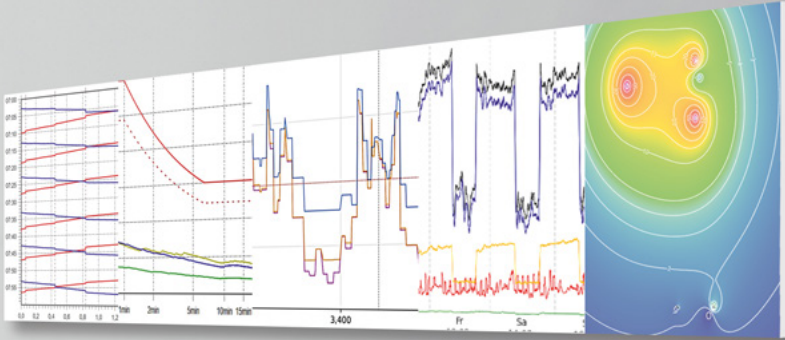




Network Studies

For DC and AC Rail Systems

Service and Expertise

We analyse, simulate, and evaluate complex rail power systems for new construction projects, upgrades and expansion as well as existing infrastructure. Our network studies provide the technical foundation for sound decisions throughout the entire life cycle of electrical infrastructure.

Methodology & Approach

- Collection of infrastructure and operational data
- Modeling of the traction power system
- Simulation of relevant operational scenarios and fault conditions
- Evaluation of alternatives and recommendation for actions

Integration & Impact

- Early detection of risks and bottlenecks
- Optimised sizing and realibility of investment
- Higher availability and operational safety
- Transparent decision-making criteria for all project phases
- Well-informed decisions for design and opera

Through precise network studies, we create transparency, enhance operational reliability, and enable economically optimised decisions throughout the entire life cycle of the rail power infrastructure.

Our Range of Services

➤ Upstream AC networks

- Dimensioning of system components

- EMV reports

- Circuit & variant management

- Load flow calculation & short-circuit calculation

- Use of energy storage (stationary and mobile)

- Loading of substations/rectifiers in accordance with EN 50328 and EN 50329

- Modeling of complex networks

- Voltage maintenance per EN 50163

- Timetable & train movement simulation

- Determination of protection settings

- Loading of cables/overhead contact lines (temperature calculation)



Learn more
about our services:

www.signon-group.com

