PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE

Report No.: AB6023
(The report # is automatically generated by IDU and should not be changed)

<table>
<thead>
<tr>
<th>Project Name</th>
<th>JiTuHun Railway</th>
</tr>
</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>
</tr>
<tr>
<td>Lending Instrument</td>
<td>SIL</td>
</tr>
<tr>
<td>Project ID</td>
<td>P122321</td>
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<tr>
<td>Borrower(s)</td>
<td>People’s Republic of China Represented by Ministry of Finance, China</td>
</tr>
<tr>
<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>
</tr>
<tr>
<td>Date PID Prepared</td>
<td>January 5, 2011</td>
</tr>
<tr>
<td>Estimated Date of Appraisal Completion</td>
<td>February 15, 2011</td>
</tr>
<tr>
<td>Estimated Date of Board Approval</td>
<td>May 19, 2011</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, 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). The Ministry of Railways 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.

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 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 16th loan to the Ministry of Railways (MOR), the Bank will have lent $3.95 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.

While many of the high speed rail projects being constructed are naturally in the most prosperous areas of China, others are more regionally focused, reflecting the Government’s desire to spread the benefits of development to more remote regions of the country. As a part of this strategy, the Bank has begun to focus its lending portfolio of high speed rail projects in the North East region of China, connecting areas which have lagged behind in terms of economic growth in recent years with the core network.

The Jilin-Tumen-Hunchun (JiTuHun) Railway Project is one such project. The existing line in the corridor was built in the 1930s up to Tumen, when the region was under foreign occupation, primarily for freight movement, with little attention given to passenger service standards. A single track route, it follows a circuitous alignment and operates for the most part at a maximum speed of about 100km/h and has not been significantly upgraded since its construction, although it is well maintained. It has for many years been a serious constraint on accessibility between the city of Jilin and its hinterland in the Yanbian Korean Autonomous Prefecture.

The Yanbian Prefecture stands to benefit from its proximity to the city of Jilin and reap agglomeration benefits. The Prefecture is currently lagging behind in terms of economic development with a GDP per capita of 70 percent of the national average. It will benefit from enhanced connection with Changchun, located on the main transport corridors and with Jilin City, which is developing rapidly with a GDP per capita 32 percent above the national average.

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).
The region is planning to undergo major urbanization during the next five years with, for example, the population of Tumen expected to increase by 50 percent.

The Prefecture is uniquely located between Russia and North Korea, only 15 km from the Sea of Japan. It is the core of the Tumen River Regional Cooperation Development Planning Outline approved by the State Council in August 2009. This outline aims at greater economic integration, development and cooperation between China, Russia and North Korea as well as creating a new growth pole in this part of China. It also aims at re-launching similar plans developed in the 1990s for the region including a tri-nation Free trade Zone, which progressed only slowly.

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 three of these priorities:

- **Pillar 1: Integrating China into the world economy**: The project creates an opportunity to facilitate rail services between northeast China, Russia, and North Korea (though a potential international connection is beyond the scope of the proposed Project).

- **Pillar 2. Reducing poverty, inequality and social exclusion**: This project will shorten travel times for passengers between Jilin, Tumen and Hunchun. The impact on the transport accessibility of Jilin and its hinterland cities will act as a catalyst for faster economic development of this relatively poor region.

- **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.4

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 Jilin-Tumen-Hunchun corridor by providing increased capacity for freight and passengers, and faster travel time and increased frequency of services for passenger.

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. By transferring part of trips along the corridor to rail transport, the overall population will also benefit from lessened externalities like traffic accident and air pollution in meeting their mobility needs.

Proposed PDO level results indicators at this time are: (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 Jilin and Hunchun.

III. Preliminary Description

The proposed project will support the construction of a new double-tracked electrified 360km long Passenger Dedicated Line (PDL) and related railway stations. The line will connect the northeastern city of Jilin in Jilin Province with its far eastern cities of Yanji, Tumen and Hunchun located in the Yanbian Korean Autonomous prefecture, close to the international border with Russia and North Korea.5

The proposed line would be an extension of the high speed Intercity Changchun-Jilin Railway (117 km) currently under construction and designed for a speed of 250km/h. The proposed railway would thus provide a seamless high quality connection between eastern Jilin province and its two largest cities of Changchun and Jilin as well as with rest of China through the Harbin-Dalian PDL and China’s PDL network.

The existing mixed-use (freight and passenger) single-tracked railway line between Jilin and Hunchun is operated with diesel locomotives and is currently congested. With the proposed PDL, the passenger journey time between Jilin City and Tumen would be reduced from the current eight hours to less than two hours. The impact on the transport accessibility of Yanji, Tumen and Hunchun cities and their surrounding area will therefore be dramatic. The existing single track railway would be used exclusively for freight trains. Its performance would be enhanced since freight trains will not be required to wait for overtaking by passenger trains as at present.

The line would have 102 bridges with a cumulative length of 77.6 km and 77 tunnels with a cumulative length of 159.4 km. Thus, about 66 percent of the railway shall be on bridges or in tunnels. The longest tunnel is 11.6 km long.

Various alternatives for the alignment are being considered particularly around the urban areas. The alignment being proposed is appropriate as it is the most direct, connects populated areas, meets the approval of local authorities and avoids most environmentally sensitive areas. The project design institute has consulted urban planning development officials of the cities and

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5 The information provided in this document is based upon the Pre-Feasibility Study Report dated June 2010, and discussions held with MOR during the identification mission 6-9 September, 2010.
counties in selecting sites for the proposed nine new railway stations\(^6\) to be built as part of the project.

Transport services would be operated with Electrical Multiple Units (EMU). The trains would have 8 or 16 cars with capacity of 600 and 1200 passengers respectively.

The planned implementation period is about five years, commencing in mid 2011 with commissioning expected by the middle of 2016. Similar to the last three China Railways projects, the Bank loan will most probably 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

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### V. Tentative financing

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### VI. Contact point

**World Bank**

Contact: John Carter Scales  
Title: Lead Transport Specialist  
Tel: 5788+7731 / 86-10-5861-7800  
Email: jscales@worldbank.org  
Location: Beijing, China (IBRD)

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\(^6\) Nine new stations are proposed at West Jiaohe City, South Weihu Mountain, Dunhua, South Dashitou, West Antu county, West Yanji City, West Tumen City, North Liangshui and North Hunchun City.

\(^*\) By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas.
Borrower/Client/Recipient: People's Republic of China Represented by Ministry of Finance
Implementing Agency: Ministry of Railways, Foreign Capital & Technical Import Center
Contact: Mr. Xu Feng
Tel: 86-10-51841825
Fax No.: 86-10-51848407
Email: xufengcn@163.com

VII. 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