

Chapter 4

Procurement of Buses and Implementation of Intelligent Transport System

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Hon'ble High Court of Delhi suo moto, through order dated 10 September 2007, inter alia, directed Delhi Government and Corporation to augment the city fleet to 11,000 buses. As per GNCTD Cabinet Decision (July 2012), Corporation's fleet share was required to be at 5,500 against which the Corporation had 3,937 low floor buses as on 31 March 2023. As discussed in Chapter 3, these low floor buses were more than 10 years old and were to be phased out completely by 2024-25. Although as on 31 March 2022, there was shortage of 1,740 buses against the requirement of 5,500 buses, no new buses (except two electric buses in March 2022 and 298 buses by November 2022) could be procured despite availability of funds of ₹ 233.06 crore as on 31 March 2022. The Corporation lost opportunity of availing Central assistance of ₹ 49 crore under FAME-I Scheme due to lack of clarity about specification of buses and indecision. Delay in finalisation of bids for 300 electric buses under FAME-II Scheme led to delay in procurement of buses with consequent reduction of contract period from 12 years to 10 years and non-levy of Liquidated damages of ₹ 29.86 crore as of December 2022. The AFCS and CCTV Surveillance system was not working in Corporation buses despite lapse of more than nine years since the project was initiated by the Government.

Thus mandated objective of providing efficient, adequate and reliable bus service in Delhi was not achieved.

4.1 Procurement of buses

The Corporation procures/engages Buses as per the policy decisions and funds provided by GNCTD. Consequent upon the approval of the Cabinet, GNCTD, efforts made by the Corporation since 2013 for procurement of buses are detailed in **Table No. 4.1**

Table 4.1: Action taken for procurement of buses

Particulars	1380 Non-AC buses with AMC	345 AC Premium Segment with AMC	1380 Non-AC buses with AMC	1000 Non-AC Standard size 900mm Floor height CNG buses without AMC	1000 LFB AC without AMC	1000 LFB AC without AMC (Re-tender)	300 Electric buses
Cabinet Approval	2086 dated 3.10.2013			2504 dated 1.9.2017	2713 dated 11.7.2019	2713 dated 11.7.2019	2795 dated 23.12.2019
Bus type/Floor height	Standard Floor buses (900 mm) CNG, with maintenance	Premium Segment 400 mm Floor height, CNG, with maintenance	Standard Floor buses (900 mm), CNG with AMC	Standard Floor 900 mm Non-AC CNG without AMC	Low Floor CNG, AC without AMC	LFB CNG AC without AMC	LF AC
Consultant	No consultant	No consultant	CIRT Pune	DIMTS	DIMTS	DIMTS	M/s. ALMONDZ
Consultancy fee paid	NA	NA	No fee mentioned	₹ 19.47 lakh	₹ 13.62 lakh	₹ 24.99 lakh	₹ 21.16 lakh
Estimated cost (₹ in crore)	414	311	414	330	850	850	1460
Tender date	4.10.13	4.10.13	30.6.14	15.3.18	26.7.19	20.3.20	15.10.2019 15.6.2020 3.12.2020
No. of bids received	One	Nil	One	One -M/s TML	Two	Two	Four
Outcome of tender	Foreclosed due to conditional bid	NA	Foreclosed due to unreasonably high basic prices and AMC charges.	High Court precluded (June 2018) from procuring Standard Floor buses.	Short closed due to discrepancies and irregularities	Contract agreement signed with M/s JBM for 700 buses and M/s Tata Motors for 300 buses, in Feb 2021.	The LOA was issued on 30.3.2021 to M/s JBM Auto Ltd. (200 e-buses) and M/s Tata Motors Ltd. (100 e-buses) with AMC at ₹ 68.58 per KM.
Decision	NA	NA	NA	Tender scrapped due to single bid and High Court decision.	To invite fresh bids	Procurement process kept in abeyance till further order as per GNCTD order dated 11.6.21.	

Besides the above, the Board approved nine proposals for procurement of buses during the period 2013 to 2021. However, these could not progress to Tendering stage either due to non-receipt of formal approval from GNCTD or change in specifications by GNCTD, as detailed in **Annexure 4.1**.

In this regard, Observations of Audit on tenders not finalized or finalised with delay are as under:

- The Corporation time and again changed the proposals for procurement of buses with different floor height between 900 mm, 650 mm and 400 mm or Midi-buses¹ and requirements changed from AC to Non-AC and with AMC or without AMC. This reflects that the Corporation itself was not sure which type of bus was suitable for the city leading to the Tender not being processed.
- Before floating Tenders, the Corporation did not assess the availability aspect from Vehicle Manufacturers (VMs). The Corporation decided specifications for 400 mm floor height premium segment AC buses against which there was no response due to unavailability of specified buses with VMs. As a result, the Tender failed each time.
- The main cause of failure of the above Tenders was procurement of buses along with AMC. The bidders quoted very high rates in such bids as they were facing difficulty in realising full payments for AMC for Low Floor CNG Buses of the Corporation. Despite this, the Corporation did not take a firm decision whether to go for AMC by VMs or AMC by a third party or in house Maintenance of buses by Workshop staff, leading to frequent change in the specifications and not finalisation of Tenders as detailed in above **Table No. 4.1**.
- The consultancy fee of ₹ 58.08 lakh became wasteful due to failure to finalise bids on three occasions.
- As per Urban Bus Specifications-II (UBS-II) laid down (April 2013) by the Ministry of Urban Development, Government of India (MoUD), maximum Floor Height of 400/650/900 mm is to be followed by the State Road Transport Corporation / State Transport Undertakings for Standard Size Bus. As per UBS-II, Cities having population of less than or equal to one million can procure buses having 900 mm Floor height also whereas Cities having population of more than one million will procure either 650 mm or 400 mm Floor Height Buses. Any change in composition is subject to approval of MoUD. After changing the specifications of buses multiple times in last seven years, it was finally decided to procure 1,000 fully built non Air conditioned Standard size of 900 mm Floor height CNG Buses without approval from MoUD which was against UBS-II specifications. Further, Hon'ble High Court also precluded (June 2018) the Corporation from procuring Standard Floor Buses as same were not 'disabled friendly'.
- The Commerce Secretary, Government of India, while informing that automobiles are available on GeM at highly discounted rates ranging from 12 per cent to 20 per cent over market rates, requested (December 2018) the Chief Secretary, GNCTD to issue necessary instructions to the concerned officers specifically Secretary Transport and MD of State Road

¹ Midi buses are larger than mini-buses and smaller than full size buses.

Transport Corporation to procure the vehicles on GeM. The Transport Department, GNCTD directed (21 January 2019) the Corporation to take action in accordance with the above orders. However, the Corporation did not explore this possibility and no reasons for the same were available on record.

- Letter of Award (LoA) for 1000 Low Floor Buses was signed with M/s JBM for 700 buses and M/s Tata Motors for 300 buses, in February 2021. However, based on a complaint, the procurement process of the same was kept in abeyance as per orders received from the Department on 11 June 2021. Further, the Government of India decided (August 2021) for undertaking a preliminary enquiry in the matter by the Central Bureau of Investigation; status of which, was not available on records during audit.
- The Corporation subscribed for engagement of 1500 Electric Buses (921 Faster Adoption and Manufacturing of Electric Vehicles (FAME II) scheme & 579 Non FAME II) under Department of Heavy Industries (DHI), GoI FAME-II scheme, through Grand Challenge scheme of Convergence Energy Services Limited (CESL). Accordingly, order for 1500 E-buses was placed on 14 July 2022, out of which, 900 E-buses were received till January 2024.

Though process of procurement of buses was initiated several times during 2015-22, except 300 E-buses², no other required buses could be procured till March 2023 despite availability of funds from GNCTD. Thus, delay in processing of tenders defeated the mandated objective of providing an efficient, adequate and reliable bus transit service to Delhi.

The Management confirmed and accepted (May 2023) the Audit Observations.

4.2 Loss of opportunity to avail Central Subsidy of ₹ 49 crore

Department of Heavy Industries (DHI), in a meeting held in November 2016, briefed about the FAME (Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles) Scheme launched in April 2015 under the National Electric Mobility Mission to encourage electric and hybrid vehicle purchase by providing financial support. Under this, State Governments may approach DHI for sanction and release of funds for procurement of E-buses.

Audit noted that the Board of the Corporation with regard to introduction of fully Electric Buses in Delhi as a pilot project directed (16 March 2017) that a proposal for procurement of 100 Hybrid Electric Buses along with proposal to

² Corporation entered into engagement of 300 e-buses under CAPEX Model of FAME-II scheme of Department of Heavy Industries, GoI. Under the Scheme, MHI contributed ₹ 55 lakh per bus as subsidy to Vendors which was to be routed through DTC. The Corporation has to pay the Vendor at the rate of ₹ 68.58 per Km for operating the buses. Hence, no upfront payment was to be made by the Corporation and the corpus of ₹ 233.06 crore remained unutilized. Out of these 300 e-buses, only 2 buses were received till March 2022 and remaining were received till November 2022.

engage a professional Consultant through Limited Tender enquiry under the FAME Scheme may be submitted. The Corporation did not take further action as FAME – I scheme was valid up to 31 March 2017. However, FAME-I was later extended up to 31 March 2018 or till launching of FAME-II scheme whichever was earlier.

Ministry of Heavy Industry & Public Enterprises, GoI informed (November 2017) GNCTD that DHI was administering FAME scheme to promote electric mobility with the aim of reducing dependency on fossil fuels. It further sought submission of an Expression of Interest (EoI) by interested Cities for procurement of Electric Buses/Four Wheeler Passenger Cars and Electric Three Wheelers before 30 November 2017.

The Corporation, after approval from Department, submitted a proposal for procurement of 100 Electric Buses to GoI on 29 November 2017 against which DHI approved (27 December 2017) 40 E-buses for Delhi. The Letter of Intent (LOI) was required to be issued by the Corporation by 28 February 2018 failing which the sanction was to be cancelled. However, the Corporation intimated the Department (9 January 2018) that it would not be feasible for it to place LOI by 28 February 2018 and as per its past experience, it would be able to place order by July 2018. It also informed that project for purchasing 40 E- buses would involve estimated expenditure of ₹ 88 crore (₹ 34 crore to be provided by DHI as incentive and ₹ 54 crore by GNCTD as equity to Corporation) besides involvement of expenditure on creating charging infrastructure in Depots. The Corporation decided not to go ahead with the sanctioned project though the FAME scheme was extended by GoI from time to time up to March 2019.

Thus, in spite of sanction of 40 E-buses for Delhi under FAME-I scheme and extension of the scheme from time to time till 31 March 2019, the Corporation did not procure 40 E-buses and lost the opportunity to avail the Central Subsidy of ₹ 49 crore under FAME scheme (₹ 34 crore towards cost of electric buses and ₹ 15 crore towards creation of charging infrastructure).

The Corporation stated (May 2023) that it had informed the Department in March 2018 about its having no technical manpower and thereby absence of expertise/knowledge about technical specifications of advanced technology based Electric Buses, implications in maintenance of Electric Buses, installation and operation of Charging infrastructure and the Tendering process for procurement of Electric Buses.

The reply is not tenable as the Corporation hired a Professional Consultant³ to undertake the whole tender process in case of procurement of 300 electric buses as mentioned in Para 4.1. However, no efforts were made to hire a Professional Consultant in case of procurement of 40 electric buses, in spite of approval of the Board.

³ M/s Almonds Global Securities Limited

Recommendation No. 4.1: The Corporation should ensure that a proper system is put in place to avail of the benefits of Government funding for improvement of the Public Transport system in the State.

4.3 Delay in procurement of Electric Buses due to delay in finalisation of bids – FAME Scheme - II

DHI launched (March 2019) Faster Adoption and Manufacturing of Electric Vehicles (FAME) Scheme Phase-II for a period of three years commencing from April 2019 for engagement of E-buses by adopting Operational Expenditure (OPEX)⁴ model by State Transport Undertakings (STUs). The maximum incentive proposed was ₹ 20,000/- per KWh with capping of 40 per cent of the cost of bus. The amount of incentives for buses was subject to competitive bidding among the Original Equipment Manufacturers (OEMs) conducted by STUs for Intra-City, Inter-City or Inter-State Buses. The last date of submission of the Expression of Interest (EoI) by STUs to GoI was 18 July 2019.

The Principal Secretary (Transport) directed (4 April 2019) Corporation to examine and put up the proposal for engagement of 1,000 Low Floor Electric Buses under FAME-II scheme on OPEX model. The Corporation intimated DHI on 25 April 2019 that it was in the process of induction of 1,000 E-buses under FAME-II scheme and a detailed proposal would be submitted to GoI.

Audit noticed that the Corporation submitted the EOI to DHI on 2 July 2019 for which approval was conveyed by DHI on 21 August 2019 for engagement of 300 AC E-buses. It was stipulated by DHI that issuance of Supply Order to successful bidder should be made by 15 November 2019 failing which the offer was liable to be cancelled. The last date for issuing supply orders was later extended up to 31 March 2021.

The timeline followed by the Corporation in getting Cabinet approval, appointment of Consultant, Tendering process and placement of LoA is detailed in **Table 4.1** and further elaborated in **Table 4.2**.

⁴ OPEX (Operational Expenditure) Model: The buses were operated by the concessionaire based on agreed per Km rate for specified period involving operation and maintenance of buses by concessionaire. Thus, ownership of buses remains with the concessionaire.

Table 4.2: Outcome of tenders for procurement of 300 E-Buses

Particulars	Tender finalisation process for engagement of 300 E-Buses under OPEX model		
	I st instance	II nd Instance	III rd instance
RFP (Tender) floating date	15.10.2019	15.6.2020	3.12.2020
Date of pre bid meeting	21.10.2019	23.6.2020	7.12.2020
Date of Freezing and uploading of RFP after amendments in RFP	5.11.2019	8.7.2020	14.12.2020
Date of opening of Techno commercial Bids	21.11.2019	25.8.2020	28.12.2020
No. of bids received	Four M/s JBM Auto, M/s TML, M/s PMI & M/s Olectra Green Tech Ltd.	Three M/s TML, M/s PMI & M/s Azad Coach	Four M/s JBM, M/s TML, M/s PMI & M/s Olectra Green Tech Ltd.
Technically qualified bids	Three M/s JBM, M/s TML, M/s PMI.	Two M/s TML, M/s PMI.	Four M/s JBM, M/s TML, M/s PMI & M/s Olectra Green Tech Ltd
Date of opening of financial bids	13.12.2019	1.10.2020	22.1.2021
No. of bidders whose financial bids were opened	Three	Two	Four
Per KM Rate quoted in financial bid	JBM ₹ 82.60 TML ₹ 83.00 PMI ₹ 98.13	PMI Ltd. - ₹ 89.72 TML ₹ 96.70	JBM Ltd ₹ 68.58 TML : ₹ 72.20 Olectra Green : ₹ 76.10 PMI: ₹ 79.84
Estimated justified rate worked out by Corporation	₹ 76.39 per km adjusted rates of Nasik Municipal Corporation Tender.	₹ 81.71 per km adjusted rates of West Bengal Transport Corporation.	₹ 74.87 per km adjusted rates of WBTC, ₹ 76.91 per km adjusted rates of Ist call of tender and ₹ 84.12/km adjusted rates of IInd call of tender.
Negotiated price	M/s JBM Ltd - ₹ 82.51 per km	Not agreed for reduction in rates PMI - ₹ 89.72 per km	No negotiation held
Proposal of the Chairman of Corporation.	26.12.2019 Proposed for acceptance of negotiated rates subject to Board approval.	19.11.2020 Negotiated rates higher than estimated rates and negotiated rates of previous tender hence, proposed to close the tender and fresh RFP to be floated by revisiting the present terms and conditions vis-a vis tender floated by other STUs under FAME-II.	23.2.2021 The L-1 rates of M/s JBM of ₹ 68.58 per Km proposed for approval with the condition to give counter offer as per RFP i.e. 200 buses to M/s JBM and 100 electric buses to M/s TML.
Decision of the Board of the Corporation	Board on 1.1.2020 observed certain deficiencies in the tender and resolved to short close the tender and directed to invite fresh bids immediately to ensure transparency and fair play in the process.	Board was not apprised with the decision of the Management.	Board accorded approval on 01.03.2021. The Cabinet approved the proposal on 30.03.2021.
Award of Contract for engagement of electric buses	Tender short closed on 1.1.2020.	Tender short closed on 19 November 2020.	The LOA for engagement of 300 AC E-buses was issued on 30.3.2021 to M/s JBM (200 e-buses) and M/s TML (100 e-buses) at ₹ 68.58 per KM involving outgo of ₹ 1,824.28 crore over the concession period of 10 years.

As can be seen from the above table, the first Tender floated in October 2019 was short closed by the Board (January 2020) citing deficiencies in the Tender and with direction to ensure transparency and fair play in the process. The Corporation took considerable time of six months in retendering in June 2020 and further three and a half month to open price bids. Eventually, the 2nd tender was also short closed on 19 November 2020 after opening the price bids stating

that negotiated rates were higher than the estimated rates and also against the negotiated rates of previous tender.

Thus, despite initiating the process for engagement of E-buses in April 2019 after launching of FAME-II scheme by DHI, the tenders could be finalised by the Corporation only on third attempt on 30 March 2021. It was observed that due to delay in award, the term period of the Contract had to be reduced from 12 years (October 2019 tender) to 10 years (December 2020 tender). As a result of the delay in processing and finalization of the LOA, the delivery of 300 electric buses also got delayed.

The Management accepted (May 2023) the Audit Observations and further stated that the first tender of E-buses was short closed on 01 January 2020 as quoted rates of L-1 bidders were unjustifiable. However, the reasons for delays in retendering and deficiencies observed were not elaborated in reply.

4.4 Penalty of ₹ 29.86 crore not imposed for delay in delivery of buses

As per LOA, the Buses were to be delivered as per the delivery schedule given in **Table 4.3**.

Table 4.3: Delivery schedule of Buses

Sl. No.	Lot No.	Scheduled date of delivery of 200 Buses by M/s JBM	Actual date of delivery	No. of days delayed	Scheduled date of delivery of 100 Buses by M/s TML	Actual date of delivery	No. of days delayed
1	Prototype	29.06.2021 (1 Bus)	March 2022	255 days	29.06.2021 (1 Bus)	April 2022	289 days
2	1 st Lot of 118 Buses	29.10.2021 (59 Buses)	April to May 2022	165 to 201 days	29.10.2021 (59 Buses)	April to June 2022	165 to 231 days
3	2 nd Lot of 100 Buses	29.11.2021 (60 Buses)	May to August 2022	170 to 257 days	29.11.2021 (40 Buses)	June to August 2022	200 to 250 days
4	3 rd Lot of 60 Buses	29.12.2021 (60 Buses)	August to October 2022	226 to 295 days			
5	4 th Lot of 20 Buses	29.01.2022 (20 Buses)	October to November 2022	265 to 283 days			

Source: LoA with vendors.

As evident from the above delivery schedule, delivery of Electric Buses was to be completed by January 2022. However, only two buses were received till 31 March 2022, after the lapse of 12 months from issue of LOA and delivery of all 300 buses was completed only by 8 November 2022.

As per Article 13.9.1 of LOA, in the event, the Operator is unable to deliver the buses as per the scheduled delivery date, for reasons not attributable to the Corporation or due to a Force Majeure Event, the Operator shall pay damages at the rate of ₹ 2500/- per bus per day for first thirty days of delay in the delivery and ₹ 5000/- per bus per day after thirty days of delay. However, damages for delay in delivery of buses worked out to ₹ 20.46 crore and ₹ 9.40 crore in respect of M/s JBM and M/s TML, respectively was not claimed by the Corporation as of December 2022.

The Management stated (May 2023) that demand for Liquidated Damages of ₹ 29.86 crore was raised (February 2023) on both the firms. However, both the firms were yet to deposit the same (May 2023).

4.5 Intelligent Transport System

In Para No. 2.2.3.9 of Report of CAG for the year ended March 2015, Revenue and Social & Economic Sectors (PSUs), GNCTD, it was reported that Urban Bus Specifications Safety Guidelines (UBSSG) of Ministry of Urban Development (MoUD), Government of India (GoI) made it mandatory for installation of Electronic Route Display System, Automated Fare Collection System (AFCS) using Electronic Ticketing Machines (ETMs), Global Positioning System (GPS) based Automatic Vehicle Location System (AVLS) and closed circuit television (CCTV) cameras in buses purchased under JNNURM⁵. The Corporation purchased 1,500 LF Buses between September 2009 and September 2010 under Jawaharlal Lal Nehru National Urban Renewal Mission (JNNURM). Further, in April 2013, Ministry of Urban Development, Government of India formulated Urban Bus Specifications-II (UBS-II) that have to be complied with by the relevant category of buses used in Urban Bus Services. As per UBS-II, the buses have to be ITS enabled bus - On Bus Intelligent Transport System – (OBITS). It shall consist of sub systems such as Passenger Information System, Automatic Vehicle Location System, Security camera network system, On-board pole mounted Ticketing Machines, etc. As AFCS, GPS, CCTVs schemes were at initial stage of implementation during previous Performance Audit (PA), the progress of same was reviewed during the current PA. Main observations are discussed in subsequent paras.

4.5.1 Automatic Fare Collection System (AFCS) not implemented

The Corporation awarded the work to M/s. Trimax IT Infrastructure and Services Ltd. (M/s. Trimax), which was the single bidder in second global tender floated in January 2015, for implementation of AFCS in Corporation Buses. Work order was issued to M/s. Trimax on 30 September 2015 for a period of six years. The implementation process of AFCS was divided in three phases⁶.

Commercial operation of the AFCS project (first phase) started from December 2017 and the ETMs were rolled out in all the Depots in May 2018. M/s. Trimax showed inability to run the above AFCS project on 24 January 2020 and stopped providing services from 14 April 2020. Thus, implementation of AFCS in Corporation buses was discontinued since May 2020.

⁵ Jawaharlal Nehru National Urban Renewal Mission

⁶ Phase I: Installation, implementation & commissioning of ETMs in 200 buses as pilot project and subsequently in total fleet.

Phase II: Implementation of validators in 200 Buses and Integration of AFCS with DMRC System

Phase III: Installation & commissioning of Validators in total fleet.

In the meantime, Hon'ble National Company Law Tribunal (NCLT) had also initiated Corporate Insolvency Resolution Process (CIRP) against M/s. Trimax vide order dated 21 February 2019. The Corporation filed its claim of ₹ 91 crore neither in time nor in proper format against M/s. Trimax. Resolution Professional (RP) rejected the claim of the Corporation on 9 January 2020. The Hon'ble NCL Appellate Tribunal, in its judgement dated 18 August 2022 also rejected the claim of the Corporation. The Corporation claimed an amount of ₹ 218.22 crore for pre-estimated damages, for periods up to November 2023 in July 2021. Hon'ble Supreme Court vide Order dated 14 November 2022 rejected the claims of the Corporation against M/s Trimax.

The Corporation appointed M/s. Earnst & Young Limited (E&Y) as Bid Management Consultant at a cost of ₹ 17.00 lakh for implementation of AFCS in the Corporation Buses. As of December 2022, Tender for selection of System Integrator for implementation of AFCS was under process and file was pending for approval for floating Open Tender as of December 2022. Payment of ₹ 8.50 lakh was made to M/s. E&Y.

As AFCS system was not functioning since May 2020, the Corporation failed to take apparent benefits of AFCS system of reduction in costs and checking revenue leakages. The Corporation failed to recover damages of ₹ 91 crore against M/s Trimax due to delay in filing the claim which was rejected by NCLT in August 2022.

The Management accepted (May 2023) the Audit Observation and stated that the Transport Department had floated National Common Mobility Card based AFCS tender for the Corporation and Cluster buses which was due for opening on 28 February 2023. The fact remains that implementation of AFCS system had been unduly delayed.

Recommendation 4.2: The Corporation should take up the matter with Transport Department to speed up the process for implementing the AFCS system.

4.5.2 CCTV Surveillance System in buses not functioning

In a meeting held on 12 March 2013 under the chairmanship of Union Home Secretary, Government of India, it was decided that Corporation would install on board CCTV cameras in the buses linked to Central Control Room and footage would be made available to Delhi Police in case of any terrorist event or an accident. This was communicated to the Corporation in August 2013. Accordingly, as a pilot project CCTV cameras were installed in 100 buses of Sarojini Nagar Depot and 100 buses of Rajghat Depot by November 2014. After the Pilot project, Tender for installation of CCTV cameras in all buses was to be initiated by the Corporation.

The Corporation decided (in August 2016), after rolling out project of CCTV Cameras on Pilot basis in November 2014 that tendering process for installation of CCTV cameras in Corporation and Cluster Buses and installation of

Passenger Information System (PIS) only in Corporation Buses would be carried out by the Transport department, GNCTD. Accordingly, Transport Department, GNCTD (TD) appointed (February 2018) M/s. E&Y as Consultant for Bid Management Process for installation of CCTV System in Corporation and Cluster Buses. Tenders were floated for installation of CCTV system three times, in November 2018, January 2019 and July 2019. Out of the two technically qualified bidders, the work was awarded to L-1 bidder M/s. Telecommunication Consultants India Limited (TCIL), in December 2019 at a cost of ₹ 149.98 crore for 5,000 buses (with a clause for variation of 10 *per cent* in quantity) of the Corporation and Cluster out of which Cost for Corporation Buses was ₹ 89.64 crore. Further, considering the issues of women safety, the Council of Ministers also decided (December 2019) that Internet Protocol Closed Circuit Television (IPCCTV), Panic Buttons and Automatic Vehicle Tracking System should be installed in all existing Corporation and Cluster Buses which would also form part of the Contract.

After completing Supply, Installation, Testing and Commissioning of CCTV System as per Master Service Agreement (MSA) in 3,697 buses of the Corporation, a payment of ₹ 52.45 crore, was released to M/s TCIL in March, 2021 after deducting applicable penalties. The Go-Live date, i.e., effective date to start the Contract of five years was to be declared after conducting the User Acceptance Test (UAT). However, a Committee for this purpose was constituted by the Department only in June 2022, i.e., after more than one year of installation and UAT was yet to be conducted as of December 2022.

Meanwhile, M/s. TCIL submitted an invoice dated 21 June 2021 for payment of ₹ 1.65 crore on account of O&M Charges for first quarter. The Corporation, however, informed that payment cannot be processed without successful completion of UAT. M/s. E&Y also, vide email dated 11 August 2021, informed that, it had not received the payment for the last three quarters and stopped work from August 2021.

As per information provided (December 2022) by the Corporation, M/s. TCIL was in the process of developing a Real-time Dashboard for keeping the records of Panic Button alerts and action taken on them and dashboard for MIS. Operation and Maintenance (O&M) part was yet to be started as of December 2022.

Thus, despite lapse of more than nine years since the project was initiated by the Government, installation of CCTV System in Corporation Buses was incomplete as of December 2022. Even after Supply, Installation, Testing and Commissioning of CCTV System in 3,697 buses of the Corporation in January 2021 and release of payment of ₹ 52.45 crore to M/s TCIL, UAT was not conducted by the Department till December 2022. With the passage of time deterioration of the CCTV systems installed also cannot be ruled out due to lack of maintenance as during a Joint Inspection conducted⁷ in September 2022, it

⁷ Conducted by TCIL, DTC and Millennium Automation Private Limited.

was found that CCTV System was functioning in only 284 out of 430 buses and Generation of SMS to Depot Manager was not functioning in any of the 15 buses test checked in two Depots each.

The Management accepted (May 2023) the Audit Observation and submitted that the Department is in process of developing Real time Dashboard for MIS reports for CCTV project and a letter was written in February 2023 to the Department for taking necessary action. The fact remains that due to delay in commencing operation of the CCTV system in all the buses intended, objective⁸ of providing security features and real time information to passengers could not be achieved.

Recommendation 4.3: As the project conceptualized in March 2013 was unduly delayed, the Corporation should immediately take up the matter with Department, for installation of CCTV System and the UAT in Corporation buses for safety of passengers.

4.5.3 CCTV surveillance system in Depots/Units/Terminals of the Corporation not installed

The Delhi Transport Corporation intended (October 2017) to install CCTV surveillance system for monitoring various activities in Depots and Offices, inculcate discipline among employees, keep strong vigil against miscreants, safe guard Depot premises from external threats etc. Hon'ble Minister of Transport, had also directed the Corporation (November 2017) after inspecting Uttam Nagar Terminal, to install CCTV surveillance system in all Bus Terminals in Delhi so that any undesirable activities could be checked/curbed.

In light of the above requirements, the tentative quantity of CCTV surveillance system to be installed in various Depots/Corporate office/Terminals was assessed at 358 (December 2017) with an estimated expenditure of ₹ six crore with maintenance period of five years.

The Corporation forwarded (March 2018) the proposal of the installation of CCTV surveillance system in all the Depots/Units/ Terminals for approval by the GNCTD. However, the Department intimated (May 2018) that Corporation being an Autonomous Body is duty bound to secure its premises through CCTV surveillance and take a decision on the matter at its own level and implement the same through its own resources. Audit noticed that the matter was not further processed even after a lapse of more than four years as of December 2022.

The Management stated (May 2023) that installation of CCTV system in Depots/Units/Terminals was kept on hold due to unavailability of sufficient Capital funds. The fact remains that not installing of CCTV system in Depots had security issue as number of cases were reported by various Depots regarding thefts of two wheelers, lockers, broken windows and intruder activities, etc.

⁸ Prevent terrorist event or accident, Women Safety, Theft acts & other threats to passengers.