DB Systemtechnik

Railway Mobile Radio und Mobile Communications

Fachtechnische Gutachten für Ihre Fragestellung

Mobile communications are a key interface between rolling stock and infrastructure. Leveraging extensive expertise in public mobile networks and railway mobile radio, DB Systemtechnik provides engineering and testing services across the railway sector.

We develop, test and validate communication solutions for rolling stock, infrastructure and their interfaces.

As railway communications evolve from 2G-based GSM-R to the 5G-based Future Railway Mobile Communication System (FRMCS), we support operators and manufacturers with proven technical expertise and railway know-how.

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Our services

- Preparation of test reports, assessments and expert opinions for mobile and railway communication systems, including GSM-R, FRMCS, LTE, 5G and Wi-Fi.
- Consulting services for the 5G-based Future Railway Mobile Communication System (FRMCS).
- Technical assessments of antennas, radio propagation, frequency use, electromagnetic compatibility, standards and specifications.
- Analysis of technical challenges with consideration of operational and business requirements.
- Definition of requirements and development of tailored solution concept.

Your advantages

- Confidently navigate the transition from GSM-R to FRMCS with our proven expertise.
- Gain technological transparency and decision confidence through independent expert opinions and technical assessments.
- Benefit from tailored solutions that consider the railway system as a whole.
- Rely on validated, reliable and technically sound expertise in mobile and railway communications

Reference projects

- Assessment of FRMCS isolation requirements towards other mobile radio services deployed on train roofs
- GINT 3.0 – Design of measurement scenarios for radio coexistence studies
- Requirements elicitation for FRMCS radio measurement systems

Your contact

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