



PROJECT RADIUS

Railway digitalisation using drones

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RAILWAY DIGITALISATION USING DRONES

UAS design

- Define and integrate the sensors to collect and process relevant data
- Secure wireless communication between the UAS and the monitored asset
- Enhanced navigation solution using EGNOS and Galileo

Integration with TMS and IAMS

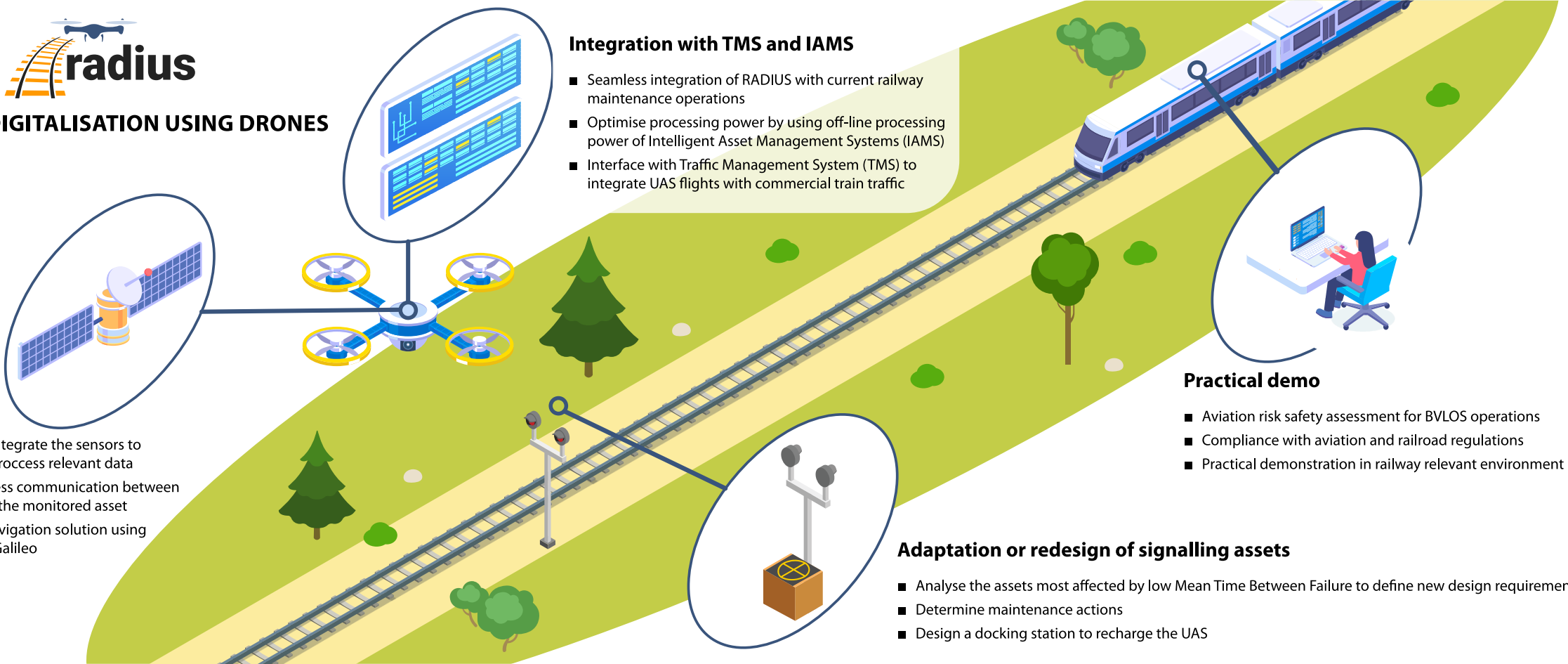
- Seamless integration of RADIUS with current railway maintenance operations
- Optimise processing power by using off-line processing power of Intelligent Asset Management Systems (IAMS)
- Interface with Traffic Management System (TMS) to integrate UAS flights with commercial train traffic

Practical demo

- Aviation risk safety assessment for BVLOS operations
- Compliance with aviation and railroad regulations
- Practical demonstration in railway relevant environment (TRL 6)

Adaptation or redesign of signalling assets

- Analyse the assets most affected by low Mean Time Between Failure to define new design requirements
- Determine maintenance actions
- Design a docking station to recharge the UAS





Thank you!



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