How we use 5G, to solve a common Dutch railway problem in autonomous trains … and more

HYPERTHRAIN

(aka. "5Geniuses")

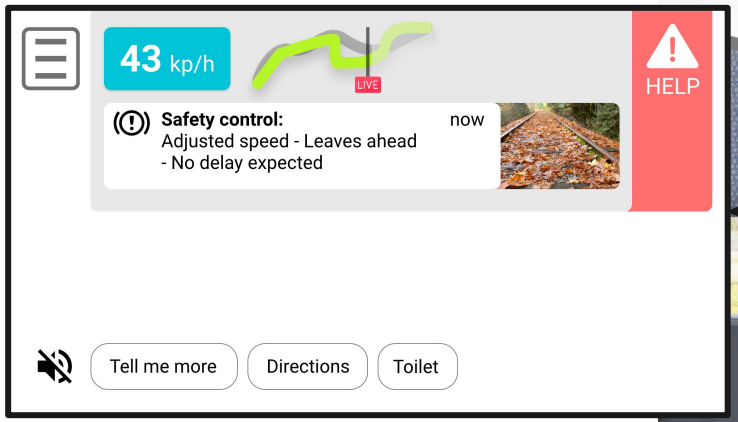
Did you ever...

Meet Emma...

- On her trip on a **GoA 4 train** to visit her son

Suddenly… the train is braking

1 ms later...



- Safety control notification + TTS pops up on user dashboard

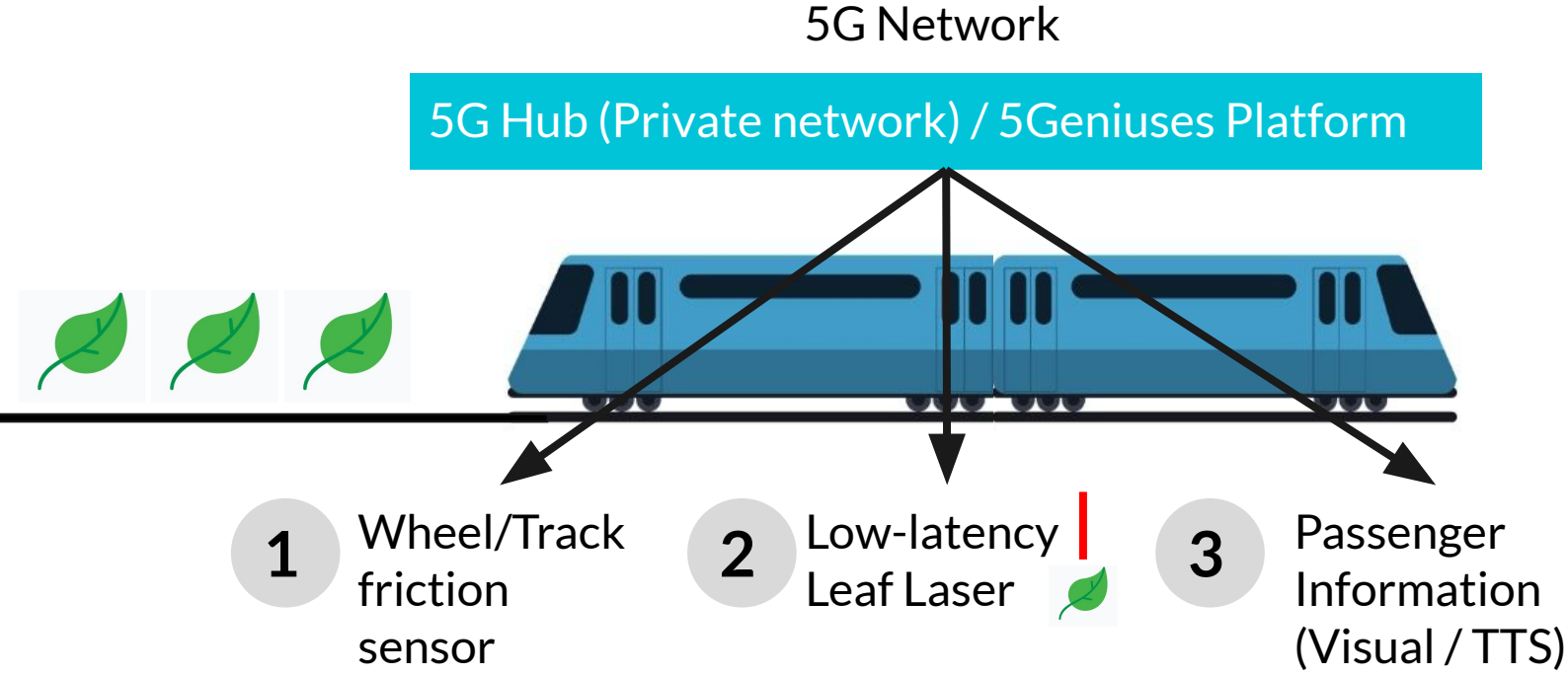
What happened?

“Blaadjes” on tracks are a huge problem in NL

- Delays & Maintenance
- Train drivers need to operate the train with more attention

This is a real challenge for Autonomous Trains!

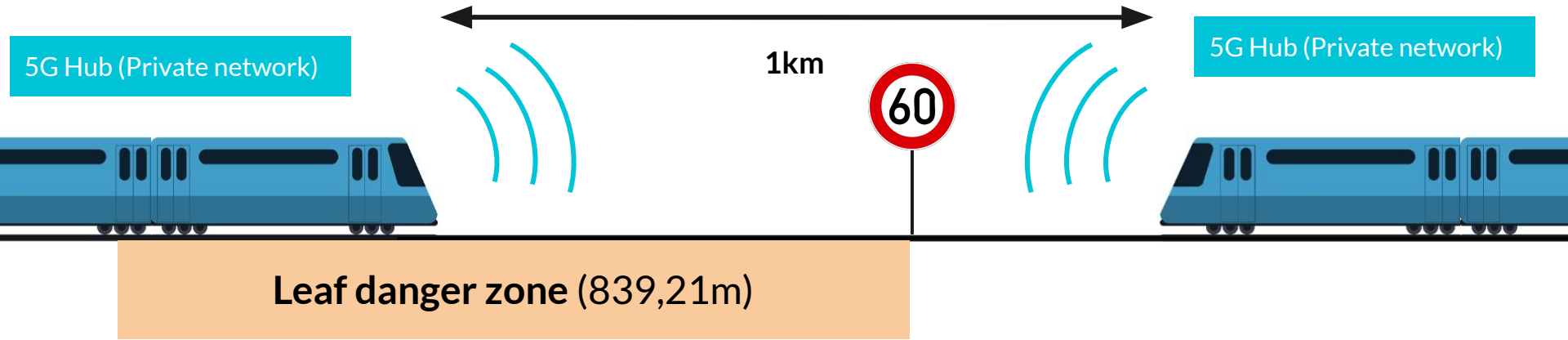
Our Solution: A modular platform for 5G-enabled sensors / devices



… and let the following trains know, so they can

- adjust their speed
- keep safe distance
- inform passengers
- Speed up again, once error is resolved

All in real-time!



Value proposition

Reliability & Sustainability

- Solve problems on the track in real-time
- Optimizing delays using real-time data
- Cut operational / maintenance costs

Safety

- Trains can drive on a tighter schedule, while maintaining a safe distance

Benefits for Emma

- Increased level of perceived safety / transparency

Build up trust towards AV

- Trust is needed to allow a high **customer acceptance**

Technical Demo

Our team #5Geniuses

Phil Wornath
UX / Marketing

Julian Berger
Full Stack Developer

Daniel Montaño
Full Stack Developer

Sietske van der Leest
Train Expert @ Arriva

Deepasundar Ponnusamy
Hardware Developer

Thank you!