+357 96 030922
info@marketpublishers.com

Connected Rail Market by Service (Passenger Information System, Train Tracking and Monitoring, Automated Fare Collection System, Passenger Mobility, and Predictive Maintenance), by Rolling Stock (Passenger Wagons, Diesel Locomotive, Electric Locomotive, Light Rail and Trams, and Freight Wagons), by Safety and Signaling System (Positive Train Control, Communication Based Train Control, and Automated Train Control) - Global Opportunity Analysis and Industry Forecast 2025-2030

https://marketpublishers.com/r/C9067BCD6ACEEN.html
Date: March 2025
Pages: 0
Price: US$ 3,975.00 (Single User License)
ID: C9067BCD6ACEEN

Abstracts

Connected Rail Market Overview

The global Connected Rail Market size was valued at USD 111.03 billion in 2024 and is predicted to reach USD 153.98 billion by 2030 with a CAGR of 5.6% from 2025-2030.

The factors such as growing urbanization, increasing investment of railway infrastructure along with expansion of tourism industry drives the market growth. However, high initial investments required for implementing advanced technologies in connected rail systems hinders the market growth.

On the contrary, introduction of smart technologies such as IoT and AI create future opportunities for the growth of the market. Moreover, top companies such as Cisco Siemens Mobility and CSX Corporation are taking various initiatives such as partnerships to maintain their dominance in the connected rail industry. As the mature

+357 96 030922
info@marketpublishers.com

market is getting placed, growing demand for connected rail system is foreseen to instigate more growth.

Increasing Investment in Railway Infrastructure Drives Market Growth

Increasing in investment in the connected rail market growth due to the need for efficient, sustainable and reliable transportation systems. The governments, along with the private sector investors are constantly recognizing the significance of upgrading and extending the rail transport to improve inter-connectivity, decongest cities and curb carbon emissions.

According to a recent report by the Federal Railroad Administration, the U.S. Department of Transportation announced more than USD 2.40 billion in Bipartisan Infrastructure Law funding for 122 rail improvement projects in 41 states. Also, a recent report by India Brand Equity Foundation, the Indian Railways committed to invest an amount of USD 83.91 billion over the next decade to lay 50,000 kilometres of new tracks. Such increase in investment in the infrastructure of railways is anticipated to drive the demand for connected rail fuelling the market growth.

Growing Urbanization Fuels the Market Growth

Rising urbanization drives the expansion of the connected rail market trends due to rising demand of transportation infrastructure and the need for efficient transportation solutions for the population staying in urban areas. Railways provide an efficient and safe means of mass transit to address these issues. According to a recent report by the World Bank Group, overall urban population across the globe increased to 4.61 billion in 2023 from 4.54 billion in 2022. Thereby the increase in the number of urban populations fuels the growth of connected rails boosting the market growth.

Expansion of Travel and Tourism Industry Drives the Market Growth

As the tourism market expands, there is increased demand for smart, efficient and scalable transport systems. Connected rails are crucial in fulfilling this demand, fuelling market expansion through improved operational efficiency, enhanced customer experience, and sustainable support. As per the latest report from the World Travel & Tourism Council, tourism sector?accounted for 9.1% of the global GDP, an 23.2% increase over 2022. So, the expansion of tourism industry is anticipated to drive the demand of advanced railway systems fuelling the market growth.

+357 96 030922
info@marketpublishers.com

High Initial Investments Hinders the Market Growth

High initial investments in installing advanced technologies in the connected rail market demand. The majority of railway operators, especially in the developing world, may not be able to meet the cost of upgrading infrastructure and software, thereby limiting market growth.

Integration of Smart Cities Create Future Opportunities

The integration of smart cities presents significant opportunities for the connected rail industry by creating more efficient, seamless, and sustainable urban transportation networks. Through the application of technologies such as IoT, big data and AI, connected rail has the capacity to improve traffic flow, alleviate congestion and enhance overall travel efficiency. It also facilitates real-time data exchange across transport modes, thus improving the travel experience through tailored travel choices and real-time information. This integration enhances sustainability by lowering emissions and encouraging energy-efficient transport models, and it makes urban mobility more connected and intelligent.

Market Segmentation and Scope of Study

The global connected rail market report is segmented on the basis of service, rolling stock, safety and signaling system. Based on service, the market is classified into passenger information system, train tracking and monitoring, automated fare collection system, passenger mobility and predictive maintenance. Based on rolling stock, the market is segmented into passenger wagons, diesel locomotive, electric locomotive, light rail and trams, and freight wagons. On the basis of safety and signaling system, the market is bifurcated into positive train control, communication-based train control, and automated train control. Geographical breakdown and analysis of each of the aforesaid classifications include regions comprising of North America, Europe, Asia-Pacific, and RoW.

Geographical Analysis

Europe region dominates the connected rail market share. This is primarily due to strong infrastructure, well established railway networks, and increasing railway passengers in the region. As per a recent report published by Office of Rail and Road UK, there were 1.70 billion passenger rail journeys in the 12 months leading up to September 2024, a 12% increase from the previous year in UK. So, the increasing use

+357 96 030922
info@marketpublishers.com

of railway transport fuels the demand of better infrastructure and connected rails systems in railways thereby driving the market growth.

Moreover, rising tourism industry in across the countries of European Union drives the demand of connected rail industry. Train travel tends to be the major choice of transportation because it is convenient, environmentally friendly and holds extensive coverage. According to a report published by the Eurostat in January 2025, in the first 10 months of 2024, 2.70 billion nights were spent in tourist accommodation in the EU. This marked an increase of 42 million nights compared with the same period in 2023. Such increase in tourism in the region fuels the demand of better infrastructure in railways thereby driving the market growth.

On the other hand, Asia-Pacific is the fastest growing region of the connected rail market this is due to the urbanization in the region that necessities the need for public transport including rail. China's wide urbanization and expanding metropolitan regions, such as Beijing, Shanghai, and Shenzhen, provide a compelling need for sophisticated transportation infrastructure to handle millions of passengers a day. According to a report published by Observer Research Foundation, in August 2023, in the period between 2025 to 2050, an urban increment of 1.70 billion people is projected globally, with China making a contribution of 186 million. Thus, increase in urbanization in China is poised to drive the demand of better transportation infrastructures thereby driving the growth of the market.

Moreover, rising government efforts in the region to the railway industry enhances the growth of the market in the region. To cope up with the growing demand for safe and efficient travel, the Indian government gave high priority to the development and improvement of the country's railway system. For example, the government of India launched Rail Drishti in the year 2019, that is still applicable to analyse and monitor the key parameters of Indian Railways with an aim to meet the objectives of transparency and accountability. Such initiatives by the governments drive the demand for connected rail fuelling the market growth.

Competitive Landscape

The connected rail industry includes several market players such as Robert Bosch GmbH, Hitachi Rail Limited, Huawei Technologies Co., Ltd., Siemens Mobility, Wabtec Corporation, Alstom SA, Cisco Systems, Inc., IBM Corporation, Nokia Corporation, Trimble Inc., ABB Ltd., Union Pacific Railroad Company, BNSF Railway Company, CSX Corporation, Verdict Media Limited, and others. These market players are adopting

+357 96 030922
info@marketpublishers.com

strategies including product launch to maintain their dominance in the connected rail industry.

For instance, in September 2024, Siemens Mobility rolled out Egypt's first Velaro high-speed train at InnoTrans, Berlin, that operate at speeds of 250 km/h and boasts improved passenger amenities and weather-proof technology. This is all of Egypt’s ambitious 2,000 km rail plan involving 41 high-speed trains.

Also, in April 2024, CSX Corporation, unveiled its first hydrogen-powered locomotive, marking a significant milestone in sustainable freight transportation. Though this is a product launch but this product is expected to drive innovation and expansion of their business.

Key Benefits

The report provides quantitative analysis and estimations of the connected rail market from 2025 to 2030, which assists in identifying the prevailing market opportunities.

The study comprises a deep-dive analysis of the Railway connectivity solutions including the current and future trends to depict prevalent investment pockets in the market.

Information related to key drivers, restraints, and opportunities and their impact on the connected rail market is provided in the report.

Competitive analysis of the players, along with their market share is provided in the report.

Value chain analysis in the market study provides a clear picture of roles of stakeholders.

Connected Rail Market Key Segments

By Service

Passenger Information System

+357 96 030922
info@marketpublishers.com

- Train Tracking and Monitoring
- Automated Fare Collection System
- Passenger Mobility
- Predictive Maintenance

By Rolling Stock

- Passenger Wagons
- Diesel Locomotive
- Electric Locomotive
- Light Rail and Trams
- Freight Wagons

By Safety and Signalling System

- Positive Train Control
- Communication Based Train Control
- Automated Train Control

By Region

- North America
- The U.S.
- Canada

+357 96 030922
info@marketpublishers.com

Mexico

Europe

The UK

Germany

France

Italy

Spain

Denmark

Netherlands

Finland

Sweden

Norway

Russia

Rest of Europe

Asia-Pacific

China

Japan

India

South Korea

Australia

+357 96 030922
info@marketpublishers.com

Indonesia

Singapore

Taiwan

Thailand

Rest of Asia-Pacific

RoW

Latin America

Middle East

Africa

Key Players

Robert Bosch GmbH

Hitachi Rail Limited

Huawei Technologies Co., Ltd.

Siemens Mobility

Wabtec Corporation

Alstom SA

Cisco Systems, Inc.

IBM Corporation

Nokia Corporation

+357 96 030922
info@marketpublishers.com

Trimble Inc.

ABB Ltd.

Union Pacific Railroad Company

BNSF Railway Company

CSX Corporation

Verdict Media Limited

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

3 GLOBAL CONNECTED RAIL MARKET BY ROLLING STOCK

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

6 COMPANY PROFILES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Connected Rail Market by Service (Passenger Information System, Train Tracking and Monitoring, Automated Fare Collection System, Passenger Mobility, and Predictive Maintenance), by Rolling Stock (Passenger Wagons, Diesel Locomotive, Electric Locomotive, Light Rail and Trams, and Freight Wagons), by Safety and Signaling System (Positive Train Control, Communication Based Train Control, and Automated Train Control) - Global Opportunity Analysis and Industry Forecast 2025-2030

Product link: https://marketpublishers.com/r/C9067BCD6ACEEN.html

Price: US$ 3,975.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/C9067BCD6ACEEN.html