



RailTeam

NORDIC RAILWAY & TRANSPORT CONSULTANTS

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Company Profiles

Bane rådgivning

Bane rådgivning is a business-oriented consultancy division within the Danish National Railway Agency. We have an annual turnover of app. EUR 40M.

Our app. 360 engineers, planners, technicians, strategic consultants, economists and technical assistants form a highly qualified basis for our broad range of strategic planning and unique technical expertise related to the railways.

Bane rådgivning focuses on markets in Denmark, Norway, Sweden, the Baltic countries and the European Commission. Through competitiveness and a competence level in the European top, we play an active role in international transport research, European standardization and the development of the European transport industry.

All projects are handled with high integrity and on a professional level. We use the latest technology and solve our assignments according to the highest quality and environmental standards (e.g. ISO 9001, ISO 14001).

BanePartner

BanePartner is an independent and business-oriented consultancy unit within Jernbanverket, the Norwegian Rail Administration. The budget of 1999 consists of an operating revenue of app. EUR 10M. Our focus is primarily the Norwegian market and the other Nordic countries.

Our knowledge and experience cover the entire spectre of rail technology, civil engineering and transport planning. Our employees,



counting app. 130 engineers, architects and economists cover a broad range of railway expertise. This background has substantiated our position as the leading railway consultant in Norway.

Customer orientation and competitiveness are our key issues. We offer qualified consultancy service within our core areas of competence. To ensure the quality of our work, and to satisfy our customers' needs, we have created a quality system based on the international standard ISO 9000 series.

Banverket Consulting

Banverket Consulting is a consultancy unit within Banverket, the Swedish National Railway Administration. Together with other National Rail Administration units, we ensure that railways continue to be a strong, environmentally-attractive and competitive transport option, both in Sweden and in the rest of Europe. We offer expert services to assist in research, project planning, and project and construction management within the railway sector. We are proud to say that our leading-edge expertise is second to none, and is in demand throughout Europe.

Our organisational set-up, with more than 400 employees, ensures short decision paths and effective management systems, which, in turn, lead to efficient work methods. We are



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committed to quality and the environment, as well as to cost-effectiveness and to meet deadlines.

We play an active part in international research and development within the railway industry.

VR-Track Ltd

On the 1st of July 1995 the rich – in tradition – Finnish State Railways was transformed into a joint-stock company. Operations continue under the VR Group, which is one of the largest enterprises in Finland. Its share capital is owned by the Finnish State. VR-Track Ltd is a subsidiary of VR-Group Ltd, and it specialises in railway construction and contracting. Annual turnover is app. EUR 320M

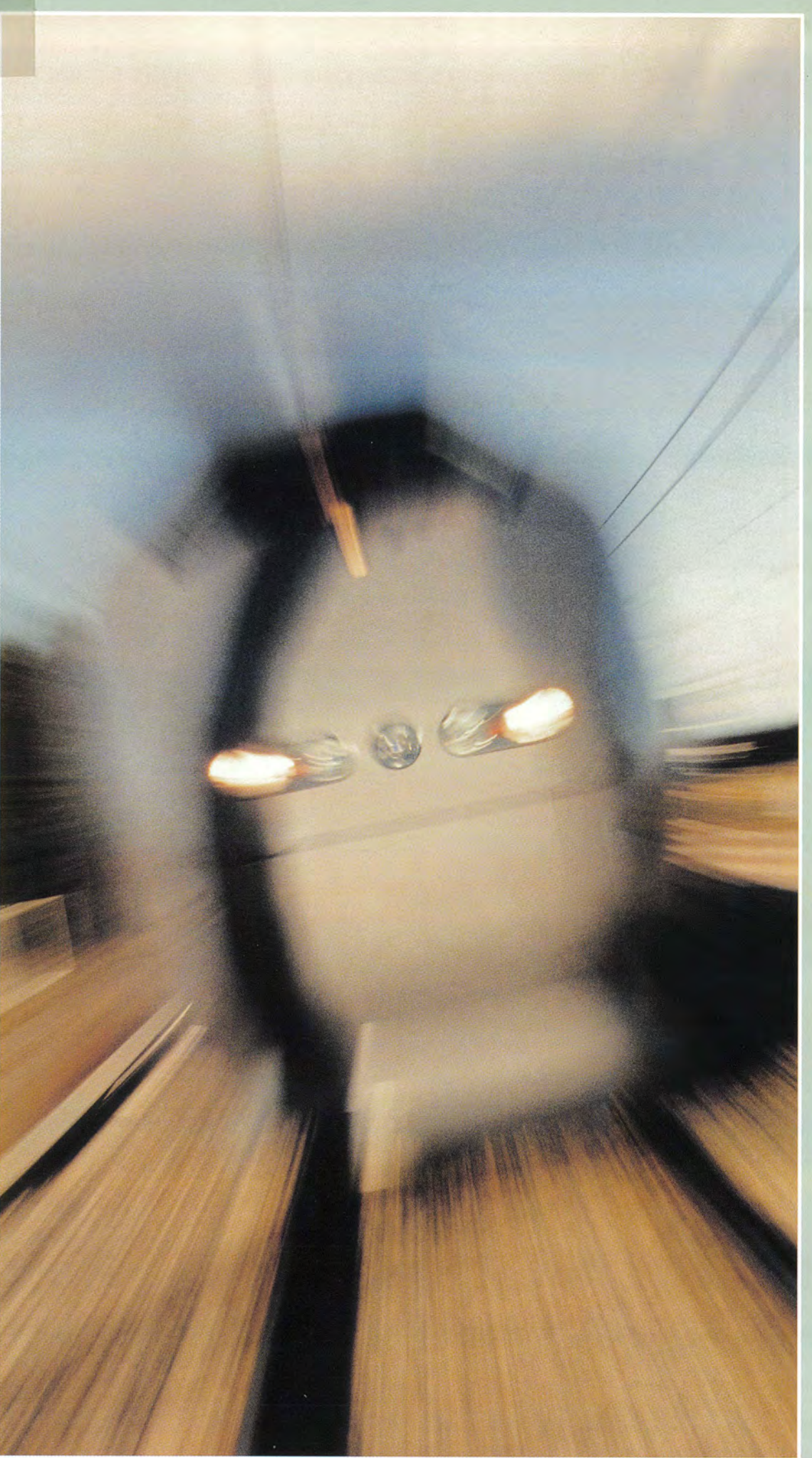
VR-Track Ltd offers professional services in consulting, maintenance, construction, electrification and safety equipment. Years of experience ensure that the company uses the latest technology and special machinery and is an expert in the management of large projects. The personnel of VR-Track Ltd knows the railway network from infrastructure to transport system. VR-Track Ltd also offers its services to municipalities, enterprises and other organisa-



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Jernbaneverket
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- Planning & Project Management
- Civil Engineering and Alignment
- Permanent Way and Terminals
- Structural Engineering
- Environmental Planning
- Electrification
- Overhead Catenary Systems
- Power Supply
- Signalling
- Automatic Train Control
- Traffic Management Systems
- Radio and Telecommunication
- Maintenance Management Systems

Transport Consultancy

Through working with intermodality and comprehensive experience, RailTeam is prepared for the future of the transport industry.

Transport consultancy has both commercial and socio-economic aspects. The focus areas are i.e. cost/benefit analyses, infrastructure strategies, transport technology and intermodal consultancy, analyses of transport economy, traffic analyses, capacity analyses, traffic forecasting, transport planning and risk analyses.

How can we assist you?

Customers can benefit from the joint experience of RailTeam. Our knowledge is obtained through several years of participation in railway and transport consultancy projects. This ensures that the needs of the customer are met in terms of time, quality and economics. Environmental and aesthetical aspects are central in our tasks.

We make our know-how available in order to help you achieve your business goals in a successful way. Whether it is in relation to new infrastructure and rolling stock or re-investment and maintenance.

Our customers

RailTeam's customers are infrastructure managers, operators, Ministries of Transport, contractors and customers within the supplier industry.

Services

With our foundation of app. 1000 experts within the areas of railway and transport consultancy, RailTeam offers total railway and transport solutions to customers.

The services of RailTeam are:

Railway Consultancy

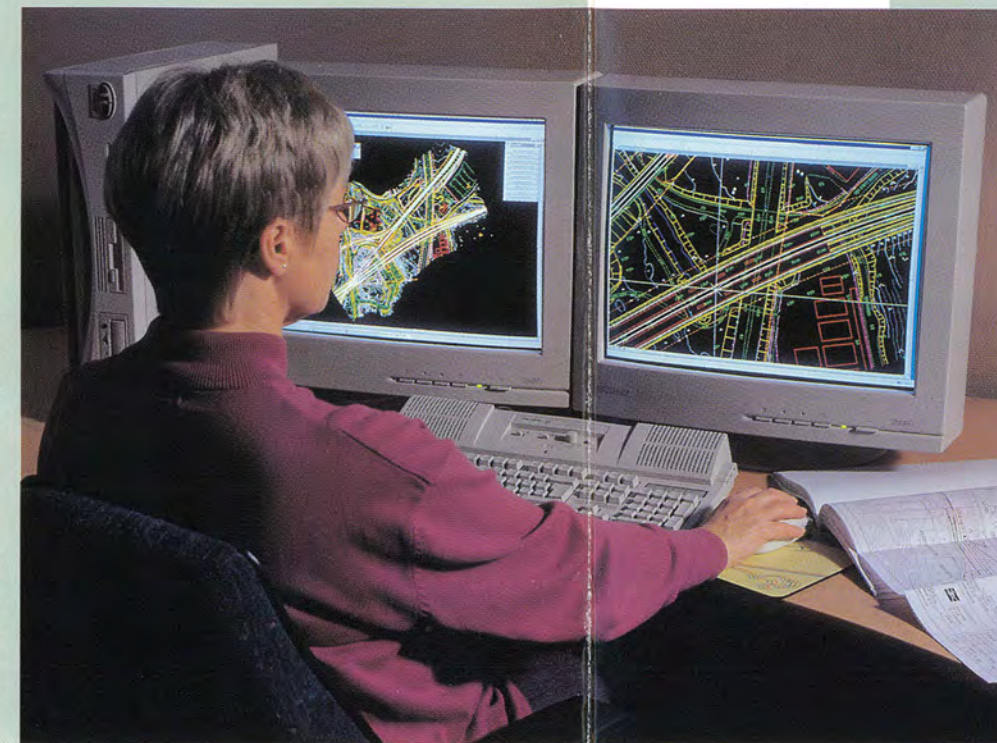
RailTeam offers railway consultancy covering all stages from planning and design through implementation and testing to supervision and commissioning of complete railway systems. RailTeam primarily operates within the following consultancy services:



Business Areas

RailTeam concentrates on the following business areas:

- New Railway Lines and Terminals
- Re-investment and Upgrading of Existing Railway Lines and Terminals
- Management and Transport Planning
- Environment and Design
- Research and Development



- The line between Vojens and Tinglev (Denmark)
- Traffic Management of the Copenhagen Urban Rail line (Denmark)
- Tilting train on the main lines (Norway)
- Traffic Management and Public Information Systems at the Oslo central station
- The West coast line between Göteborg and Malmö (Sweden)
- The West main line between Stockholm and Göteborg (Sweden)
- The East Cost line between Stockholm and Sundsvall (Sweden)
- The line between Helsinki and Turku (Finland)
- The line between Helsinki and Tampere (Finland)

Transport Consultancy

Transport consultancy comprise feasibility studies, analyses, project management, socio-economic and commercial analyses, risk analyses, capacity analyses and validation.

- Technology Whitebook for the European Commission (Denmark)
- Maintenance Management Systems (Denmark)
- Validation of small low-cost interlocking systems (Denmark)
- National Transport Plan (Norway)
- Gamlebyen in Oslo - Simulation of Capacity (Norway)
- Railway Investment Planning (Sweden)
- Socio-economic Rail Analysis (Sweden)
- Capacity Simulations (Finland)
- Feasibility Studies (Finland)

Environment and Design

Environmental aspects from pollution, noise and vibration to aesthetics are parts of the RailTeam capabilities, and are taken into consideration in our services.

Altogether, our business areas count projects carried out in the Nordic region in the last decades in Denmark, Norway, Finland and Sweden. Listed below are some examples:

New Railway Lines

From idea to completed project. Suggestions of new railway lines elaborated for the Ministries of Transport. Arranging public hearings.

- The urban rail-line between Ballerup and Frederikssund (Denmark)
- The Øresund line and Kastrup station (Denmark)
- The Gardemoen line (Norway)
- The line between Ski and Moss (Norway)
- The Svealand line (Sweden)
- The Grödinge line (Sweden)
- The Helsinki-Tikkurila fourth track (Finland)

Reinvesting and Upgrading of Existing Main Lines

Upgrading existing main lines by expanding to double tracks, new interlocking systems, installing new train control systems, traffic management systems or tele communication systems, etc.

- Overhead Catenary Systems, European Steel Award (Denmark)
- Environmental assessment systems (Denmark)
- Environment programs (Norway)
- Noise calculation and planning (Norway)
- Noise and vibration planning (Sweden)
- X-2000 Fast trains (Sweden)

Research and Development

By making alliances and co-operating with research teams at universities and business schools, new systems and simulation tools are developed along with new strategies, analyses and methods.

- Cooperation with Technical Universities – Ph.D.-studies (Denmark)
- Geographical Information System (GIS) (Denmark)
- Railway signalling education program (Norway)
- Banskolan, railway education (Sweden)
- Development of technical design systems (Sweden)
- Railway Technical Standards (Finland)

Introduction to RailTeam

RailTeam is a neutral and independent railway and transport consultancy team based in the Nordic countries. The team consists of four Nordic consultancy businesses; Banverket Consulting (Sweden), BanePartner (Norway), Bane rådgivning (Denmark) and VR-Track Ltd (Finland).



RailTeam (1000 experts) Clients

Together we represent a large and unique pool of railway know-how.

The expertise counting both the latest knowledge from international research as well as local knowledge and local language skills gives RailTeam a strong foundation for solving projects of high professional standards.

RailTeam focuses on the Nordic markets, the Baltic countries, Russia and the European Commission.

Background

RailTeam is the largest group of railway and transport consultants and the leading consultant team within this field in the Nordic countries. We offer our accumulated expertise with different geographical, demographical and environmental solutions as well as different standards to our customers. RailTeam is able to provide the right team of consultants and experts for any railway assignment.

We use our competence and ultramodern IT-platform to provide an updated and efficient planning of railway alignment, catenary design, permanent way, signalling, traffic management, radio and telecommunication elements. This includes state of the art technology in CAD and GIS systems, using the latest versions of MicroStation and AutoCad as well as more specific applications such as InRail, CatenaryDesign, OptiSE. The use of common integrated data models for the different disciplines is highly stressed, in order to reduce project time and total costs for our clients.



Our Vision

We wish to provide solutions that comply with customer needs and contribute to the success of our clients.

