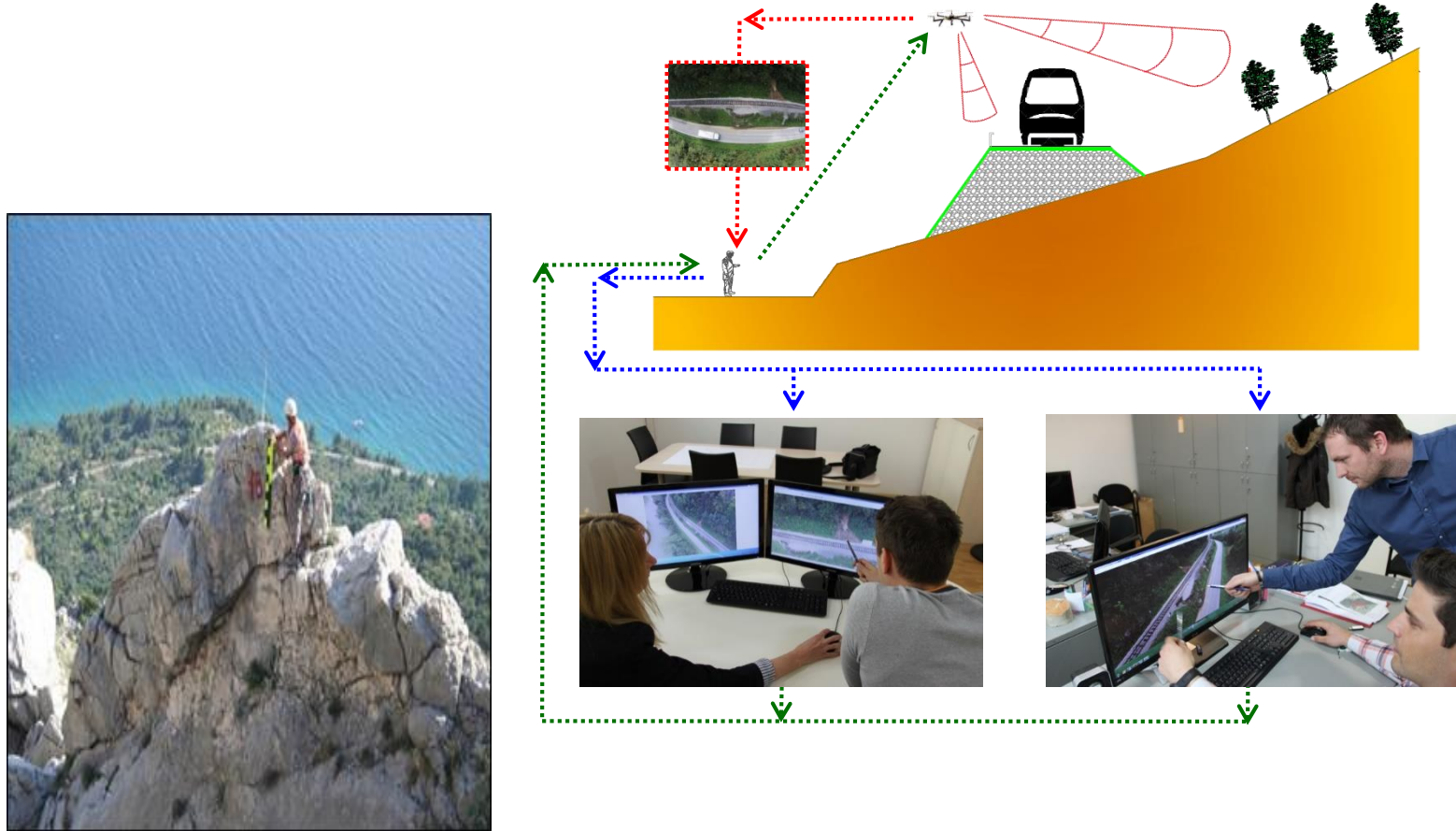


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# Use of Drones for monitoring slope stability



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# Results of a Drone Flight; Varazdin- Dalj Embankment.



# Summary



- Technology can help.
- Invest in monitoring equipment and software to interpret the results. *Make it mandatory for new projects or major renewals.*
- Share data.
- Accept that the network condition changes for a variety of reasons.



**Thank You for you attention**  
**Do not forget the final conference in**  
**Zagreb on 26<sup>th</sup>/27 April 2018**

**Michael Robson, Member of the Executive**  
**Board DESTinationRAIL**  
**[www.destinationrail.eu](http://www.destinationrail.eu)**



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