



Market Opportunity Japan

Railway Technologies & Services



Overview

- The EU-Japan Economic Partnership Agreement (EPA) entered into force on 1 February 2019, opening strong new opportunities for European companies in the railway industry.
- Japan's railway sector has approx. 150 passenger railway operators, including small and medium-sized companies. Market share is dominated by six major players along with 16 major private railroads. Total turnover for this market is over € 57 billion.
- Approx. 90% of passenger traffic is concentrated in urban areas.
- Japanese manufacturers have had a strong presence in Asia, and they have only recently begun to expand into large overseas markets outside the region.

Top Business Opportunities for EU Companies

- Offering safety technologies and systems.** Continuous investment in signal systems and safety equipment through information systems development, particularly for high speed and urban railways. Additional opportunities for physical and cyber-security solutions.
- Offering technologies and solutions to relieve commuting congestion** in urban areas.
- Offering energy saving and energy storage technologies,** including for hybrid vehicles.
- Providing engineering, design, planning and consulting services for vehicles & railway stations,** "luxurious railway sightseeing" initiatives and vehicular customisation. Additional opportunities for products and solutions catered to the needs of inbound tourists ahead of the Tokyo 2020 Olympics.
- Offering systems and technologies that increase efficiency and/or lower maintenance costs of railway operation services and transport,** e.g. information systems for fare systems, big data and IoT applications to expand services and automated systems that provide continuous maintenance, monitoring and resolution. For the freight industry, investments toward transport efficiency include examples such as the improvement of urban container terminals.
- Open to research partnerships, technical alliances and collaboration** on railway technologies, vehicle development, railway management, local transport and infrastructure.
- With innovative concepts and technologies to catalyse new business fields and opportunities for the railway industry.** Additional opportunities for companies with solutions that can establish new, non-core revenue streams from auxiliary services.
- With solutions addressing issues stemming from labour shortage** (including in the road freight industry).

Market Characteristics

System of licences and approval. The Ministry of Land, Infrastructure, Transport and Tourism sets regulation and manages the system of licences and approval for all railway operators in Japan. Each operator has wide discretion in the implementation of general safety requirements by the Ministry.

Safety and reliability a high priority. Railway operators will continue high annual capital investment on enhanced safety measures and systems. The Japanese Government will be offering subsidy and loan systems to this end.

Investment on enhanced commuter experience and sustainable practice. The push to relieve commuter congestion in urban areas and improve commuter experience increases the demand for enhanced transportation capacity, coordination with in-house advertising information systems, barrier-free stations and vehicles. Luxurious railway sightseeing is now seen as a means to raise brand image, spurring growth in vehicle design and construction of concept-driven station buildings.

Railway operators are diversifying. Established railway operators have been expanding into commercial land and real estate businesses, including commercial facilities around the main stations. There is rising demand for new and innovative concepts to diversify scope of the railway industry, in relation to sustainable urban living and mobility.

€ 57 billion market

9 billion passenger transactions per year

*JR Passengers only

Japan





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Drivers

- EU-Japan Economic Partnership Agreement to increase market access and significantly lower export barriers for European companies
- Diversification of Japan's railway industry has opened opportunities for new technologies, alternative business models and product offers that could expand the industry beyond its traditional scope

Barriers

- Complex requirements (including testing, after-sales and liability issues) that may be set by each operator separately
- Different levels of customisation and localisation of products and technologies required to adapt to Japan's specificities and industry standards

Key Players: Railway Operators



JR East, Central, West and Kyushu dominate Japan's high-speed railways and run urban and local railways. JR Shikoku, Hokkaido and JR Freight are also part of this group.

Major Private Railway Operators

Kanto region: Tobu, Odakyu, Keisei, **Kinki region:** Kintetsu, Keihan, Hankyu, Seibu, Keio, Tokyu, Keikyu, Soutetsu Hanshin, Nankai

Tokai region: Meitetsu (also known as Nagoya Railroad) **Kyushu region:** Nishitetsu

Small to Medium-sized Private & Third Sector Railway Operators

Includes: Aoimori Railway, Chichibu Railway, Enoshima Electric Railway, Hakone Tozan Train, Shinano Railway, Toyama Chihou Railway, Kobe Electric Railway, Chizu Express, Hiroshima Electric Railway, Nagasaki Electric Tramway, Hankai Tramway, Metropolitan Intercity Railway Company (Tsukuba Express)

Other Public Railway Operators

Osaka Municipal Transportation Bureau, Tokyo Municipal Transportation Bureau, Nagoya Transportation Bureau, Yokohama City Transportation Bureau, Sapporo Transportation Bureau, Kyoto Municipal Transportation Bureau, Fukuoka City Transportation Bureau, Kobe Municipal Transportation Bureau, Sendai City Transportation Bureau, Tokyo Metro (private company majority-owned by public bodies)

Key Players: Vehicle & Equipment Production

Vehicles

- Hitachi
- Kawasaki
- Nippon Sharyo
- Kinki Sharyo
- Japan Transport Engineering Company

Vehicular Equipment

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| Main electrical equipment | Fuji Electric Mitsubishi Electric |
| Brakes | Nabtesco Akebono Brake Industry |
| Bogies, wheels | Nippon Steel Sumitomo Metal |
| Pantographs | Toyo Denki |
| Line / Signal Transportation system | Mitsubishi Heavy Industries |
| Signal security | Nippon Signal Kyosan Daido Signal |

