





Collaboration, Innovation and Resilience: Championing a Digital Generation

Brisbane, Ast a 6-10 April

#### **Inland Rail - On Track Spatially**

**Applications and Challenges of Mobile Mapping** 

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#### **Presentation overview**

- **Program Overview**
- On Track Spatially Mobile Mapping
- Sustainable Development Goals





















### Program overview



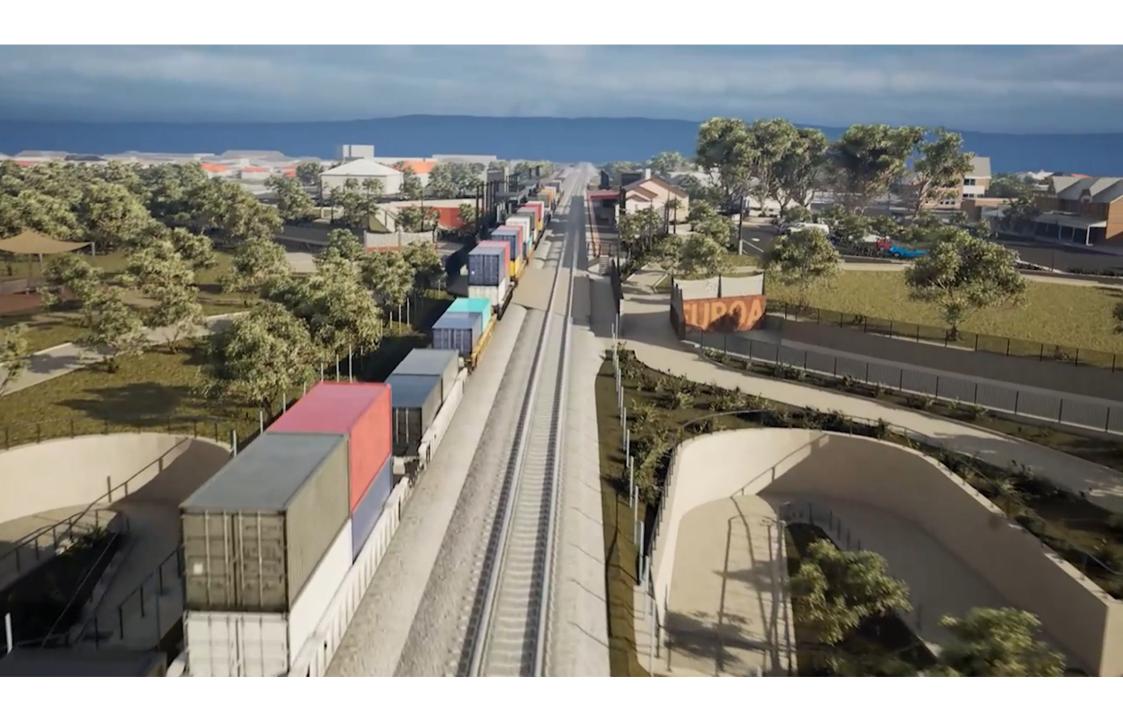
Connecting existing freight routes through rail, road and ports



Supporting Australia's growth



Reducing congestion and carbon emissions from fewer long-haul trucks





### **Applications and** challenges of mobile mapping

Aerial Imagery & LiDAR capture assist Inland Rail with:

- Route Selection
- Flood Modelling
- **Concept Design**
- **Quality Assurance Validation**

























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# Applications and challenges of mobile mapping

Aerial Imagery & LiDAR capture provide additional benefits:

- Fast accurate data capture
- Reduced impact on landowners
- Align with project phases
- Feature extraction / background information





















# Applications and challenges of mobile mapping

Continually Operating Reference Station (CORS)

- 5x CORS stations
- Geoscience Australia
- Constant Datum

















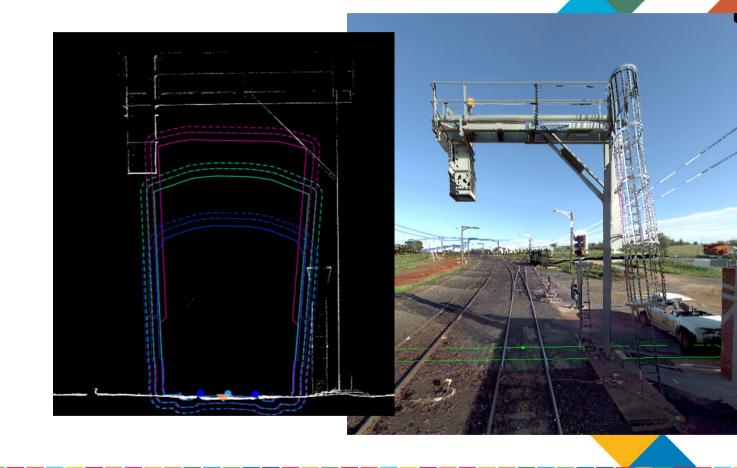




## Applications and challenges of mobile mapping

#### Track Scan LiDAR

- Vehicle and train mounted
- Infringement Assessments
- Tolerances / relativity
- Survey data?





















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### The most relevant SDGs related to the presentation and theme of this session









International Federation of Surveyors supports the Sustainable Development Goals



















