



Presented at the FIG Working Week 2023,
28 May - 1 June 2023 in Orlando, Florida, USA

FIG WORKING WEEK 2023

28 May - 1 June 2023 Orlando Florida USA

Protecting
Our World,
Conquering
New Frontiers

Protecting Railway Transport

Advancements in Autonomous and Automated Geodetic Deformation Monitoring

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Organized By

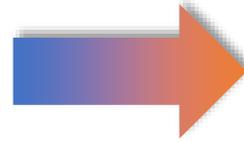


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Why & When is railway monitoring needed?

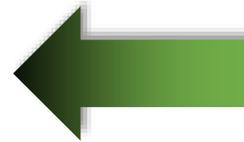
- Increasing speed & frequency
- Nearby construction
- Natural hazard threat
- Geological instability
- Structural health (age)



- Safety threat to passengers and rail vicinity
- Economic losses for operators



- Increase safety
- Mitigate risks



- Deformation monitoring

Our mission in railway

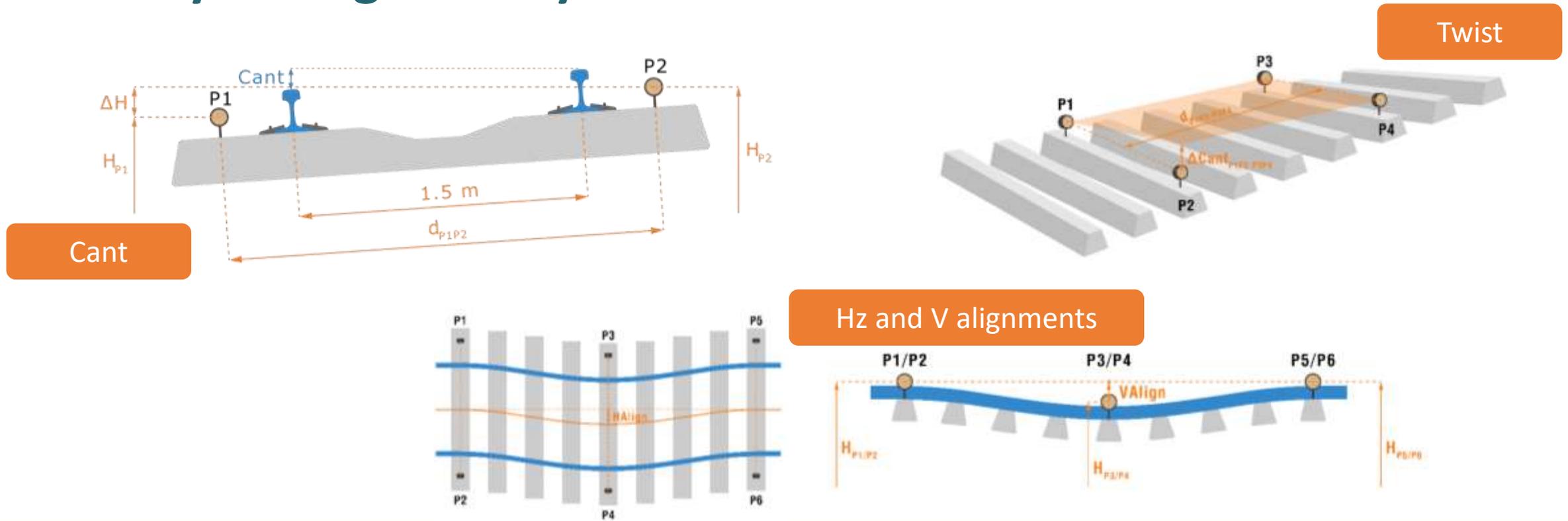
- Safety
- Sustainability
- Automation & Autonomy
- Reliable information

- when it has to be **right**

Leica
Geosystems



Railway track geometry



Monitoring technologies

Geodetic



Geotechnical



Hybrid



Others...

Path from data to information

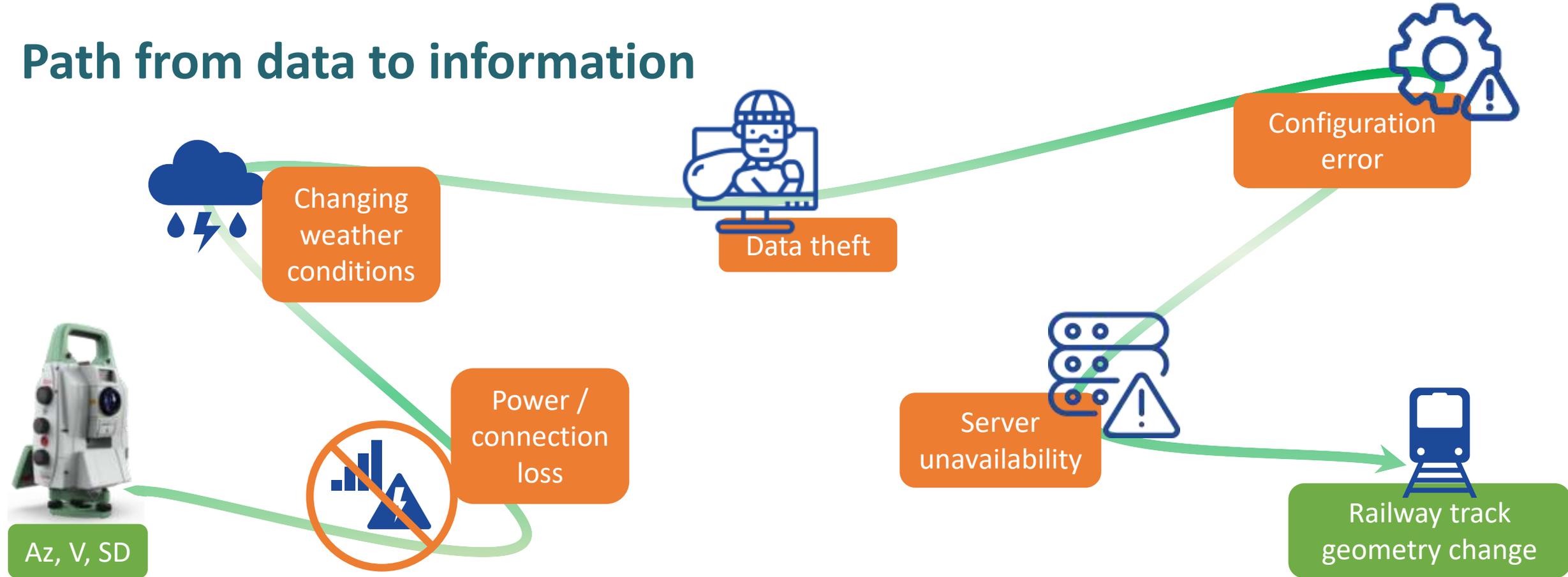


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Field



Az, V, SD



Cloud



Server



Railway track geometry change

Intelligence in every step

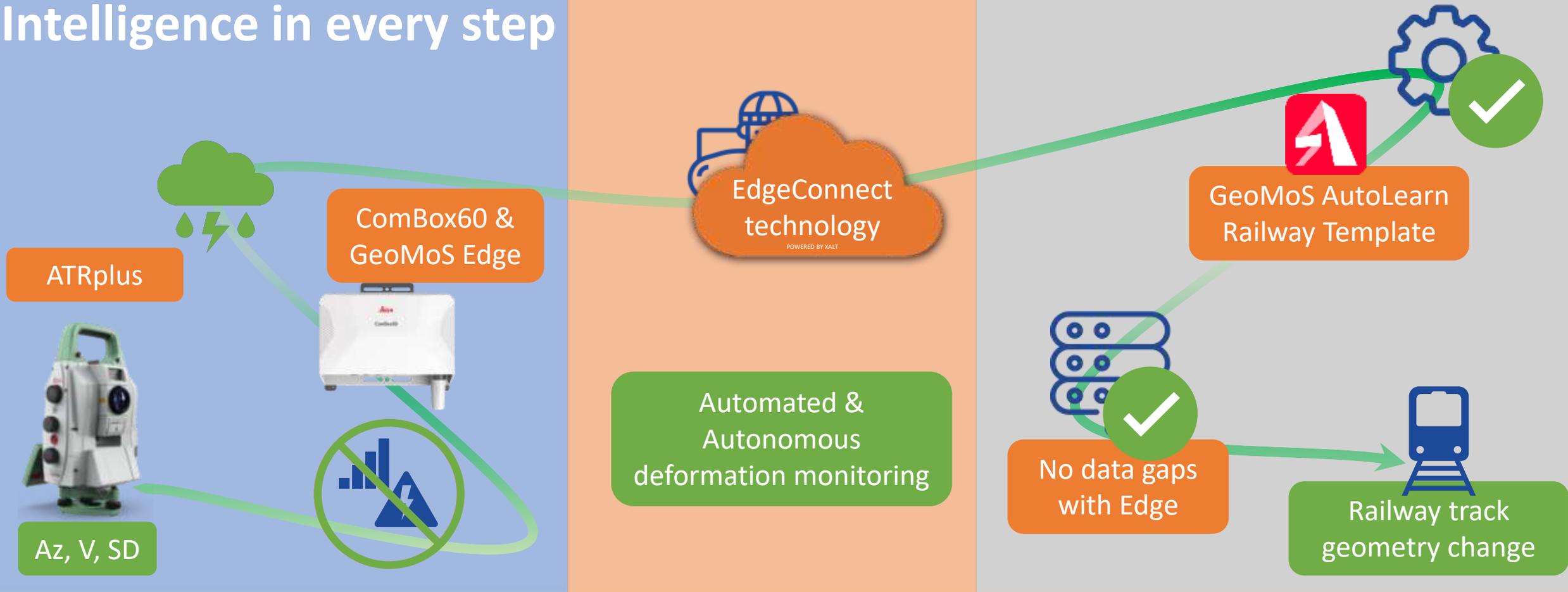




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Thank you!

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