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PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA104

Project Name	ZhangHu Railway (P122319)
Region	EAST ASIA AND PACIFIC
Country	China
Sector(s)	Railways (100%)
Lending Instrument	Specific Investment Loan
Project ID	P122319
Borrower(s)	International Department, Ministry of Finance
Implementing Agency	Ministry of Railways
Environmental Category	A-Full Assessment
Date PID Prepared	11-Jan-2012
Estimated Date of Appraisal Completion	10-Jan-2012
Estimated Date of Board Approval	22-Mar-2012
Decision	

I. Project Context

Country Context

1. China has experienced substantial economic growth over the past several decades, with sustained annual GDP growth rates in excess of 10%. In order to maintain growth, balance its distribution, and promote trade, China has made investment in transport infrastructure a centerpiece of its strategy.

2. Investments in the transport sector have increased in recent years. The total investment in the transport sector in the 10th Five Year Plan (2000-2005) was 4.4 trillion RMB (US$678 billion / US$138 billion annual average) and this number nearly doubled in the 11th Five Year Plan to 7.7 trillion RMB (US$1.2 trillion / US$240 billion annual average).

3. Relative investments in the rail sector have also increased. At the time of the 10th Five Year Plan period (2000-2005), infrastructure investment in roads represented around three-quarters of the total investment in transport infrastructure, while the railway sector only attracted about 17 percent of investments. Ports, airports and inland waterways made up the rest.

4. In the 11th Five Year Plan (2005-2010), however, the government set forth a policy to promote railway development, due to both its relative importance (the railway system carries around 29 percent more traffic than the road system) and in recognition of the higher energy efficiency and lower carbon emissions of rail transport compared to road (and air) transport. As a result of this substantial increase in investments, in particular via the economic stimulus package adopted in 2008, railway network development reached unprecedented levels.

5. National Development and Reform Commission (NDRC) estimates that road transport will account for 55-65% of transport infrastructure investment in the 12th Five Year Plan (2010-2015), air transport and water transport together will take 10-15%, and the remainder (20%-35%) will be on railway development.

II. Sectoral and Institutional Context

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The Railway Sector

1. Government policies and railway management actions over the last decades have transformed the railway sector into a vital element of China's national transport system, helping facilitate China's economic growth. On a relatively small railway network of just over 80,000 route-km , China Railways carries the highest volume of passenger traffic and the second highest volume of freight traffic of any railway in the world. Between 2000 and 2010, traffic grew very rapidly, with passenger traffic growing by 6.8 percent/year (in passenger-km) and freight volume growing by 7.2 percent/year (in tonne-km).

2. The railway sector in China as a whole faces two key challenges. The first is the need to improve the capacity and quality of infrastructure and services in a railway network that is already the busiest, by a wide margin, of any in the world. The second is the need to adapt the industry to become more commercially responsive to the market economy.

3. China's railway infrastructure development strategy is embodied in the Government's Mid- and Long-term Railway Network Plan, which was adopted in 2004 and updated in 2008, and which describes railway development up through 2020. The strategy, containing the most ambitious program of railway network development anywhere in the world since the nineteenth century, is ahead of its original implementation schedule. The Plan will increase the public rail network from 75,000 km before the plan, to 120,000 km by 2020. By then half of the network will be double-tracked, or electrified, or both. The completed network will have 16,000 route-km of fast (250 km/h plus) passenger railway routes. Rail freight transport will also be enhanced. The capacity freed up by launching new dedicated passenger lines will be used to meet growing freight demand, but the Plan also includes new high-capacity coal transport corridors and the development of rail container services and terminals. The Plan is currently being delivered ahead of schedule as a result of its being given prominence in the economic stimulus package adopted by China in 2008. As that package is phased out, so the rate of network expansion is now being slowed but the Plan will still be attained on or ahead of time.

ZhangHu Railway Project

4. As one of the high-speed lines proposed in the Mid- and Long-term Railway Network Plan, the Zhangjiakou to Huhehaote line (the ZhangHu line) is critical to the development of the Inner Mongolia region. Inner Mongolia is the third-largest sub-division of China and comprises about 12 percent of the total land area of China's provinces and autonomous regions.

5. The region which the ZhangHu line is designed to serve is growing rapidly in terms of its urban population, industrial production and income. The region's impressive economic performance is to a large extent based on the development of natural resources, especially coal, the production of which has increased from less than 50 million tonnes/year in 1990 to over 600 million tonnes/year in 2009. Most of the coal comes from the Huhehaote-Baotou-Erdos sub-region which contains more than one-sixth of China's known coal reserves.

6. Highways and railways in the eastbound corridor from this sub-region towards Beijing and coastal ports are frequently congested. This was highlighted in 2010 by international media attention to a ten-day, 100 km long road traffic jam on the highway from Inner Mongolia to Beijing. This jam was exacerbated by large numbers of coal-carrying trucks using the highway due to a shortage of railway capacity. A new, dedicated heavy-haul coal railway, designed to avoid population centers, has recently been completed between Huhehaote and Zhangjiakou and is being extended to the port of Caofeidian. Combined with improvements on other coal routes this new railway will relieve the bulk freight transport bottleneck. This coal line, however, will not do much to improve passenger transport in the sub-region, would be essential for achieving the wider economic diversification targeted in the provincial 12th Five Year Plan.

7. By enabling the dramatic shortening of travel distances between Huhehaote to Beijing, the project will have a transformational impact on both sub-regional accessibility and long-term railway competitiveness.

8. Apart from providing inter-city links between the sub-region and Beijing, the new line will perform five specific transport roles: (i) it will free up capacity on the existing line for international freight traffic to and from neighboring Mongolia; (ii) it will boost inter-provincial travel between Zhangjiakou in Hebei Province and Huhehaote in Inner Mongolia; (iii) it will improve intra-regional connections between a number of Inner Mongolian cities (such as between Jining and Huhehaote, for which the new railway will reduce travel time from 3 hours to about 45 minutes); (iv) it will form a key link in a direct route from Beijing to Lanzhou in Western China; and (v) it will free up capacity on the existing line to carry more of the general and containerized rail freight that will assist in the diversification of the Inner Mongolian economy.

Institutional Context

1. The Bank's involvement in this project not only contributes to both the increase in infrastructure capacity and the improvement in service quality that are the twin prongs of China's railway sector strategy, but also supports wider economic goals. Transport service improvements that effectively reduce economic space and distance will facilitate China's urbanization policies and generate the agglomeration benefits and the improved spatial and economic integration the country is seeking.

2. The value added by the Bank comes from the long-term partnership between China and the Bank, which has extended over twenty years in the sector. This program has combined support to the physical development of the Chinese railway system with a wide range of demand driven analytical and advisory activities that contribute to the railway system's transformation. With this 15th loan to the Ministry of Railways (MOR), the Bank will have lent over US$3.7 billion in support of China railway development.

3. The ZhangHu railway project will provide a platform for continued and informed high-level engagement on railway and transport policy between the Bank, the Ministry of Railways and the National Development and Reform Commission (NDRC). At project level, this partnership provides the Ministry with timely access to technical advice on the application of safeguard policies, economic evaluations and procurement, which can be applied across its broader Mid- and Long-term Railway Network Plan.

4. Recent technical and analytical assistance provided by the Bank has included topics as diverse as: specification of new traffic management information systems; advice on non-traditional financing sources; advice on handling multiple train operators on the railway network; comparison of the social costs of railways and other modes; railway infrastructure investment policies in selected countries; and research into market-based railway pricing policies and structures. The Bank has also supported the transfer of lessons learned in China to other countries, most recently in the form of a high-level study tour of Indian Railways to China and a review of high-speed rail experience in China and its applicability to other parts of the world.

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III. Project Development Objectives

The development objective of the proposed project is to improve accessibility and mobility by responding to existing and anticipated transport demand along the Huhehaote-Zhangjiakou (to Beijing) corridor through the provision of additional railway capacity and reduction of transport time for passengers and freight.

IV. Project Description

Component Name

ZhangHu Railway

V. Financing *(in USD Million)*

For Loans/Credits/Others	Amount
Borrower	4482.23
International Bank for Reconstruction and Development	200.00
Total	4682.23

VI. Implementation

Institutional and Implementation Arrangements

1. Institutional and implementation arrangements are identical to those applied in the previous three Bank financed railway projects in China. The Ministry of Railways, through its Foreign Capital and Technical Import Center (FCTIC), will be responsible for: (i) overseeing the project implementation including monitoring, reporting, and compliance with safeguards; (ii) financial management of the World Bank loan, including disbursement and reporting; and (iii) all Bank-financed procurement with the support of an independent procurement company. FCTIC will provide implementation progress reports every half year.

2. The Ministry of Railways together with the relevant provinces formed the Mengji Railway Company ("the Project Company"). The Project Company is tasked with the day-to-day responsibility for the railway line construction. This includes the procurement, management and supervision of all contracts for non-Bank funded civil works, installation of goods and equipment funded by the Bank loan through contractors, coordination with the local government entities responsible for resettlement and land acquisition, transfer of funds for resettlement to local authorities, monitoring of project progress, and reporting to the Ministry of Railways on physical progress, safeguards and financial management. The Project Company is staffed primarily by the Ministry of Railways' regional Hohhot Railway Bureau.

Results Monitoring and Evaluation

1. The Ministry of Railways collects sufficient data to allow satisfactory reporting and monitoring of the outcomes and results of the project as part of its regular business activities (see Annex 3). The Project Company will also be asked to collect relevant data that will enable monitoring of the above indicators. These outcomes and results can only be measured after the completion of the project, commissioning, opening of the line, and several years of operation. The performance indicators will be monitored as they become available. Intermediate result indicators will capture physical progress in the implementation of the project.

Sustainability

1. The project's sustainability comes from its strategic, economic, operational, environmental, social and financial dimensions. The project is part of the Government's Mid- and Long-term Railway Network Plan to 2020 and as such has been strategically endorsed. The project has a positive economic internal rate of return (EIRR) of 15 percent and its economic sustainability will likely strengthen over time because the value of the main non-financial benefits of the project, such as saved time, are all expected to increase in the future. The technical requirements for maintaining fast passenger train services are well known and the project will be using established technologies. Findings from the Wenzhou train crash investigation are being analyzed for their impact on the project and relevant action will be taken. Railway services also offer a more sustainable approach for meeting China's future mobility needs in terms of energy efficiency and greenhouse gas emissions than a road transport alternative.

2. The social sustainability of the project will depend mainly on the affordability of the services it offers. To gauge this, the Ministry of Railways has carried out detailed passenger attitude surveys. These have established a strong willingness to pay a surcharge of 50 percent on high-speed services compared to conventional rail. In addition, even with higher fares on the new services per kilometre, the cost increase to most passengers will be less than some other new high speed rail lines because the new line offers a substantially shorter route. Overall, the project will encourage more passengers to use rail transport. Inter-city railway services in China are used by a people from a range of socio-economic backgrounds, unlike either private cars or airlines, which tend to serve exclusively higher income groups. Because of this, the impact of railway improvements tends to be more equitable, and thus more socially sustainable.

3. In financial terms, the project will be sustainable if at a network level the transport services are able to earn a positive contribution above long-run marginal costs; if so, they will make a positive financial contribution to the railway's financial performance and not be an increasing financial drain that might threaten its survival. With the inclusion of revenue from the existing line, the project is expected to be "cash positive" and generate sufficient income for its own operations immediately from the opening of the new ZhangHu railway line. The risk that the Ministry of Railways might not be able to maintain the infrastructure after services are implemented therefore seems negligible.

VII. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No

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Environmental Assessment OP/BP 4.01	X	
Natural Habitats OP/BP 4.04	X	
Forests OP/BP 4.36		X
Pest Management OP 4.09		X
Physical Cultural Resources OP/BP 4.11	X	
Indigenous Peoples OP/BP 4.10		X
Involuntary Resettlement OP/BP 4.12	X	
Safety of Dams OP/BP 4.37		X
Projects on International Waterways OP/BP 7.50		X
Projects in Disputed Areas OP/BP 7.60		X

VIII.Contact point

World Bank

Contact: John Carter Scales
Title: Lead Transport Specialist
Tel: 5788+7731 /
Email: jscales@worldbank.org

Borrower/Client/Recipient

Name: International Department, Ministry of Finance
Contact: Ms. Han Su
Title: Deputy Director
Tel: 68551138
Email:

Implementing Agencies

Name: Ministry of Railways
Contact: Mr. Xu Feng
Title: Director
Tel: (86-10) 5184-1825
Email: xufengcn@163.com

IX. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop

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