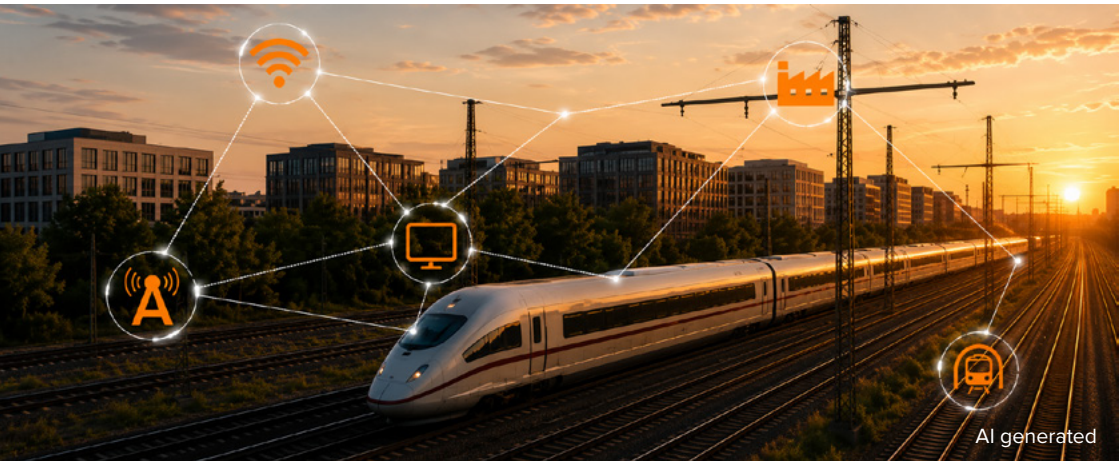




Radio Network Design

Providing stability by simulations for your radio-based infrastructure — we analyse interactions, identify potential interference, set recommendations for high-performance and future-proof radio coverage.



Radio network design

Professional and precise with iBwave®



Modern networks

5G, GSM-R, government safe radio, Wi-Fi



Optimal supply

solutions tailored to your needs for every setting



Reliable, safe & secure

Highest quality for critical communication networks

Expertise & Areas of Application



Rail Infrastructure

- Radio network design for rail lines, stations, and tunnels
- Design for government safe radio (TETRA), GSM-R, FRMCS, and Wi-Fi



Buildings & Building Services

- Design of technical installation
- Design for radio-based coverage within a building
- Integration with building information

Methodology & Approach

The iBwave® software enables precise, three-dimensional propagation forecasting and simulations of radio signals – based on a wide range of relevant parameters.

These include:

- physical properties
- frequency bands
- coverage goals
- analysis on interference and overlaps

Integration & Impact

Your Project – Our Structured Approach:

- 1 Needs Analysis** – Together, we define your coverage goals, frequency bands, and specific requirements.
- 2 Data Preparation** – Using your building plans, we create a detailed, digital 3D model as well as 2D simulation data for the subsequent radio field calculation.
- 3 Simulation** – Using iBwave®, we precisely calculate radio wave propagation while taking physical properties, interference, and network topologies into account.
- 4 Evaluation** – You'll receive clear documentation with field strength maps, key metrics, and recommendations for specific optimisation.
- 5 Design** – Based on the performed simulation, we provide design in different stages including preparat.

Learn more
about our services:

www.signon-group.com

