

# **TCMS Market by Train Control Solution (PTC, CBTC, & Integrated Train Control), Component (Vehicle Control Unit, Mobile Communication Gateway, & HMI), Connectivity (GSM-R, Wi-Fi, TETRA), Train Type (EMU, DMU, Metro & High Speed) & Region - Forecast to 2022**

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## **Abstracts**

“Development of light rail transit and metros at a rapid pace to upsurge the TCMS market”

The Train Control and Management System (TCMS) market is projected to grow at a CAGR of 8.02% from 2017 to 2022, to reach USD 3.58 billion by 2022. The key factors driving the market growth include rapidly growing population and urbanization in the Asia Oceania region, increasing government mandates in developed regions such as North America and Europe, and availability of high-speed communication systems. The increasing rail transit network such as light rail transit, metros, and high-speed rails is also expected to boost the demand for TCMS as it is a standard system for rail safety and management. On the other hand, the major factors hindering the TCMS market growth are high infrastructural and maintenance costs and lack of interoperability.

“Metros & high-speed trains to witness the fastest growth during the forecast period”

The market for metros & high-speed trains is projected to grow at the highest CAGR, in terms of value, during the forecast period. The increasing government initiatives to enhance high-speed rail network and fulfill the transportation gap in countries such as the UK, France, India, China, and South Korea are expected to drive the metros & high-speed trains segment in the TCMS market.

“Vehicle control unit is expected to be the largest market segment in the Train Control and Management System (TCMS) market”

The vehicle control unit is the most expensive component of TCMS. Thus, the vehicle control unit is estimated to be the largest segment in the TCMS market, by component. The growth of this segment can be attributed to the high installation rate of TCMS in developed regions and the increasing penetration in developing regions.

“Communication-Based Train Control (CBTC) is expected to be the largest market segment in the train control solution market.”

The Communication-Based Train Control (CBTC) segment is estimated to account for the largest share of the global train control solution market during the forecast period, owing to the growing demand in European countries such as the UK, France, Germany, and Spain. CBTC eliminates additional maintenance costs as physical vehicle detection systems such as track circuits are not required. CBTC also increases the turnaround time of vehicles.

“North America to grow at the highest CAGR during the forecast period”

Europe is estimated to be the largest market in 2017, whereas North America is estimated to see the highest growth in the TCMS market during the forecast period. The North American countries are focusing on reducing greenhouse gas emissions and air pollution by the transportation sector. Thus, the government is taking initiatives to develop light rail transit and metros at a rapid pace to follow a sustainable path, which in turn is estimated to drive the demand for TCMS market.

The study contains insights provided by various industry experts. The breakdown of the primaries is as follows:

By Company Type: Tier 1—49%, and Tier 2—51%

By Designation: C level—76%, D-level—15%, and Others—8%

By Region: North America—14%, Europe—41%, and Asia Oceania—33%, and the Middle East & Africa—12%

The key players in the TCMS market are profiled in the study. These include Bombardier Inc. (Canada), Siemens AG (Germany), Toshiba Corporation (Japan), Mitsubishi Electric Corporation (Japan), Hitachi Ltd. (Japan), Knorr-Bremse AG (Germany), ALSTOM SA (France), CAF GROUP (Spain), ABB (Switzerland), Thales Group (France), ASELSAN A.? (Turkey), DEUTA-WERKE GmbH (Germany), Rockwell Collins (US), MEN Mikro Elektronik GmbH (Germany), Eke Group (Finland), Strukton Rail (Netherlands), CRSC (China), HUBER+SUHNER (Denmark), Wabtec Corporation (USA), Quester Tangent (Canada), Medha Servo Drives Private Limited (India), UniControls a.s. (US), Leroy Automation (France), Amaronia Rail Ltd. (Finland), and Tech Mahindra (India).

### Research Coverage

The TCMS market is segmented by component (vehicle control unit, mobile communication gateway, human machine interface, and others), train type (metros & high-speed trains, EMU, and DMU), connectivity (GSM-R, Wi-Fi, TETRA, and others), and solution (PTC, CBTC, and ITC).

### Reasons to Buy the Report:

The report provides insights concerning the following points:

**Market Development:** The report offers comprehensive information about lucrative emerging markets. The report analyzes the market for TCMS across regions.

**Product Development/Innovation:** The report provides detailed insights into R&D activities, upcoming technologies, and new product launches in the global TCMS market.

**Market Diversification:** The report gives detailed information about untapped markets, investments, new products, and recent developments in the global TCMS market.

**Dive Matrix:** The report offers detailed information and in depth analysis of key players based on their business strategy and product offering.

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11.7 EKE FINANCE LTD.

11.8 ALSTOM

11.9 CAF

11.10 STRUKTON

11.11 ABB

11.12 THALES GROUP

11.13 CHINA RAILWAY SIGNAL & COMMUNICATION CORPORATION LIMITED (CRSC)

11.14 ASELSAN A.?

11.15 QUESTER TANGENT

\*Details on Business Overview, Strength Of Product Portfolio, Products Offered, Business Strategy Excellence & Recent Developments might not be captured in case of unlisted companies.

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