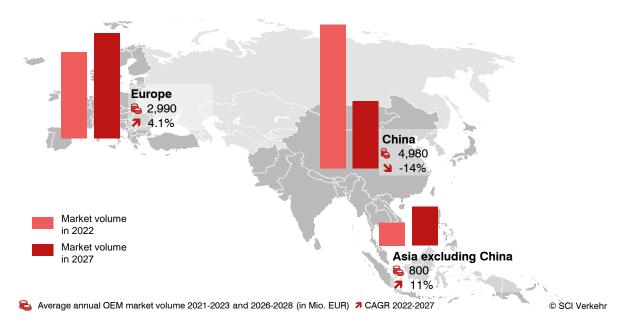




## High-speed rail (HSR): Asia and Europe make up the global market among themselves.

Decades of financial and political support in these two regions are bearing fruit: 90% of the world's high-speed rail infrastructure is found here, and more than 95% of the global fleet operates there. Asia and Europe also accounted for 95% of the global market volume in the last five years. Despite their shared omnipresence, the two markets are developing very differently. While SCI Verkehr expects a moderate annual growth of 4% for the European market during the next five years, the Asian market will decline after the extreme Chinese delivery peaks of the last few years. Due to the ever larger and at the same time ageing fleet, the after-sales market in particular will grow strongly in the coming years. This is the conclusion of the current MultiClient study "High-speed Rail Transport - Global Market Trends 2023", in which SCI Verkehr analyses the individual developments of high-speed transport in the different market regions.

HSR vehicle market: Market volume in Europe and Asia (OEM; in EUR million)



## The Chinese market for high-speed trains outcompetes not only the Asian regional market, but also the entire global market.

Since 2003, a huge high-speed rail network has been built in China. The national high-speed network passed the 40,000 km threshold in 2021. By 2035, the Chinese government plans to have a network of 70,000 km to connect all 300 cities with more than 500,000 inhabitants to the network. In the medium term, however, the strong growth in transport performance in China will slow down as the speed of network expansion slows down, the population decreases slightly, urbanisation stagnates, and the newly connected routes do not offer as much potential as the initial routes. Nevertheless, SCI Verkehr still sees potential for further growth, albeit at a comparatively slower pace. This can be attributed to the Chinese middle class, which is expected to continue to grow, as HSR's primary customer group particularly for longer routes. According to the World Bank, it could make up around 70% of the Chinese population by 2030. In addition, the Chinese government is placing increasing emphasis on environmental concerns and could regulate the Chinese domestic airline market. Rising fuel prices could also further boost demand for Chinese HSR services. Outside the well-known markets of China, Japan and Korea, new markets entering the HSR sector in the medium term include Indonesia, Thailand and India. In the longer term, others such as Vietnam could follow.

## Competition in the European HSR market - liberalisation and barriers in the market.

Unlike in Asia, where the operator landscape is characterised only by state railways and driven by infrastructure development, Europe is the first market region with arising direct competition in the HSR segment between new and incumbent operators (usually a former state railway). Among the most notable cases of private open access operators in high-speed rail in Europe are: NTV (Italo) in Italy since 2012 and most recently Iryo which launched HSR services in Spain at the end of 2022.

In addition, more and more incumbents in Europe are offering selected routes in direct competition. With increasing competitive pressure, the European incumbents are reducing their cross-border cooperation of their HSR services and expanding into other European countries via subsidiaries. Trenitalia, which has been operating its own services between Milan and Paris since 2022, is a direct competitor of SNCF in the French domestic market. SNCF is participating in the liberalisation of the Spanish HSR market and has been offering services under its low-cost concept OuiGo in Spain since 2021. Between other national markets, such as between France and Germany, binational cooperation still predominates as long as stronger competition is not reinforced by regulation. Although long-distance passenger markets, including HSR markets in the EU, are all open to competition, barriers to competition and liberalisation remain, such as high procurement risks, high track access charges, network capacity bottlenecks and existing monopolies by incumbents (for example for ticketing and sales).

The market study "High-speed Rail Transport - Global Market Trends 2023" is available in English from SCI Verkehr GmbH from April (<a href="www.sci.de/shop">www.sci.de/shop</a>).