



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

HYPERTHRRAIN
(aka. “**5G**eniuses”)





Did you ever...

Meet Emma...



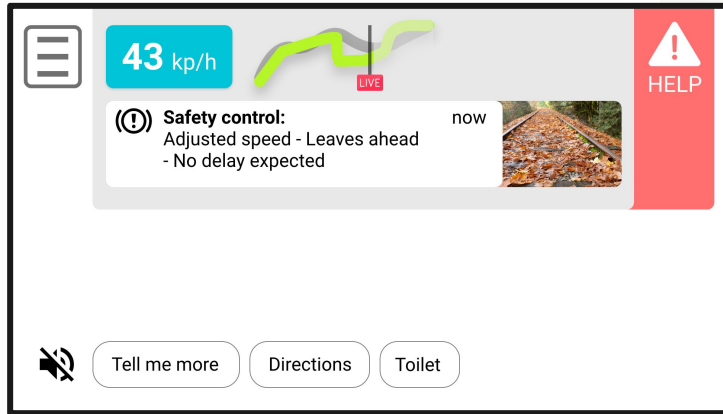
- On her trip on a **GoA 4** train to visit her son



Suddenly...
the train is
braking



1 ms later...



The dashboard interface features a top navigation bar with a hamburger menu icon on the left and a red 'HELP' button with a warning icon on the right. The main content area displays a speed indicator of '43 kp/h' in a blue box, followed by a green line graph with a 'LIVE' label. Below this, a 'Safety control' notification is shown with a warning icon, stating 'Adjusted speed - Leaves ahead' and 'No delay expected', accompanied by a small image of a road with fallen leaves. At the bottom, there are three buttons: 'Tell me more' (with a speaker icon), 'Directions', and 'Toilet'.

- Safety control notification + TTS pops up on user dashboard



What happened?

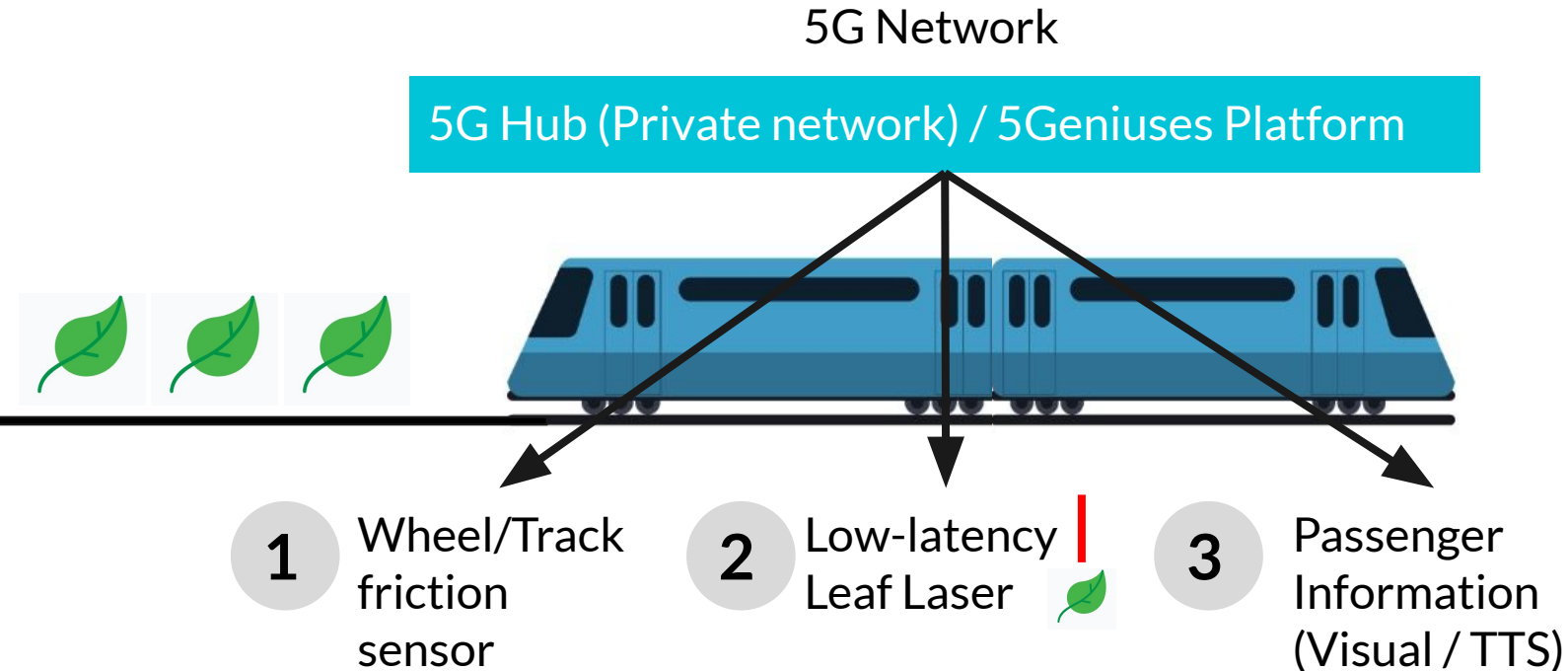
“Blaadjes” on tracks are a huge problem in NL

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

This is a real challenge for Autonomous Trains!



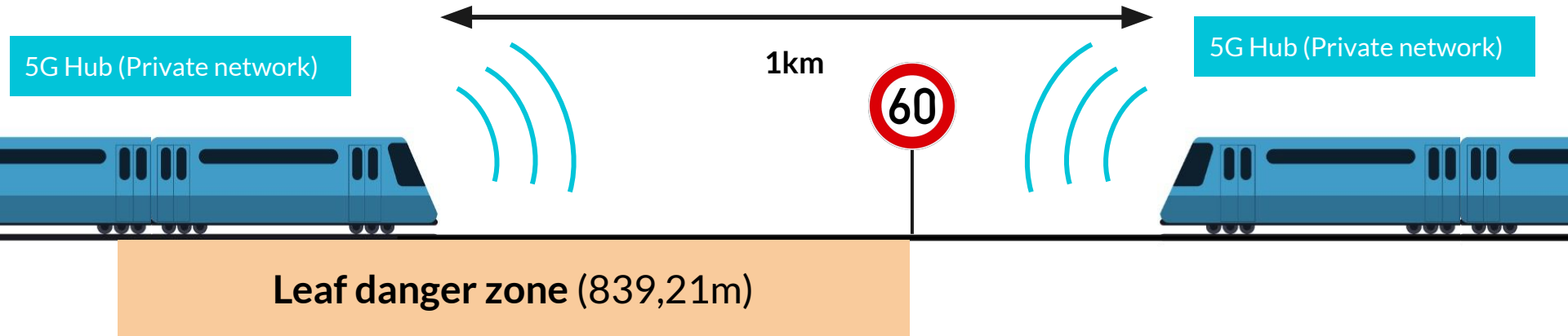
Our Solution: A modular platform for 5G-enabled sensors / devices



... 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
Montaña**

Full Stack
Developer



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Train Expert @
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Hardware
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Thank you!