

SCI/Verkehr

**TURNING
POINT**

**WHAT DRIVES THE
RAILWAY INDUSTRY**



Maria Leenen, CEO SCI Verkehr GmbH

Turning point - the beginning of a new era.

This image became politically and economically charged in large swaths of the world due to the Russian invasion of Ukraine on 24th February 2022. The term “Zeitenwende” is also representative of a radical and necessary course adjustment in the railway industry: war, pandemic, inflation, disrupted supply chains, energy shortages and not to mention the most fundamental global problem of climate change are changing the world and therefore also the railway sector to which we are passionately committed. A new era means change, opportunities for improvement and small- and large-scale innovations along the way. A paradigm shift is just as necessary as a new mindset for everyone involved. And a huge advantage is that the railway

has room for improvement. It is a sleeping giant that wants to be awakened.

**Adjusted for inflation,
the railway industry will grow
by 1.4% p.a. until 2026.**

However, before the big wake-up call, allow me to take stock briefly. Where does the railway industry stand in the context of a global political situation that has come apart at the seams? In our recently published study „Worldwide Market for Railway Industries 2022“, SCI Verkehr analyses the central issues and formulates six theses on the current situation.

- 1 Despite the uncertain global situation and high price increases, the railway industry will still grow by 1.4% per year, adjusted for inflation.
- 2 A third of the global market volume is accounted for by Asia with China as the most important country market. The festering conflict over Taiwan poses uncertainties.
- 3 High inflation rates in many world regions are consuming infrastructure budgets. In the coming years, construction in real terms will scarcely increase despite rising investments.

- 4 The automation of the railways requires an end to end digital and connected control and safety technology.
- 5 Rail freight transport is driving the OEM market for rolling stock. The total rolling stock market is expected to exceed EUR 156 billion including price increases.
- 6 CRRC, Alstom and Siemens are the clearly the largest companies in the railway industry - considerable movement can be observed in the bottom half of the top 10.

In our specialised sector, new routes can only be advanced together and in productive competition.

Growth, uncertainties, pressures, the range is broader than ever and calls for new ideas. While global economic conditions pose problems for our sector, it also has its own challenges. The long lifetime of the railway calls for vision and endurance while at the same time enabling time-sensitive innovation and smart cooperation. The railway is a strong system and a delicate network simultaneously: endowed with enormous economic power, a high degree of social impact and yet, on a global scale, the business of a small group of

proven experts. This is precisely why the railway*family must cooperate to fight the global challenge of climate change despite the geostrategic problems. In such a specialised sector, new routes and impulses can only be advanced together and in productive competition.

Be it as a manufacturer, operator, financier, consultant - we all influence the rail system. Together we can focus on raising the "green" potential of the sector. The mindset of the members of the railway industry should work across borders, just as technology does. The harmonisation of the railway systems and of the minds can therefore become the driver of the "Zeitenwende".

Sincerely yours,



Maria Leenen



Change calls for stability

SCI Verkehr provides answers to the railway industry's questions

We support you with our expert knowledge of global mobility markers based on our 28-year experience and supported by our railway industry database.

SCI Verkehr is a medium-sized, sustainability-oriented consultancy focussing on strategic issues in the international rail and logistics business. We support our busi-

ness partners in optimising their processes and evaluating their assets. We help to analyse markets and develop sustainable and tailor-made strategies for the future. This includes, among other things: Accompanying M&A activities, realising climate targets, optimising the portfolio or existing processes, and opening up new markets and business areas.

CUSTOMISED SOLUTIONS

INDIVIDUAL STRATEGIC CONSULTING

CONSULTING

STANDARD SOLUTIONS FROM OUR SHOP

MARKET ANALYSIS & EVALUATION

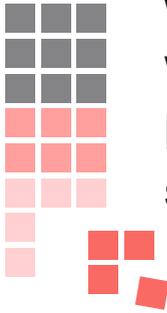
STUDIES

DATA PROCESSING & ASSESSMENT

DATA

MARKET OBSERVATION & MEDIA EVALUATION

NEWS



We hear your issues. We see the facts and we have a passion for finding solutions together.

SCI Verkehr is a specialised boutique consultancy whose consultants know the challenges of the global railway and logistics industries and develop solutions for their customers based on their many years of experience and SCI Verkehr's unique database.

We offer the following consultancy services:

Strategic management consultancy: We assist companies in developing strategies and evaluating portfolios, in mergers & acquisitions and in due diligence processes. In doing so, we can draw upon extensive methodological foundations and a wealth of project experience.

Market Analyses: Current and future market volumes for products and services form the basis for fact-based consultancy and thus complement qualitative trend statements and top-down analyses. Trends and market developments can be recognised early and therefore serve as decision-making basis for strategic recommendations.

Asset Valuations: SCI Verkehr is one of the globally leading providers in the assessment of current and future asset

values of railway vehicles. The valuation methods that are tailored to the requirements of our clients comply with European and international standards and are widely appreciated in the industry.

Profitability Analyses: We assist our clients in preparing and assessing bids for commuter rail services, operating concepts, product benchmarks and product concepts as well as performing feasibility investigations

Process Optimisations: SCI Verkehr supports companies in change processes like Operational Excellence, implementation of new procedures as well as in developing and implementing new process structures. Besides inefficiencies within established structures, the dynamic digitisation is a main driver here.

Public Consulting: Municipalities and their promotion of the economy, federal and state governments as well as the European Commission belong to our public clients. Here we provide support for strategic issues, market and competitor analyses, feasibility investigations and funding applications.



Nicolas Wille, COO SCI Verkehr GmbH

You have been working at SCI Verkehr for more than 20 years and, besides countless consultancy projects, you have build the SCI DATABASE and supervised many MultiClient Studies - how does the “Zeitenwende” - turning point - influence Studies, Data and News of SCI Verkehr?

Nicolas Wille: It has always been of a core importance to us that our forecasts of and data about the global railway market are up to date, for example during the financial crisis and the euro crisis. However, we have observed an increasingly dynamic shift of the markets in the past few years through the Covid-19 pandemic, supply chain shortages, the energy market, the war in Ukraine and so on. While the world is changing rapidly, we have also adjusted the pace of our market analyses.

Our work based on data and projects allows us to deliver forecasts based on facts

even in the currently uncertain times. At the moment we are focusing on reacting to changes at shorter notice and to even better depict their effects in market scenarios.

Every week, the SCI RAILDATA offers current news of the railway market. And every day, we observe news from every region and therefore continuously keep our customers informed.

Klusii is a new product that SCI Verkehr is launching at Innotrans. Can you explain what Klusii is and what we can expect in the future?

Nicolas Wille: Klusii is a product in which we present market information to our customers purely digitally for the first time. Two years ago, we already started to collect and systematically process market and company information on provider of digital solutions for the railway industry. The new platform offers a digital industry atlas with extensive search and filter functions. This allows me to quickly identify the companies and products relevant to my question and, in a second step, call up all the information in interactive factsheets.

As a second step we plan to extend the platform by adding more companies from the industry such as rolling stock manufacturers and suppliers. The digital factsheets will be connected to our SCI RAILDATA which makes any company information readily available.

Our knowledge prepared for you - standardised solutions from our shop

STUDIES Market analysis and evaluation

Our compact MultiClient studies provide a harmonised view and definitions of the markets, prepare data on current stocks and forecasts, document current trends and provide detailed and comprehensive information on market and industry developments.

New releases

Global railway industry trends 2022

- Worldwide Rolling Stock Manufacturers (published approx. 12/22)
- Worldwide Market for Railway Industries

Global rolling stock market trends 2022

- Freight wagons (published approx. 11/22)
- Light rail vehicles (published approx. 10/22)
- Multiple units
- Metro vehicles
- Electric locomotives
- Buses

European market trends 2022

- Digital companies in the rail sector
- Push-pull trains
- ETCS development until 2030

You can find all available studies selectable by regions and segment in our online shop sci.de/shop. The studies are exclusively published in English and are delivered as a pdf. Key figures are available separately in Excel format. For prices, please see the complete product list in the appendix of this brochure.

Worldwide Market for Railway Industries 2022

"Despite the uncertain global situation and high price increases, the railway industry will still grow by 1.4% per year, adjusted for inflation" is the key message of the current study. The latest edition provides market sizes and developments, infrastructure parameters and fleets for all world market regions and operators.

More on our studies



DATA

Data preparation and evaluation

SCI Database - systematic preparation and evaluation

With continuously collected and updated key figures on companies, vehicle fleets and network infrastructure our SCI DATABASE provides a unique option for data-based decision-making in the railway industry. Our clients receive individual

analyses and valuations by the fastest means. Individual analysis and evaluation is available to our customers in the fastest way possible. Our data sheets in Excel format present relevant numbers transparently and at a glance. The open data sets can be used for an individual evaluation or configuration or to add to available market data.

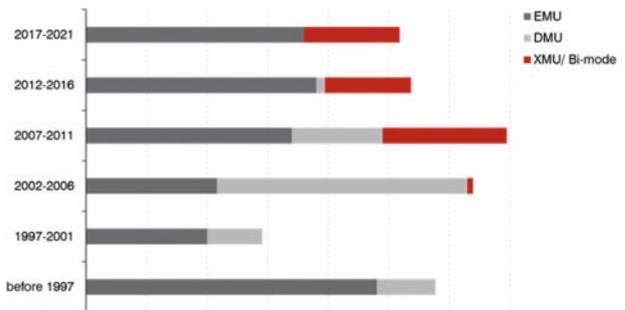
Fleet Database

Project Outlook

Market Forecast

Players & Network

Installed base of multiple units per operator in France (units)



As an example, the fleet database of the SCI DATABASE offers a structured storage and updates of all relevant information on railway assets.

records contain information on the number, status and ownership of the individual rail vehicle types as well as their essential technical data.

An overview of all worldwide fleet assets is available to our customers. The data

[More information on SCI DATABASE](#)



NEWS

Market surveillance and media evaluation

SCI RAILDATA - The market intelligence platform for decision markers in the railway industry

The range of weekly industry news and 24/7 access to our Market Intelligence Platform includes short news on rail freight and passenger transport operators, politics and technology, infrastructure projects, procurement, maintenance of rail vehicles and all relevant tenders. More than 250,000 short news items, project histories, invitations to tender and exciting specialist articles on all aspects of rail are available to subscribers at any time - up to date and archived in digital format for over 24 years.

Free trial

Your free trial to SCI RAILDATA includes

- 4 weeks of unlimited access to the online platform
- Maximum of 10 licences
- Weekly update by e-mail
- No sperate cancellation necessary

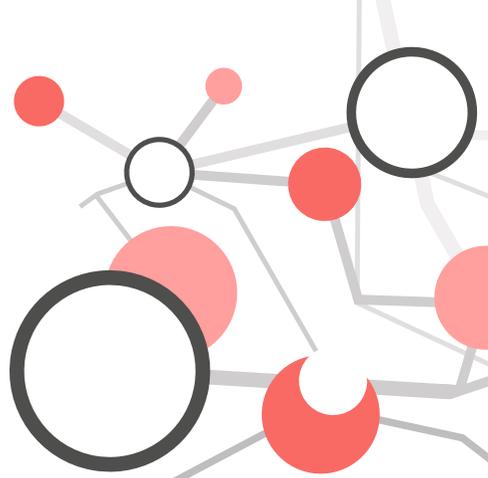
Your contact

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Information forms the basis of all our decisions.

However, there is often not enough time to filter out the relevant facts from the flood of information. With SCI RAILDATA we can take care of this for you. Every week we supply our subscribers with compact short news from the worldwide railway industry

"For us, the weekly SCI RAILDATA is the compact summary of all railway news worth knowing from the most diverse media platforms. This saves us valuable time and always gives us the feeling of being fully informed."

Dana Schiffer
Marketing
DEUTA-WERKE GmbH

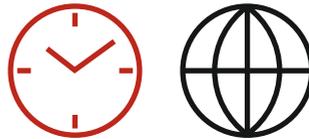
More information on SCI RAILDATA



Sector data always selectable and accessible

Klusii

by SCI Verkehr



Everywhere. Anywhere.

SCI Verkehr has identified, grouped and analysed over 200 companies from the digital sector related to the railway industry. The results were incorporated into the new, also digital, industry atlas named Klusii.

News from the sector and company information prepared as factsheets.

Klusii offers a quick overview on the companies in the market and displays their service portfolio, size, project references and corporate investments. In addition, Klusii offers comprehensive industry news from the digital railway sector.

Subscribers can access the growing content at any time and from anywhere and use the data via download.

Klusii Premium 1,490.00 EUR yearly

- Access to the online platform for 1 year
- Unlimited download of factsheets
- Access to industry news

Klusii Basic 390.00 EUR yearly

- Full access to search and segment companies
- Display and download of 3 factsheets per month
- Access to industry news

All prices are subject to VAT at the current rate of 19%.

Klusii

by SCI Verkehr

With the order you decide whether to have access to a flat rate use of the online platform Klusii or if the download of 3 company factsheets per month is sufficient for you.

Klusii is the launch into a purely digital data world

Both the topic in focus and the form of presentation is digital. SCI Verkehr therefore takes its product range into a new era and offers its customer a dynamic and contemporary range of information.

Client 0

The name Klusii can be traced back to the first client who requested and received digitally compiled data from SCI Verkehr in the mid-90s. The client's name was Klusmeier and he went on to become an important employee of SCI Verkehr and can therefore be regarded as client 0. Klusii is a continuation of his first request and addresses the current need for rapid

data availability combined with up-to-date data processing.

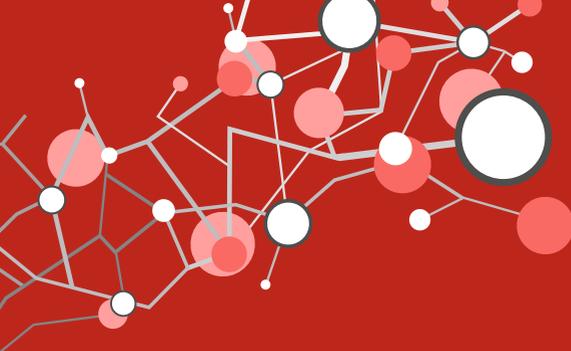
Due to ongoing updates and expansion, Klusii always has the latest information available.



**More knowledge.
Anywhere.
Everywhere**

More information on KLUSII





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Our products

Studies

Publication PDF in EUR Excel in EUR*

World market

Worldwide Market for Railway Industries 2022	09/22	4,400.00	2,800.00
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Infrastrcuture

ETCS Development until 2030 in Europe 2022	06/22	3,400.00	--
Railway Electrification – Global Market Trends 2021	02/21	3,500.00	2,100.00
Railway Track Systems – Global Market Trends 2020	09/20	3,700.00	2,100.00

Vehicles

Freight Wagons – Global Market Trends 2022	11/22	3,900.00	2,200.00
Light Rail Vehicles – Global Market Trends 2022	10/22	3,900.00	2,200.00
Multiple Units – Global Market Trends 2022	09/22	3,900.00	2,200.00
Push-Pull Trains European Market Trends 2022	05/22	3,600.00	1,400.00
Metro Vehicles – Global Market Trends 2022	03/22	3,700.00	2,200.00
Electric Locomotives – Global Market Trends 2022	03/22	3,700.00	2,200.00
Buses – Global Market Trends 2022	04/22	3,500.00	--
Electric Buses – Global Market Trends 2021	06/21	3,700.00	2,200.00

Transport markets

The European Rail Freight Transport Market 2021	07/21	3,500.00	2,000.00
The Chinese Railway Market 2021	05/21	3,600.00	1,800.00
The European Railway Market 2021 – COVID-19 Crisis and Market Trends	04/21	3,700.00	2,000.00

Manufacturers

Worldwide Rolling Stock Manufacturers 2022	12/22	3,900.00	1,900.00
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After Sales

Rail Vehicle Maintenance – Global Market Trends in the After-Sales Market 2021	02/21	3,700.00	2,100.00
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Data

SCI DATA COMPILATION Complete Package Worldwide	from 7,500.00
SCI DATA COMPILATION Europe	from 3,000.00
SCI DATA COMPILATION America	from 3,000.00
SCI DATA COMPILATION Asia	from 3,000.00
SCI DATA COMPILATION Urban Rail Worldwide	from 3,000.00
SCI DATA COMPILATION Multiple Units / High Speed Trains Worldwide	from 3,000.00

We are happy to provide you with an individual offer adjusted to your business needs.
You are welcome to send us your enquiry to info@sci.de.

News

SCI RAILDATA subscription for 1 user	per year 500.00
SCI RAILDATA subscription for 10 user	per year 2,190.00
SCI RAILDATA subscription for 20 user	per year 3,190.00
SCI RAILDATA subscription for 50 user	per year 4,190.00
SCI RAILDATA subscription for 100 user	per year 5,190.00

Digital

Klusii Premium	per year 1,490.00
Klusii Basic	per year 390.00

All prices are subject to VAT at the current rate of 19%.

*only available with the pdf

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