PROJECT INFORMATION DOCUMENT (PID)  
CONCEPT STAGE  

Report No.: AB6022  
(The report # is automatically generated by IDU and should not be changed)  

<table>
<thead>
<tr>
<th>Project Name</th>
<th>ZhangHu Railway</th>
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</thead>
<tbody>
<tr>
<td>Region</td>
<td>EAST ASIA AND PACIFIC</td>
</tr>
<tr>
<td>Country</td>
<td>China</td>
</tr>
<tr>
<td>Sector</td>
<td>Railways (100%)</td>
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<tr>
<td>Lending Instrument</td>
<td>SIL</td>
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<tr>
<td>Project ID</td>
<td>P122319</td>
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<tr>
<td>Borrower(s)</td>
<td>People’s Republic of China Represented by Ministry of Finance, China</td>
</tr>
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<td>Implementing Agency</td>
<td>Ministry of Railways, Foreign Capital &amp; Technical Import Center</td>
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<tr>
<td>Environmental Screening Category</td>
<td>[X ]A  [ ]B  [ ]C  [ ]FI  [ ]TBD (to be determined)</td>
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<tr>
<td>Date PID Prepared</td>
<td>November 9, 2010</td>
</tr>
<tr>
<td>Estimated Date of Appraisal Completion</td>
<td>February 15, 2012</td>
</tr>
<tr>
<td>Estimated Date of Board Approval</td>
<td>August 16, 2012</td>
</tr>
<tr>
<td>Concept Review Decision</td>
<td>Following the review of the concept, the decision was taken to proceed with the preparation of the operation.</td>
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I. Introduction and Context

A. Country Context

Until recently, the greatest part of transport infrastructure investment in China, around three-quarters, was in the road system, while the railway sector attracted about 17 percent of the investment. China is now giving increasing attention to investments in its national railway network, which carries around 29 percent more traffic (in traffic unit km) than the road system.

This attention was evident in China’s November 2008 economic stimulus program. Of the total program, transport was nearly half and railway construction projects notably constituted over 40 percent of the transport component. As the stimulus package has been subsequently enhanced, the planned contribution of railway investment has been further augmented.

B. Sectoral and Institutional Context

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 and facilitator of China’s economic growth. In 1949, China had only 22,000 km of poorly maintained and war-damaged
railway line. Today, on a railway network of nearly 80,000 route-km\(^1\), 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 2008, traffic grew very rapidly, with passenger traffic
growing by 70 percent (in passenger-km) and freight by 82 percent (in tonne-km), leading to
congestion in many parts of the network. The Ministry of Railways (MOR) and its constituent
regional railway authorities and other entities have created a modern rail system by adopting
proven international practices and technologies and adapting them to Chinese circumstances. The
success factors are described in more detail elsewhere.\(^2\)

China’s railway infrastructure development strategy is embodied in the Government’s Mid to
Long-Range Railway Network Plan to 2020 (MLRNP), adopted in 2004\(^3\) and updated in 2008.
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
World Bank has played an almost continuous role during the twenty years of major railway
investment in China and is supporting this Plan. With this 15\(^{th}\) loan to MOR, the Bank will have
lent about $3.75 billion in support of China Railway development over the last twenty years.
Despite this significant investment, foreign funding for Chinese railways is dwarfed by domestic
contributions. China has funded over 95 percent of railway improvements from domestic
sources.

The MLRNP supports the development of the existing network into a high-quality coherent
network fostering economic development and economic integration, mindful of other transport
modes. The realization of the MLRNP will dramatically reduce economic distance between
major urban areas by cutting transportation time and improving service quality including
frequency. It will provide additional capacity to meet rapidly growing demand through the
creation of new lines and the separation of lines for passenger and freight services. It will also
expand the coverage of the network to support and encourage sustainable economic and regional
development outside the coastal area.

The proposed ZhangHu line directly fits such priorities. Currently there is no direct railway line
between Zhangjiakou and Hohhot. Passengers need seven hours over a distance of 433
kilometers to travel between the two cities. The proposed line will bring the capital city of Inner
Mongolia, Hohhot, within 90 minutes of Zhangjiakou and only 2.5 hours from Beijing (versus
10.5 hours today by rail), creating economic agglomeration opportunities. It will greatly enhance
access to North-West China and Inner Mongolia and in particular to the rapidly growing sub-
region of Baotou, Baiyun and Ordos, and eventually to Lanzhou.

It will also provide much needed relief to one of the highest density corridor in China with a near
term demand of about 300 million tons of freight (mostly coal). The area west of Hohhot is rich
in natural resources with 17 percent of Chinese coal, 30 percent of its natural gas and 87 percent

\(^1\) Though China’s is still a very sparse network compared to the European Union (about 210,000 route-km) and USA
  (about 225,000 route-km).
\(^2\) ‘Tracks from the Past, Transport for the future - China’s Railway Industry 1990-2008 and its future plans and
  possibilities’ World Bank 2009. A summary of its infrastructure targets is given in Annex A.
\(^3\) The MLRNP is described in detail in the Bank’s sector review of China’s railway industry WB09 op.cit: ‘Tracks
  from the Past, Transport for the future - China’s Railway Industry 1990-2008 and its future plans and possibilities’
  World Bank 2009.
of Chinese rare earths. Traffic along this transport corridor is rapidly increasing, both by road and rail, as a result of growth in coal production in the large mines of Inner Mongolia as production is being transferred from the small private mines in Shanxi, which are progressively shut down for economic and safety reasons. Both road and rail transport in this corridor are extremely congested as highlighted by recent media attention to the ten day traffic jam on the highway from Inner Mongolia to Beijing. A new dedicated heavy-haul coal railway is already under construction between Hohhot and Zhangjiakou, with future extension to Caofedian. The current project will provide additional capacity by separating passenger traffic from freight traffic and extending the Beijing – Zhangjiakou line currently under construction.

C. Relationship to CAS

The Bank’s Country Partnership Strategy (2006-2010) contains five “pillars” (priorities) for the Bank’s support of China’s development. This project contributes to two of these priorities:

- **Pillar 2. Reducing poverty, inequality and social exclusion**: This project will shorten travel times for passenger and therefore enhance the transport accessibility of the North-West China, spurring and spreading economic development.

- **Pillar 3. Managing resource scarcity and environmental challenges**: The project will enable railways to retain and also attract traffic that would otherwise be carried mainly by road transport, which will save land, use less energy and emit less greenhouse gases, and be much safer than road transport. The region is currently suffering greatly from the congestion and local pollution of excessive truck traffic,

II. Proposed Development Objective(s)

A. Proposed PDO

The development objective of the proposed project is to respond to existing and anticipated transport demand along the Hohhot-Zhangjiakou corridor by providing increased capacity for freight and passengers, and faster travel time and increased frequency of services for passengers.

B. Key Results

Direct project beneficiaries will include the population along the corridor and companies located along the catchment area of the new railway line. Passengers will benefit directly from the sharp improvement in transport services between cities located on the line and beyond on the rest the core high speed rail network. Companies will benefit from a reduction in economic distances. Cities along the corridor will experience new economic opportunities in the form of economic agglomeration. The separation of passenger traffic from freight traffic will also increase capacity for freight on the existing line. By transferring part of trips along the corridor to rail transport,

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the overall population will also benefit from lessened externalities like traffic accident and air pollution in meeting their mobility needs.

The assessment of the achievement of the project development objective will be carried out through the measurement of outcome indicators such as: (i) increased number of high speed train services (number of pairs of trains per day); (ii) increased freight capacity on existing line (number of pairs of trains per day); and (iii) reduced transit time for passengers travelling between Hohhot and Zhangjiakou.

III. Preliminary Description

The proposed project will support the construction of a new double-tracked electrified 287 km long passenger dedicated railway line (PDL) along the Zhangjiakou to Hohhot alignment, with the related railway stations. The line will be operated with electrical multiple units, with a design speed of 250 km/h. The rail travel distance will be reduced from 433 km to 287 km. About 64 percent of the line will be on bridges or through tunnels.

The termini of this east-west line will be Zhangjiakou in the Hebei Province and Hohhot, the provincial capital of the Inner Mongolia Autonomous Region. Several different alignments are being studied in two intermediate sections, Zhangjiakou City to Ulan Qab and Ulan Qab to Hohhot. Alignments are being evaluated based on their impact on resettlement, environment, geological conditions, economic benefits, engineering, and cost. A small portion of the alignment passes through Shanxi Province through a tunnel.

Implementation is currently planned to commence in early to mid 2011 with commissioning of the line expected by mid 2016. The total estimated cost for this project is RMB 32 billion (US$4.8 billion) at an average of about RMB 112 million (US$16.7 million) per main line kilometer.

The Bank loan is expected to finance goods and equipment possibly consisting of signaling, electrification, bridge beams, and track fittings. In addition the project may finance technical assistance components yet to be agreed.

IV. Safeguard Policies that might apply

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered by the Project</th>
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<td>[Environmental Assessment (OP/BP 4.01)]</td>
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<td>Natural Habitats (OP/BP 4.04)</td>
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<td>Safety of Dams (OP/BP 4.37)</td>
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<td>Projects in Disputed Areas (OP/BP 7.60)</td>
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* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas
V. Tentative financing

Source: ($m.)
Borrower/Recipient 4,596.00
IBRD 200.00

Total 4,796.00

VI. Contact point

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