



India: Railways Track Electrification Project

Project Name	Railways Track Electrification Project		
Project Number	51228-001		
Borrower/Company	Indian Railway Finance Corporation		
Country	India		
Location	Nation-wide		
Approval Number	7560/3680		
Type of ADB Assistance / Amount	3680	Ordinary capital resources	INR 50,385.00 million Approved
Strategic Agendas	Inclusive economic growth		
Drivers of Change	Partnerships Private sector development		
Sector / Subsector	Transport - Rail transport (non-urban)		
Gender Equity and Mainstreaming	No gender elements		
Responsible ADB Department	Private Sector Operations Department		
Responsible ADB Division	Infrastructure Finance Division 1		
Responsible ADB Officer	Choudhary, Mayank		
Project Sponsor(s)	Indian Railway Finance Corporation		
Description	<p>The project involves electrification of existing railway tracks spread across 13 states in India, being undertaken by Indian Railways Finance Corporation (IRFC). IRFC, has approached the Asian Development Bank (ADB) to consider a nonsovereign loan up to \$750 million to meet a part of the funding requirements for railway track electrification. IRFC will lease the electrification assets to Ministry of Railways (MOR), under a long term lease agreement. The lease rentals paid by MOR will be utilized by IRFC to service the ADB loan.</p>		
Objectives and Scope	<p>The proposed financing, aimed at supporting key infrastructure development, represents a unique opportunity for ADB to support the government's railways modernization program. The project involves electrification of existing railway tracks spread across 13 states in India. Electric traction has following advantages: (i) it is substantially cheaper to run trains on electric traction compared with diesel-powered trains. Despite carrying 65.4% of all freight and 51.2% of the passenger load of Indian Railways, electric traction accounts for only 36% of the total energy bill, with diesel accounting for the balance 64%. (ii) electric traction is not dependent on a specific primary source of energy (in contrast to diesel) and can therefore be sourced from a range of energy forms taking price and other characteristics into consideration, such as increasing renewable energy capacity in India. (iii) electric traction makes regenerative braking possible, where energy is recovered from braking or slowing down of the train and thereby saving energy by up to 20%. (iv) use of electricity reduces dependence on imported energy (diesel), thereby helping manage the current account deficit, and removes variability of input energy prices which are dependent on international crude oil price movements. ADB is providing a 20-year amortizing local currency loan. Structuring the transaction in this manner allows IRFC to match the cash flows from the assets to loan repayment with no foreign exchange risk. The aggregate funding requirements of Indian Railways for its ongoing modernization program is immense about \$132 billion. The precedent set through this transaction will encourage other private sector institutions to provide financing to IRFC for its project pipeline.</p>		
Linkage to Country/Regional Strategy	<p>The project's development supports infrastructure, one of ADB's five core operational areas, which are reaffirmed through the Midterm Review of Strategy 2020. ADB's country partnership strategy, 2018 2022 for India is based on three development pillars: (i) boosting economic competitiveness to create more and better jobs, (ii) inclusive provision of infrastructure networks and services, and (iii) addressing climate change and increasing climate resilience. The project particularly supports pillars (i) and (ii).</p>		

Safeguard Categories

Environment	B
Involuntary Resettlement	B

Summary of Environmental and Social Aspects

Environmental Aspects	The project is classified category B for impacts on environment which are generally site specific, reversible, and mostly associated with construction activities, such as land and vegetation clearing for site preparation, transportation and delivery of equipment and materials, excavation and laying of foundations for electricity poles and transmission towers. Environmental impacts include occupational and community health and safety, short-term and localized generation of dust, air emission, noise, wastes, soil erosion, and water pollution. The transmission lines will be aligned through agricultural or government land avoiding any impacts on forests or water bodies. The recommended mitigation measures to address the project environmental impacts are presented in the environmental management plan and will be implemented and monitored by IRFC. Initial environmental examinations in accordance with the environmental assessment and review framework, will be prepared for each of the corridors proposed for ADB funding, prior to disbursement.
Involuntary Resettlement	In compliance with ADB's Safeguard Policy Statement, the project is classified as category B for involuntary resettlement. The railways electrification will be carried out along the existing tracks within land owned by Indian Railways and is unlikely to result in physical or economic displacement impacts. New facilities such as traction substations and sectioning and paralleling posts will be located on railway land. No permanent land acquisition will be carried out for the transmission line alignments. These alignments will be finalized to avoid impacts on structures and assets, agricultural lands, forests and water bodies. Compensation for temporary damage to crops and trees will be paid at replacement costs to the landowners. Corridors categorized as A for involuntary resettlement impacts will be excluded from ADB funding. The due diligence carried out for the two corridors (Rohtak Panipat and Ranchi Tori sections) confirm that no land acquisition and involuntary resettlement impacts are expected along the electrification tracks. The 8.0 km transmission line for the Rohtak Panipat section and the 8.8 km transmission line for the Ranchi Tori section will traverse private agricultural land and the 132 kilovolt transmission towers will be erected on private land. Compensation for temporary damage to crops and trees will be paid at replacement costs to the landowners. The resettlement framework includes procedures for screening of corridors and guidance for preparation, implementation and monitoring of resettlement plans. Resettlement Plans for each of the corridors proposed for ADB funding will be prepared, in line with the resettlement framework, prior to disbursement.
Indigenous Peoples	The project is classified as category B for indigenous peoples. The indigenous peoples planning framework for the proposed loan will include procedures for screening of corridors and guidance for preparation, implementation and monitoring of indigenous peoples plans. Corridors categorized as A for indigenous peoples impacts will be excluded from ADB funding. Based on the due diligence carried out two corridors (Rohtak Panipat and Ranchi Tori), a section of the 8.8 km transmission line for the Ranchi Tori corridor passes through scheduled areas occupied by tribal groups. The impacts are expected to be limited to temporary crop damage during construction.
Stakeholder Communication, Participation, and Consultation	Consultations with the officials of CORE, electric transmission agencies and other stakeholders, such as rail users, and people living along the railway corridor, were undertaken during the preparation of the IEEs. Local residents opined the need for the electrification of the corridor for the better services of rail passengers. Corridors which will be financed by ADB will follow the consultation, information disclosure requirements under the IFRC safeguards frameworks.

Timetable for assistance design, processing and implementation

Concept Clearance	29 Aug 2017
Due Diligence	
Credit Committee Meeting	25 Apr 2018 to 25 Apr 2018
Approval	10 Jul 2018
Last PDS Update	17 Jul 2018

Project Page	https://www.adb.org/projects/51228-001/main
Request for Information	http://www.adb.org/forms/request-information-form?subject=51228-001
Date Generated	16 October 2018

ADB provides the information contained in this project data sheet (PDS) solely as a resource for its users without any form of assurance. Whilst ADB tries to provide high quality content, the information are provided "as is" without warranty of any kind, either express or implied, including without limitation warranties of merchantability, fitness for a particular purpose, and non-infringement. ADB specifically does not make any warranties or representations as to the accuracy or completeness of any such information.