

# Introduction

The development of railway systems around the world is as diverse as the countries themselves. In continental Europe and Scandinavia, rail markets are developing in line with the policies of the European Union toward ever greater openness and competitiveness. In Great Britain – the cradle of railways – the government changed the rules practically overnight in the 1990s. Following the negative developments of recent years, the country is now seeking to regain long-term stability in its railway system. New Zealand has experienced a failed privatization effort. Russia is currently in the throes of a fundamental and far-reaching reform of its railways. China is busy building what will become the biggest high-speed network in the world. The railway systems in Brazil and India – although quite different – are both driven by the enormous economic growth seen in those countries and various mega-events. And in the Middle East, some of the billions in oil revenue are being used to construct prestigious rail connections and public transit systems.

Each of the above-mentioned railway systems merits closer inspection. The list of interesting developments is by no means complete.

The different railways of the world, however, have one thing in common: they are a vital means of transportation and their significance will continue to grow in the coming years. For this, there are three important reasons:

1. The current economic crisis has put something of a damper on developments in the transportation industry. But sooner or later things will pick up and the process of globalization will gather speed again, bringing with it increasing transportation and mobility requirements.
2. The emergence of mega-cities, not just in China but in many countries across Asia, South America and Africa. Urbanization, like globalization, is an area where experts are in agreement. Systems of rail transportation are particularly advantageous in major conurbations.
3. The limited supply of fossil fuels, especially oil. Burning these fuels also creates the CO<sub>2</sub> emissions that are responsible for climate change. In many cases, rail is the most energy-efficient and hence the best means of transportation in terms of CO<sub>2</sub> emissions.

So is everything rosy for railways? Yes and no. Demand is set to grow, but this does not mean guaranteed success for the companies operating in particular markets. This is especially true in the transportation industry, where barriers to entry are often relative, capacities great and the rules of the game unclear or downright unfair.

Rail companies need to make their own efforts to shore up their future. They need transparent financing agreements and a clear framework for liberalization. Investments in infrastructure and rolling stock must follow a logical economic strategy. Political requirements should be separated from business implementation. Customer orientation, efficiency and flexibility should be improved so that railways can survive the intra- and intermodal competition. State railways must recognize that freight transportation, in particular, cannot just serve the needs of a single country: international shippers require international solutions, especially from rail, which offers distinct advantages on longer routes. Passenger transportation is becoming more international, too. The key drivers are tenders for public transit systems and the expansion of high-speed networks.

As I said at the beginning, railways are diverse. Yes, technical standards need to be harmonized – a key area for action and a precondition for international competitiveness and improved efficiency. But their diversity means that the different railways around the world are facing different challenges, and need to find different ways to master these challenges.

This book gives an overview of the current situation and recent developments. It is by no means exhaustive: that would require a multi-volume work on railway transformation, at least. But it presents a useful synopsis of the issues facing rail companies such as Deutsche Bahn – the company I myself have led for almost a decade. It makes particularly interesting reading as various companies and railway bodies have contributed their personal perspectives to the individual chapters.

Hartmut Mehdorn