

5GiRa

5GCorridors Call 3 Projects (Guide webinar)

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ProRail

Railway track Arnhem – Emmerich

TEN-T Rhine - Alpine corridor

Preparation phase

1. Improve public mobile Internet in trains

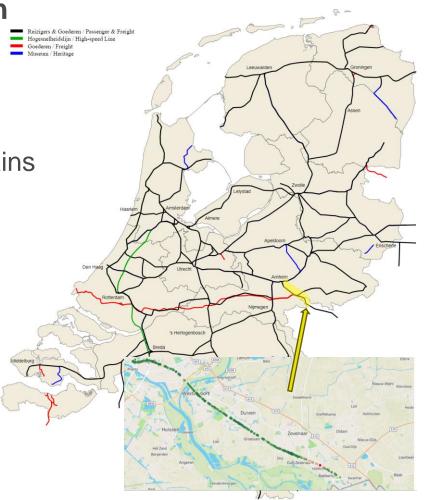
2. 5GiRa (5G GigaRail) study

Arnhem – Emmerich

Trial phase

1. Morane-2 field test trial

Arnhem – German border



5GiRa

CEF2 Digital 5G coverage along transport corridors

- Study FRMCS and Gigabit train
- ProRail (NS), DB, Nokia, Ericsson, KPN, Cellnex, Vantage Towers
- 1 December 2024 1 June 2025 (6 months)



WP1 Project management, communication & dissemination)

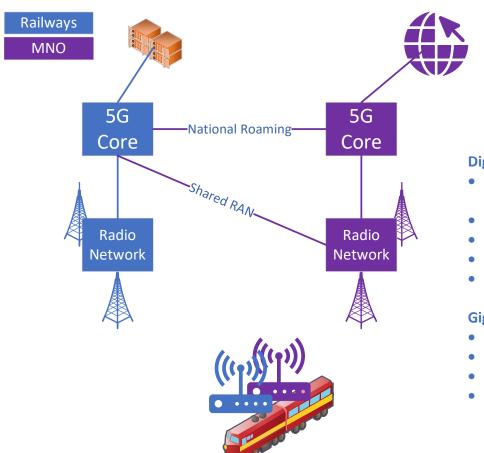
WP2
Use cases and requirements

WP3
FRMCS & Gigabit architecture,
MNO/RMR interfacing/migration

WP4
FRMCS & Gigabit site and radio planning

WP5
Collaboration, cost modelling & Cost-Benefit Analysis

5GiRa results are a building block...



Digital Rail Operations (FRMCS)

- Hybrid operation (MNO and RMR spectrum)
- Sharing options (MOCN, Roaming)
- Slicing (MNO) and QoS control
- FRMCS Multipath
- Modular installations in trains

Gigabit train

- Broadband technology
- Passive infra sharing (neutral host)
- Modular installations in trains
- Radio transparant windows in trains

5GiRa progress

WP1 Lead beneficiary: ProRail	Project management, communication & dissemination
WP2 Lead beneficiary: Nokia	Use cases, requirements & benefits
WP3 Lead beneficiary: KPN	FRMCS & Gigabit architecture and interfacing
WP4 Lead beneficiary: Ericsson	FRMCS & Gigabit site- and radio planning
WP5 Lead beneficiary: ProRail	Collaboration, cost modelling & Cost- Benefit Analysis (CBA)

