

## **Executive Summary**



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### Why did we take up this audit?

Government of Uttar Pradesh (GoUP) in the Budget for 2013-14 included an announcement for metro rail project in Lucknow. Delhi Metro Rail Corporation Ltd. (DMRCL) prepared Detailed Project Report (DPR) with two corridors i.e., North-South corridor covering 22.88 km and East-West corridor covering 11.10 km. The DPR was finally approved in October 2013 and in-principle approval of North-South corridor i.e., Phase-1A of the project was granted by Government of India (GoI) in December 2013.

Lucknow Metro Rail Corporation Limited (the Company) was incorporated in November 2013 to execute Lucknow Metro Rail Project. The work on North-South corridor of Lucknow Metro was commenced in September 2014 and completed in March 2019 with 22.88 km of length. Name of the Company was later changed to Uttar Pradesh Metro Rail Corporation Limited (UPMRCL) on 23 October 2019. This Company is a joint venture of GoI and GoUP with 50:50 equity contribution.

Performance Audit on Construction and Operation of Phase-1A of Lucknow Metro Rail Project was taken up with the objective to examine whether (i) effective planning was done to ensure economic viability and selection of the most appropriate technologies; (ii) implementation in terms of project execution and contract management was done with due care, economical, and in a timely and transparent manner; (iii) an adequate mechanism was in existence to monitor the project to ensure timely completion and conformity of works executed with laid down specifications; and (iv) the operation and maintenance were efficient, and the planned benefits were achieved after commercial operation.

The Performance Audit covered the activities of Phase-1A of the project for the period since its inception in November 2013 to March 2023. A total of 51 (21 major works and 30 minor works) contracts involving ₹ 4,987.21 crore out of total 144 contracts relating to civil, rolling stock, track, electrical, signalling & telecom, property development and operation & maintenance were covered in audit. The Indian Institute of Technology, Kanpur (IIT Kanpur) was engaged for providing technical consultancy during review of the technical aspects of the Phase-1A project.

### What have we found?

#### (A) Planning

The Company did not include 'Alternative Analysis' for evaluation of available technologies, in the DPR of Lucknow Metro Rail Project, as envisaged in the 'Guidelines for preparation of DPR for Integrated Mass Transit System Development Plans (Bus based/Rail based)' issued by Ministry of Urban Development, Government of India in November 2006. This guideline required detailed evaluation of various alternative technologies to solve the existing public transportation problems.

The GoI accorded in-principle approval (December 2013) for taking up the Phase-1A of Lucknow Metro Rail Project covering a total length of 22.88 km

stations in North-South corridor and excluded Mahanagar Metro station, which had second highest projected daily loading capacity in 2021 as per the DPR, from the project without approval from the concerned authority.

The Company did not comply with conditions contained in the in-principle approval of the GoI to the project such as periodic fare revision, setting up of District Urban Transport Fund and framing of advertising and parking policy.

For bulk extraction of ground water, any commercial organisation was mandatorily required to apply and obtain permission from Central Ground Water Authority (CGWA)/Ground Water Department, GoUP (GWD). Audit found that Company did not get registered in CGWA/GWD, UP for obtaining NOC during 2013-23.

### **(B) Contract and Project Management**

The company did not open the financial bid of M/s Gammon India Limited despite its name being recommended by the technical evaluation committee. In reply, the State Government stated that it was a conscious decision of the Board based on past performance of M/s Gammon India Limited at Delhi and Chennai metro project and lack of desirable safety measure and avoidable delay in these projects. The reply was not acceptable because if the Company had prior information about the unsatisfactory past performance of M/s Gammon India Limited, it should not have allowed M/s Gammon India Limited to participate in the technical bidding stage itself.

Government order for obtaining Additional Performance Guarantee (APG) was not followed for the execution of below to the departmental rates in the contract agreement of LKCC-07 and the Company did not obtain APG to safeguard its interest. Plant & Machinery advance was irregularly paid to the contractor for the plants and machineries already owned by him in violation of the contract agreement (LKCC-07). Similarly, another contractor was irregularly paid excess amount of advance for material at site contrary to the provisions of the contract conditions of LKCC-04 works.

A lump sum work of Schedule E (miscellaneous work under DSR-2014) of LKCC-07 was executed to ₹ 51.40 crore against the bonded cost of ₹ 15.75 crore. The Company provided the details of items of works of only ₹ 1.30 crore despite repeated requests were made for providing in Audit. The State Government did not respond on this issue.

The Company awarded (June 2017) a contract for advertisement rights in trains of Metro Phase-1A (N-S Corridor). Despite taking over 12 train sets, the licensee had not paid license fee to the Company. Moreover, the Company relieved the licensee from the license fee payment instead of acting as per provisions of the licensee agreement for recovery of license fee including Goods and Services Tax (GST). In reply, the State Government stated that license fee was not collected as the advertising agency had not utilised these train sets. The reply was not acceptable since the licensee was bound to pay license fee for these 12 train sets as per the license agreement.

The Project authorities of the Company neither collected Form MM-11 (transit pass) before making payment to the contractor nor ensured the deductions of

royalty and price of minerals amounting to ₹ 3.16 crore from the contractor. The Company did not obtain permit from Geology and Mining Department for extraction of ordinary soil during construction of underground stations and ramps. Further, the Company did not collect royalty from other Government departments for ordinary soil transferred to them and did not deposit the same in Government Account.

The Company procured 25.80 hectares of land for construction of depot of Lucknow Metro. However, 1.98 hectares (7.67 per cent) out of this land was disputed and already under litigation. The Company constructed depot on the acquired land including the disputed land. Audit noticed that the tripartite agreement among the Company, Additional District Magistrate (Land Acquisition), and parties related to disputed land lacked signatures of some of the related parties. This agreement was not registered also. As such, the agreement was not legally enforceable and may attract litigation in case of disagreement among the parties. In reply, the State Government stated that the tripartite agreement on stamp paper was not required as the ownership of disputed land was not clear. Needless expenditure on stamp duties and registration fee would have to be borne by the Company. The reply was not acceptable because construction of the depot on the disputed land was against the financial rules. Also, non-registered tripartite agreement was not legally enforceable.

### **(C) Operation & Maintenance**

The Company did not opt for open tender process for the engagement of security firm and awarded the contract to M/s G4S on nomination basis without any recorded justification as to why this particular security firm was selected. This was in violation of the Central Vigilance Commission (CVC) Guidelines and provisions of General Financial Rules (GFR).

The tests conducted by IIT, Kanpur on the rail samples provided by the Company to determine the hardness value of rails at depot area and mainline, revealed that the hardness value was less as compared to the Indian Railway Standard (IRS) specification issued in December 2009. In reply, the State Government stated that the tests have not been conducted by IIT in accordance with prescribed codal provisions. The earlier tests carried out during procurement demonstrated that the hardness measured satisfied the provisions enumerated in “IRS-T-12-2009”. In response, IIT Kanpur stated that testing procedures applied by it were as per the standards (IS 1500:2005) which was standard practice.

A certified cyber security agency for routine Vulnerability Assessment and Penetration Testing (VAPT) was not empanelled to examine the security and therefore, the metro system was susceptible to threat and malfunction.

The Company did not determine any benchmark for maintaining noise level within the permissible limit. Thus, the objective for providing comfortable environment inside the Metro trains and outside at the stations was not fulfilled.

The Interim Speed Certificate (ISC) was not renewed despite its requirement after expiry of five years from the date of its issue (March 2017). In absence of ISC, wear and tear in wheel of rolling stock and adjustment needed thereof could not be ascertained. By not renewing the Speed Certificate after expiry of five

years, the Company has taken unnecessary risk with the safety of passengers. In reply, the State Government stated that as per Procedure for Safety Certification and Technical Clearance of Metro System (PSTM)-2015, Interim Speed Certificate (ISC) shall remain valid till the issuance of the final speed certificate as no extension provision of ISC (such as 5 years) is defined. The reply was not factual because the PSTM-2015 does not state that ISC shall remain valid till the issuance of the Final Speed Certificate. Therefore, ISC issued to Lucknow metro was valid only for five years as specifically mentioned in ISC and was required to be renewed thereafter.

#### **(D) Revenue Management**

Revenue generation through Property Development by metro projects is a global practice as the metro projects are highly capital intensive and the only way to become financially sustainable without government subsidies, is by generating Non-Fare Box Revenue from property development activities viz. advertisements, retailing, real estate at metro stations, etc.

Operating revenue of the Company increased from ₹ 5.55 crore to ₹ 99.35 crore (1690.10 *per cent*) during the period 2017-18 to 2023-24 with average growth of 281.62 *per cent*. During this duration, operating expenses also increased from ₹ 16.17 crore to ₹ 76.11 crore. Nevertheless, it was encouraging for the Company that it earned operating revenue more than the operating expenses after five years of operations of Lucknow Metro Rail Project.

Further, the company could not achieve the year-wise footfall and revenue from operations anywhere near the projections envisaged in the DPR. In reply, the State Government stated that year-wise footfall and revenue operations projected in the DPR was made considering combined traffic from both North-south and East-West corridors, however, East-West corridor could not be made operational.

The Company did not insure its administrative office building taken from a Society on rent in violation of terms of the rent deed. The Company paid rent without payment of Service Tax/GST as the Society was not registered with Service Tax/GST authorities. This resulted in loss of Service Tax/GST revenue to the Government.

The Company was issued electricity energy bill by the DISCOM at the rate of ₹ 7.30 KVAh among other charges under HV-3B category. The Company collected electricity charges at higher rate of ₹ 8.75 KVAh from its commercial tenants resulting in higher collection of electricity duty also from July 2019 to August 2022. This higher collection of electricity duty was retained by the Company unauthorisedly and not remitted to the State Government or the DISCOM. In reply, the Company stated that it was charging higher tariff on its commercial tenants to recover the cost of maintenance of infrastructure built by it. The reply was not acceptable because the Company may collect higher tariffs to recover the cost incurred by it for construction and maintenance of transmission and distribution networks, but electricity duty collected by it should be remitted directly to the Government or through DISCOM.

The revenue of Lucknow Metro mainly consists of fare box collection and non-fare box collection (property development, advertisement, parking, etc.). Audit

noticed that company could not explore the possibility of leasing out 54,196 sq. ft. available commercial spaces as of March 2025. Besides, bids for 15,984.54 sq. ft. available parking spaces were also not invited by the Company during 2017-24.

The GoUP identified (October 2013) land to be provided to the Company for property development but the same was handed over to the Company in April 2022 after lapse of more than eight years. Moreover, the Company did not utilise 86.10 acres of land for property development after lapse of almost three years since receipt of the same.

### **Way forward: What we recommend?**

#### **Audit recommends that the Company should:**

- *ensure that any change if required in metro station conceived under the Project is carried out only after the approval of the authority who had sanctioned the original Project.*
- *ensure obtaining No Objection Certificate from Ground Water Department, GoUP for extraction of ground water.*
- *ensure that terms of contract are adhered to and a system should be in place to recover dues and irregular/excess payment of advance.*
- *fix responsibility where variation & extra items are beyond limits in a contract without sanction from proper delegated authority, thus vitiating the contract integrity.*
- *obtain Form MM-11 (transit pass) from the contractors to ensure that the minerals used in the construction works of the metro have been procured from legal sources and royalties etc. are deposited in Government Account.*
- *ensure full compliance with the statutory provisions, rules, Central Vigilance Commission guidelines, Indian Railway Standards/specifications, agreements, etc.*
- *ensure to empanel a certified cyber security agency for routine vulnerability assessment and penetration testing to avoid susceptible threat and malfunctioning of the communication-based train control system.*
- *devise ways to attract commuters into the metro by providing end to end connectivity to increase the ridership and revenue.*
- *ensure timely development of land available for property development and also ensure realisation of optimal revenue from developed properties through timely leasing out of available commercial and parking spaces.*

