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Technical Document accompanying the
ECE Standard on Public-Private Partnerships in Railways

Implementing the United Nations Agenda for Sustainable Development through effective
‘People-First Public Private Partnerships’

Note by the secretariat

Background

The following technical document accompanying the ECE Standard on Public-Private Partnerships in Railways contains a list of projects and programmes from which lessons and experience were considered based on published information in the development and implementation of private-public partnerships in the railways sector.
It was prepared by a ECE Project Team\(^1\) composed of international experts\(^2\) with experience of Public-Private Partnerships in the railways sector and sustainable development initially led by Jonathan Beckitt and then by Naresh Bana.

The Secretariat is very grateful to Naresh Bana and Jonathan Beckitt for leading the Project Team; to Anand Chiplunkar for sharing his vast experience of working in this sector; and to Scott Walchak for managing the work of the Project Team.

The full list of projects and programmes from which lessons and experience were considered based on published information in the development of the Standard is available on the project team website at [http://www.unece.org/ceci/ppp.html](http://www.unece.org/ceci/ppp.html) for governments seeking more detailed advice, experience and lessons learned from the delivery of Public-Private Partnerships. The Standard will be maintained by ECE and the Centre of Excellence in Public-Private Partnerships.

The Working Party is requested to take note of this document and ask the secretariat to update it as necessary.

\(^1\) The ECE draws attention to the possibility that the practice or implementation of this document may involve the use of a claimed intellectual property right. This document is based on the contributions of participants in the Public-Private Partnerships standard development process, who have acknowledged that all new intellectual property rights generated belongs to the ECE and have also agreed to waive enforcement of their existing intellectual property rights used in the Public-Private Partnerships standards against any party using the outputs.

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\(^2\) The list of experts involved in the work of the Project Team is available at: [https://wiki.unece.org/display/pppp/P0005-Team+members](https://wiki.unece.org/display/pppp/P0005-Team+members)
Introduction

The projects highlighted in these sections are examples of Public-Private Partnerships in railways, some of which have been implemented in developed countries and be capable of adaptation for low and middle-income countries. Governments can study the lessons learned from all these projects including the key risks and hopefully accelerate their own research initiatives and reduce the expenditure of the time, money and resources necessary to benchmark and better understand Public-Private Partnerships in the railways sector.

Regardless of the examples provided here, it is widely recognized that a pragmatic approach should be adopted to Public-Private Partnerships as opposed to an approach based on political dogma and the absolute virtues of the private sector. In fact, experience has shown that no ready-made solution exists and that the strict duplication of a project between countries can be problematic. A Public-Private Partnerships project can only produce efficiency gains and added value to the railways sector and to the people if its characteristics are designed in accordance with the constraints and bottlenecks faced by the rail agency, the country framework and the capacity of the private sector. In other words, a Public-Private Partnerships project should be carefully tailored to its environment, but also about how the environment may need to change to maximize development gains.

Part I. Case studies

Projects and programmes in the following countries may offer lessons and experience based on published information. Empirical observations of the following cases and others were considered by the team in developing the Standard.

HSL Zuid

Using the DBFMT approach, is a 125 Km high speed railway line connecting Amsterdam Zuid and Rotterdam via Schiphol airport. It is a 25-year concession (beginning December 2006 through 2031) primarily funded by the Dutch transport ministry. A Euro 5 billion project it separated the construction works from the track and signalling to have a better risk management profile and facilitate the project financing. This means the funding for the civil works, including tunnels, bridges and elevated sections, was provided by the Dutch transport ministry (EUR 2.6 Billion) while finances for all other works, including track and signalling, were raised by the private concessionaire. This approach made the project more financially viable and ultimately sustainable over the long term for both the Dutch government and the private sector partner.

South East Atlantic HSR, France

Is a very recent 50-year DBFOMT concession to develop a new high-speed railway between Tours and Bordeaux in France. It has reduced travel time between Paris and Bordeaux by almost one hour and ridership projections are positive. At Euro 7.8 billion it is one of the largest Public-Private Partnerships projects in France and Europe and the initial segments were completed and have been running since early July 2017. While it shortens existing travel times and better connects two urban centres, its future, contemplated extension to Toulouse and Spain offers significant development potential as it will create a new high speed new cross border corridor between those countries.
Sydney’s Waratah Rolling Stock Public-Private Partnerships, Australia

Procured 626 new train carriages under a 30-year agreement in December 2006. At $3.6 billion, it was the single largest procurement of trains in Australia’s history and was equivalent to approximately 50% of Sydney’s total suburban train fleet. The project aimed to update the trains and system but also offered increased security, improved safety features, and greater enhanced disability and wheelchair access thus improving the overall quality of and access to the service.

Gautrain rapid rail link project in Gauteng, South Africa

Links Johannesburg, Pretoria, Ekhuruleni and O. R. Tambo International Airport. It is a railways infrastructure project, developed, operated and maintained through a 20 year, DBFOMT concession agreement in September 2006 valid up to 2026. It consists of approximately 80km of railway line, 10 stations, and approximately 125 buses in its dedicated feeder and distribution system. It became fully operational in June 2012. The government supported the project by a grant of R25.2 million and also provides a Patronage Guarantee for a Minimum Required Total Revenue (MRTR). It is the first modern, ‘state-of-the-art’ Rapid Rail Link transport project in Africa and was built to relieve the traffic congestion in the Johannesburg–Pretoria traffic corridor and offer commuters a viable alternative to road transport. It was expected that the system will transport approximately 100,000 passengers per day, but the actual trips reached up to 60,000 passengers/day (2016 Annual Report of Gautrain).

Part II. Pros and cons of Public-Private Partnerships in the rail sector

Risks in Public-Private Partnerships in railways projects are to be approached with care to ensure identification, categorization, thorough understanding and, thereafter, apportionment based upon the needs of the parties and the viability, efficiency and sustainability of the project. Evidence has shown that there are mainly three causes of failure of Public-Private Partnerships in railways - political risk, complexity risk and commercial risk. For example, safety regulation structures are particularly important to the operational environment of a Public-Private Partnerships in railways and need to be carefully addressed and changes in those requirements anticipated. Governments must therefore select the right delivery approach and better understand the risks and their mitigation measures while evaluating the pros and cons of Public-Private Partnerships in railways.

Examples of Disadvantages

The risks of performance failure are usually unacceptable for the government. When the concessionaire is facing financial difficulties, mainly in traffic-based payments, the government is left with two options: let the concessionaire fail and accept infrastructure not being commissioned or allow the trains to stop running, or, bail the concessionaire out and support it through hard times – even if the public sector has no contractual obligation to do so.

3 A comprehensive study of 27 railways Public-Private Partnerships until 2012 has been done, in order to observe long term trends and to quantify the potential of failure or success of such Public-Private Partnerships. It provides useful lessons and emerging trends.


https://mpra.ub.uni-muenchen.de/38415/1/Dehornoy_Review_of_railways_PPPs_2012_.pdf
so. For example, the government had to provide direct financial support either by bailout (Channel Tunnel Rail Link, Taiwan HSR, Sydney Airport Rail Link), or by paying a substantial revenue guarantee (Eurotunnel) or a loan guarantee (Kuala Lumpur Express Rail Link – KL ERL), or by making right-of-way available (KL ERL) or cancelling the project (Paris CDG Express).