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German RailGroup

Engineering & Consulting GbR

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Your network

for the railways of the future

German
RailGroup 
Engineering & Consulting

Consolidated expertise for the success of the railways

Planning and designing rail infrastructures and delivering success amid diverse real-world constraints are the complex challenges that we, in the German RailGroup, are dedicated to helping our customers overcome. We do this with consolidated expertise and a unique networking concept. Since the German RailGroup was founded in 2008, we have taken care of your large-scale projects through perfect cooperation and with “Engineering & Consulting”, specialisation and total commitment.



Specialist disciplines of the German RailGroup

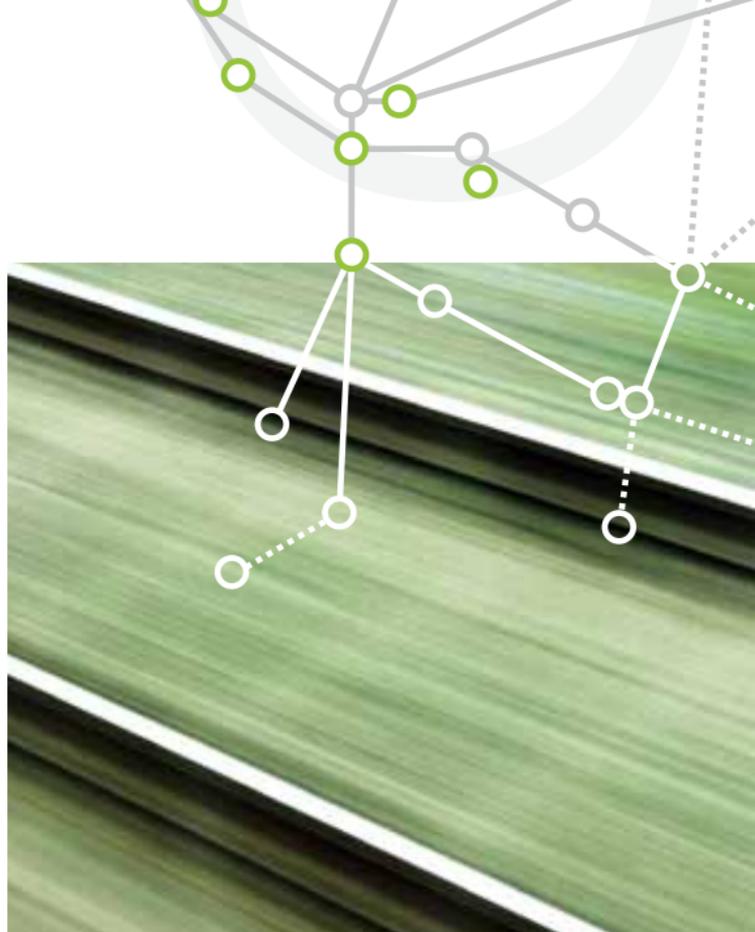
Complete planning

Technical equipment

Rail transport operations

Site planning, architecture, design

Building services engineering, technical systems



Landscape and environmental planning

Surveying

Geotechnical engineering

Vibration behaviour and track dynamics

Logistics

In the German RailGroup, our all-encompassing project support for rail infrastructure installations is supplemented by the specialisations of each one of our partners to form a single, highly capable resource. All partners add value to the collaboration with outstanding experience in their respective specialist discipline. This has enabled us to become a complete provider, offering a uniquely broad range of services. We are therefore eminently qualified to take control of your rail project, whether it is in Germany or at international level.

Constructive **vision** for connections geared to the future

The railway connects – people to people, customers to contractors, goods to recipients, products to markets. No matter the scale, no matter the location, the implementation or expansion of a rail infrastructure imposes exceptionally high requirements for conceptual design, planning and execution. To design connections that are also geared as much as possible to the future, all partners of the German RailGroup enjoy a working relationship that is close, constructive and, above all, far-sighted.

Complete planning



Technical equipment



Rail transport operation



Generalists and specialists

German RailGroup

Engineering & Consulting

Planning and consulting for the railways of the future

We don't build, we create solutions – in a degree of complexity that hardly any other provider could handle. With the cumulative expertise of each and every one of our cooperation partners and the specialist capabilities of the German RailGroup in planning and consulting, we realise comprehensive solutions for the railways of the future.

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Site planning, architecture, design



Building services engineering, technical systems



for your rail project

We cover traffic planning as well as capacity planning. We calculate the viability and study the feasibility. We plan routes, tunnels, bridges and stations and, by factoring in repairs and modernisation, we ensure that what we create today lasts well into the future.

German RailGroup service portfolio in detail

- Traffic planning
- Capacity planning
- Routing
- Feasibility studies
- Inter-modal links
- Site planning
- Supporting structure planning
- Profitability calculations
- Technical equipment
- Track optimisation
- Immission control
- Repair and modernisation

Landscape and environmental planning



Surveying



Geotechnical engineering



Thinking and acting for maximum satisfaction

The German RailGroup benefits from the pooled knowledge of over 900 employees. That's over 900 specialists, all working together "constructively" in every sense of the word.

Together, we get behind the projects entrusted to us – intelligently, integratively and always with as much flexibility as the specific task requires.

Together, we develop solutions, think long term and act with commitment for the maximum satisfaction of our customers.

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Vibration behaviour and track dynamics



Logistics





Strong partners for rail infrastructure

Today, there are more than a dozen strong partners within the German RailGroup working on a diverse range of rail projects. Further collaborations with qualified partners are already being planned. With our cooperation philosophy, the pooling of our engineering services and the strengths of each individual company, we are seeing considerable market interest. After all, we are shaping “your network for the railways of the future”.



Solutions that impress ...

... because they are good and cost-effective. That is what the German RailGroup and its cooperation partners endeavour to achieve. When our customers demand specialist knowledge, we find the answer in superior competencies established in a variety of business areas.

General planners pool and coordinate the expert knowledge of network partners and assume overall responsibility for even the most complex projects, particularly in the area of rail infrastructure installations and railway traffic planning. In this way, we provide optimum support for customers and relieve as much of the burden as possible.



Planning of railway facilities including the necessary engineering works

Complete planning

Consulting, planning and quality assurance in all areas

The art of engineering project planning consists in pre-empting the difficulties that might arise in any construction. The key to our success here is rooted in our international project experience and our interdisciplinary approach to thinking and working. We assemble teams of highly specialised experts who fulfil exactly all planning instructions and requirements. Not only do they contribute their technical expertise to the planning and development stages, they are always prepared to keep the complete picture in mind.

In complex construction projects, we undertake complete planning in all business areas. With internal and external specialists, we create optimised total solutions of the highest calibre.

Planning services in all specialist fields for newly laid track



Planning, coordination and implementation of railway equipment

Whether public transport stations or control and safety systems, telecommunications equipment or electrical and electronic installations, the German RailGroup gets involved in all phases of the project: from the feasibility study to development concepts, draft and execution planning, and project management.

The well-founded expertise and commitment of cooperation project engineers guarantee a superior level of professionalism – and extra peace of mind for your time and cost management.



Control and safety systems
planning of complex ICE
routes

Technical equipment



Electronic signalling control
centres are replacing
electromechanical systems



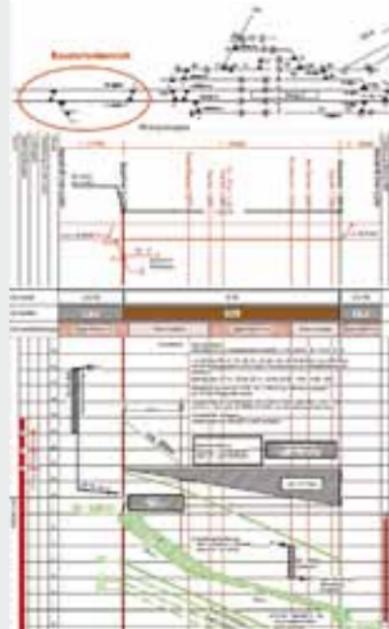
Rail transport operations

Solutions for rail-bound traffic

The German RailGroup develops conceptual solutions with the focus on “rail-bound traffic”. Operational planning to the necessary detail, the development of proposal strategies and transport planning are frequently integrated components of consulting projects and research assignments.

This multidisciplinary approach requires cooperation with a number of leading institutes, specialist offices and prominent experts on the one hand and, on the other, enables specific problems relating to any aspect of transport engineering to be thoroughly addressed. Our pool of expertise simply cannot be overlooked.

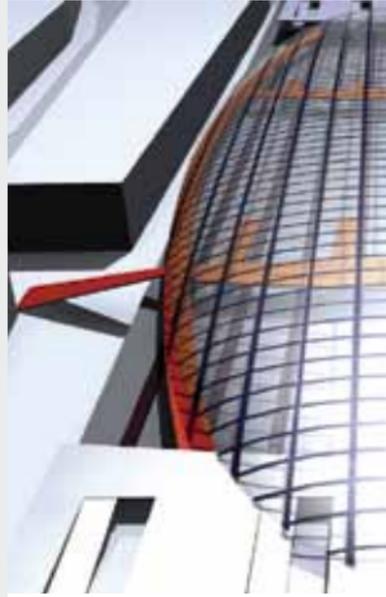
Construction and operational planning as an example of integrated solutions



Sophisticated design and well-founded planning

Planning is an integrated and an integrative process that serves to bring creative forces together. In particular, it leads to well-founded, matched and highly sustainable solutions.

As appropriate to the nature of the task, the collaborating architects and urban planners of the German RailGroup work across disciplines in the rail industry, teaming up with specialists, technical planners and engineer consultants. Planning and collaboration in comprehensive transport projects has given rise to a cooperative working style that leads to a long-term, trusting and constructive relationship between all involved.



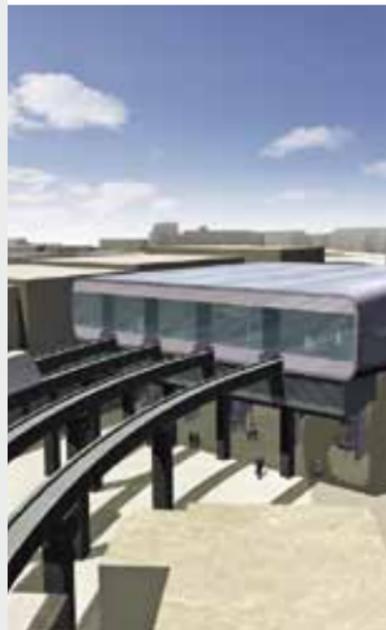
**Urban-planning integration
of transport buildings in a
feasibility study**

Site planning, architecture, design

In addition to building and site planning in conjunction with spatial development, the German RailGroup takes control of urban-planning services and project management tasks. These include new-build projects, construction within existing building stock, restorations and fire safety upgrades.

Drawing on the experience acquired in the course of demanding projects, e.g. at Frankfurt Airport, in industrial construction and in public building works, the architecture partners of the German RailGroup have developed comprehensive and overarching expertise – and our customers are the ones who benefit.

**Transport concepts and
associated infrastructure
in a feasibility study**





Safe, sustainable and viable supply infrastructure through integrated planning

Building services engineering, technical systems

So that everything works the way it should

As part of its integrated planning services, the German RailGroup also takes care of planning the technical building services of the particular building infrastructure required by the rail project. Planning efforts are focused on the objectives of security of supply, sustainability and economic feasibility and these are achieved through integrated planning and by specialists working together.

To accomplish these goals, the partners of the German RailGroup tap into the comprehensive experience that they have gained in energy concepts and projects involving a high degree of technical complexity undertaken in industry, trade and commerce, the public sector and healthcare.

Integral planning of technical building services



Environmental compatibility in the transport infrastructure

The German RailGroup provides environmental planning services all across Germany. Our key competencies include expert supervision and consulting at all stages of a transport infrastructure project – from spatial planning and approval to ecological construction supervision. Project work is supported by state-of-the-art methodologies and ultra-modern geo-information systems.

The aim is to develop legally compliant and sustainable solution strategies and to achieve compatibility between projects and the environment in the long term.



Project and nature conservation compatibility in environmental planning

Landscape and environmental planning



Precision and reliability

High-calibre services in surveying and geographic information science: in this specialist field especially, our cooperation partners have positioned the German RailGroup among the most competent providers in Germany.

Many years of experience coupled with intensive application of state-of-the-art technologies enable us to advise customers comprehensively and to develop and implement optimised concepts based on the latest findings in science and technology.



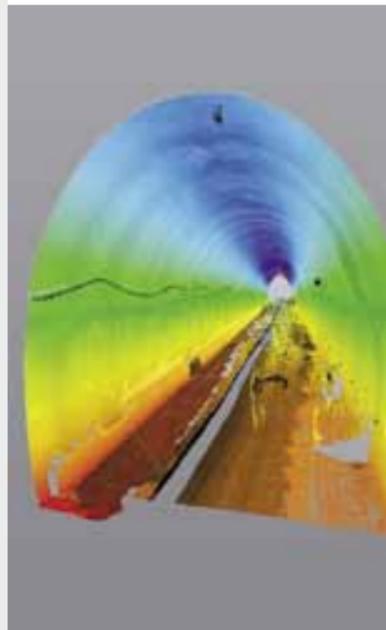
Draft surveying and land acquisition planning for transport projects

Surveying

We offer solutions for today's engineering survey requirements and have access to our own systems in the fields of mobile laser scanning and strain monitoring.

We also provide support in the creation of principles for planning projects, from data acquisition to migration and archiving.

3D strain measurements and monitoring in tunnel projects



Underground engineering in complex rail projects

Thanks to its cooperation partners, the German Railgroup thrives in all geotechnical fields of civil engineering. Proximity to research and teaching has been decisive in the advancement in this specialist discipline.

The German RailGroup plans and monitors all work involved in underground engineering and applies its experience from countless projects at home and abroad. It is particularly distinguished by its high level of competence in specialist areas and clear and comprehensible communication of technical content. We provide solutions that are always founded on proven scientific findings and real construction experience. You can rest assured that our solutions have been optimised for safety, environmental compatibility and financial viability.



Tunnelling as an example of foundation work consulting

Geotechnical engineering



Consulting and expertise in demanding construction projects



Predicting loads and constructively adapting building measures

Vibration behaviour and track dynamics

Optimum track type selection by use of comprehensive empirical data

The German RailGroup has comprehensive experience in dynamic measurements involving a diverse range of physical quantities relating to international track types.

The results are channelled into our consulting resources and are also used in special software programs. We use applications that predict vibration effects and secondary airborne noise, provide accurate and cost-effective sizing of protective measures for the surroundings and on the rails in the form of resilient elements or spring-mass systems, and software that helps us to develop the optimum track construction through analysis and project-specific adaptation.

Developing solutions for anti-vibration protection by spring-mass systems



Efficient logistics solutions for high-performance transport systems

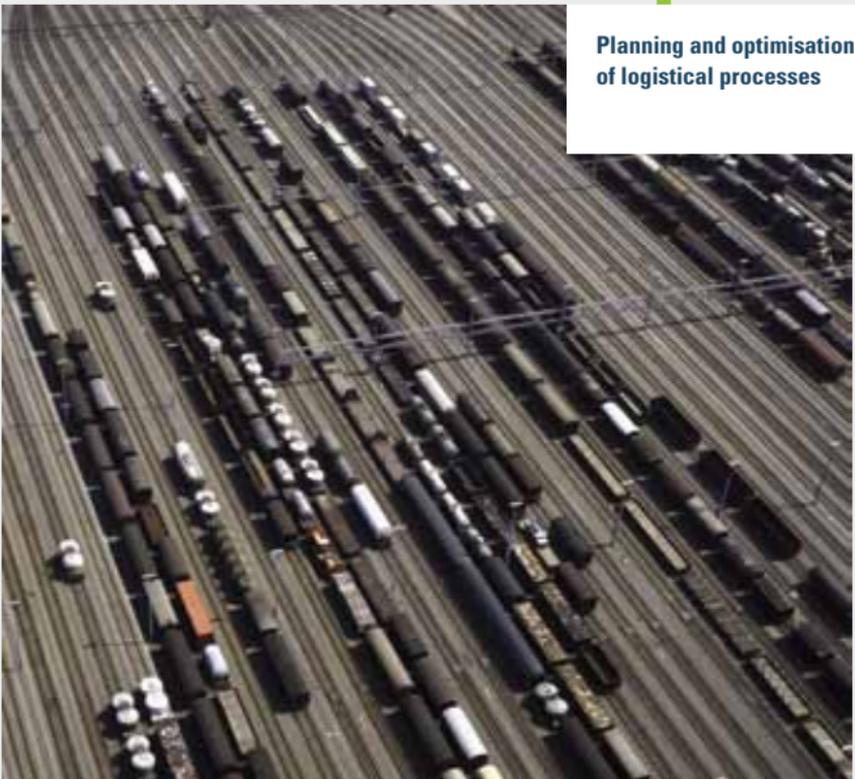
The German RailGroup draws on many years of comprehensive experience in the planning and optimisation of logistical processes and makes an important contribution to the efficient and cost-effective running of transport systems. The development of special inter-modal and intra modal transport concepts for existing or planned infrastructures for both passenger and freight traffic is just one aspect of the German RailGroup service portfolio.

By undertaking an all-encompassing analysis, the German RailGroup ensures delivery of the optimum, individually tailored logistics solution.



Development of inter-modal and intra modal transport concepts

Logistics



Planning and optimisation of logistical processes

Broader vision for the challenges of the future

With its engineering services and established partnerships, the German RailGroup is committed to the expansion of the European rail network – from start to finish. The cost-effective running of the railway and its entire infrastructure is our ambition. Within our collaborative organisation, we work together with commitment and vision so that we may overcome the challenges of the future.

The network of the German RailGroup is growing continuously:

