The way forward with drones

A short introduction on railway applications

Jørgen Torgersen - Smart Vedlikehold

Foto: Bane NOR (Harry Korslund)

Nordic Institute of Navigation, Trondheim 15th November 2018
Topics

• How and why we got a ‘world-first’
• Rationale
• Advantages
• Path forward
How

Test with pilots
April 2018

Verification of test
April 2018

Path planning
Mai 2018

GPS coordinates
June 2018

Test without pilots
June 2018
Why

React

Interval

Limit

Predict

Self repairing
Rationale
Advantages

Optimal railway, 24/7 monitoring of infrastructure

Trains run from 4 am to 1:30 am next day

Heavy maintenance from 1:30 am to 4 am

Inspection and lighter maintenance 24/7 with drones

Well maintained infrastructure
Path forward – A journey where safety comes first

Drone operator
Pocket drones for technicians primarily for HSE

Inspection drones
Safety pilots
Data driven inspection connected to analytics platform

Maintenance drones
Robotize simpler maintenance and inspection task
Machine to machine communication on analytics platform
Thank you for the attention

• Jorgen.Torgersen@banenor.no