

**The People's Republic of China  
Luoyang Metro Project (18CN02)  
Project Performance Evaluation  
Approach Paper**

Independent Evaluation Office

September 2023

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**ABBREVIATIONS and ACRONYMS**

CNY	Chinese Yuan
IEO	Independent Evaluation Office
LRTC	Luoyang Rail Transit Corporation
NDB	New Development Bank
PCR	Project Completion Report
PIA	Project Implementation Agency
PRC	People's Republic of China
USD	United States Dollar

## **I Background**

1. In line with the Evaluation Policy of the New Development Bank (NDB), the Independent Evaluation Office (IEO) conducts project evaluations of a number of NDB-financed operations every year.
2. In general, the main objectives of independent project evaluations are to (i) assess the results and impact of the project; (ii) generate findings and recommendations for the design and implementation of ongoing and new operations in the country; and (iii) identify issues of corporate, operational and strategic interest that may merit future evaluative work.
3. As decided by the NDB Board of Directors, the Luoyang Metro Project in the Henan Province in the People's Republic of China (implemented from 2017 to 2021) has been selected for a project evaluation to be undertaken by IEO in 2023. This approach paper presents the overall design of this project evaluation, including the evaluation objectives, methodology, key evaluation questions, process and timeframe. The evaluation framework in annex I presents a summary of the evaluation criteria and the key questions that will be used in conducting this evaluation.

## **II Project Overview**

### **2.1 Country and Local Context**

4. Since opening up and launching of the reform policy in 1978, there have been significant improvements in economic and social development in China. This includes increased access to health and education and more than 800 million people have been lifted out of poverty. As the third most populous province in China, Henan has over 99.37 million inhabitants and the Gross Domestic Product (GDP) of Henan accounts for 5.07% of China's GDP in 2022, ranking first among the landlocked provinces.
5. Luoyang is situated in the western part of Henan Province, about 138 Km away from Zhengzhou, the capital city of Henan. The urban area population is 2.39 million in 2020. Urbanization has brought notable challenges to the existing transport infrastructure in the city, including inadequate connectivity in the city and an unfavorable transportation environment for the citizens.

### **2.2 Project Objectives**

6. The objective of the project is - through financing the construction of the first urban metro line (Line 1) in Luoyang - to provide a safe, reliable and comfortable means of transport for the commuters in the city. It is expected that the project would connect the residential areas to the city center of Luoyang and provide easy access to public services, business, commercial centers and cultural sites. To achieve this, the project was expected to achieve the following outcomes: (i) increased transport capacity, thus easing congestion on existing roads; (ii) faster commute and improved mobility; (iii) enhanced comfort, safety and

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reliability of traffic in the city; (iv) improved connectivity contributing to a balanced city spatial development; and (v) more robust socio-economic development of Luoyang.

### 2.3 Project Components

7. The project was structured around three components outlined below:
  - i) **Component 1: Construction of Line 1 (construction of stations and boring of tunnels).** This component was financed by non-NDB funds. It covered the construction of Line 1 from Gushuixi Station to Wenhuaajie Station (about 22.34 km), including all the 18 underground stations, one depot, one parking yard, tracks and tunnels. Component 1 will be financed entirely by funds from non-NDB sources – commercial bank loans and/or Government of Henan contribution. At project design, it was estimated that USD 1,125.68 million would be spent on this component, accounting for 40.6% of the total project cost.
  - ii) **Component 2: Equipment for Line 1 (purchase and installation of equipment such as train sets, power lines, signalling, communication, fare collection, etc.).** This component was mainly financed by the NDB loan and included the purchasing and installation of the equipment for the operation of Line 1. The initial proposed project cost for this component was USD 675.81 million, constituted 24.3% of the total project cost.
  - iii) **Component 3: Design, construction management and technical assistance (consultancy for project documents, reports, approvals, staff and management training, and research).** This component focused on capacity-building activities to ensure staff would be properly trained and would be qualified for the operation of Line 1 and other future lines in the city. At the design phase, it was estimated that USD 497.7million from non-NDB funds would be allocated to this component, accounting for 17.9% of the total project cost.

### 2.4 Project Financing

8. The total cost of the project was estimated at USD 2,775.7 million at project design, to which NDB contributed USD 300 million, representing 10.81% of the total cost. The NDB financing was in the form of Sovereign Project Loan, with a maturity of 22 years including a grace period of 4 years.
9. The other sources of the project financing included: (i) USD 1,311 million equivalent of financing from commercial banks (i.e. the Agricultural Bank of China, the Bank of China); and (ii) USD 1,164 million equivalent of financing from the local government. The People's Government of Henan also committed to fund cost overruns, if any, through additional equity contribution and/or through additional debt from banks/financial institutions. The total project financing is shown in table 1 below.

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**Table 1. Total project cost <sup>1</sup>**

	Amount in CNY (In million)	Amount in USD (In million)	% of Total Financing Required
<b>Component 1: Construction of Line 1</b>	<b>7,348.46</b>	<b>1,125.68</b>	<b>40.6%</b>
Station	3,629.52	555.99	20.0%
Tunnel	2,330.56	357.01	12.9%
Track	509.52	78.05	2.8%
Depot	702.47	107.61	3.9%
Operation Buildings	176.40	27.02	1.0%
<b>Component 2: Equipment for line 1</b>	<b>4,411.68</b>	<b>675.81</b>	<b>24.3%</b>
Rolling stock	897.00	137.41	5.0%
Communication system	355.00	54.38	2.0%
Signal system	324.78	49.75	1.8%
Power supply	1,327.61	203.37	7.3%
Monitoring System (incl. environment)	226.40	34.68	1.2%
Safety/Security/Civil Air-Defense	150.53	23.06	0.8%
Ventilation/AC	218.29	33.44	1.2%
Water supply/Sewerage/Fire protection	131.50	20.14	0.7%
AFC	185.88	28.47	1.0%
Depot equipment	305.32	46.77	1.7%
Station auxiliary equipment	289.36	44.33	1.6%
<b>Component 3: Land acquisition &amp; consultancy</b>	<b>3,244.85</b>	<b>497.07</b>	<b>17.9%</b>
Land acquisition	1,348.11	206.51	7.4%
Pre-stage work, Design, Survey, Revisions, Capacity building	1,896.75	290.56	10.5%
<b>Total Baseline Costs (excluding contingencies)</b>	<b>15,005.00</b>	<b>2,298.56</b>	<b>82.8%</b>
Contingencies	1,410.80	216.12	7.8%
<b>Total Project Costs (including contingencies)</b>	<b>16,415.80</b>	<b>2,514.67</b>	<b>90.6%</b>
Interest during construction	1,689.88	258.87	9.3%
Initial working capital	13.80	2.11	0.1%
<b>Total Financing Required</b>	<b>18,119.48</b>	<b>2,775.66</b>	<b>100.0%</b>

<sup>1</sup> The table is retrieved from the Project Document to the Board on A Proposed Loan of USD300 million for the Luoyang metro project to the People's Republic of China (NDB, 2018).

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10. **Project timeline.** The construction of Luoyang Metro Line 1 was started at the end of June 2017. The NDB loan to finance the Luoyang Metro Project was approved by NDB Board of Directors on July 20, 2018. The loan agreement was signed on August 16, 2018 and entered into force on October 15, 2018. The project was completed on March 28, 2021, nine months earlier than the original completion date (December 31, 2021). The closing date of the project is August 15, 2022. At the time of project completion, the disbursement rate was 100% of the NDB loan.
11. **Implementation arrangements.** At project appraisal, a two-level institutional structure has been proposed for the management and implementation of the Project by the People's Government of Luoyang. The overall responsibility of project management and coordination was entrusted to the Luoyang Urban Rail Construction Command Office) - an entity which was jointly established by concerned government agencies both at the municipal and district level. For project execution, the Luoyang Rail Transit Corporation (LRTC) served as the project implementation agency (PIA), which was responsible for the daily management of project preparation and implementation, including procurement, counterpart fundraising, project construction and completion acceptance, operation and maintenance, financial management, fiduciary compliance, monitoring and evaluation, resettlement and social and environmental safeguards.
12. **Supervision arrangements.** The project was directly supervised by NDB. During the implementation cycle, a total of three supervision missions were undertaken by NDB Operations Department in April 2021, June 2021<sup>2</sup>, and April 2022<sup>3</sup>, respectively.
13. The Project Completion Report (PCR) is under preparation and should be available in the near future. IEO believes that the lack of availability of the PCR is not a constraint in conducting the independent evaluation at this point in time, as ample secondary data, documentation and reports are available on the project to facilitate a robust independent assessment. Moreover, IEO has recently successfully completed NDB-financed project evaluations in India and South Africa, and in these cases as well, the corresponding PCRs were not available at the time of the IEO evaluation. Using a combination of evaluation instruments - including techniques of triangulation, project site visits, interviews with key informants, analysis of secondary data and others - has allowed IEO to build experience and expertise in conducting credible evaluations in the absence of PCRs.
14. **Amendments to the loan agreement.** One amendment to the Loan Agreement was made with reference to Schedule III (B) on the Project Financing Plan in May 2020. Specifically, the terms of allocation of loan and expenditure categories (basis for disbursement) was amended, ensuring that 100% of the contract price should include taxes and duties.

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<sup>22</sup> Environmental and Social Implementation Review Mission (21-25 April 2021).

<sup>3</sup> A virtual mission was carried out on April 27, 2022, due to the travel constraints during the COVID pandemic.

### III Project Evaluation

#### 3.1 Objectives and Scope

15. **Evaluation objectives.** The main objectives of this evaluation are to: (i) provide an independent assessment of the overall results and impact of the Luoyang Metro Project; and (ii) generate findings and recommendations to guide the Government and NDB for the ongoing and future investment on urban development and transportation in the People's Republic of China.
16. **Scope.** This project evaluation would assess the full spectrum of project activities, with a focus on the activities financed through the NDB loan. In this regard, key evaluation questions that will be addressed by the evaluation may be seen in the evaluation framework in annex I. As a basis for the evaluation, IEO will analyze key project documents and conduct interviews with key NDB staff. During the evaluation's field mission, additional data, information and evidence will be collected to verify available information and generate an independent assessment of performance and results.

#### 3.2 Methodology

17. **Evaluation criteria.** The evaluation will be undertaken in accordance with NDB Evaluation Policy (2022). In line with the internationally recognized evaluation practices, as adopted by the Evaluation Cooperation Group of the multilateral development banks, IEO will apply the following criteria in this project evaluation:
  - i) **Relevance:** The extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change.
  - ii) **Effectiveness:** The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.
  - iii) **Efficiency:** The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.
  - iv) **Impact:** The extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects.
  - v) **Sustainability:** The extent to which the net benefits of the intervention continue or are likely to continue after the project period.
  - vi) **Performance of partners (NDB and Government):** This will entail assessing the contribution of both NDB and the borrower government to project design, execution, monitoring and reporting, supervision and implementation support. The performance of the partners will be assessed with a view to the expected role and responsibilities of the partners in the project cycle.
18. **Rating scale.** The evaluation will rely on mixed methods of both quantitative and qualitative analysis. Based on the evidence collected and using techniques of triangulation, the



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evaluation team will assign a rating to each of the evaluation criteria. IEO adapts a six-point rating system (see table 2), where 6 is the highest score and 1 being the lowest score.

**Table 2. Rating scale**

Rating	Score (rating) descriptor
6 Highly Satisfactory	Under the concerned criterion, the project achieved or surpassed all main targets, objectives, expectations, and results and can be considered as a model within its project typology.
5 Satisfactory	Under the concerned criterion, the project achieved almost all (indicatively, over 80-95%) of the main targets, objectives, expectations, and results.
4 Moderately Satisfactory	Under the concerned criterion, the project achieved the majority (indicatively, 60 to 80%) of the targets, objectives, expectations, and results. However, a significant part of these was not achieved.
3 Moderately Unsatisfactory	Under the concerned criterion, the project did not achieve its main targets (indicatively, less than 60%), objectives, expectations, and results.
2 Unsatisfactory	Under the concerned criterion, the project achieved only a minority of its targets, objectives, expectations, and results.
1 Highly Unsatisfactory	Under the concerned criterion, the project achieved almost none of its targets, objectives, expectations, and results.

19. **Stakeholders’ participation.** In accordance with the NDB Evaluation Policy, the main project stakeholders will be involved at key stages of the evaluation process. This will ensure their concerns are duly taken into account. It will also help the evaluation team fully understand the context in which the project was designed and implemented. Regular interactions and communication will be held particularly with the NDB China Desk and the Government of China, and other concerned partners. Formal and informal opportunities will be explored during the process for discussing findings, lessons and recommendations.

### 3.3 Key Evaluation Questions

20. **Overarching question.** To what extent has the project contributed to improving the access to markets, business centers, and social services as well as improving the effectiveness, efficiency, and sustainability of the comprehensive urban transport system by integrating the project into the existing and future urban transportation networks in the city and cross-city transport hubs such as railways and other transportations?
21. The overarching question will be supported by the following key sub-questions. In addition, a complete set of questions may be seen in the evaluation framework in annex 1.
- How is the project aligned with and supportive of the objectives of People’s Republic of China’s (PCR)13th Five-Year Plan for Economic and Social Development (2016 - 2020), PRC’s 13th Five-Year Plan for the Development of a Modern Comprehensive Transportation System (2016 - 2020), and the Luoyang City Master Plan (2011 - 2020) approved by the State Council of the PRC on April 9, 2012?
  - To what extent has the project contributed to the improved urban public transportation system by integrating a fast, safe, comfortable, and punctual mass

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- transit system, and a more all-weather metro line in Luoyang City, into the existing and future urban public networks?
- How and to what extent has the project contributed to Luoyang City's socioeconomic growth transition from speed-oriented development to quality-oriented development?
  - To what extent has the project been compatible with the interventions of the other multilateral development banks and domestic financial institutions in Luoyang City and the public transportation sector?
  - To what extent has the project empowered and strengthened the institutional capacity of the Luoyang Urban Rail Construction Command Office and Luoyang Rail Transportation Co., Ltd. (LRTC, the implementing agency of the Project) to ensure effective and efficient project implementation and sustainable operation and maintenance of the project facilities?
  - In which ways has the project demonstrated its commitment to encouraging women and ethnic minorities in the area to participate in the project's planning, implementation, public awareness, and education programs and providing project-created job opportunities to women and ethnic minorities as a priority?
  - In which ways has the project on the urban transport sector added value in terms of project concept development, project design, technology transfer, know-how, and capacity building, among others?

### IV Evaluation Process

#### 4.1 Evaluation Team

22. The evaluation will be conducted under the overall guidance and responsibility of the Director General of IEO (Mr. Ashwani Muthoo). Critical inputs will be provided by a team of consultants comprised of Mr. Xiaoxin Chen (Senior Transportation Expert), and Ms. Maliha Hamid Hussein (Senior Development and Evaluation Expert). They will be supported by Ms. Jaqueline Rabelo Souza, IEO evaluation communication and outreach expert and Mr. Jinghong Zhang, IEO analyst. The Director General of IEO is responsible for the overall quality and timeliness of the report.

#### 4.2 Evaluation Process

23. The evaluation will involve (i) a review of relevant documents and papers; (ii) consultations in NDB, primarily with staff in the Operations Department; (iii) a visit to the project sites; (iv) data collection from PIA; and (v) discussion with staff from government, implementing agencies, project implementation units and project management offices, local governments, and other stakeholders, including business associations and local communities.
24. The evaluation will entail the following steps:

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- a. **Desk review.** IEO will conduct an initial literature review based on available project documents as well as the general strategies, policies and guidelines of NDB and key strategies of the Government. This phase will be in preparation for the field work.
  - b. **Main field mission.** Thereafter, IEO will organize a field mission to Luoyang to conduct data collection and initial analysis. The mission members will interact directly with representatives of the Government of China, project staff, beneficiaries and key informants to collect additional evidence, and visits project sites. The quantitative analysis will rely on secondary data, including data from the project's internal monitoring and evaluation system, financial data, as well as country and sector data from public sources. The evaluation team will organize a debriefing meeting with relevant stakeholders at the end of its field work.
  - c. **Report drafting and internal peer review.** After the field visit, a draft evaluation report will be prepared and shared within IEO for internal peer review. The Asia-Pacific Finance and Development Institute (APFDI) will serve as external peer reviewers and provide comments on the draft evaluation report.
  - d. **Comments by Management and the Government.** The draft evaluation report will be shared simultaneously with NDB Management and the Government for review and comments. IEO will finalize the report, taking into consideration the comments by Management and Government and prepare an audit trail illustrating how all comments have been included in the final report.
  - e. **Management response.** As per the NDB Evaluation Policy, a written management response on the final evaluation report will be prepared by NDB Management. This will be included in the project evaluation report, when it is published.
  - f. **Stakeholders' seminar and Board discussion.** As per usual practice, in co-ordination with NDB Management and the Government of China, IEO will organize a stakeholders' seminar to discuss the main evaluation findings, lessons and recommendations in end November 2023 and thereafter, the evaluation report along with NDB Management Response will be discussed in the NDB Board of Directors session, also in the end of November 2023.
  - g. **Communication and dissemination.** In line with disclosure provisions in the NDB Evaluation Policy, the evaluation approach paper, final evaluation report and related products will be disseminated widely using a variety of communication instruments. The key documentation will be made available through the IEO webpages on the NDB website.
25. **Timelines.** The evaluation will be conducted from August to December 2023. Specific deliverables and a corresponding timeline are shown in Table 3.

**Table 3 Deliverable timeline**

<b>Deliverable</b>	<b>Timeline (2023)</b>
<b>Draft Approach Paper sent to Management and the Government for comments</b>	15 August
<b>Comments by Management and Government received</b>	30 August
<b>Finalized Approach Paper shared with Management and Government</b>	1 September
<b>Main field mission to Luoyang</b>	4 - 8 September
<b>Draft Evaluation Report sent to APFDI, Management and Government for comments</b>	9 October
<b>Comments by Management and Government received</b>	27 October
<b>Final Evaluation Report sent to Management for preparation of NDB Management Response</b>	3 November
<b>Final Evaluation Report &amp; Management Response sent to Corporate Secretary's Department</b>	10 November
<b>Stakeholders' Seminar</b>	End November (date to be determined)
<b>Presentation to NDB Board of Directors</b>	27-29 November

**ANNEXES**
**Annex 1: Evaluation framework**

Evaluation Criteria	Evaluation Questions	Sources
<u>Relevance</u>	<ul style="list-style-type: none"> <li>• How does the project's objective relevant with the national, provincial, and municipal priorities in the country?</li> <li>• Were the expected outcome of the project aligned with NDB's policies and strategies at the sector and project levels?</li> <li>• Was the project design appropriate in addressing the envisaged impact (improvement of the productivity of workers and reducing carbon emissions), outcome (a safe, efficient, speedy, and comfortable metro line for passengers; decongestion of roads), and outputs (Luoyang Metro Line 1 from Gushuixi Station to Wenhuajie station with a total of 22.34km in length including 18 stations complete with ancillary facilities)?</li> <li>• Did the design of the inputs, outputs, and outcomes of the project follow the logical results chain to achieve the project objective?</li> <li>• To what extent has the project been compatible with the interventions of the other multilateral development banks, international financial institutions, and local funds in Luoyang City and in the metro transportation sub-sector in PRC?</li> </ul>	<p>National/Provincial/municipal policies, strategies and plans</p> <p>NDB Strategies and Policies</p> <p>Interviews with the Government, project staff, NDB Management and staff</p>
<u>Effectiveness</u>	<ul style="list-style-type: none"> <li>• To what extent have the project outcomes and outputs been achieved as indicated in the design framework at the appraisal?</li> </ul>	<p>Project documents</p> <p>Data/information from PIA</p>

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	<ul style="list-style-type: none"> <li>• To what extent has the project integrated with the planned metro lines, Line 2, Line 3, and Line 4, to form the main artery of Luoyang's public transportation networks to develop an efficient, green, safe, and accessible comprehensive public transportation system in Luoyang?</li> <li>• To what extent has the project achieved the following:             <ul style="list-style-type: none"> <li>- mitigated tariff congestion in the urban by transforming traveling people in the urban from taxis and private motor vehicles to public transportation;</li> <li>- reduced carbon emissions by providing a greener transport mode and increasing its transport density;</li> <li>- improved urban resilience by providing a more all-weather mode against extreme climate conditions (e.g. extreme ice and snow freeze, massive rainfall, heave fog, etc.);</li> <li>- enhanced passengers' efficient movement and worker's productiveness; and</li> <li>- reduced personal casualties by comparing with and without the project to assess the effectiveness of a more safe transport mode provided?</li> </ul> </li> <li>• To what extent the environment safeguard-related plans have been implemented? Did the project interventions have any negative impacts?</li> <li>• What are the other factors that contributed to the achievement or</li> </ul>	<p>Interviews with the Government, project staff, NDB Management and staff</p> <p>Interviews with Government, project staff, NDB Management and staff</p>
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	non-achievement of expected outputs and outcomes?	
<b><u>Efficiency</u></b>	<ul style="list-style-type: none"> <li>• Were the Loan Agreement and the Project Agreement signed off and effective in a timely manner, which was in line with the estimated sound project readiness at the appraisal stage?</li> <li>• Have the financial resources been used to achieve the intended outcomes?</li> <li>• Was the project procurement (contracts awarded) and disbursement performance in line with the appraisal estimates and the project design profile?</li> <li>• Have the project components been implemented as envisaged at the appraisal?</li> <li>• Has the project been put into operation as planned at appraisal?</li> </ul>	<p>Project documents</p> <p>Data/information from PIA</p> <p>Interviews with Government, project staff, NDB Management and staff</p>
<b><u>Sustainability</u></b>	<ul style="list-style-type: none"> <li>• What is the likelihood that project benefits will be sustained within and beyond the life of the project?</li> <li>• Are there provisions for generating or gathering adequate revenue or funding for maintenance?</li> <li>• Are there any institutional issues that affect the performance of the project?</li> <li>• Are there any risks that may degrade environmental protection and social benefits?</li> <li>• Are there any issues with resettlement after the operation?</li> <li>• Are there any risks that affect the sustainability of the project?</li> <li>• Has LRTC trained its workers and staff and employed qualified personnel for</li> </ul>	<p>Project documents</p> <p>Data/information from LRTC</p> <p>Interviews with Government, project staff, NDB Management and staff</p>

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	<p>the operation and maintenance of the project?</p> <ul style="list-style-type: none"> <li>• Has LRTC sufficient funds to meet the requirements of the operation and maintenance?</li> </ul>	
<b><u>Impact</u></b>	<ul style="list-style-type: none"> <li>• What are the socioeconomic impacts of the project? To what extent will the project reduce the emissions of public urban transport, increase disposable income per capita, and increase Gross Domestic Product (GDP) per capita in Luoyang City?</li> <li>• To what extent is the project likely to contribute to Luoyang City’s overall development objectives, including (1) a provincial sub-central city; (2) an advanced manufacturing base in the central part of the People’s Republic of China; (3) internationally renowned tourist city; and (4) an environment-friendly livable city (refer to Luoyang City Master Plan: 2011-2020)?</li> <li>• In what ways has the project demonstrated its commitment to encouraging women and ethnic minorities in the area to participate in the project’s planning, implementation, public awareness, and education programs and providing project-created job opportunities to women and ethnic minorities as a priority?</li> <li>• Did the project have any unintended or adverse impact on society and the economy?</li> <li>• Did the project comply with safeguard requirements? Are there any issues left or new issues after completion?</li> </ul>	<p>Project documents</p> <p>Data from LRTC</p> <p>Interviews with Government, project staff, NDB Management and staff</p>
<b><u>Performance of Partners</u></b>	<b>NDB:</b>	Project documents



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	<ul style="list-style-type: none"> <li>• How well were the comments and recommendations of quality enhancement and quality assurance processes included in the final project design?</li> <li>• Was adequate supervision and implementation support provided in a timely manner, and portfolio performance monitored on a continuous basis?</li> <li>• Did IEO exercise its developmental and fiduciary responsibilities adequately, ensuring that projects had sound financial management systems, audit reports were submitted in a timely manner, the required?</li> </ul> <p>Government:</p> <ul style="list-style-type: none"> <li>• How were periodic progress reports used and was the PCR provided in a timely manner and of the required quality?</li> <li>• Were counterpart resources (funds and staffing) provided in line with the agreement at design stage?</li> <li>• Were the flow of funds and procurement procedures suitable for ensuring timely implementation?</li> <li>• Did the government have the required capacity at all levels to implement the project as per schedule?</li> </ul>	<p>Interviews with Government, project staff, NDB Management and staff</p>
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## Annex 2: Evaluation report outline

<b>Acknowledgement</b>	<b>1 page</b>
<b>Preface by DG IEO</b>	<b>1 page</b>
<b>List of Abbreviations and acronyms</b>	<b>1 page</b>
<b>Executive summary</b>	<b>3-4 pages</b>
<b>Management response</b>	
<b>Background</b>	
• Country and international context	1 page
• State and local contexts	1 page
• Key points of chapter (bulleted in a box)	½ page
<b>Project background</b>	
• Project objectives	½ page
• Project design and components	1 page
• Implementation arrangements and support	½ page
• Key points of chapter (bulleted in a box)	
<b>Evaluation objectives, methodology and process</b>	
• Objectives	½ page
• Methodology, questions and rating system	2 pages
• Limitations and mitigation measures	½ page
• Process steps	1 page
• Key points (bulleted in a box)	
<b>Project performance</b>	
• Relevance	2 pages
o Objectives	
o Design	
▪ Components	
▪ Implementation arrangements	
• Effectiveness in achieving development objectives	1-2 pages
• Efficiency of resources use	1-2 pages
• Impact	1 page
• Sustainability	½ page
• Coherence	½ page

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- Compliance 2 pages
  - o Environmental and social safeguards
  - o financial management and procurement
  - o Monitoring and evaluation
- Overall project performance (with table of ratings by criteria) 1 page
- Key points (bulleted in a box)

**Performance of NDB** ½ page

**Performance of Government and other in-country partners (if relevant)** ½ page

### Conclusions and recommendations

- Storyline 2 paras
- Conclusions 3-4 paras
- Recommendations 1 page

### Annexes:

- Map of project area
- Project Design and Monitoring Framework
- Project Evaluation Framework
- Lists of documents reviewed and list of persons interviewed

**The People's Republic of China: Luoyang Metro Project**
**Annex 3. Project Design and Monitoring Framework**

#	Indicators for result monitoring	Unit	Baseline	Target				Frequency	Data Source /Methodology	Data reporting	Responsibility for Data Collection
				202	2022	2023	2024				
1	Successful operation	/	0	100				One time	Test run assessment summary in progress report	LRTC	LRTC
2	Passenger flow intensity	10000/km·d	0		0.6	0.9	1	Annually	Operation statistics in the comprehensive progress report	LRTC	LRTC
3	Average travel time saved	10000h	0		3.46	5.89	7.44	First year of operation	Daily passenger flow multiplying the time saved for a passenger traveling by line 1 compared to traveling by bus for a distance of 7.3 km.	LRTC	LRTC
4	Share of metro in motorized travel	%	0		6	9	10	Annually	Comprehensive progress report	Luoyang Transport Bureau and LRTC	LRTC
4.1	Share of metro in public transportation	%	0		12	16	20	Annually	Comprehensive progress report	Luoyang Transport Bureau and LRTC	LRTC
5	Rate of passenger's satisfaction of Line 1	%	0		97	97	98	Annually	Satisfaction survey report	LRTC	LRTC

### Annex 4: Background documentation

#### Section A. NDB Policies, Guidelines and General Strategies

- NDB (2016). New Development Bank Country Partnership Plan
- NDB (2016). New Development Bank Procurement Policy
- NDB (2016). New Development Bank Environment and Social Framework
- NDB (2017). New Development Bank General Strategy: 2017 – 2021
- NDB (2018). Project Implementation Guidelines
- NDB (2016). Policy on Sovereign Loans & Loans with Sovereign Guarantee

#### Section B. Project Documents

- NDB (2017) Luoyang Metro Project Environmental Impact Assessment, February 2017
- NDB (2017) Luoyang Metro Project Feasibility Study Report (Chinese), June 2017
- NDB (2017) Luoyang Metro Project Feasibility Study Report (English), June 2017
- NDB (2017) Project Document to the Board, September 13, 2017
- NDB (2018) Appraisal Mission Memorandum of Understanding Between New Development Bank, Henan Provincial Department of Finance and Luoyang Rail Transportation Co., Ltd.
- NDB (2018) Luoyang Metro Project Loan Agreement Between New Development Bank and People's Republic of China, August 16, 2018
- NDB (2018) Loan Agreement between People's Republic of China and New Development Bank, August 16, 2018
- NDB (2020) Request for the Amendment to Legal Agreement, April 10, 2020
- NDB (2020) Amendment No.1 to the Loan Agreement, May 07, 2020
- NDB (2020) Project Progress Report (September 2018-June 2020), July 24, 2020
- NDB (2021) Aide Memoire, Environmental and Social Implementation Review Mission, June 25, 2021
- NDB (2021) Aide Memoire, Review Mission, April 27, 2022
- NDB (2021) Project Progress Report (July 2020-June 2021), September 06, 2021
- NDB (2022) Project Performance Assessment, August 17, 2022
- NDB (2022) Project Performance Assessment, November 9, 2022
- NDB (2022) Project Progress Report (July 2021-December 2021), March 21, 2022
- NDB (2022) Project Progress Report (January 2022-August 2022), September 30, 2022
- NDB (2022) Structure of Project Completion Report
- NDB (2022) Aide Memoire, Review Mission, April 25, 2022