



Rail

Choose certainty.  
Add value.

## Operation and Maintenance of Railway Systems

We offer innovative maintenance solutions for railway systems as well as the integration of maintenance into operation. You will competently be guided through the fields of operation, maintenance and the relevant management processes:

- Evaluation of your existing solutions
- Consulting and coaching
- Development of strategies
- Compilation of entire concepts, programmes and schedules

### **Operation**

- Operational strategies, integration of maintenance into operation
- Definition of resources and deployment planning of resources (vehicles, personnel)
- Organisation of operation and interface to maintenance
- Rules and regulations for operation

### **Maintenance**

- Maintenance theory and strategies
- Maintenance concepts (incl. guidance for practical realisation), planning processes
- Organisation of maintenance and interfaces to operation

- Maintenance processes (incl. optimisation)
- Definition of resources (personnel, material, tools, measurement and test equipment)
- Maintenance scheduling
- Maintenance infrastructure (incl. storage and logistic concepts)
- Rules and regulations for maintenance
- Management Processes for Operation and Maintenance

### **Management systems (requirements and interface specifications)**

- Quality, Safety and Requirements management
- Documentation
- Training for operation and maintenance
- Safety at work and environmental protection

### **LCC**

- Development of LCC schemes
- Calculation of operational and maintenance costs
- Optimisation of life cycle costs

TÜV SÜD Rail GmbH  
Rolling Stock  
Maintenance

TÜV®





Rail



[www.tuev-sued.de/rail](http://www.tuev-sued.de/rail)

#### References (extract)

##### **Siemens AG:**

- Establishment of the accomplishment for certification of vehicle maintenance for Desiro Mainline train sets (Mittelrheinbahn)
- Engineering support for the high speed multiple unit train Velaro Russia

##### **TCDD (Turkish State Railways):**

- Maintenance assessment for multiple unit trains (type HT65000 of the CAF company) during commissioning and start of operation

##### **Bombardier Transportation:**

- Support Maintenance Concept and maintainability requirements for the high speed multiple unit train Zefiro

##### **ODIG:**

- Check of the existence of rules and regulations for maintenance and assessment of their application to practice

#### **Your contact for matters concerning Rolling Stock and Maintenance:**

Dipl.-Ing. Ralf Müller

Phone: +49 30 632230 13

Fax: +49 30 632230 99

E-Mail: [mueller.ralf@tuev-sued.de](mailto:mueller.ralf@tuev-sued.de)

TÜV SÜD Rail GmbH

Groß-Berliner Damm 73 d • 12487 Berlin • Germany • Phone: +49 30 632230-13