

Project Administration Manual

Project Number: 42019-014
May 2019

People's Republic of China: Multimodal Passenger
Hub and Railway Maintenance Project

ABBREVIATIONS

ADB	–	Asian Development Bank
ASEAN	–	Association of Southeast Asian Nations
CCCPC	–	Central Committee of the Communist Party of China
CKRC	–	Chengdu–Kunming Railway Company Limited
CKRL	–	Chengdu–Kunming railway line
CRB	–	Chengdu Railway Bureau
CRC	–	China Railway Corporation
EA	–	executing agency
EIRR	–	economic internal rate of return
FMA	–	financial management assessment
IA	–	implementing agency
km	–	kilometer
NPV	–	net present value
PRC	–	People's Republic of China
TA	–	technical assistance

CONTENTS

I.	PROJECT DESCRIPTION	1
A.	Rationale	1
B.	Impact and Outcome	4
C.	Outputs	4
II.	IMPLEMENTATION PLANS	5
D.	Project Readiness Activities	5
E.	Overall Project Implementation Plan	6
III.	PROJECT MANAGEMENT ARRANGEMENTS	7
A.	Project Implementation Organizations: Roles and Responsibilities	7
B.	Key Persons Involved in Implementation	9
C.	Project Organization Structure	11
IV.	COSTS AND FINANCING	12
A.	Cost Estimates Preparation and Revisions	12
B.	Key Assumptions	12
C.	Summary Cost Estimates and Financing Plan	13
A.	Detailed Cost Estimates by Expenditure Category	15
B.	Allocation and Withdrawal of Loan Proceeds	16
C.	Detailed Cost Estimates by Financier	17
D.	Detailed Cost Estimates by Outputs	18
E.	Detailed Cost Estimates by Year	19
F.	Contract and Disbursement S-Curve	20
G.	Fund Flow Diagram	21
V.	FINANCIAL MANAGEMENT	22
A.	Financial Management Assessment	22
B.	Financial Sustainability Analysis	22
C.	Disbursement	25
D.	Accounting	26
E.	Auditing and Public Disclosure	26
VI.	PROCUREMENT AND CONSULTING SERVICES	27
A.	Advance Contracting and Retroactive Financing	27
B.	Procurement of Goods, Works, and Consulting Services	27
VII.	SAFEGUARDS	28
VIII.	GENDER AND SOCIAL DIMENSIONS	29
IX.	PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION	31
A.	Project Design and Monitoring Framework	31
B.	Monitoring	33
C.	Evaluation	33
D.	Reporting	34
E.	Stakeholder Communication Strategy	34
X.	ANTICORRUPTION POLICY	34
XI.	ACCOUNTABILITY MECHANISM	34
XII.	RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL	35
	Appendix 1: Procurement Plan	36

Project Administration Manual Purpose and Process

1. The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with the policies and procedures of the government and Asian Development Bank (ADB). The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.
2. The China Railway Corporation (CRC), the executing agency; and Chengdu–Kunming Railway Company Limited (CKRC), the implementing agency, are wholly responsible for the implementation of ADB-financed projects, as agreed jointly between the borrower and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation including compliance by the executing and implementing agencies of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.
3. At loan negotiations, the borrower and ADB shall agree to the PAM and ensure consistency with the loan agreement. Such agreement shall be reflected in the minutes of the loan negotiations. In the event of any discrepancy or contradiction between the PAM and the legal agreements, the provisions of the legal agreements shall prevail.
4. After ADB Board approval of the project's report and recommendations of the President (RRP), changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval, they will be subsequently incorporated in the PAM.

I. PROJECT DESCRIPTION

A. Rationale

1. **Railway development in the southwestern region of the People's Republic of China (PRC).** The rail transport subsector is vital to the economic and social development in this region, and its expansion is needed to extend the benefits of development to people living in the region. Railway development has lagged in the southwestern region owing to the highly mountainous terrain, which makes railway construction difficult. This constrains economic growth, particularly in landlocked provinces like Yunnan and Sichuan. This region has also lagged in economic development, and gross domestic product per capita remains low, especially compared with the more prosperous eastern provinces: out of the 31 administrative divisions in the PRC, Sichuan province is ranked 23rd and Yunnan province 30th. The government recognizes the virtues of the railway as a cheaper, safer, and more fuel-efficient mode compared to other transport modes. It has the potential for greater speed and the capacity to provide demand-responsive sustainable development along core economic corridors without taking much land area, if properly planned and developed. In the Thirteenth Five-Year Plan, 2016–2020, the government has placed special emphasis on expanding the railway network to promote sustainable development in poorer and undeveloped provinces.¹ The plan envisages removing existing constraints in railway capacity and enhancing railway development in the western region by developing intercity rail networks.

2. **Chengdu–Kunming railway line.** The existing line connecting the capital cities of Yunnan and Sichuan provinces was constructed in 1970, is a single-track line with operating speeds of 40–60 kilometers (km) per hour and has been operating at near full capacity for more than 10 years. To expand capacity across the southwestern region of the PRC, a new railway line is being developed. The new Chengdu–Kunming railway line (CKRL) involves the construction of 860 km (645 km in Sichuan and 215 km in Yunnan) of railway line for passenger and freight transportation. The new CKRL is 22% shorter (236 km) than the existing single-track line (1,096 km). Trains on the new railway line will be able to run at 160 km per hour compared with the existing speed of only 60 km per hour. The capacity for passenger trains per day would increase from 24 to 70. The shorter alignment and faster train speeds will shorten the travel time to less than 8 hours for passenger trains. Presently, it takes 18–22 hours for people to travel from Chengdu to Kunming via rail. The shorter travel time is likely to make the railway a more attractive travel option, and it is estimated that there will be a modal shift of 3.2 million passengers from road to railway after the new line becomes operational.

3. **Need for integrated and energy-efficient multimodal hubs.** In the PRC, new railway stations often do not meet the needs of passengers, as they are often located far from city centers and are not well integrated with cities' transport systems. Thus, while the new railway lines will facilitate faster intercity travel, the stations also need to be efficiently linked to city centers with well-designed multimodal transport infrastructure and high-quality integrated public transport services. This will enhance the quality of the journey experience for passengers and will encourage increased use of public transport. This will reduce transport costs, increase travel opportunities and regional accessibility to jobs and services, and promote economic development and poverty reduction. One of most important multimodal hubs on the CKRL will be developed in Xichang city, which has a population of about 775,000. It is rich in agriculture and food processing industries, is one of the centers of the PRC's space satellite program and is a popular tourist

¹ Government of the PRC, National Development and Reform Commission. 2015. *Outline of the Thirteenth Five-Year Plan for National Economic and Social Development of the People's Republic of China, 2016–2020*. Beijing (adopted in 2016).

destination. It is estimated that 2.8 million passengers will use the Xichang multimodal hub in 2025. Developing Xichang into a well-designed multimodal hub could have a major demonstration impact for the region. One of the most important strategic objectives of all development initiatives in the PRC is the reduction of energy consumption and carbon emissions across sectors. In the PRC, buildings alone consume over 20% of the total energy produced, and a shift toward green buildings is of great importance. The rail transport subsector in the PRC has developed rapidly, with the number of stations now exceeding 5,000, so the subsector should pay sufficient attention to the use of energy in the stations. Railway stations can be developed as a model to demonstrate best practices in energy efficiency.

4. **Ensuring sustainability through improved maintenance.** Good maintenance practices are an integral part of providing competitive, high-quality, and reliable railway transportation. The PRC railway network is managed and maintained by 18 bureaus that are wholly owned and controlled by China Railway Corporation (CRC). The new CKRL line will be managed and maintained by Chengdu Railway Bureau (CRB). By the end of 2016, the network size under CRB had reached 9,100 km. Of this, about 2,100 km of track had an operating speed of 200 km per hour and above, and the remaining 7,000 km was ordinary railway track. The volume of traffic carried was 210 million passengers, and 190 million tons of freight. The railway lines managed by CRB are typically in mountainous areas. The geological situation is complex, and the topography and landscape are hazardous. The difficult terrain poses major challenges for conventional maintenance systems. Over 1,500 km of the network has curves with a radius of fewer than 600 meters, which causes rapid track wear and deformation and requires careful monitoring. CRB's current maintenance and inspection equipment are insufficient. The maintenance staff have limited capacity and often struggle to keep up with the demands of the rapidly growing network, which is increasingly difficult to maintain owing to the surge in operating speeds.

5. **Regional Cooperation.** The southwestern PRC has good economic complementarities with South Asian and Southeast Asian countries, and bilateral trade is growing rapidly. Bordering on Viet Nam, the Lao People's Democratic Republic, and Myanmar, the provinces of the southwestern PRC form a regional cooperation link between the PRC and Association of Southeast Asian Nations. The new CKRL will, together with the pan-Asia railway, constitute an international railway channel (i) connecting the PRC with Myanmar, Viet Nam, and the Lao People's Democratic Republic; (ii) playing a key role in strengthening communication and trade between the PRC and Southeast Asia and South Asia; and (iii) promoting the development of the PRC–Association of Southeast Asian Nations free trade area.² The PRC further needs assistance in ensuring that the line is (i) properly integrated with other transport modes through well-designed multimodal hubs, and (ii) made sustainable by having an improved maintenance system in place.

6. **Strategic priorities.** The project supports a number of the operational priorities of Strategy 2030.³ By improving maintenance and thus reliability of railway operations, the project, which is located in a less-developed area of Sichuan province in the southwestern PRC, will address poverty by improving access to markets and nonfarm employment opportunities. The project incorporates distinct gender-sensitive design features to enhance women's inclusion and participation and ensure that women benefit from the railway line and station. The project will

² The Pan-Asia railway (also known as the Kunming–Singapore railway) refers to a network of railway lines, planned or under construction, that would connect the PRC to Singapore and the countries of mainland Southeast Asia. The CKRL will also be integrated with the Belt and Road Initiative, which is an economic development initiative of the Government of the PRC for integrating trade and investment in Eurasia.

³ ADB. 2018. *Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific*. Manila.

support climate change mitigation by maximizing the passenger hub's (i) capacity to facilitate efficient intermodal connectivity and (ii) incorporation of energy efficiency features. The presence of the passenger hub on an important railway line will strengthen the hub's role, as it will have a demonstration effect on the design of other railway stations in the PRC. By improving railway maintenance on an international railway corridor linking the PRC and Southeast Asia, the project will (i) strengthen service delivery and improve institutional capacity, and (ii) facilitate regional cooperation. Through its support for climate change mitigation and regional cooperation, the project supports regional public goods.

7. The project is aligned with the strategic priorities of ADB's country partnership strategy for the PRC, 2016–2020 in supporting inclusive economic growth, as the project is in a less-developed region (Sichuan province in the southwestern PRC).⁴ The project will help the PRC address the challenges highlighted above, and deepen the cooperation between the government and Asian Development Bank (ADB) by helping to develop the rail transport mode into a sustainable transport system for freight and passengers. The project is in line with ADB's Sustainable Transport Initiative, which highlights railway development as an important opportunity for sustainable transport operations.⁵ The project is consistent with the PRC Thirteenth Five-Year Plan's objectives of balanced development of rural and urban areas, better transport connectivity, and inclusive urbanization (footnote 1). The CKRL is also part of the PRC's medium- and long-term railway network plan, which seeks to improve the railway system, especially in the central and western PRC.⁶

8. **Value added by ADB assistance.** CRC has been promoting the development of multimodal hubs and the use of modern rail maintenance technologies and equipment consistent with the requirements of the southwestern PRC. It is seeking to attract foreign technology and expertise to meet these needs. ADB has played a significant role in this area, including through the provision of technical assistance for developing multimodal passenger hubs.⁷ ADB will also support the development of the multimodal hub in Xichang city. The hub, located on an important railway line, is expected to have a significant demonstration effect. ADB's value addition will include (i) an emphasis on the use of recycled materials to ensure sustainable construction, (ii) extensive use of renewable energy sources and energy efficiency features in building design, and (iii) a design to maximize connectivity between different transport modes to facilitate intermodal transfers for passengers. CRC will develop the Xichang hub as an example for the region of best practice for designing, planning, and operating multimodal hubs. In addition, the Xichang hub will be one of the first passenger hubs in the region incorporating state-of-the-art energy efficient design. ADB will also finance procurement of modern track maintenance equipment using international advertising. Investing in high-quality, state-of-the-art maintenance systems will yield substantial benefits by improving the reliability and operational efficiency of train operations and facilitating sustainability. The capacity building activities will assist in the development of an integrated approach to maintenance systems, which is needed to maintain the intensively used railway infrastructure. ADB's involvement will also prioritize maintenance, which, in the past in the PRC, has been given lower priority than the construction of new railway lines.

⁴ ADB. 2016. *Country Partnership Strategy: People's Republic of China, 2016–2020—Transforming Partnership: People's Republic of China and Asian Development Bank, 2016–2020*. Manila.

⁵ ADB. 2010. *Sustainable Transport Initiative Operational Plan*. Manila.

⁶ Government of the PRC. 2004. *Railway Development Plan*. Beijing.

⁷ ADB. 2011. *Technical Assistance to the People's Republic of China for Developing Multimodal Passenger Transport Hubs*. Manila.

B. Impact and Outcome

9. The project is aligned with the following impact: sustainable railway system in the southwestern PRC developed (footnotes 1 and 6). The project will have the following outcome: integrated, energy-efficient, and sustainable railway corridor in Sichuan province developed.⁸

C. Outputs

10. **Output 1: Multimodal passenger hub developed.** The project will construct a multimodal passenger hub in Xichang (Xichang west station), which is a growing tourist destination in Sichuan province.⁹ Xichang City is the capital of Liangshan prefecture in Sichuan province, located in the middle of the CKRL.¹⁰ The hub will include good intermodal connectivity and energy efficiency features in the form of improved insulation and enhanced air ventilation systems, and conform to the PRC's standard for green buildings.¹¹ It will have improved drainage systems to adapt to the risk of flooding and will generate renewable energy generation through solar power. The hub will incorporate a bus station for long-distance, local, and tourist buses; ticketing and support facilities; parking for cars, motorcycles, and bicycles; and pedestrian walkways linking the railway station to other transport modes to facilitate intermodal transfers.

11. **Output 2: Railway maintenance improved.** Track-renewal and track-laying operations require high expenditure for personnel and machines. With the help of mechanized work methods, these costs can be significantly reduced, and a higher quality can be achieved. This output will procure modern railway track maintenance machines. The equipment will cover track inspection and repair, as well as rescue and restoration. This output will also include capacity building for railway maintenance measures and training on railway maintenance systems. Staff from executing and implementing agencies will be trained, and technical exchanges on maintenance technologies and new maintenance techniques will be organized to familiarize staff in these areas. Training on the operations of the new railway maintenance machines will be included in the procurement contracts. ADB will also provide railway asset management training through its knowledge and support technical assistance on sustainable transport.¹²

⁸ The design and monitoring framework is in Section IX.

⁹ About 18.20 million tourists visited in Xichang in 2013, which was 18.69% higher than the 15.33 million in 2012, with tourism revenue of CNY10.52 billion in 2013 compared with CNY8.06 billion in 2012.

¹⁰ Xichang west station will be built in Xichang's newly urbanized area, 10 km northwest of the existing city and 9 km southwest of Xichang Qingshan Airport.

¹¹ Government of the PRC, Ministry of Housing and Urban-Rural Development. 2014. *Assessment Standard for Green Buildings – GB/T 50378-2014*. Beijing.

¹² ADB. 2017. *Technical Assistance for Implementation of Sustainable Transport for All*. Manila.

II. IMPLEMENTATION PLANS

D. Project Readiness Activities

Table 1: Project Readiness Activities

Indicative Activities	2018									2019									Responsible
	Q2			Q3			Q4			Q1			Q2			Q3			
	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
1. Establish project implementation arrangements																			CRC, CKRC
2. Loan negotiations																			CRC, MOF, ADB
3. ADB Board approval																			ADB
4. Loan signing																			CRC, MOF
5. Government legal opinion provided																			CRC, MOF
6. Government budget inclusion																			CRC, MOF
7. Loan effectiveness																			CRC, MOF, ADB

ADB = Asian Development Bank, CRC = China Railway Corporation, MOF = Ministry of Finance.

E. Overall Project Implementation Plan

Table 2: Overall Project Implementation Plan

Activities	2018	2019				2020				2021				2022				2023				2024				2025				2026			
	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
A. Design and Monitoring Framework																																	
Output 1: Multimodal hub developed																																	
1.1. Detailed design																																	
1.2. Safeguards implementation monitoring																																	
1.3. Procurement (including Advance Action)																																	
1.4. Construction																																	
Output 2: Railway maintenance improved																																	
2.1. Develop technical specifications																																	
2.2. Procure and install equipment and related systems																																	
2.3. Commissioning and usage																																	
2.4. Provide Training																																	
B. Management Activities																																	
1. Annual review missions																																	
2. Project completion																																	

Source: Asian Development Bank.

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations: Roles and Responsibilities

12. The executing agency will be CRC, which will be responsible for the overall project preparation and implementation. It will also coordinate the operations management and maintenance of infrastructure assets. The implementing agency will be CKRC, a joint venture shareholding company established under PRC company law. The shareholders are China Railway Development Fund Company Limited (under CRC) and Sichuan Provincial Railway Industry Investment Group Limited (under the Sichuan Provincial Government). CKRC is responsible for project construction. The executing agency has engaged a tendering company to assist in procurement.

13. The project will be implemented over 7 years from September 2019 to March 2027. Procurement (including consulting services) to be financed by ADB will follow the ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

14. The implementation arrangements are summarized in Table 3.

Table 3: Project Implementation Organizations – Roles and Responsibilities

Project Implementation Organizations	Management Roles and Responsibilities
China Railway Corporation, the executing agency	<ul style="list-style-type: none"> • Responsible for overall project implementation and coordination; • Obtain commitment letter from CKRC; • Onlend loan proceeds to CKRC • Assist in the preparation activities of signing loan agreement and project agreement; • Administration of the advance account; and • Endorse to ADB the authorized staff with approved signatures for withdrawal applications processing. <p><u>Development and Reform Department</u></p> <ul style="list-style-type: none"> • Review and approve the project design and budgets in the light of its administrative authority; • Monitor and evaluate the project development outcome and activities, and propose the recommendations and suggestions; and • Coordinate with the implementing agency and design institute to complete designs and budgets to be submitted to ADB in timely manner. • Recruit consultants; and • Organize and implement the training program. <p><u>Financial Department</u></p> <ul style="list-style-type: none"> • Process and submit to ADB withdrawal applications and reimbursement requests and, if required, requests for reallocating the loan proceeds; • Supervise financial management system in CKRC, and conduct financial audits as per agreed timeframe; • Monitor the financial aspects of project implementation and providing respective coordination and facilitation;

Project Implementation Organizations	Management Roles and Responsibilities
	<p>Review work statement, and ensure timely allocation of counterpart funds;</p> <ul style="list-style-type: none"> • Cooperate with related departments to conduct financial audits as per agreed timeframe; and • Provide agreed counterpart funds for project activities at a timely manner. <p><u>Materials Management Department</u></p> <ul style="list-style-type: none"> • Provide guidance to CKRC on project implementation to ensure compliance with the loan covenants; • Coordinate and supervise the progress of approval procedures; • Review bidding documents submitted by CKRC, oversee the procurement activities, and ensure the bidding document preparation, bid opening, bid evaluation and contract award are in compliance with guidelines; • Review and check work quality, progress, safety, land acquisition and resettlement, fund utilization, and implementation of environment protection measures in the light of administrative authority so as to ensure compliance with agreements; • Review project progress reports (including progress, quality, safety, design variation, etc.), project completion report, and their timely submission to ADB; and • Provide assistance for post evaluation of the project as needed.
Chengdu–Kunming Railway Company Limited, the implementing agency	<ul style="list-style-type: none"> • Prepare withdrawal applications and submit to CRC; • Responsible for organizing the construction and management of the components under the project; • Submit necessary materials and documents to ADB at the project preparation stage; • Develop proposals to update the agreed procurement plan for submission to ADB; • Recruit design institute, contractors and construction supervision company; • Responsible for implementation and acceptance of completed works of the project components; • Responsible for work progress, quality, safety, land acquisition and resettlement, environment protection, contract payment, design variation, closure of the project final accounts, and the handover of works at completion; • Prepare progress reports, monitoring reports, evaluation reports and implementation completion report for submission to ADB at a timely manner; • Establish strong financial management system and fund utilization control systems, and process withdrawal applications to ensure timely payments to contractors, suppliers and consultants; • Review interim payment certificates, variation orders, prepare statement and payment certification, and process payments within the periods defined in the Works contract documents; • Accept and take action on the findings and recommendations of the project audit conducted by ADB and/or authorized Government departments; and • Monitor the work quality, safety and management activities during the implementation period; and providing coordination and facilitation as needed.

Project Implementation Organizations	Management Roles and Responsibilities
Ministry of Finance	<ul style="list-style-type: none"> • Borrower representative; • Responsible for signing the Loan Agreement; • Primarily responsible for supporting CRC in the implementation of the project; and • Provide training of CRC on ADB financial documentation requirements, as needed.
Asian Development Bank	<ul style="list-style-type: none"> • Provide guidance to the executing agency and implementing agency at each stage of the project for smooth implementation in accordance with the agreed implementation arrangements; • Conduct regular loan review missions, including midterm and project completion review missions; • Review and approve procurement actions; • Monitor compliance with all loan covenants including safeguards; • Timely processing of withdrawal applications and releasing eligible funds; • Review annual audit reports and follow-up on audit recommendations; • Regularly update the project performance review reports in coordination with both the CRC and CKRC; and • Regularly update the project information documents for public disclosure at ADB website, including the safeguard documents.

ADB = Asian Development Bank, CKRC = Chengdu-Kunming Railway Company Limited, CRC = China Railway Corporation.

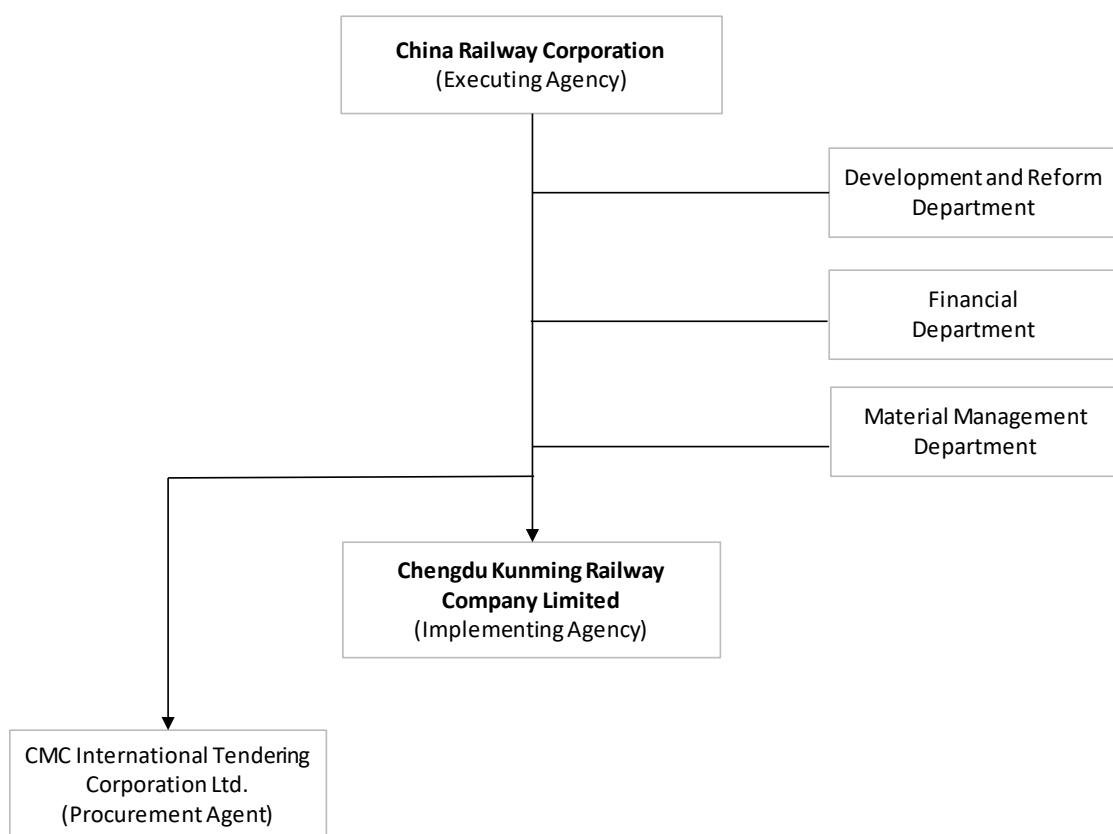
Source: Asian Development Bank.

B. Key Persons Involved in Implementation

Government	
China Railway Corporation, executing agency	<p>Mr. Huang Dianhui Director General, Development and Reform Department Tel: +86 10 5184 1991 Fax: +86 10 5184 2411 Office Address: No. 10 Fuxing Road, Haidian District, Beijing</p> <p>Mr. Wang Laixiang Director General Material Management Department Office Address: No. 10 Fuxing Road, Haidian District, Beijing Fax: +86 10 5184 8407 Tel: +86 10 5184 8406</p> <p>Mr. Liu Hongrun Director General, Finance Department Tel: +86 10 5184 7211 Office Address: No. 10 Fuxing Road, Haidian District, Beijing</p>
Chengdu Kunming Railway Company Limited, implementing agency	<p>Mr. Zhou Lixin Deputy General Manager Tel: +86 28 8648 3105 Fax: +86 28 8648 3100 Office Address: Floor 16, Zhiyejiazhou, No. 1 Shawandong 2nd Road. Jinniu District, Chengdu, Sichuan Province</p>

Government	
	<p>Mr. Wang Kunyu Deputy Department Director, Engineering Department Tel: +86 28 86483167 Fax: +86 28 8648 3100</p> <p>Mr. Xiong Hua Director, Material and Equipment Management Tel: +86 28 8648 3138 Fax: +86 28 8648 3146</p> <p>Ms. Xia Jing Deputy Department Director Planning and Financial Department Tel: +86 28 8648 3127 Fax: +86 28 8648 3100</p>
Asian Development Bank	
Transport Division, East Asia Department	<p>Ms. Sujata Gupta Director Tel: + 63 2 632 4901 (local)/Fax:+ 63 2 636 2444 Email address: sgupta@adb.org 6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines</p>
Mission Leader	<p>Mr. Jeffrey Miller Principal Transport Specialist Transport Division, East Asia Department Tel: +63 2 632 5826/Fax +63 2 636 2444/2426 Email address: jmiller@adb.org 6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines</p>

C. Project Organization Structure



IV. COSTS AND FINANCING

A. Cost Estimates Preparation and Revisions

15. The cost estimates were prepared jointly by the EA, IA, and ADB with assistance from the project preparatory technical assistance consultant. The sources and basis for cost estimates were reviewed during the project preparation and had been confirmed by related parties. The process was facilitated by a model in excel software which enabled easy updating or revision if necessary. The model is maintained by both IA and ADB. Revision of cost estimates will be conducted when deemed necessary during implementation. The EA and the IA will be responsible in proposing and drafting the revision which will be subject to ADB approval.

B. Key Assumptions

16. The main assumptions of the financial analysis are as follows:

- (i) The project will be implemented from 2019 to 2026 and the operation period from 2026 to 2045.
- (ii) All revenues and expenses were expressed in 2018 prices and in nominal terms. The revenue and expenditure projection were taken from the railway line feasibility study report which was conducted by Chengdu–Kunming Railway Bureau and verified by the TA consultant.
- (iii) The average tariff for high-value cargo is assumed at CNY0.18 per ton-kilometer (km), excluding the railway construction fund surcharge, which averages CNY0.015 per ton-km. The passenger tariff ranges from CNY0.12 per passenger-km for local trains to CNY0.29 per passenger-km for high-speed rail operating at 160 km per hour. Other revenues (e.g., warehouse storage and parcel service in the train stations) amount to 4.5% of freight and 8.0% of passenger revenues.
- (iv) O&M costs include personnel salaries and welfare, hub maintenance costs, administration, insurance, taxes, power costs, and other expenses such as depreciation. Wages are assumed to increase by 4% based on 5-year historical data (2013-2017), and benefits estimated at 33% of the annual wages.
- (v) Residual value was calculated based on the economic life of fixed assets.
- (vi) US dollar (\$) costs are converted to Chinese yuan (CNY) at an exchange rate of CNY6.3341 = \$1.00, which is the prevailing exchange rate as of 14 May 2018.
- (vii) Interest and commitment charges during implementation will not be capitalized in the loan but will be paid by the EA.
- (viii) Physical contingencies are computed at 5% of base cost, price contingencies account for cumulative cost inflation over the construction period, and domestic and international inflation assumptions are based on the ADB projections as presented in Table 4.

Table 4: Escalation Rates for Price Contingency Calculation

Item	Year								Average
	2019	2020	2021	2022	2023	2024	2025	2026	
Foreign rate of price inflation	1.50%	1.50%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.57%
Domestic rate of price inflation	2.30%	2.40%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.46%

Source: Asian Development Bank.

C. Summary Cost Estimates and Financing Plan

17. The total project cost is \$425.81 million. The summary cost estimates are presented in Table 5. ADB will provide the project with \$120.0 million.

Table 5: Summary Cost Estimates
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Multimodal Hub developed	126.01
2. Railway maintenance improved	240.69
Subtotal (A)	366.70
B. Contingencies^c	41.49
C. Financing Charges During Implementation^d	17.62
Total (A+B+C)	425.81

^a Includes taxes and duties of \$42.24 to be financed from government resources as counterpart funds through cash contributions.

^b In mid-2018 prices as of May 2018.

^c Physical contingencies computed at 5% for civil works and equipment. Price contingencies computed at average of 1.5% for the first and second year, 1.6% thereafter on foreign exchange costs and 2.3% for the first and second year and 2.2% annually thereafter on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest rate and commitment charges. Interest during construction for the OCR loan has been computed at the 7-year US dollar fixed swap rate plus an effective contractual spread of 0.5% and maturity premium of 0.2%. Commitment charges for the OCR loan is at 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

18. The government has requested a regular loan of \$120 million from ADB's ordinary capital resources to help finance the project. The loan will have a 25-year term, including a grace period of 7 years; an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; a commitment charge of 0.15% per year; and such other terms and conditions set forth in the draft loan and project agreements. Based on the loan terms and government's choice of 10% annuity repayment option, the average maturity is 18.76 years, and the maturity premium payable to ADB is 0.20% per year. The interest charges will not be capitalized.

19. The summary financing plan is in Table 6. The loan will finance 28.20% of the project cost, including equipment and civil works. The government will finance the remaining \$305.81 million through counterpart funds provided by CRC.

20. The Government of the PRC is the borrower of the loan and will relend the loan to CRC on the same terms and conditions as those of the ADB loan. CRC will assume the foreign exchange and interest variation risks of the ADB loan, including contingencies. The Government of the PRC, CRC, and Chengdu–Kunming Railway Company Limited (CKRC) have assured ADB that counterpart funding will be provided in a timely manner, including any additional counterpart funding required for any shortfall of funds or cost overruns.

21. Climate mitigation is estimated to cost \$365.43 million and climate adaptation is estimated to cost \$1.26 million. ADB will finance 32.75% of mitigation costs and 25% of adaptation costs.¹³

¹³ Details of the adaptation and mitigation finance are in Climate Change Assessment (accessible from the list of linked documents in Appendix 2 of the Report and Recommendation of the President).

Table 6: Financing Plan
(\$ million)

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank	120.00	28.20
Government	305.81	71.80
Total	425.81	100.00

Source: Asian Development Bank estimates.

A. Detailed Cost Estimates by Expenditure Category

Table 7: Cost Estimate by Expenditure Category

Item	CNY (million)			USD (million)			% of Total Base Cost
	Foreign Exchange	Local Currency	Total Cost	Foreign Exchange	Local Currency	Total Cost ^a	
A. Investment Cost^b							
1 Civil Works							
a. Xichang West multimodal hub	45.45	154.55	200.00	7.18	24.40	31.58	8.62
b. Other facilities	0.00	432.24	432.24	0.00	68.24	68.24	18.63
2 Equipment							
a. Maintenance equipment	144.85	415.24	560.09	22.87	65.56	88.42	24.13
b. Other equipment	0.00	964.44	964.44	0.00	152.26	152.26	41.56
3 Environment and social mitigation	0.00	2.00	2.00	0.00	0.32	0.32	0.09
4 Land acquisition and resettlement	0.00	110.31	110.31	0.00	17.41	17.41	4.75
5 Design, survey and management	0.00	53.59	53.59	0.00	8.46	8.46	2.31
Subtotal (A)	190.31	2,132.36	2,322.67	30.04	336.65	366.69	100.00
B. Contingencies^c							
1 Physical	9.52	106.62	116.13	1.50	16.83	18.33	5.00
2 Price	14.61	215.77	230.37	2.31	20.85	23.16	6.31
Subtotal (B)	24.13	322.38	346.51	3.81	37.68	41.49	11.31
C. Financing Charges During Implementation^d							
1 Interest During Implementation	107.92	0.00	107.92	17.04	0.00	17.04	4.65
2 Commitment Charges	3.70	0.00	3.70	0.58	0.00	0.58	0.16
Subtotal (C)	111.62	0.00	111.62	17.62	0.00	17.62	4.81
Total Project Cost (A+B+C+D)	326.05	2,454.75	2,780.80	51.48	374.33	425.81	116.12

^a Includes taxes and duties of \$42.24 million to be financed from government resources as counterpart funds through cash contributions.

^b In mid-2018 prices as of May 2018.

^c Physical contingencies computed at 5% for civil works and equipment. Price contingencies computed at average of 1.5% for the first and second year, 1.6% thereafter on foreign exchange costs and 2.3% for the first and second year and 2.2% annually thereafter on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction for the ordinary capital resources loan has been computed at the 7-year United States dollar fixed swap rate plus an effective contractual spread of 0.5% and maturity premium of 0.2%. Commitment charges for the ordinary capital resources loan are 0.15% per year, to be charged on the undisbursed loan amount.

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

B. Allocation and Withdrawal of Loan Proceeds**Table 8: Allocation and Withdrawal of Loan Proceeds**

CATEGORY			ADB FINANCING
No.	Item	Amount Allocated for ADB Financing (\$)	Percentage and Basis for Withdrawal
1	Works and Goods**	120,000,000	100% of total expenditure claimed*
Total		120,000,000	

* Exclusive of taxes and duties within the territory of the Borrower.

** Subject to the condition for withdrawal described in paragraph 6 of Schedule 3.

C. Detailed Cost Estimates by Financier

Table 9: Cost Estimates by Financier
(\$ million)

Item	ADB		Government		Total Cost ^a	
	Amount	% of Cost Category	Amount	% of Cost Category	Amount	Taxes and Duties
A. Investment Costs^b						
1 Civil Works						
a. Xichang West multimodal hub	28.80	100.00	0.00	0.00	28.80	2.78
b. Other station facilities	0.00	0.00	62.24	100.00	62.24	6.00
2 Equipment						
a. Maintenance equipment	91.20	100.00	0.00	0.00	91.20	13.64
b. Other equipment	0.00	0.00	117.47	100.00	117.47	18.38
3 Environment and Social Mitigation	0.00	0.00	0.30	100.00	0.30	0.02
4 Land Acquisition and Resettlement	0.00	0.00	16.45	100.00	16.45	0.97
5 Design, survey and management	0.00	0.00	8.00	100.00	8.00	0.46
Subtotal (A)	120.00		204.45		324.46	42.24
B. Contingencies^c						
1 Physical	0.00	0.00	18.33	100.00	18.33	0.00
2 Price	0.00	0.00	23.16	100.00	23.16	0.00
Subtotal (C)	0.00	0.00	41.49	100.00	41.49	0.00
C. Financing Charges During Implementation^d	0.00	0.00	17.62	100.00	17.62	0.00
Total Project Cost (A+B+C)	120.00		263.57		383.57	42.24
% Total Project Cost		28.2%		71.80%		

^a Includes taxes and duties of \$42.24 million to be financed from government resources as counterpart funds through cash contributions.

^b In mid-2018 prices as of May 2018.

^c Physical contingencies computed at 5% for civil works and equipment. Price contingencies computed at average of 1.5% for the first and second year, 1.6% thereafter on foreign exchange costs and 2.3% for the first and second year and 2.2% annually thereafter on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction is based on the ADB 7-year fixed swap rate, plus a spread of 0.5%, and additional 0.2% loan maturity premium. A commitment charge for ADB loan is at 0.15% per year on the undisbursed loan amount.

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

D. Detailed Cost Estimates by Outputs**Table 10: Cost Estimate by Outputs**
(\$ million)

Item	Total Cost ^a	Xichang West Multimodal Hub		Railway Maintenance Equipment	
		Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Costs^b					
1 Civil Works					
a. Xichang West multimodal hub	31.58	31.58	100.00	0.00	0.00
b. Other station facilities	68.24	68.24	100.00	0.00	0.00
2 Equipment					
a. Maintenance equipment	88.42	0.00	0.00	88.42	100.00
b. Other equipment	152.26	0.00	0.00	152.26	100.00
3 Environment and social mitigation	0.32	0.32	100.00	0.00	0.00
4 Land acquisition and resettlement	17.41	17.41	100.00	0.00	0.00
5 Design, survey and management	8.46	8.46	100.00	0.00	0.00
Subtotal (A)	366.70	126.01	34.40	240.69	65.60
B. Contingencies^c					
1 Physical	18.33	6.30	34.40	12.03	65.60
2 Price	23.16	7.96	34.40	15.20	65.60
Subtotal (B)	41.49	15.91	34.30	27.23	65.60
C. Financing Charges During Implementation^d					
1 Interest During Implementation	17.04	5.85	34.40	11.18	65.60
2 Commitment Charges	0.58	0.20	34.40	0.38	65.60
Subtotal (C)	17.62	6.06	34.40	11.57	65.60
Total Project Cost (A+B+C)	425.81	146.32	34.40	279.49	65.60

^a Includes taxes and duties of \$42.24 million to be financed from government resources as counterpart funds through cash contributions.

^b In mid-2018 prices as of May 2018.

^c Physical contingencies computed at 5% for civil works and equipment. Price contingencies computed at average of 1.5% for the first and second year, 1.6% thereafter on foreign exchange costs and 2.3% for the first and second year and 2.2% annually thereafter on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction is based on the ADB 7-year fixed swap rate, plus a spread of 0.5%, and additional 0.2% loan maturity premium. A commitment charge for ADB loan is at 0.15% per year on the undisbursed loan amount.

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

E. Detailed Cost Estimates by Year

Table 11: Cost Estimate by Year
(\$ million)

Item	Total Cost ^a	2019 (Year 0)	2020 (Year 1)	2021 (Year 2)	2022 (Year 3)	2023 (Year 4)	2024 (Year 5)	2025 (Year 6)	2026 (Year 7)
A. Investment Costs^b									
1 Civil Works									
a. Xichang West multimodal hub	31.58	0.00	0.95	3.16	11.68	9.79	4.10	1.89	0.00
b. Other station facilities	68.24	0.00	2.05	16.17	15.01	18.97	9.21	6.82	0.00
2 Equipment									
a. Maintenance equipment	88.42	0.00	2.65	4.42	13.26	22.11	28.30	13.26	4.42
b. Other equipment	152.26	0.00	4.57	36.09	33.50	42.33	20.56	15.23	0.00
3 Environment and social mitigation	0.32	0.00	0.01	0.02	0.05	0.08	0.10	0.05	0.02
4 Land acquisition and resettlement	17.41	0.00	6.97	5.22	5.22	0.00	0.00	0.00	0.00
5 Design, survey and management	8.46	0.00	1.27	1.27	1.27	1.27	1.27	1.27	0.85
Subtotal (A)	366.70	0.00	18.46	66.35	80.00	94.54	63.54	38.52	5.28
B. Contingencies^c	41.49	0.00	1.26	5.62	8.05	11.13	8.63	5.89	0.91
C. Financing Charges During Implementation^d	17.62	0.00	0.28	0.76	1.61	2.64	3.60	4.23	4.50
Total Project Cost (A+B+C)	425.81	0.00	20.00	72.73	89.66	108.32	75.77	48.64	10.69
% Total Project Cost	100.00%	0.0%	4.7%	17.1%	21.1%	25.4%	17.8%	11.4%	2.5%

^a Includes taxes and duties of \$42.24 million to be financed from government resources as counterpart funds through cash contributions.

^b In mid-2018 prices as of May 2018.

^c Physical contingencies computed at 5% for civil works and equipment. Price contingencies computed at average of 1.5% for the first and second year, 1.6% thereafter on foreign exchange costs and 2.3% for the first and second year and 2.2% annually thereafter on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges. Interest during construction is based on the ADB 7-year fixed swap rate, plus a spread of 0.5%, and additional 0.2% loan maturity premium. A commitment charge for ADB loan is at 0.15% per year on the undisbursed loan amount.

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

F. Contract and Disbursement S-Curve

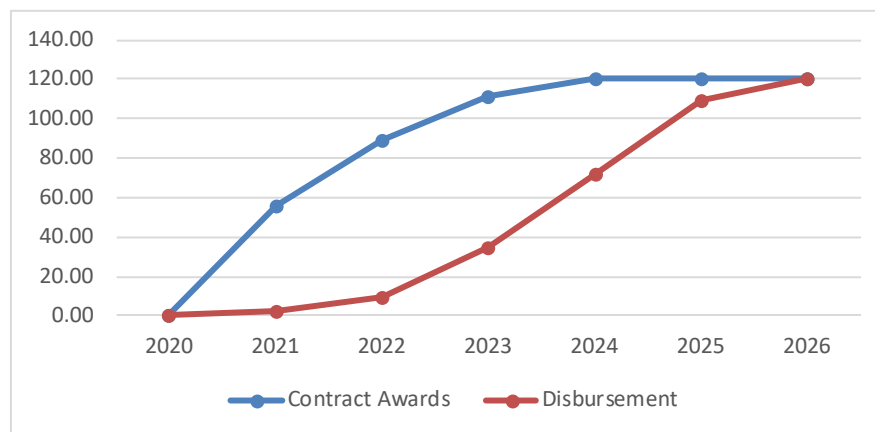
Table 12: Project Contract Awards and Disbursement

Year	Contract Awards					Disbursement				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	0.00	28.80	0.00	0.00	28.80	0.00	0.00	0.00	0.00	0.00
2021	0.00	26.71	0.00	0.00	26.71	0.00	2.80	0.00	0.00	2.80
2022	0.00	29.87	3.42	0.00	33.29	0.00	3.00	3.32	0.00	6.32
2023	0.00	13.64	9.20	0.00	22.84	0.00	5.00	10.00	11.00	26.00
2024	0.00	8.36	0.00	0.00	8.36	0.00	10.31	11.34	15.00	36.65
2025	0.00	0.00	0.00	0.00	0.00	0.00	13.00	15.00	10.00	38.00
2026	0.00	0.00	0.00	0.00	0.00	10.23	0.00	0.00	0.00	10.23

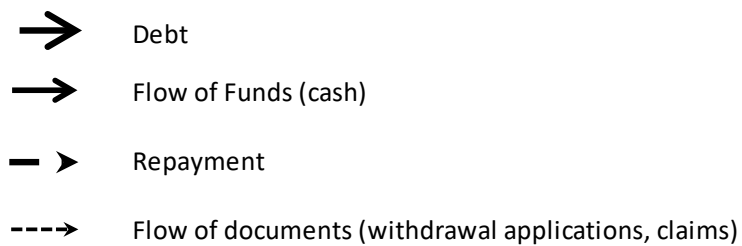
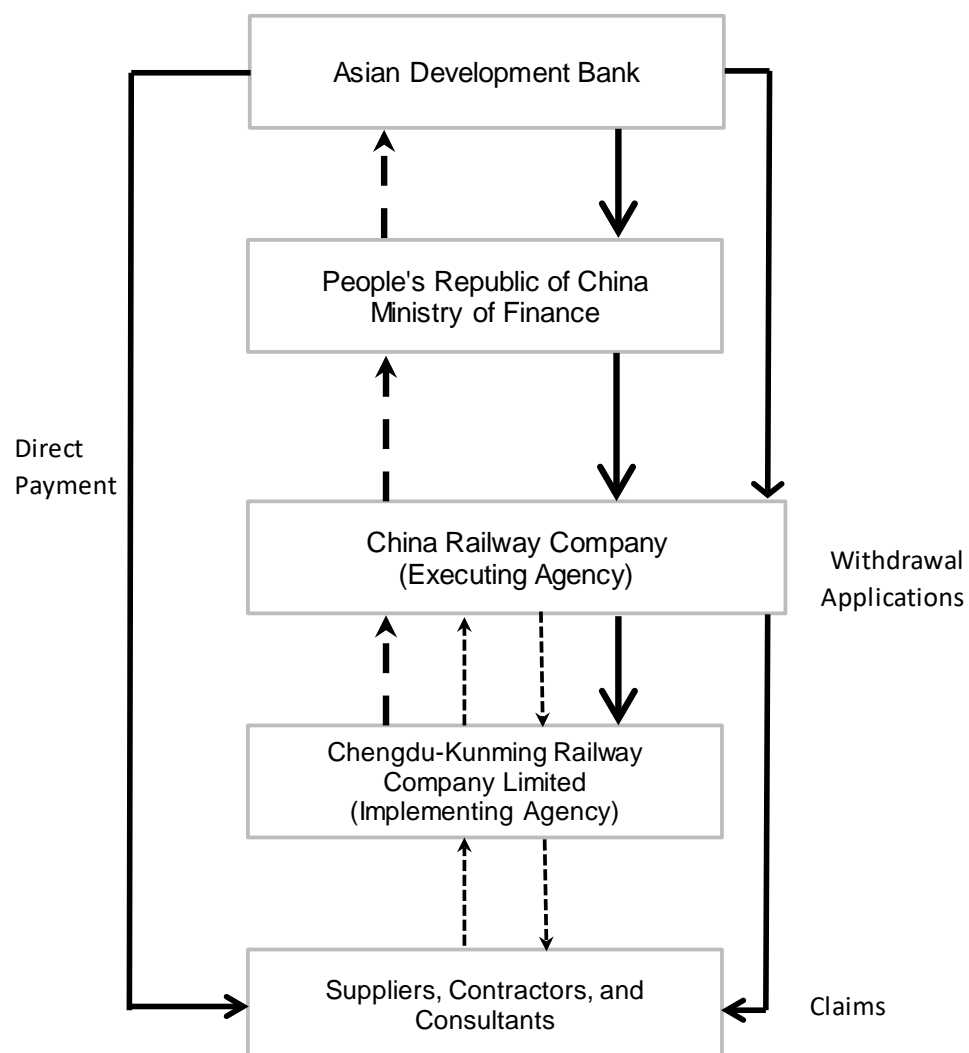
**Table 13: Project Contract Awards and Disbursement
(cumulative)**

Item	2020	2021	2022	2023	2024	2025	2026
Contract Awards	28.80	55.51	88.80	111.64	120.00	120.00	120.00
Disbursement	0.00	2.80	9.12	35.12	71.77	109.77	120.00

Figure 1: Contract and Disbursement Projections



G. Fund Flow Diagram



V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

22. The financial management assessment (FMA) was conducted in accordance with the ADB's Guidelines for the Financial Management and Analysis of Projects and the Financial Due Diligence: A Methodology Note.¹⁴ The FMA concluded that the capacity of both CRC and CKRC is adequate and the overall financial management risk is moderate. The CRC has prior and ongoing experience in implementing ADB projects and an understanding of ADB procurement, disbursement, and financial management procedures. The FMA recommended that CKRC further strengthen its financial management capability by undertaking training, particularly on ADB policy and its procedural requirements for financial management, including financial reporting and disbursement.¹⁵

B. Financial Sustainability Analysis

23. The financial analysis comprises of a fiscal sustainability analysis to assess the capacity of CRC and CKRC to provide sufficient funds for all incremental recurrent costs to be incurred by the project. The financial analysis of the project was carried out in accordance with the ADB policies and guidelines for financial analysis of projects.¹⁶ The project will not generate revenue for cost recovery because it is only part of the whole railway line. The financial analysis therefore comprises (i) projections of incremental recurrent costs, including operating and maintenance (O&M) expenditures required to ensure sustainability of the project benefits; and (ii) an assessment of CRC's capacity and the projected revenue of the railway line to finance the recurrent costs.

24. The financial sustainability analysis assesses the capacity of CRC and the projected revenues and expenditures of the railway line where the multimodal hub will be connected. CRC will be responsible for (i) counterpart funds during project implementation, (ii) servicing the ADB loan; (iii) all O&M costs for project-financed facility, and the railway maintenance equipment; and (iv) the debt service payments after project completion.

25. As the project will not generate revenue for cost recovery, the analysis focuses on the financial capacity of CRC and the projected revenue stream from the railway line to fulfill counterpart funding commitments and incremental recurrent costs. Based on the CRC's historical financial surplus and projected financial ratios, the required counterpart funding during project implementation is miniscule, and the project operation commitments are all less than 3% of projected revenue of the railway line. It is therefore concluded that the (i) financial impact to CRC's operation will be minimal; and (ii) the revenue from the railway line can contribute the required funding under the project. It is anticipated that the railway line will also provide passengers with significantly faster and better services, which may justify the future increase in fares and will likely add financial revenues to the railway line, providing additional resource mobility. The project's legal agreements will include assurances that additional resources will be made available as required.

¹⁴ ADB. 2005. *Financial Management and Analysis of Projects*. Manila.; ADB. 2009. *Financial Due Diligence: A Methodology Note*. Manila.

¹⁵ Financial Management Assessment (accessible from the list of linked documents in the RRP).

¹⁶ ADB. 2014. Financial Management, Cost Estimates, Financial Analysis, and Financial Performance Indicators. *Operations Manual*. OM G2/BP. Manila; ADB. 2009. *Financial Due Diligence: A Methodology Note*. Manila; and ADB. 2005. *Financial Management and Analysis of Projects*. Manila.

Table 14: Summary of Financial Management Capacity, Internal Control and Risk Assessment

Risks	Risk Assessment	Risk Description	Risk Mitigation Measures
Inherent Risk Assessment			
1. Entity specific risk	M	Financial management and internal control in place, but there may be a delay in withdrawal application for the ADB loan.	The EA to provide assurance that necessary control will be in place and ensure proper coordination mechanism to enhance processing of ADB's disbursement.
Control Risk Assessment			
1. Implementing Agency	M	IA's have limited familiarity and experience with ADB loan administration procedures.	Training and assistance from the EA and ADB will be provided.
2. Accounting Policies and Procedures	L	IA's lack of familiarity with the accounting and reporting requirements for ADB project, which may derail identification of issues on the use of loan proceeds.	CRC and CKRC have adopted Accounting Standards for Business Enterprises approved by the Ministry of Finance since 2007, which is consistent with international accounting standards on a project accounting level. CRC will provide guidance to CKRC covering ADB requirements.
3. Funds Flow including disbursement arrangements, use of Advance Account, SOE, & Direct Payment arrangements	L	The IA's lack of familiarity with ADB's disbursement requirements and procedures.	CRC has implemented a number of ADB Projects. Past experience has indicated that CRC has sufficient experience and capacity to handle withdrawal applications, manage the advance account and SOE. Capacity training on ADB requirements and procedures of disbursement will be provided to ensure all related staff at CKRC can understand ADB's procedures and standards in advance.
4. Staffing	L	Staff are in place and are adequately qualified but may need additional training to familiarize with ADB guidelines and policies.	Training will be provided by the EA and ADB.
5. Internal Audit	M	CKRC has no internal audit.	CRC's internal audit function will cover CKRC's operation.
6. External Audit	L	Due to the large number of ADB and World Bank projects to be audited, insufficient auditors may delay the issuance of auditors' reports.	Suggest hiring more CPAs to assist China National Audit Office in their annual audit on the project accounts.
7. Reporting and Monitoring	L		The current routine practice of reporting and monitoring at CKRC and CRC is adequate for the monitoring purposes of the project. CKRC will prepare project financial statements in accordance with Accounting Methods mandated by the Ministry of Finance. These financial statements will be submitted to CRC for review and confirmation. The audited entity financial statements of CKRC will be submitted to ADB during implementation to supplement the audited project financial statements.

Risks	Risk Assessment	Risk Description	Risk Mitigation Measures
8. Information Systems	L		CRC and CKRC use computerized accounting systems which produce financial statements automatically.
Overall Control Risk (before mitigation action)	M		Implementing the mitigation actions mentioned above will reduce the control risks from moderate to low.

ADB = Asian Development Bank, CKRC = Chengdu Kunming Railway Co., Ltd., CRC = China Railway Corporation, L = low, M = moderate, PRC = People's Republic of China, SOE = statement of expenditures.

Source: Asian Development Bank.

C. Disbursement

1. Disbursement Arrangements for ADB Funds

26. The loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time),¹⁷ and detailed arrangements agreed upon between the government and ADB. Online training for project staff on disbursement policies and procedures is available.¹⁸ Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

27. The CKRC will be responsible for (i) collecting supporting documents and (ii) preparing and sending withdrawal applications through CRC to ADB.

28. **Advance fund procedure.** To facilitate project implementation and funds flow, an advance account may be set up in a commercial bank upon loan effectiveness. The account will be in US Dollar and will be managed by the CRC. The advance account is to be used exclusively for ADB's share of eligible expenditures. The CRC who established the advance account in its name is accountable and responsible for proper use of advances to the advance account. The total outstanding advance to the advance account should not exceed the estimate of ADB's share of expenditures to be paid through the advance account for the forthcoming 6 months. The government may request for initial and additional advances to the advance account based on 6 months estimated expenditures to be financed through the advance account. The advance account will be established, managed, and liquidated in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) and detailed arrangements agreed by the Government and ADB. ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) describes which supporting documents should be submitted to ADB and which should be retained by the Government for liquidation and replenishment of an advance account.

29. **Statement of expenditure procedure.**¹⁹ Statement of expenditures may be used for liquidation and replenishment of the advance account and to reimburse eligible expenditures for any individual payment not exceeding \$100,000 equivalent to expedite fund flows. Payments in excess of the statement of expenditures ceiling will be reimbursed, liquidated, or replenished based on the full supporting documentation process. Statement of expenditure records should be maintained by CRC and made readily available for review by ADB's disbursement and review mission or upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit.

30. Before the submission of the first withdrawal application, the borrower should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is stipulated in the *Loan Disbursement Handbook* (2017, as amended from time to time). Individual payments below this amount should generally be paid (i) by the EA/IA and subsequently claimed to ADB through reimbursement, or (ii) through the advance fund procedure, unless otherwise accepted by ADB. The borrower should ensure sufficient category and contract balances before requesting disbursements. Use of ADB's Client Portal for Disbursement (CPD)²⁰ system is encouraged for submission of withdrawal applications to ADB.

¹⁷ Available at: <http://www.adb.org/documents/loan-disbursement-handbook>.

¹⁸ Disbursement eLearning. http://wpqr4.adb.org/disbursement_elearning.

¹⁹ SOE forms are available in Appendix 7B and 7D of ADB's *Loan Disbursement Handbook* (2017, as amended from time to time).

²⁰ The CPD facilitates online submission of WA to ADB, resulting in faster disbursement. The forms to be completed by the Borrower are available online at <https://www.adb.org/documents/client-portal-disbursements-guide>.

2. Disbursement Arrangements for Counterpart Fund

31. Counterpart funds will come from the EA and IA. The EA will provide \$34.03 million to cover financing charges during implementation, the taxes and duties of the civil works and equipment financed by ADB, and any additional contingencies. The EA thru the IA will contribute \$271.78 million to finance civil works; maintenance equipment; environmental management and monitoring; surveys, design, and supervision; taxes and duties of the civil works and procured equipment; and contingencies. The EA and the implementing agencies will timely provide counterpart funds for civil works; goods; design, procurement and supervision; land acquisition and resettlement; environmental protection; and contingencies as specified in the loan and project agreements and will disburse counterpart funds to contractors, suppliers, service providers, and people affected by land acquisition and resettlement.

D. Accounting

32. The CKRC should maintain project accounts and have them audited. The CKRC should submit project financial statements in accordance with the Government's accounting laws and regulations which are consistent with international accounting principles and practices. The audited entity financial statements of CKRC will be submitted to ADB during implementation to supplement the audited project financial statements.

E. Auditing and Public Disclosure

33. The CRC through the CKRC will cause the project financial statements to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB. The audited project financial statements will be submitted in the English language to ADB within six months of the end of the fiscal year by the CKRC.

34. The annual audit report for the project accounts will include an audit management letter and audit opinions which cover (i) whether the project financial statements present a true and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting framework; (ii) whether loan proceeds were used only for the purposes of the project; (iii) compliance with financial covenants, where applicable. The audited financial report should cover the complete project funding and expenditure, including the provision of counterpart funding from CRC/CKRC.

35. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

36. The CRC and CKRC have been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.²¹ ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

37. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Access to Information Policy.²² After review, ADB will disclose the audited project financial statements and the opinion of the auditors on the financial statements no later than 14 calendar days of ADB's confirmation of their acceptability by posting them on ADB's website. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

38. All advance contracting and retroactive financing will be undertaken in conformity with ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower, CRC, and CKRC have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

39. **Retroactive financing.** Retroactive financing could only apply to the equivalent of 20% of the total ADB loan, with respect to expenditures incurred during loan effectiveness but not more than 12 months before the signing of the Loan Agreement. The contract proposed for advance contracting and retroactive financing is shown in the procurement plan (Appendix 1).

B. Procurement of Goods, Works, and Consulting Services

40. Procurement (civil works and equipment) to be financed by ADB will follow ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

41. For open competitive bidding, ADB and the government will review the public procurement laws of the central and state governments before the start of any procurement, to ensure consistency with ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The first draft

²¹ ADB Policy on delayed submission of audited project financial statements:

- (i) When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue; and (b) if they are not received within the next six months, requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- (ii) When audited project financial statements have not been received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions; and (b) advise that the loan may be suspended if the audit documents are not received within the next six months.
- (iii) When audited project financial statements have not been received within 12 months after the due date, ADB may suspend the loan.

²² Access to Information Policy: <https://www.adb.org/documents/access-information-policy>.

English language of the procurement documents (bidding documents, and draft contract) should be submitted for ADB approval regardless of the estimated contract amount. Subsequent procurements will be reviewed based on the review type defined in the procurement plan.

42. **Market Assessment.** For Works, national advertisement will follow as local contractors have demonstrated access to materials, machinery, labor, technical expertise, and finance. For Goods, international advertisement will follow to ensure that enough suppliers, with adequate financial and resources capacity, are sufficiently interested in the contracts to provide a competitive bidding. It is also intended to attract international suppliers capable of providing advanced technology.

43. **Eligibility.** The Government-owned enterprises in the borrower's country may participate as a bidder only if they can establish that they (i) are legally and financially autonomous; (ii) operate under commercial law; and (iii) are not dependent agencies of the borrower or sub-borrower.

44. An 18-month procurement plan indicating threshold and review procedures, civil works, and goods contract packages, and national competitive bidding guidelines is in Appendix 1.

45. The procurement guidelines and resources are as follows:

Reference Guide	url
ADB Procurement Policy	https://www.adb.org/documents/adb-procurement-policy
Procurement Regulations for ADB Borrowers	https://www.adb.org/documents/procurement-regulations-adb-borrowers
Project Administration Instructions	http://www.adb.org/documents/project-administration-instructions
Anticorruption Policy	http://www.adb.org/documents/anticorruption-policy
How to report fraud and corruption	http://www.adb.org/site/integrity/how-to-report-fraud-old

Source: Asian Development Bank.

VII. SAFEGUARDS

46. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows:²³

47. **Environment (category B).** The project is classified category B for environment, which mainly reflects the environmental impact associated with the construction of Xichang multimodal passenger station. The initial environmental examination (IEE) complies with ADB's policies and requirements, including ADB's Safeguard Policy Statement (2009), and identifies potential adverse impacts. During construction, such risks would include (i) soil erosion; (ii) construction noise and dust affecting local residents; (iii) inappropriate storage of construction materials and wastes; and (iv) safety to construction workers. During operation, limited adverse impacts are anticipated except for noise due to increased travelers. The IEE concludes that those impacts can be mitigated through the implementation of the environmental management plan, which specifies mitigation measures, monitoring requirements, and institutional responsibilities for ensuring proper environmental management throughout the project's construction and operation. The EA has considerable experience with previous ADB and World Bank projects. Both EA and IA are committed to managing the identified environmental risks and have agreed on a comprehensive set of mitigation measures and a training program with a strong emphasis on environment safeguards. The IEE will be posted on ADB website. Environment safeguard documents were disclosed to the affected people. Potential environmental complaints or disputes will be handled in accordance with the grievance redress mechanism established for the project. A rapid climate

²³ ADB. Safeguard Categories. <https://www.adb.org/site/safeguards/safeguard-categories>.

risk assessment concludes that climate risk is *medium*, and the most significant risk to the project areas and their vicinities relates to flood. During the detailed engineering designs of the station, flood risk will be incorporated by ensuring sufficient drainage system at Xichang multimodal hub.

48. **Involuntary resettlement (category B).** For output 1, a total of 530 *mu* of collective land was acquired for the construction of the Xichang multimodal hub, affecting 45 households with 187 persons.²⁴ The total cost of land acquisition and resettlement was CNY38.7 million. A social compliance audit report was prepared in accordance with ADB's Safeguard Policy Statement.²⁵ Furthermore, a Resettlement Due Diligence Report for associated facilities (the E'mei–Miyi Main Rail Line from E'meishan City to Miyi County) was prepared.²⁶ The two reports include a corrective actions plan with time-bound actions to address the remaining resettlement issues. The implementing agency is committed to monitor and work closely with the relevant government agencies to manage resettlement issues. The executing agency will engage an external monitor for semiannual monitoring and reporting. Public consultations were undertaken during project preparation and will continue throughout the project cycle. A grievance redress mechanism has been established to address affected peoples' concerns and suggestions. Output 2 involves the procurement of maintenance equipment and therefore has no land acquisition and resettlement issues.

49. **Indigenous peoples (category C).** There are no ethnic minority communities that will be adversely affected by the project.

50. **Prohibited investment activities.** Pursuant to ADB Safeguard Policy Statement (SPS) (2009), ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the Safeguard Policy Statement (2009).

VIII. GENDER AND SOCIAL DIMENSIONS

51. **Poverty and social.** The causes of poverty include (i) low profits from local products because of lack of market access and local processing of agricultural products, (ii) lack of local nonfarm employment opportunities, (iii) insufficient access to health care, (iv) vulnerability to climate change and other environmental degradation; and (v) lack of access to credit and other social services. The project will improve maintenance and reliability of higher-speed railway operations that provide access to regional markets, thereby increasing profit margins and raising rural incomes.

52. **Project beneficiaries.** The project has the potential to benefit people in the project area through (i) employment during project construction and operation; (ii) improved access to markets, transport, and other services through the larger railway line development; and (iii) integration of the project area with regional trade and commerce. Rural households will increase and diversify their agricultural production to include more market-oriented agriculture because of expanded access to markets and the ability to move bulk goods, improving their quality of life thanks to better access to goods, services, and social infrastructure at less cost. Travel time to destinations along the Chengdu-Kunming railway line will be reduced significantly.

53. **Gender.** The project is categorized as having some gender elements. Women in the project areas have differentiated transport needs arising from their combined engagement in productive activities, and caring roles such as travelling with children and the elderly. These gendered roles result in specific mobility patterns and accessibility issues. Women also tend to have higher concerns for personal safety when using public transportation. To address women's

²⁴ A *mu* is a Chinese unit of measurement (1 *mu* = 0.067 square meters).

²⁵ Social Compliance Audit Report (accessible from the list of linked documents in Appendix 2 of the RRP).

²⁶ Resettlement Due Diligence Report (accessible from the list of linked documents in Appendix 2 of the RRP).

specific transportation needs, the project incorporates distinctive gender-sensitive design, including improved safety features such as lighting and CCTV in waiting areas and around hubs, universal design to facilitate accessibility of people using mobility aids, strollers, and those helping others, and improved signage in and around hubs for the easy location of reserved seating, baby care rooms, toilets, and lockers. The project expects that these measures will enhance the level of satisfaction, comfort and safety of women when using public transportation. The project has also set targets to contribute to women's economic empowerment through employment during construction and for the operation of the hub. Targets have also been set to ensure women railway staff actively participate in technical training and update their knowledge and skills on new railway maintenance approaches, increasing their employability and chances for career progression.

54. Women will be equal beneficiaries of the project. Increased job opportunities created during construction and operation will provide potential new sources of income for women. Increase in female participation in the labor market through improved mobility increases women's net income and savings, improves overall family welfare, and helps improve women's status.

55. Activities outlined in the gender action plan (GAP) therefore focus on (i) ensuring women's equitable participation in the project including public consultation; (ii) implementing gender-responsive features of the project; (iii) promoting employment and income generation opportunities for women; and (iv) increasing the capacity and technical skills for hub management among CRC and CKRC female staff. Key GAP performance indicators are incorporated into the project outputs in the project design and monitoring framework. The GAP is provided below.

Action	Indicator	Responsible for Institution
1. Incorporate social and gender-responsive features into the design of multimodal hub	(i) Special facilities, especially for people with special needs ¹ , including reserved seating areas, baby care room, and security check channel for women only, toilets and locker room constructed; (ii) Installation of safety facilities such as appropriate lighting, CCTV cameras and monitoring in the multimodal hub including waiting areas applied; (iii) Clear information and well-located signage installed.	CRC, CKRC, design institutes, WF
2. Promote women's participation	(i) At least 30% local women to participate in consultation meetings of design of the station.	CRC, CKRC, design institutes, WF
3. Improve women's employment opportunities	(ii) At least 20% of unskilled construction jobs to be provided to women on priority; and (iii) Among about 100 new staff to be recruited for operation of the hub, at least 30% to be provided to women.	CRC, CKRC, WF, Construction Contractors
Increase female staff's capacity	(iv) At least 30% of female staff to be included in appropriate training events (e.g. at least 30 female staff of 100 staff in total to receive training on maintenance systems).	CRC, CKRC,

CRC = China Railway Corporation, CKRC = Chengdu-Kunming Railway Company Limited, GAP = Gender action plan, WF = women federation.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

A. Project Design and Monitoring Framework

Impact the project is aligned with			
Sustainable railway system in South Western PRC developed (Railway Development Plan, Thirteenth Five-Year Plan, 2016–2020). ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Integrated, energy efficient and sustainable railway corridor in Sichuan province developed	By 2027 a. Passenger volume through Xichang increased to 2.85 million per year (2017 baseline: 1.77 million per year) b. Number of pairs passenger trains stopping in Xichang increased to 35 (2017 baseline: 10) c. Maintenance manpower requirement per km of track reduced by 50% (2017 baseline: track tamping requires 1 person per hour for every 50 meters of track) d. Response time for rescue operations reduced by 20% (2017 baseline: Average response time is 30 minutes)	CRC and CKRC statistics	Limited integration of the hub with existing and planned urban transport infrastructure.
Outputs 1. Multimodal Hub developed	By 2026 1a. New Xichang railway station with bus terminal and other facilities constructed (2017 baseline: 0) 1b. Enhanced personal safety features such as appropriate lighting, CCTV cameras and monitoring in the multimodal hub including waiting areas applied (2017 baseline: 0) 1c. Disability and elderly-friendly access features (e.g. ramps, escalators, elevators) constructed (2017 baseline 0)	1a-1d. Project progress reports, Consultant Reports and review missions	Delay in construction of the Chengdu–Kunming Railway line could lead to delays in the construction of the multimodal hub.

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
2. Railway maintenance improved	<p>1d. Facilities addressing the needs of women travelling with babies such as appropriate access to childcare or nursery or baby changing facilities, reserved seating and waiting areas constructed (2017 baseline: 0)</p> <p>2a. Railway maintenance equipment procured (2017 baseline: 0)</p> <p>2b. 100 staff (out of which women staff - 30) of CRC including from CRB trained in railway maintenance (2017 baseline: 0)</p>	2a-2b. Project progress reports, Consultant Reports and review missions	
Key Activities with Milestones <p>1. Multimodal hub developed</p> <p>1.1. Develop detailed design (Oct 2018–Oct 2019)</p> <p>1.2. Monitor the implementation of corrective actions related to land acquisition and resettlement (ongoing up to December 2024)</p> <p>1.3. Procurement of civil works for the multimodal hub (Jul 2019–Dec 2019)</p> <p>1.4. Construction of hub (Jan 2020–Dec 2023)</p> <p>2. Railway maintenance improved</p> <p>2.1. Analyze requirements to enhance railway maintenance (Apr 2019–Mar 2020)</p> <p>2.2. Develop technical specifications (Jan 2020–Dec 2020)</p> <p>2.3. Procure and install equipment and related systems (Apr 2020–Sep 2025)</p> <p>2.4. Commissioning and usage of equipment (Apr 2021–Sep 2026)</p> <p>2.5. Provide training (Oct 2020–Jul 2025)</p>			
Project Management Activities <p>Annual review missions</p> <p>Project completion</p>			
Inputs <p>Ordinary Capital Resources: \$120,000,000</p> <p>Government of the People's Republic of China: \$305,810,000</p>			
Assumptions for Partner Financing <p>Not applicable.</p>			

CCTV = closed-circuit television, CKRC = Chengdu–Kunming Railway Company Limited, CRB = Chengdu Railway Bureau, CRC = China Railway Corporation, PRC = People's Republic of China.

^a Government of the PRC, National Development and Reform Commission. 2015. *Outline of the Thirteenth Five-Year Plan for National Economic and Social Development of the People's Republic of China, 2016–2020*. Beijing (adopted in 2016); and Government of the PRC. 2016. *Medium- and Long-Term Railway Network Plan*. Beijing.

Source: Asian Development Bank.

B. Monitoring

56. **Project performance monitoring.** Within 3 months of loan effectiveness, the EA with support from the IA will establish a project performance monitoring system (PPMS). The PPMS will monitor the following:

- (i) **Project progress.** The EA will monitor on a yearly basis data corresponding to the indicators and targets set in the design and monitoring framework. The indicators will be submitted as part of the semi-annual progress reports to ADB. They will provide information necessary to update ADB's PPMS.
- (ii) **Component progress.** Information on the progress of each component under outputs 1 and 2 will be monitored by the IA and reported to the EA; information includes (a) baseline social data; and (b) procurement, physical, and financial progress. The EA will update the information on a semi-annual basis and report in the semi-annual progress reports. Within 6 months after the completion of a subproject, the EA will update social data, finalize physical and financial information, and reevaluate economic benefits based on new traffic count results.

57. **Compliance Monitoring.** The EA and IA will submit reports and information to ADB concerning the use of the loan proceeds, project implementation, project implementation performance, and compliance of loan and project covenants.²⁷ These reports will include (i) semiannual progress reports on project implementation; and (ii) midterm adjustment report, and (iii) a project completion report, which should be submitted not later than three months after the completion of the project facilities. The compliance status of loan and project covenants will be reported and assessed through the quarterly progress report. ADB review missions will verify status.

58. **Safeguards Monitoring.** CRC shall ensure that the railway line fully complies with the applicable PRC laws, regulations, standards, and approval requirements of the environmental impact report which is equivalent to the ADB's Safeguard Policy Statement (2009). CRC shall ensure any grievance related to the railway to be adequately addressed under the PRC laws and regulations. The compliance status of such safeguard issues will be monitored and reported in the semi-annual progress report. In addition, the executing agency will engage an external monitor for semiannual LAR monitoring until December 2023. The external monitoring reports will be submitted to ADB and disclosed to the public. During construction of the railway line, the environment and land acquisition and resettlement impacts, if any, will also be monitored and reported in the semi-annual progress report.

C. Evaluation

59. ADB, EA, and IA will undertake a semiannual review mission to evaluate the progress of project implementation. ADB, EA and implementing agencies will undertake a comprehensive midterm review three years after the start of project implementation to have a detailed evaluation of the scope, implementation arrangements, achievement of scheduled targets, and progress on the agenda for policy reform and capacity building measures. Feedback from the PPMS activities will be analyzed. Within three months of physical completion of the project, the IA will submit a project completion report to ADB.²⁸

²⁷ Loan and Project Agreements (accessible from the list of linked documents in the Report and Recommendation of the President to the Board of Directors).

²⁸ Project completion report format available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>.

D. Reporting

60. The EA will provide ADB with (i) semi-annual progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets; (b) key implementation issues and solutions; (c) updated procurement plan; and (d) updated implementation plan for the next 12 months; and (iii) a project completion report within 6 months of physical completion of the project. To ensure that projects will continue to be both viable and sustainable, project accounts and the project audited financial statement together with the associated auditor's report should be adequately reviewed.

E. Stakeholder Communication Strategy

61. Project information will be communicated through public consultation meetings, interviews, focus group discussions and, information will be disclosed on ADB's and government's website, in accordance with ADB's requirements of public communications policy. Consultations with communities have taken place and will continue through the project implementation. Special attention will be paid for women's participation including other vulnerable groups, such as the poor during further consultation.

X. ANTICORRUPTION POLICY

62. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.²⁹ All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the EA and all project contractors, suppliers, consultants, and other service providers. Individuals and/or entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.³⁰

63. To support these efforts, relevant provisions are included in the loan agreement, and the bidding documents for the project. ADB's Anticorruption Policy (1998, as amended to date) will be explained to and discussed with EA and the IA. Consistent with its commitment to good governance, accountability and transparency, ADB reserves the right to investigate any alleged corrupt, fraudulent, collusive, or coercive practices relating to the project. To address the risks on governance and corruption related to procurement of equipment, relevant provisions of ADB's Anticorruption Policy will be included in the loan agreement and the bidding documents for the project. In particular, all contracts financed by ADB in connection with the project will include provisions specifying the right of ADB to audit and examine the records and accounts of EA and the IA, contractors, suppliers, consultants, and other service providers as they relate to the project. The EA has indicated its commitment to promote good governance and establish a corruption-free environment under the project. Further to this, a number of good governance and anticorruption provisions have been included in the loan and project agreements.

XI. ACCOUNTABILITY MECHANISM

64. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's

²⁹ Anticorruption Policy: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

³⁰ ADB's Integrity Office web site: <http://www.adb.org/integrity/unit.asp>

operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make a good faith effort to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, they should approach the Accountability Mechanism.³¹

XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

65. The PAM is a living document and is subject to change after ADB Board approval of the project's report and recommendation of the President. It is concise yet informative, providing checklists of all activities related to project implementation along with the necessary procedures for the project management office's to effectively implement and monitor the project.

No.	Changes/Updates	Date	Remarks
1	PAM initial draft agreed	25 May 2018	Agreed during the loan fact finding mission
2	Updated PAM agreed	24 October 2018	Agreed during the loan negotiation
3	Updated PAM	24 April 2019	Before loan approval

³¹ For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

PROCUREMENT PLAN

Basic Data	
Project Name: Multimodal Passenger Hub and Railway Maintenance Project	
Project Number: 42019-014	Approval Number: tbd
Country: People's Republic of China	Executing Agency: China Railway Corporation
Project Procurement Classification: Category B	Implementing Agency: Chengdu-Kunming Railway Company Limited
Procurement Risk: Low	
Project Financing Amount: US\$ 425,810,000 ADB Financing: US\$ 120,000,000 Cofinancing (ADB Administered): N/A Cofinancing (subject to APA): N/A Non-ADB Financing: US\$ 305,810,000	Project Completion Date: 30 September 2026 Project Closing Date: 31 March 2027
Date of First Procurement Plan: 25 May 2018	Date of this Procurement Plan: 6 May 2019
Procurement Plan Duration: ____ months	

A. Methods, Review and Procurement Plan

Except as the Asian Development Bank (ADB) may otherwise agree, the following methods shall apply to procurement of goods, works and consulting services.

Procurement of Goods and Works		
Method	Threshold	Comments
Open Competitive Bidding (OCB) for Works	As per PPRA	National advertising is envisaged
RFQ for Works	As per PPRA	Up to US\$99,999
Open Competitive Bidding for Goods	As per PPRA	International advertising is envisaged
Open Competitive Bidding for Goods	As per PPRA	
RFQ for Goods	As per PPRA	Up to US\$99,999

Consulting Services	
Method	Comments

B. List of Procurement Packages (Contracts)

The following table lists goods, works and consulting services contracts for which the procurement activity is either ongoing or expected to commence within the procurement plan duration and over the life of the project (i.e. those expected beyond the current period).

Goods and Works							
Package Number	General Description	Estimated Value	Proc. Method	Review	Bidding Procedure	Adv Date	Comments
CW 1	Xichang West Multimodal Hub	28,800,000	OCB National Advertising (OCB NA)	Prior	1S1E	Q3 2019	Advance contracting
EQ-1 Lot TF-1 Lot TF-2 Lot TF-3 Lot TF-4 Lot TF-5	Transport Facilities Three platform hi-speed tunnel inspection vehicle 270 kw rail car 300 kw rail car 1,000 kw electrical car rail Accident relief commanding vehicle	26,708,713 9,169,181 7,752,126 4,647,108 4,584,590 555,708	OCB International Advertising (OCB IA)	Prior	1S1E	Q2 2020	
EQ-2 Lot LS-1 Lot LS-2 Lot LS-3	Large-scale Maintenance Machine Continuous three sleeper tamping vehicle Fast rail change car Dual power grinding vehicle	29,869,302 16,671,238 3,334,248 9,863,816	OCB IA	Prior	1S1E	Q3 2020	
EQ-3	Maintenance Tools <i>Including: (1) Hydraulic drilling machine, (2) vertical grinding machine, (3) small track grinding machine</i>	3,417,604	OCB IA	Prior	1S1E	Q2 2021	
EQ-4 Lot IM-1 Lot IM-2 Lot IM-3 Lot IM-4 Lot IM-5 Lot IM-6	Inspection Machine Track Maintenance Inspection Machine <i>Including: (1) Fast rail measuring machine, (2) Laser holographic imaging system for tunnels, (3) Corrugated wear inspection car</i> Defects Detection Machine <i>Including: (1) Eddy current inspection vehicle, (2) Handheld eddy current scanner</i> Level 0 track inspection car Profile Measuring Machine (Profiler) Large scale maintenance machine malfunction and dynamic and visible inspection system Bridge and Tunnel Inspection Machine <i>Including: (1) Mobile underwater topographic survey system, (2) Sallow water wave detection system, (3) Wireless bridge vibration detection system, (4) Hi-definition</i>	13,641,242 6,585,140 2,199,215 1,214,222 1,528,197 555,708 1,558,760	OCB IA	Prior	1S1E	Q3 2021	

Goods and Works							
Package Number	General Description	Estimated Value	Proc. Method	Review	Bidding Procedure	Adv Date	Comments
	<i>measurement robot, (5) GRS comprehensive measuring system, (6) Multi-channel dynamic and static strain gauge, (7) Concrete perspective instrument</i>						
EQ-5	Locomotive Maintenance Machine	9,169,181	OCB IA	Prior	1S1E	Q2 2022	
Lot LM-1	Rescue crane	9,169,181					
EQ-6	Power Supply Maintenance Equipment	8,363,404	OCB IA	Prior	1S1E	Q3 2023	
Lot PS-1	Catenary (OHE) inspection vehicle	4,084,453					
Lot PS-2	Catenary (OHE) operating vehicle	3,584,316					
Lot PS-3	Aerial operating vehicle	694,635					

Consulting Services							
Package Number	General Description	Estimated Value	Selection Method	Review	Type of Proposal	Advertisement Date	Comments
None							

C. List of Awarded and Completed Contracts

The following table lists the awarded contracts and completed contracts for goods, works, and consulting services.

Goods, Works, and Consulting Services					
Package Number	General Description	Contract Value	Date of ADB Approval of Contract Award	Date of Completion	Comments

D. Non-ADB Financing

The following table lists goods, works, and consulting services contracts over the life of the project, financed by Non-ADB sources.

Goods, Works, and Consulting Services				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement / Selection Method	Comments
External Monitor - Resettlement	-	-	Gov't Procedure	National Government-Financed (100%)