

CHAPTER-5
OPERATION AND MAINTENANCE AND
REVENUE MANAGEMENT

ELDECO JUNCO

PROJECT BY ELDECO AND KAPOOR DEVELOPERS

FASHION

PRAD

THE MOBILE STORE

Adidaas

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Chapter 5

Operation and Maintenance & Revenue Management

5.1 DMRC follows a mixed approach for operation and maintenance wherein the core operation and maintenance of major assets are done in-house with the regular staff specially recruited and trained for this purpose, while non-core and offline activities are generally out-sourced though some of them are managed in-house. Revenue generation through Property Development by metro projects is a global practice as the metro projects are highly capital intensive and they can remain financially sustainable, without government subsidies, by generating Non-Fare Box Revenue from property development activities viz advertisements, retailing, real estate at metro stations. DMRC has Property Development and Property Business divisions for earning Non-Fare Box Revenue. DMRC has been mandated to generate 4.5 *per cent* of the project cost in Phase-III from Property Development. Property Business division is responsible for generating revenue for meeting operation & maintenance expenses. Property Development division conducts studies for estimation of reserve price or action plan for generating revenue to meet the targets set by Ministry. Generally, Property Business division does not conduct any studies as they have to lease the area which is constructed by the Project division on the metro stations. Audit reviewed the actual ridership vis-a-vis the DPRs projections, operational efficiency of DMRC and the guidelines of Unified Traffic & Transportation Infrastructure Planning & Engineering Centre in respect of Multi Modal Integration.

Audit noticed inefficiencies in operation and maintenance, shortfall in achievement of planned targets in respect of Property Development and estimated earnings and Property Business after commercial operation as brought out in the succeeding paras.

5.2 Operation and Maintenance

5.2.1 Non-maintenance of line-wise operational profit/ loss statements and non-claiming of operational loss from respective State Government

Secretary, MoUD directed (April 2012) DMRC to prepare line-wise profit and loss account. Extracts from sanction letters issued by MoUD/ MoHUA during 2011 to 2019 regarding bearing/ sharing of operation loss are shown in the **Annexure-VII**. Comparison of projected ridership and actual ridership which indicated shortfall of 15 *per cent* to 88 *per cent* during 2019-20 of various lines/ corridors under Phase-III is shown in Table 1.1.

However, Audit observed that all the corridors/ lines (except Dhansa Bus Stand extension) constructed during Phase-III including NCR extensions are operational as on 31 March 2020. DMRC did not prepare line-wise operation profit and loss, in the absence of which it could neither apprise the Board of Directors of the operational profit/ loss nor make necessary claims with the respective State Governments, wherever required, thereby making the recovery of past years' operational loss from respective State Governments as per sanction letters seems doubtful.

The Ministry/ GNCTD while accepting the Audit observation replied (January 2021) that it has been decided and approved at the 138th meeting of Board of Directors (12 November 2020) to apportion operating loss from 2020-21. However, the fact remains that in the absence of line wise operational profit and loss, past year's operational losses, if any, could not be claimed from respective State Governments.

5.2.2 Non-accomplishment of projected ridership after completion of Phase-III and National Capital Region extensions

Government of India sanctioned (26 September 2011) four corridors of 103.05 km of metro lines and nine extensions (within Delhi and to NCR) of 57.70 km (September 2011 to March 2020). As on 31 March 2020, all the corridors except Dhansa Bus Stand are operational. The corridor/ section wise projected ridership and actual ridership of initial Phase-III corridors NCR/ other extensions is shown below:

Figure 5.1
Projected Ridership and Actual Ridership

NAME OF CORRIDOR/ SECTION	PROJECTED DAILY RIDERSHIP IN 2019-20 as PER DPR	ACTUAL DAILY RIDERSHIP DURING 2019-20	% SHORTFALL
DWARKA-NAJAFGARH	97,070	12,012	87.63
MUKUNDPUR (MAJLIS PARK) – MAUJPUR-SHIV VIHAR	11,63,191	1,83,044	84.26
BADARPUR-FARIDABAD-BALLABHGARH	3,38,873	60,648	82.10
MUNDKA-BAHADURGARH	1,27,776	22,968	82.02
DILSHAD GARDEN- NEW BUS ADDA (GHAZIABAD)	1,72,679	43,617	74.74
CENTRAL SECTT. - KASHMIRI GATE	2,42,688	62,578	74.21
JANAKPURI WEST-KALINDI KUNJ	6,50,188	1,71,262	73.66
JAHANGIR PURI-BADLI	52,081	27,600	47.01
NOIDA CITY CENTRE-NOIDA ELECTRONIC CENTRE	93,312	67,978	27.15
KALINDI KUNJ-BOTANICAL GARDEN	51,917	44,068	15.12

In this regard, Audit observed that:

(i) As against the projected ridership of 18.56 lakh in 2016 (20.89 lakh in 2019-20) from initially sanctioned four corridors of Phase-III, the actual ridership in 2019-20 was only 4.38 lakh, which is 79.02 per cent lower than projected ridership as per DPR. Similarly, in case of NCR/ other extension, the actual ridership on these corridors was 15.12 per cent to 87.63 per cent lower than projected ridership as per DPRs. DMRC had selected the Heavy Metro system for Delhi MRTS based on ridership projection in the DPR. However, since the shortfall in ridership during operation ranged from 15.12 per cent to 87.63 per cent, DMRC may henceforth consider adopting an objective and rational method for selecting the most suitable form of transportation from the available modes like Light Metro and Bus Rapid Transit System as suggested by the Working Group on Urban Transport.

(ii) As per the DPRs of Phase-III and NCR extensions, the total ridership of entire DMRC network (Phase-I, Phase-II and Phase-III) after completion of the project in the year 2016 was estimated as 43.79 lakh (53.47 lakh in 2019-20). Whereas, after completion of entire Phase-III and NCR extensions, except for a small portion of Dwarka-Dhansa Bus Stand (1.2 km), the actual ridership of DMRC was 27.79 lakh (2019-20) only i.e., 51.97 per cent of projected ridership.

(iii) Ridership of Dwarka-Najafgarh (Line-9) section was 11,972 (November 2019) after its opening in October 2019 whereas the ridership in the existing Dwarka Mor and Dwarka station reduced⁸³ by 11,074 from September to November 2019 indicating that only 898 new passengers (0.92 per cent as per DPR projected ridership of 97,070) were added after incurring an estimated expenditure of ₹1,065 crore and recurring significant operation & maintenance expenditure. Similarly, after opening of Mundka-Bahadurgarh section in June 2018 and actual ridership was 17,304, there was reduction of 5,762 in ridership⁸⁴ of existing Mundka station during May and July 2018. Thus, only 11,542 new passengers (i.e., 10.93 per cent of projected ridership of 1,05,6,00) were added after incurring an estimated expenditure of ₹1,991 crore.

(iv) Total ridership of the entire DMRC network was on an increasing trend for the period 2011-12 to 2016-17 (**Annexure-VIII**) when no fare was revised. However, there was steep increase in fare by 91 per cent during 2017-18 as per Fourth Fare Fixation Committee which impacted the ridership. The actual ridership of 25.21 lakh during 2018-19 was lower than actual ridership of 25.94 lakh during 2015-16 indicating that there was no incremental growth in ridership despite addition of new lines/ sections of 131 km length during this period and annual growth of ridership as per DPRs.

(v) After completion of Phase-III, ridership per km for the year 2019-20 was 8,543 which was far lower than 9,921 for the year 2011-12.

⁸³ Daily ridership of Dwarka mor station September 2019-44,729, November 2019-35,478 Daily ridership of Dwarka station September 2019-9963, Nov. 2019-8140 Net reduction in ridership of existing Dwarka and Dwarka mor station-11,074

⁸⁴ Difference in ridership of Mundka station for the month of May 2018 and July 2018

The Ministry/ GNCTD and DMRC replied (January 2021 and July 2020) that ridership decreased due to various reasons including opening of Phase-III in a phased manner, discontinuity at Trilokpuri, implementation of recommendation of Fourth Fare Fixation Committee, operation of cab services etc., which were not considered at the time of preparation of DPR. However, DMRC has not only regained its ridership but also achieved maximum average ridership of 27.79 lakh in Financial Year 2019-20. Initially high-density regions were covered which led to high passengers/ network length. Moreover, some of the expansions were designed to ease out passenger load on some of the densely used corridors of DMRC which was otherwise overcrowded. However, DMRC is taking a number of measures to attract passengers and to increase its ridership. DMRC also uses scientific four stage traffic modelling for projection of ridership which is duly established.

The reply of the Ministry/ GNCTD/ DMRC needs to be viewed in the light of fact that the opening of Phase- III in a phased manner was considered at the time of formulation of Phase-III DPR. Out of 103.05 km length of initial Phase-III corridors, only a small portion of 300 meter at Trilokpuri is still under construction. Whereas, against projected ridership of 20.89 lakh in 2019-20, actual ridership in 2019-20 from Phase-III corridors was only 4.38 lakh i.e., 21 *per cent*. DMRC did not provide any document to substantiate shifting of number of metro commuters to other mode of transport like cab. Besides, other reasons for low ridership include poor last mile connectivity, lack of Multi Model Integration facilities etc. DMRC reply is silent regarding reduction in passenger per km after implementation of Fourth Fare Fixation Committee recommendations. Even though the projected ridership could not materialise in Phase-I and Phase-II after applying the same model, DMRC still continued with the same traffic modelling without any modification.

5.2.3 Last mile connectivity services to the commuters

The feeder buses project was undertaken by DMRC to ensure last mile connectivity in the interior areas of the city. Its major envisaged benefit was improvement in ridership, partly due to increased supply and partly due to more attractive and convenient vehicles. DMRC awarded (May 2012/ January 2013) contracts to procure, operate and maintain 400 Midi DMRC Feeder Buses to two operators, M/s Rajdhani Coach Clusters Service Private Limited for 300 buses and M/s Prasanna Purple Mobility Solutions Private Limited for 100 buses. As per the terms and conditions of the agreement, these buses will operate from 73 State Transport Authority approved routes.

In this regard, Audit observed the following:

- (i) Till date only 174 Midi feeder CNG Non-AC buses out of 400 buses (43.5 *per cent*) were procured by the private operators for providing last mile connectivity. Due to availability of lesser buses, DMRC was operating buses on 32 routes, out of 73 routes. Further, the operators have requested (January 2021) for termination of contracts citing Covid-19 pandemic and GNCTD scheme for free travel by women passengers.

(ii) About 800 electric-rickshaw were operational prior to lockdown and Covid-19 scenario; at present about 250 electric-rickshaw are operational. Similarly, cab aggregator and electric-scooter services are operational from 11 and 6 metro stations only, respectively (out of 254 stations). Auto aggregator service is yet to be operationalised.

(iii) During 2018-19, in order to strengthen the last mile connectivity, DMRC also floated (13 April 2018) a wholly owned subsidiary company 'Delhi Metro Last Mile Services Limited (Company)' with which it proposed to run AC Electrical/ CNG buses as feeder services with viability gap funding by GNCTD. Two Operators for North and East clusters on 10 routes comprising 100 electric-buses AC low floor have been selected (December 2019) but buses are yet to be put to operation. As on 31 March 2020, there was no operational income and expense of the Company.

Thus, commuters were denied the envisaged benefits of last mile connectivity.

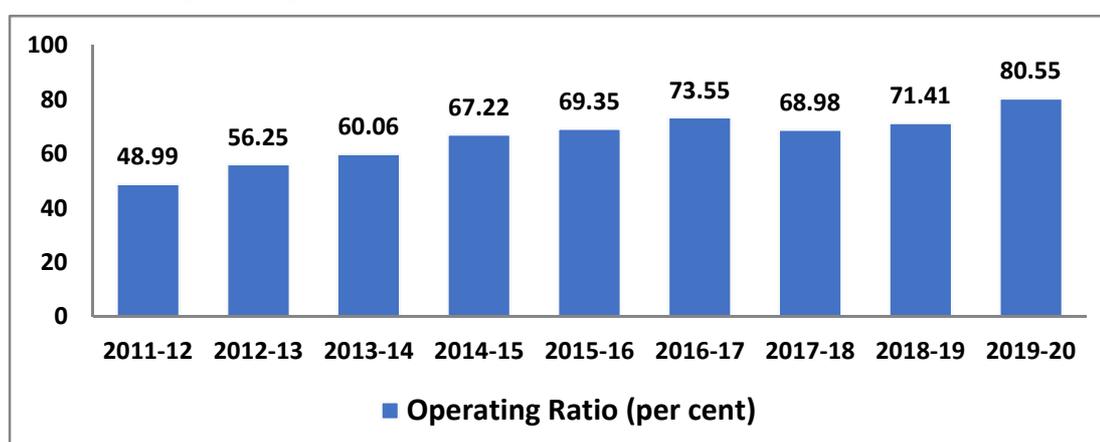
The Ministry/ GNCTD and DMRC replied (January 2021 and July 2020) that DMRC awarded contracts to procure, operate and maintain 400 Midi DMRC Feeder Buses. Meanwhile, operators requested to reduce the scope of work on account of various factors. Subsequently, the number of Midi Feeder Buses was reduced and DMRC allowed the operators to operate the existing 174 Non-AC Midi feeder buses with signing of addendum to the contract agreements. The buses could not be procured by the operator as the specifications of buses released by MoHUA were not readily available in the market.

The statement of DMRC regarding non-availability of buses with tendered specifications is not acceptable as it was the responsibility of DMRC to ensure availability of buses in the market before floating and finalisation of tender process.

5.2.4 Inefficient operational performance of DMRC

Operating Ratio establishes the relationship between operating costs i.e., cost of revenues from operations plus operating expenses and revenue from operations. The objective of operating ratio is to assess the operational efficiency of the business. A rise in the operating ratio indicates decline in efficiency.

Chart 5.1
Operating ratio of DMRC (Phase-I, Phase-II and Phase-III)



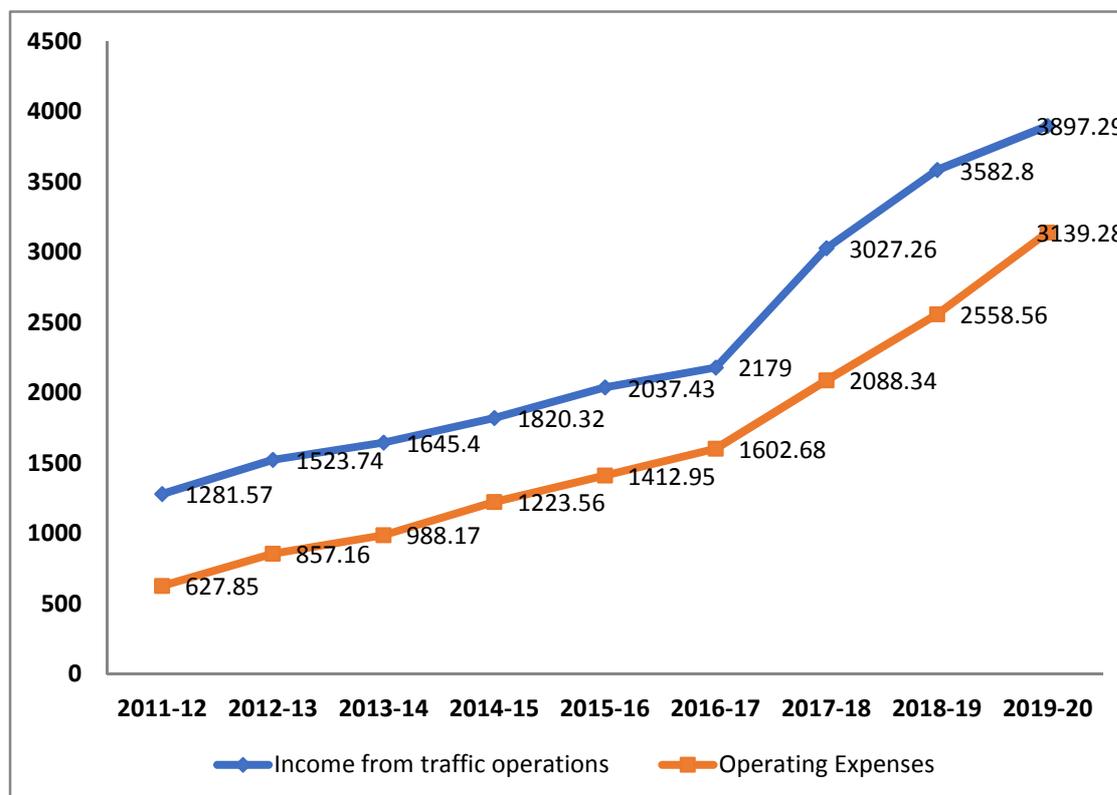
In this regard, Audit observed that:

(i) As per Generally Accepted Accounting Principles, operating profits refer to an accounting statistic that calculates the profit earned by a company/ corporation from its core business operation including depreciation and amortisation but excluding interest and tax deductions. Further, as per Fourth Fare Fixation Committee report (September 2016), Operation & Maintenance cost of Delhi metro have been categorised under the five major heads i.e., staff cost, maintenance cost, energy cost, interest charges and depreciation. Hence, depreciation & amortisation and interest cost are part of the operating expenses. While calculating operating ratio, DMRC excluded the depreciation & amortisation expenses and interest cost as part of the operating expenses thereby reducing the operating expenses. Thus, DMRC was rather suffering operational loss instead of earning operating profit as reported in its annual report as shown in **Annexure-IX**.

(ii) Even without considering the depreciation and interest expenses, there has been a consistent increase in the operating cost ratio (barring 2017-18), which indicates inefficient operational performance of DMRC.

Chart 5.2
Details of DMRC income from traffic operation and operating expenses

(₹ in crore)



The Ministry/ GNCTD and DMRC replied (January 2021 and July 2020) that the profit/ loss incurred after considering the interest and depreciation during the financial year is reflected in the financial statement of DMRC. The calculation of operating ratio shows

the efficiency and recoverability of operating expenses excluding depreciation and interest from the revenue earned while running the metro trains.

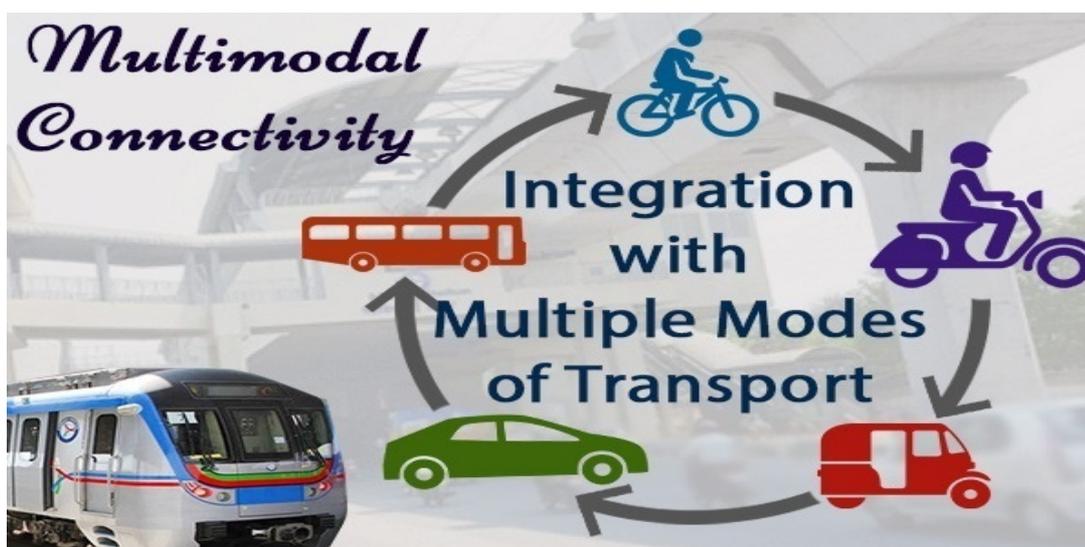
Reply of the Ministry/ GNCTD/ DMRC is not acceptable because a rise in the operating ratio indicates decline in efficiency of the organisation. DMRC has also accepted that while calculating the operating ratio, the operating expenses relating to depreciation and financing cost were excluded, which resulted in operating profits.

5.2.5 Non-implementation of all components of Multi Modal Integration

One of the objectives of GoI's National Urban Transport Policy, 2006 was enabling the establishment of an integrated and quality focused multi modal public transport system providing seamless travel across modes. On all new stations of Phase-III metro corridors, necessary components of Multi Modal Integration⁸⁵ are to be incorporated as per Unified Traffic & Transportation Infrastructure Planning & Engineering Centre Street Design, Connectivity and Pedestrian Design Guidelines (2009).

Figure 5.2

Multi Modal Integration



In this regard, Audit observed that:

- (i) DMRC neither envisaged implementation of complete Multi Modal Integration in the DPR stage nor included any budget provision or additional land areas. It also did not include the same even at the time of finalisation of tenders for Phase-III of the MRTS.
- (ii) As implementation of Phase-III works was delayed by almost two years, focus of DMRC was on immediate road restoration work only and not on implementation of

⁸⁵ *The objective of Multi Modal Integration includes seamless interchange between various modes of transport, availability of safe pedestrian crossing facilities near metro stations, creation of traffic calming measures, improving access and last metro connectivity, walk ability, safety, improve short term parking and drop off facilities, creation of Non-Motorised Vehicle (NMV) lanes, bus shelters, public toilets and to promote green and clean transport.*

complete Multi Modal Integration. In the name of Multi Modal Integration, DMRC carried out road restoration work on the land at all new stations of Phase-III.

(iii) Thirty metro stations of Phase-I and Phase-II facing traffic congestion throughout the day were identified in February 2019 for retrofitting. Audit observed that complete Multi Modal Integration has not been implemented in any of them except Chhatarpur station.

(iv) The conceptual drawing of Multi Modal Integration plan for Chhatarpur metro station was approved on 28 February 2012. The tender for implementation of same was floated (05 April 2017) by DMRC and Letter of Acceptance was issued on 09 August 2017. As per the contract, the work was to be completed within 10 months from 14 August 2017 i.e., by 13 June 2018. However, the work was completed in August 2019. While DMRC took five years in floating of tender, there was delay of more than one year in completion of work of Multi Modal Integration at Chhatarpur Station.

Thus, in absence of complete multi model integration, the envisaged benefits could not be achieved.

During the Exit Conference (January 2021) for this report, Ministry agreed for implementation of all components of Multi Modal Integration.

5.3 Revenue from Property Development and Property Business

5.3.1 Short fall of revenue of ₹1,847.87 crore from Property Development

As per the directive of Administrative Ministry (MoHUA), revenue generated from Property Development was to be used for funding of Phase-III Project and 4.5 per cent of project cost is to be met out from Property Development. DMRC has projected an amount of ₹2,505 crore (including short fall of ₹751 crore of Phase-II) to be generated through Property Development during Phase-III.

Accordingly, DMRC appointed (21 June 2012) consortium of M/s KPMG Advisory Services Private Limited & M/s Knight Frank (India) Limited (the consortium) to advice on formulation of an actionable strategy to generate targeted revenue for Phase-III through Property Development. The consortium submitted (May 2013) their final report by identifying three sites⁸⁶ for Property Development to be developed during the Phase-III.

In this regard, Audit observed that even after lapse of seven years, as on 31 March 2020, so far only ₹657.13 crore has been earned by DMRC against the targeted earning of ₹2,505 crore. Therefore, there was an overall shortfall of ₹1,847.87 (₹2,505-₹657.13) crore (i.e., 73.77 per cent). Audit also observed the following:

(i) DMRC has not explored any possibility for Property Development at site of Vasant Vihar site which alone has the potential earning of ₹2,292 crore.

⁸⁶ Vasant Vihar, Bhikaji Cama Place, Anand Vihar

In response, DMRC stated that it had requested (March 2014) DDA for allotment of plot at Vasant Vihar. However, DDA suggested that in lieu of land, it will be appropriate if DMRC seeks funds corresponding to Property Development Budget. Accepting this proposal, DMRC communicated demand of ₹2,505 crore for Phase-III to DDA. Despite follow up, DDA has not taken any favorable action. However, the facts remain that DMRC was unable to get either the plot at Vasant Vihar or any amount as suggested by the DDA.

(ii) Although land of 14,000 sqm for Property Development has been identified at Bhikaji Cama Place, till date no tender has been finalised.

In response, DMRC stated that Property Development at Bhikaji Cama Place is envisaged above the station box. After initial delay by Land & Development office, land has been allotted on 16 April 2019. The project is on hold as the land use of the area has not been changed from 'District Park' to 'Transportation'. Further, an application against the proposed commercial development has been filed in the Hon'ble National Green Tribunal which has ordered to maintain 'status-quo' in this area. DMRC is pursuing with DDA for change of land use and also in National Green Tribunal for vacation of stay. However, the fact remains that the envisaged revenue from Property Development could not be materialised.

(iii) At Anand Vihar, as against the proposed land of 1.5 hectare (15,000 sqm), only 1,358 sqm land has been identified for Property Development and no proposal has been initiated for the Property Development.

In response, DMRC stated that at Anand Vihar, an area of approximately 9,000 sqm has been identified for commercial development in the station box of Phase-II metro station. The project could not be taken up due to upcoming interchange of Phase-III station. Tenders for leasing of the vacant space shall be invited soon. The reply of DMRC is not tenable as the station under Phase-III was started for commercial operation on 31 December 2018 while the area identified for Property Development was pertaining to Phase-II. Thus, fact remains that DMRC failed to lease out the identified area to meet the project cost of Phase-III.

Thus, considering the potential upfront and lease income from these plots, necessary approval and planning should have been completed earlier so that loss of potential revenue could have been mitigated.

5.3.2 Non-accomplishment of revenue from the Property Development area constructed at a cost of ₹151.49 crore

The Ministry of Urban Development sanctioned (13 September 2011) the extension of Line-6 from Badarpur (in Delhi) to YMCA Chowk (Haryana) over a route of length of 13.875 km comprising nine stations⁸⁷. Four hectares of land was to be provided by the Government of Haryana free of cost for Property Development for augmenting the

⁸⁷ Sarai, NHPC Chowk, Mewala Maharajpur, Sector 27 A, Badkal Mor, Old Faridabad, Ajronda, Faridabad New Town and YMCA Chowk

earnings and making the corridor viable. As per the DPR (February 2007), two plots of land owned by Government were identified for Property Development and commercial utilisation which were expected to generate ₹234.22 crore. DMRC was also allowed commercial exploitation of the air space above the metro stations and parking area for early re-couplement of loan taken for Rolling Stock. The corridor was further extended to Ballabgarh with a length of 3.25 km with two stations viz NCB Colony and Ballabgarh (now Raja Nahar Singh). The corridor from Badarpur to YMCA Chowk (nine stations) and NCB colony to Raja Nahar Singh (two station) were opened for commercial operation on 06 September 2015 and 19 November 2018, respectively. Property Development areas of 44,751 square meter (sqm) were constructed with expenditure of ₹151.49 crore⁸⁸ on 11 stations of the above mentioned corridors. In this regard, Audit observed that:

- (i) An area of 44,751 sqm constructed on metro stations including three additional floors each at Sarai and Raja Nahar Singh stations at a cost of ₹151.49 crore which was exclusively created for Property Development remained idle as DMRC has not been able to lease them out till date.
- (ii) Land at Sector 5 and Sector 20 of Faridabad handed over by Haryana Urban Development Authority for Property Development have not been leased out by DMRC till date. Thus, DMRC has not been able to generate ₹234.22 crore from Property Development as estimated in the DPR.
- (iii) As per the Para 12.8 of DPR for Badarpur-Faridabad corridor, there was negative cash inflow of ₹798 crore in a period of 30 years. Hence, the extension of metro line up to YMCA Chowk was not recommended. It was recommended that DMRC should be permitted to commercially exploit the land made available for the project and air rights above stations without sharing of revenues with any other authority/ body/ organisation. This will enable repayment of the commercial loan taken by DMRC for procurement of Rolling Stock. However, DMRC failed to generate any Property Development revenue from the two plots allotted by Government of Haryana and the Property Development area constructed on the eleven stations at a cost of ₹151.49 crore.

Thus, DMRC was unable to let out 40,071 sqm (out of 44,751 sqm) during the last five years which is approximately 90 per cent of total areas constructed exclusively for Property Development.

DMRC stated (July 2020) that cost of construction for the framework which was required to attain the height cannot be attributed to Property Development and that ₹151.49 crore have not been spent on construction of Property Development area.

⁸⁸ *Property Development area construction cost in respect of nine station were obtained from the cost sheet prepared by DMRC and in respect of two stations viz. Sant Surdas (NCB Colony) & Raja Nahar Singh (Ballabgarh) the actual cost of construction was not provided by DMRC, the same have been considered on the basis of actual construction cost of Ajrona and Sarai station respectively.*

DMRC had successfully floated tenders for Property Development spaces at five stations in 2015-16. For Sarai and Neelam-Chowk Ajrona stations, tenders have been floated thrice. Continuous efforts are being made by Property Development department by way of re-tendering based on experience gained, besides efforts to lease out spaces to Government departments of Government of Haryana and other PSUs.

The Ministry/ GNCTD and DMRC replied (January 2021 and July 2020) that Audit contention that an amount of ₹151.49 crore has been spent on creation of Property Development spaces is not agreed to as the methodology used by Audit to work out the cost of creating the Property Development spaces is wrong. In the recent past, Property Development plot measuring 7,615 sqm in Sector 20-B has been leased out and an up-front payment of ₹6 crore has been received along with requisite security. Similarly, the floor space measuring 4,680 sqm at old Faridabad metro station has been leased out and an up-front payment of ₹2 crore has been received along with requisite security. As regards early recoupment of loan, the cost of Rolling Stock was met by DMRC from its internal resources. On the issue of negative cash flow, it is stated that DMRC never projected that with Property Development.

Reply of the Ministry/ GNCTD/ DMRC is not tenable because Audit did not adopt any methodology of its own for calculation of Property Development area construction cost. Rather, the cost of construction of nine stations were obtained from the cost sheet prepared by DMRC. The area of 44,751 sqm was constructed exclusively for Property Development at the cost of ₹151.49 crore which was over and above the construction cost of stations. Government land pockets have been identified in the DPR of 2007 and the line opened for commercial operation in September 2015. Yet, till date DMRC is not able to let out the properties. It was clearly mentioned in the DPR para 12.8 that the project was not recommended and DMRC should be permitted to commercially exploit the land made available for the project and air rights above stations for early repayment of commercial loan.

5.3.3 Undue benefit to the single bidder

DMRC invited (24 February 2016) bids for Property Development of 12,219 sqm plot at Malviya Nagar for lease period of 50 years (including three-year moratorium) and upfront payment was assessed as ₹120 crore. The tender was opened (11 May 2016) but no bid was received. The revised tender was floated (September 2016) on the revised parameters by reducing the upfront fee to ₹50 crore. Only one bidder i.e., M/s Eldeco Infrastructure & Properties Limited (EIPL) has submitted its bid upto closing date (01 December 2016). M/s EIPL quoted monthly lease fee of ₹19.70 per square feet per month (₹212 per square meter per month). The Tender Committee accepted the offer of M/s EIPL and Letter of Acceptance (LoA) was issued (13 February 2017) to M/s EIPL. In this regard, Audit observed that:

(i) Prior to opening of financial bid (27 January 2017), the bidder has submitted (15 November 2016) their financial proposal of monthly lease fee of ₹19.70 per square feet per month along with fixed upfront lease fee of ₹50 crore. This was prior to the evaluation of the technical bid (20 January 2017). Since the price bid was known to

DMRC before opening of technical bid, the tender should have been cancelled by DMRC. Instead, the work was awarded to the single bidder. The fact that the contractor had submitted its financial proposal was known to the Director (Business Development) who was also the member of Tender Committee. Yet, this fact was neither brought to the notice of Tender Committee nor apprised to the Managing Director, DMRC while seeking his approval.

(ii) As per the modified bid parameter for inviting Property Development tender for standalone plots, the upfront lease should be kept up to 30 *per cent* to 35 *per cent* of the Project Net Present value (NPV). There were no criteria for reducing the upfront fee in the approved bid parameter. However, the upfront fee has been consistently reduced from ₹120 crore to ₹60 crore and then to ₹50 crore by DMRC, without any justification.

(iii) DMRC engaged three consultants⁸⁹ to provide details of prevailing rentals of constructed properties at five locations near Malviya Nagar metro station. However, DMRC considered only the rental rate of ₹151 per square feet per month of the Square One mall which was the second lowest among rental rates of the five locations for tendering purpose. Based on rental of Square one Mall of ₹151 per square feet per month⁹⁰, DMRC computed the Reserve Price⁹¹ of ₹41.47 per square feet per month⁹² (as it was a vacant plot, cost of construction, upfront fee etc. was considered for its calculation) with upfront fee of ₹60 crore. However, this was further reduced (January 2017) to ₹14.21 per square feet per month⁹³ considering rental of ₹110 per square feet per month by the Reserve Price Committee without any justification though quoted price of ₹19.70 per square feet per month was known ((November 2016) to DMRC. This indicates the undue benefit to the sole bidder.

The Ministry/ GNCTD and DMRC replied (January 2021 and July 2020) that any additional financial information if submitted by bidder with the technical package cannot be treated as financial offer. Post demonetisation, the Real Estate market was in bad shape for a long time. DMRC could have lost huge revenue if that bid was not processed. DMRC further stated that achieving 30 *per cent* to 35 *per cent* of project NPV through upfront was not possible during the previous invitation of tender and therefore, moderation of upfront amount was done to make it more attractive, and the NPV was reduced. Average rates of areas which are similar in location and size was accordingly kept as base for reserve price estimation of ₹110 per square feet per month.

The reply of the Ministry/ GNCTD/ DMRC is not tenable as Dy. Chief Engineer and Executive Director/ Contract had brought to the notice of Director (Business Development) that the sole bidder has submitted its financial bid. DMRC reply is also silent about withholding of information from the Tender Committee. Four tenderers had submitted tender security up to the stipulated date i.e., 1 December 2016. Thus, there was ample response for the tender. If the market was in bad shape, DMRC should

⁸⁹ *M/s JLL, M/s CBRE and M/s Knight Frank (I) Private Limited*

⁹⁰ *Potential monthly lease income of ready to move in property*

⁹¹ *Minimum reserve price below which tender can't be awarded*

⁹² *₹446.38 per sqm per month*

⁹³ *₹153 per sqm per month*

have extended the bid submission date instead of evaluation of single bid. The bidding parameters were revised in such a way that nominal upfront payment would be received during the construction period and maximum recurring lease fee would be received over the operational period. The upfront fee received by DMRC will help in reducing the project cost and the lease fee will enhance the operating income of DMRC over the lease period. Instead of considering the average rent as suggested by the consultant, lowest rent was considered by DMRC which resulted in fixation of lower reserve price. Thus, to give undue benefit to M/s EIPL, reserve price was fixed at ₹14.21 per square feet per month below the known price bid of ₹19.70 per square feet per month of single bidder.

5.3.4 Transfer of lease right to a third company

M/s EIPL submitted their proposal (3 July 2017) to execute the Malviya Nagar Project through Special Purpose Company. Accordingly, they requested DMRC for executing the lease deed in favour of Special Purpose Company. DMRC granted (7 August 2017) approval for formation of Special Purpose Company for implementation & monitoring of the project through M/s Best View Infracon Limited (BVIL) (a subsidiary of EIPL). For this purpose, an addendum to agreement was signed (22 November 2017) among DMRC, EIPL, and BVIL and they entered (27 March 2018) into supplementary lease agreement where it was decided that BVIL will execute the project and advance lease fee will be submitted by them. In this regard, Audit observed that:

- (i) Since Request for Proposal (RFP) does not provide for the transfer of project to subsidiary company/ Special Purpose Company, the transfer of development rights to BVIL was in violation of tender conditions. Thus, DMRC granted the development rights to BVIL who had not participated in the bidding process.
- (ii) BVIL was not a new Special Purpose Company created for the specific purpose but an existing subsidiary of EIPL which was incorporated in 2008. This fact was not brought to the notice of DMRC while seeking approval for transfer of project to BVIL. Executive Director (Property Development) also rejected (10 March 2017) the proposal of formation of any Special Purpose Company as RFP documents does not have such a provision. Besides, while transferring work to the BVIL, the financial and technical capacity was not evaluated. Reviewing the financial results (half yearly) for the year ended 2016 and 30 September 2017 revealed that BVIL does not have any operational income. Thus, BVIL was not financially competent to enter into the bidding process.
- (iii) Further, Clause 3 of supplementary lease agreement executed (27 March 2018) among DMRC, EIPL and BVIL states that “all rights transferred to the EIPL/ Lessee vide lease agreement dated 29 June 2017 shall now vest with BVIL”. Thus, DMRC granted the development rights to BVIL who did not participate in the bidding process and was also not financially competent to enter into the bidding process. EIPL participated in the tender process and work was granted to them but later transferred to BVIL.

Thus, EIPL participated in the tender process and then the work was granted and transferred to BVIL.

DMRC replied (July 2020) that formation of Special Purpose Vehicle/ Special Purpose Company for a company was not mentioned in the contract agreement. But, for effective implementation & monitoring of the project, EIPL submitted proposal of wholly owned subsidiary company (controlling 99.99 *per cent* equity share of Special Purpose Company). Hence, modification was made in the contract condition to allow SPC by taking the approval of Managing Director. The Ministry/ GNCTD endorsed (January 2020) the replies of DMRC.

The Ministry/ GNCTD/ DMRC has accepted that there was no provision in the agreement for formation of Special Purpose Company. No new Special Purpose Company was formed but the work was transferred to BVIL (existing subsidiary of EIPL). Reply of DMRC is silent on financial and technical capacity of BVIL.

5.3.5 Construction of Property Development space over Vinod Nagar depot without market survey/ analysis

As per DPR (September 2011) of Phase-III, a new at-grade Depot at Mayur Vihar (presently Vinod Nagar) was proposed. But, due to land constraint during execution stage, DMRC planned (July 2014) and constructed elevated Vinod Nagar depot and Property Development area above the depot.

Audit observed that DMRC had made provision of ₹37.71 crore for strengthening of structures for Property Development area at Vinod Nagar depot. However, no market analysis on potentiality of the plan and future probability was carried out before deciding for Property Development in the Depot. This Property Development space has not been let out till date even though the depot work is operational since 2018.

The Ministry/ GNCTD and DMRC replied (July 2020 and January 2021) that the provision for future Property Development over double deck stabling was considered due to its location on NH-24 with good connectivity from all directions. The system was planned for stabling of trains on the first two floors and Property Development after market survey on the four floors over these floors.

Reply of the Ministry/ GNCTD/ DMRC is not acceptable as in the absence of any market survey/ analysis, potentiality of Property Development in future cannot be relied upon. Further, no records relating to marketing survey was furnished along with response.

5.4 Revenue from Property Business

5.4.1 Shortfall in revenue generation of ₹1,841.19 crore from Property Business divisions

Detailed Project Report of Phase-III stipulates that the revenue from Property Business⁹⁴ and advertisement during the operation stage would be 25 *per cent* of the

⁹⁴ In July 2012 a new division namely Property Business was carved out from existing Property Development division

Fare Box collection. During 87th Board of Directors meeting held on 15 March 2012, it was stated that non-operational revenue of DMRC constitute only 21.6 *per cent* of the total revenue and there is tremendous scope for increasing non-operational revenue to at least 30 *per cent* of total revenue in the next five years. In this regard, Audit observed that:

(i) DMRC had no Standard Operating Procedure/ approved plan/ strategy for generating Non-Fare Box Revenue as estimated in DPR for Phase-III including extensions and for guidance and decision making of Property Development/ Property Business Divisions.

(ii) Detailed Project Report of Phase-III and other extensions had a target of ₹1,917.25 crore for Non-Fare Box Revenue during 2016-17 to 2019-20 (**Annexure-X**), out of which, major portion of earning pertained to semi-naming rights/ co-branding rights of Phase-III stations, which was a new concept and was not contemplated in DPRs. Against this target, DMRC earned only ₹76.06 crore (3.97 *per cent*) till March 2020. Hence, there was shortfall of ₹1,841.19 crore (₹1917.25 crore–₹76.06 crore) from Property Business revenue during 2016-2020.

(iii) Inputs/ suggestions were not taken by Consultancy Division from Property Development/ Property Business division at the time of preparation of DPRs for estimated Property Development/ Property Business income. For example, Property Development/ Property Business area was planned and constructed at Haiderpur Badli Mor station and Vinod Nagar depot, which are located near a landfill site without duly considering that they were underdeveloped areas and with traffic connectivity issues. Besides, space for advertisement, kiosk, ATMs etc., inside and outside the proposed stations on the corridors of Phase-III was not ensured.

The Ministry/ GNCTD and DMRC replied (January 2021 and July 2020) that 25 *per cent* of the Fare Box Collection was to flow from recurring payments on the leased properties, advertisement rights, leasing of kiosks, ATMs, semi-naming rights of stations, etc., on full commissioning of Phase-III. Non-fare Box Revenue was estimated on the presumption that the entire Phase-III network will be operational by the year 2016-17. However, Phase-III Project could only be completed by December 2018 except a small portion of 1.5 km. The total Property Development/ Property Business earning up to March 2020 for Phase-III contracts is approximately ₹76.06 crore. The architecture wing provides a tentative list of spaces marked for Property Business activities. However, the final list of the spaces is ascertained after opening of said section/ line/ station. Property Business is a volatile activity and depends upon the existing market conditions.

DMRC accepted that DPR target has not been achieved. The facts remain that there was no coordination between Consultancy Division and Operation Department regarding location, area for Property Development/ Property Business activities. At the time of preparation of DPR, a fixed *per cent* of Fare Box Revenue like 1 *per cent* to 25 *per cent* was fixed for computation of Financial Internal Rate of Return/ viability without mentioning the area for Property Business activities, market trends, expected

rental in the vicinity. Property Development/ Property Business income is estimated at the time of preparation of DPR i.e., before commencement of construction of particular line section/ corridor without any market analysis and demand projections. Reply of the Ministry/ GNCTD/ DMRC is silent on other issues like formulation of Standard Operating Procedure/ Property Development manual. Further, the DPR containing the targets for Property Business was approved by the BoDs, the Board has not reviewed periodically the achievement of target of Property Business division as mentioned in the DPRs and did not take necessary action for accomplishment of the same.

5.4.2 Loss of revenue of ₹15.80 crore due to delay in award of contract

Co-branding contracts: Vigilance Circular (06 October 2012) of DMRC regarding procedure order for calling of Tender/ Award of Tender/ Extensions/ Execution in Property Development and Operation & Maintenance Contracts states that the administrative approval of the proposal should commence at least four months in advance of the contract closure and tenders should be floated at least three months in advance. Further, it was stipulated that Tender Committee should be constituted well before calling of tenders. Property Business division awarded several contracts for co-branding of metro stations constructed during Phase-III with delays ranging from 71 days to 1,270 days in awarding of the 15 co-branding contracts (**Annexure-XI**). As a result, DMRC had to forgo revenue of ₹15.80 crore which could have been earned if the vigilance circular was adhered to and contract of the said metro stations were awarded in scheduled time.

The Ministry/ GNCTD and DMRC replied (January 2021 and July 2020) that Co-branding is a very innovative concept of advertisement introduced by DMRC in 2014. The process of calling of tenders of co-branding as well its awarding started well before the completion of Phase-III and is a continuous process. Hence, considering the delay from the date of floating of tender to the date of operation of an individual station is not reasonable. The tender for licensing Semi Naming Rights of metro stations are being called on the principle of expression of interest. Only those metro stations for which expression of interests are received are included in the tender to avoid unnecessary expense of valued revenue of DMRC.

The reply of Ministry/ GNCTD/ DMRC is not correct as vigilance circular was introduced in 2012 whereas DMRC introduced the co-branding concept in 2014 for Phase-I and Phase-II stations existing at that time. Therefore, advance planning for tendering process should have been done so that time frame as per the circular could be adhered to. Further, till scheduled date of completion of Phase-III i.e., March 2016, tenders for only seven stations (excluding above mentioned) Semi Naming Rights contracts were finalised as there was sufficient time (two years/ four years) before scheduled opening of Phase-III corridors i.e., March 2016 and majority stations were opened in 2018-19. But due to delay in finalisation of semi naming rights tenders and awarding before commencement of revenue operation of Phase-III stations, DMRC had to forego revenue amounting to ₹15.80 crore.

5.4.3 Non-utilisation of advertisement space on Platform Screen Doors installed on metro stations of Line-7 and Line-8

In May 2012, DMRC proposed for procurement of Unattended Train Operation based Rolling Stock on Line-7 and Line-8, besides suggesting for installation of Platform Screen Doors on all the stations of Line-7 and Line-8. The proposal of Platform Screen Doors was placed (July 2012) in the 91st meeting of Board of Directors. The Board of Directors appointed sub-committee deliberated that since the initial cost of Platform Screen Doors is high, earning from advertisement has been estimated to explore the method of funding. The sub-committee recommended (August 2012) for installation of Platform Screen Doors on 63 stations on Line-7 and Line-8 with the facility to use space for advertisement and after considering 15 square meter area per station available for advertisement, the potential earning from advertisement on Platform Screen Doors on 63 stations of Line-7 and Line-8 for 30 years was assessed to be ₹225 crore. There was an average advertisement space of 200 sqm on stations as intimated by DMRC. Audit observed that as per NIT of inside advertisement rights for selected 49 metro stations on Line-7 and Line-8, minimum area of advertisement of 40 square meter to 80 square meter is given to licensee after categorisation of each station on the basis of projected ridership, without specifying the actual area of advertisement available at each station including Platform Screen Doors.

The Ministry/ GNCTD and DMRC replied (January 2021 and July 2020) that despite offering the optimum area, more than 40 *per cent* to 45 *per cent* of advertisement inventories are generally lying vacant but successful licensee has to pay the fixed license fee according to contract conditions. Floating separate tender for advertisement rights of Platform Screen Doors and inside stations may attract conflict of interest between the parties which may lead to unnecessary litigation for DMRC. Moreover, the basic thrust of the installation of Platform Screen Doors was to prevent accidental fall or jump by commuters on the track. Earning from the advertisement was envisioned with a noble concept to earn revenue.

The reply of Ministry/ GNCTD/ DMRC is not acceptable as DMRC never floated tender exclusively for Platform Screen Doors advertisement which was envisaged by Board of Directors at the time of approval for installation of Platform Screen Doors. DMRC calculated the estimated price of Line-7 and Line-8 in advertisement contracts on the basis of existing lines wherein Platform Screen Doors was not installed. The conflict of interest between two advertisers is presumption of DMRC and DMRC had already awarded separate tender for digital advertisement other than inside station advertisement contract at ITO station. As potential of Platform Screen Doors advertisement is high, instead of awarding separate contract as recommended by Board of Directors, DMRC allowed existing contractors for station to utilise this huge area without specifying the advertisement area of Platform Screen Doors.

Conclusion

Thus, there were deficiencies in operation and maintenance and shortfall in achievement of planned benefits after commercial operation. DMRC did not prepare

line-wise operational profit/ loss statements and not claiming operational losses, if any from the respective State Governments till March 2020. The actual ridership after completion of Phase-III was only 4.38 lakh against projected ridership of 20.97 lakh in 2019-20, which was 79.03 *per cent* less than the projections. In the NCR and other extensions, the actual ridership was 15.12 *per cent* to 87.63 *per cent* lower than the projections. The operational efficiency of DMRC was also declining with the operating cost ratio rising from 48.99 *per cent* in 2011-12 to 80.55 *per cent* in 2019-20.

DMRC's method of calculating operating expenses excluded the depreciation and amortisation expenses and interest cost, resulting in reduced operational expenses and depicting operating profit although in reality they were incurring operational losses. DMRC not only failed to provide last mile connectivity services, but also did not comply with extant guidelines and was unable to provide Multi Modal Integration facilities.

There was shortfall of ₹1,847.87 crore⁹⁵ in earning from Property Development, against the targeted earning of ₹2,505 crore. Further, there was shortfall of ₹1,841.19 crore in Non-Fare Box Revenue generation through Property Business against the estimated Non-Fare Box Revenue of ₹1,917.25 crore during 2016-17 to 2019-20.

Recommendations

17. *DMRC may prepare line-wise profit and loss account and claim operation loss, if any, from respective State governments.*
18. *DMRC may also ensure last mile connectivity for augmentation of ridership through various modes including planned feeder bus services.*
19. *DMRC may enhance its efforts to increase operating efficiency by reducing the operating ratio and also estimate more realistic ridership for future DPRs.*
20. *DMRC may ensure implementation of a complete Multi Modal Integration as per extant guidelines with integrated planning of land use and various modes of transport.*
21. *A structured and approved Property Development and Property Business manual may be formulated for ensuring uniformity and consistent decision making. DMRC may also consider preparing a road map to accomplish targeted Non-Fare Box Revenue on the basis of combined experience of Phase-I, Phase-II & Phase-III.*
22. *There should be a member/expert with marketing skill in Board for efficient dealing with Property Development and Property Business related activities.*

⁹⁵ ₹2,505crore - ₹657.13 crore