



भारी उद्योग मंत्रालय
MINISTRY OF
HEAVY INDUSTRIES

सत्यमेव जयते



PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE)

**Expression of Interest (EoI) for
City/ State transport undertakings
(STUs)/ Authority**

November 2024

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I. INTRODUCTION

I.1 Background

Government of India (GoI) has set itself ambitious goals for enabling creation of demand for EVs. The Faster Adoption and Manufacturing of (Hybrid and) Electric Vehicles (FAME) India Scheme and Production Linked Incentive (PLI) scheme for Advance chemistry cells and Automobiles & Auto components are the major incentives notified by GoI in this direction. Current trends suggest that the business economics of EVs is improving, and the new business models are gaining acceptance, thereby boosting confidence that India's EV market is poised for significant growth in the coming decade.

The then Department of Heavy Industry had launched a scheme, namely Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME-I), for promotion of electric and hybrid vehicles with an outlay of ₹795 crore. FAME-I was initially approved for a period of 2 years, commencing from 1st April 2015. The scheme was subsequently extended up to 31st March 2019 with an enhancement in outlay from ₹795 crore to ₹895 crore. After review of the phase I, DHI formulated Phase II of the scheme (FAME-II) with an outlay of ₹10,000 crore which was subsequently enhanced to ₹11,500 crore for the period from 1st April 2019 to 31st March 2024. Thereafter, to maintain continuity of support for electric two wheelers (e-2Ws) and electric three wheelers (e-3Ws), MHI launched the Electric Mobility Promotion Scheme 2024 (EMPS-2024) with an outlay of ₹500 crore, which was subsequently enhanced to ₹778 crore, for the period from 1st April 2024 till 30th September 2024.

Further, after review of FAME-II and EMPS-2024, Ministry of Heavy Industries (MHI) formulated PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) scheme ("the Scheme") with the approval of the Union Cabinet as per the scheme parameters given in subsequent paragraph.

The PM E-DRIVE Scheme, with an outlay of ₹10,900 crore, shall be implemented from 1st October 2024 to 31st March 2026, for faster adoption of electric vehicles (EVs), setting up of charging infrastructure and development of EV manufacturing eco-system in the country. Further, EMPS-2024 being implemented for the period from 1st April 2024 to 30th September 2024 is subsumed under this Scheme.

Payment Security Mechanism (PSM) is applicable on the e-Buses to be deployed under the PM E-DRIVE. As per the PSM scheme guidelines, State Guarantee will be provided for payment of bus operations and States shall register a Direct Debit Mandate (DDM) with RBI. The scheme notification is available at this link: https://heavyindustries.gov.in/sites/default/files/2024-10/psm_gazette_notification.pdf

Furthermore, the scheme guidelines can be accessed using the link below: https://heavyindustries.gov.in/sites/default/files/2024-10/psm_scheme_guidelines-final.pdf

The State/ UT is required to register the DDM mandate with RBI as per Annexure C. The Buses under PM E-DRIVE will only be tendered for those States/ UTs that submit the confirmation of the RBI on the mandate/ letter of authority as per Annexure D, along with this EoI.

I.2 About CESL

Energy Efficiency Services Limited (EESL) is an Energy Service Company (ESCO), promoted by Ministry of Power, Government of India as a Joint Venture of Central Public Sector Undertakings (CPSU). To focus on initiatives beyond Energy Service including but not limited

to e-mobility, Convergence Energy Services Limited (CESL) was incorporated, which is a wholly owned subsidiary of EESL.

CESL offers interventions that solve multiple gap areas in the energy ecosystem by amalgamating seemingly independent yet complementary sectors such as electricity, transport, home appliances and introducing models for adoption at scale through government partnerships and innovative financing such as carbon markets.

CESL has done multiple e-Bus tenders in the past and after the success of these earlier tenders:

- 1) Grand Challenge (GC) under FAME India Scheme Phase-II, whereby demand was aggregated for 5,450 e-buses in India across five cities and
- 2) National Electric Bus Program (NEBP) to deploy aggregated demand of 6,465 e-buses across 6 Indian states/cities in 8 different lot sizes on Gross Cost Contracts (GCC).
- 3) PM-eBus Sewa to deploy 10,000 e-Buses in cities with population less than 40 lakhs. Under Phase 1 and Phase 2, a total demand for 6,743 electric buses has been aggregated till date. Phase 2 tender for 4,588 nos. of e-Buses is currently live and LOA for 1,390 e-Buses has already been issued.

CESL has now been assigned to aggregate demand of electric buses (e-buses) and float RfP for procuring e-Buses under the PM E-DRIVE for 9 cities initially.

The Buses will be tendered on Gross Cost Contract (GCC) model. Under this model, the private service provider invests in the purchase of bus and charging infrastructure along with its operations and maintenance throughout the contract tenure and in return receive a per km (“PK”) fee. The revenue collection would continue to remain with the city. The model has the advantage of enabling the contracting authority to focus on overseeing service delivery, limiting the upfront capital investment by cities and the need to manage staff, and at the same time transferring the technology risk of electric buses to the service providers who are best suited to manage them.

2. MODALITIES

2.1 Quantity of Buses

This program facilitates tendering of e-buses under GCC model. The aggregated demand will be tendered out for price discovery by CESL. **Each participating city is required to indicate its demand in the format provided in Annexure A.**

2.2 Participation parameters

1. The State/ UT shall register a Direct Debit Mandate (DDM) under the PM-eBus Sewa-Payment Security Mechanism (PSM) scheme with RBI as per Annexure C. Furthermore, the format provided in Annexure C shall not be altered in any way which undermines the scope and applicability of **PM-eBus Sewa- Payment Security Mechanism (PSM) scheme** for procurement of e-Buses under PM E-DRIVE.
2. Confirmation of the RBI on the duplicate copy of the letter of authority as per format attached in Annexure D.

3. STU/ Authority should provide a favorable ecosystem for Bus Operators to deploy e-Buses such as identifying the dedicated depots, development of depot infrastructure, providing sufficient depot space, tech-enabled depots for real time monitoring, etc.

The STU/ Authority shall provide the following basic depot infrastructure to the Operator:

- a) Civil and electrical works and electric connection at available HT metering level (11/22/33/66 kV connection) including onsite sub-stations for stepping down voltage to 415 Volt.
 - b) Proper drainage system at the depot to avoid stagnation of water.
 - c) The depot pavement shall be concretized or blacktopped.
 - d) Adequate parking area (approx. 150 sq.m. per bus including basic depot requirements, such as parking, workshops, staff amenities, administrative block, etc.)
 - e) Civil infrastructure facilities that include security booths, office with adequate space, first-aid facility and rest room, canteen, spare parts store, Effluent treatment plant (ETP), Street light, septic tank, workshop sheds (for washing facilities, maintenance / service pits @ 2 pits per 50 buses).
 - f) Boundary wall: approx. 2 m height with 0.6m railing
4. If the City/ STU/ Authority accepts the LI prices discovered by CESL through the tender process, then the City/ State/ Authority has to issue a LOA to the Selected Bidder.
 5. Additionally, an indicative list of parameters that STUs must account for while submitting their demand are given below:

S. No.	Criteria*	7m	9m	12m
1	Minimum annual assured km	57,600	64,800	72,000
2	Contract period	12 years	12 years	12 years
3	Minimum Opportunity charging time per day	45 mins	45 mins	45 mins

**the parameters are indicative and subject to change for the RfP*

2.3 Contracting model

This EoI is inviting demand for operating e-buses under the GCC Wet Lease model. Under the Wet Lease Model of procurement, the bus is owned, operated, and maintained by the Operator for a specific rate and contract period as defined in the Concession Agreement. The Authority pays a pre-decided per km fee (PK Fee) discovered through competitive bidding process to the Operator. The model is adopted under the Grand Challenge, NEBP- I and PM-eBus Sewa tender and the major roles and responsibilities of STU and Operator are covered in Section 6.

3. TIMELINES

Tentative timeline for Administration of PM E-DRIVE Tender is as follows:

Activity	Tentative timeline
Floating of EoI	T0
Receipt of demand from cities along with PSM acknowledgement (T1)	T0 + 6 weeks

Activity	Tentative timeline
Floating of Draft RfP for stakeholder consultation (T2)	T1 + 2 weeks
Floating of tender to bidders (T3)	T2 + 3 weeks
Pre-bid meeting with the Bidders (T4)	T3 + 2 weeks
Final date of bid submission against tender (T5)	T4 + 6 weeks
Sharing of prices with States and acknowledgement (T6)	T5 + 5 weeks
Approval of Prices and Issuance of LoA by Authority (T7)	T6 + 2 weeks
Signing of Concession agreement (T8)	T7 + 4 weeks
Prototype testing and approval of the same	T8 + 6 weeks
Completion of conditions precedent and handover of depots by the STU/Authority (T9)	T8 + 16 week
Fit-out works completion and delivery of min 40% Buses qty awarded in the LOA	T9 + 6 weeks
Delivery of minimum 75% Buses qty awarded in the LOA	T9 + 16 weeks
Delivery of 100% Buses qty awarded in the LOA	T9 + 24 weeks

4. ALLOCATION MECHANISM OF BUSES

1. **Under-Subscription:** If the demand received from STUs/Authorities is less than the available incentive under PM E-DRIVE, then following shall apply:
 - i. Subsequent EoI may be issued for existing/ new cities.
2. **Over Subscription:** If the demand received is more than the available incentive under PM E-DRIVE, then the following will apply:
 - i. First preference shall be given to those number of buses of cities/states, which are being procured after scrapping old STU buses, through authorised RVSFs following the MoRTH Vehicle Scrapping Scheme guidelines.

5. PAYMENT SECURITY MECHANISM

1. Payment Security Mechanism for Electric buses funded by GOI Schemes
 - ✓ Dedicated Payment Security Fund (PSF)
 - ✓ Direct Debit Mandate – Registered by the State/UT with RBI
2. Event of PSM Triggering
 - ✓ Delay / Non-Payment of bill by Public Transport Authority (PTA) in the prescribed time as per CA
 - ✓ OEM/Operator shall report to CESL (Fund Manager)
3. Disbursement of PSF by CESL
 - ✓ CESL to initiate disbursement from the PSM fund to the Authority Escrow Account
 - ✓ Authority will be mandated to release this payment to Operator Designated Account
4. Repayment Mechanism of PSF by PTAs

- ✓ PTA to recoup entire amount with Late Payment Surcharge (LPS) within 90 days from the date of its disbursement
 - ✓ Late Payment Surcharge (LPS) will be payable on the amount to be repaid
 - ✓ The LPS would be levied @1% per annum in addition to the SBI's 3 years MCLR prevailing on the date of disbursement, compounded annually
5. Invocation of DDM by RBI
- ✓ If non repayment by PTAs beyond 90 days – CESL to report to Steering Committee of PSM under MHI
 - ✓ MHI to request RBI for invoking DDM
 - ✓ RBI to debit from current account of State/UT and transfer amount to PSM Fund

6. KEY ROLES & RESPONSIBILITIES

6.1 CESL

- 1 Demand aggregation from eligible Cities/ STU/ Authority through Expression of Interest
- 2 Designing and implementing a transparent and fair competitive bid process.
- 3 Finalization of the technical specifications for buses suitable for the participating Cities/ STU/ Authority
- 4 Floating of Tender for e-Buses deployment
- 5 Discovery of GCC prices and communication of the same to Cities/ STU/ Authority
- 6 Issuance of Letter of Confirmation Quantity to Selected Bidders
- 7 Assist Authorities and the Selected Bidder in regard to clarification on the draft Concession Agreement.
- 8 Administering Payment Security Mechanism (PSM) to be setup by Government of India (GOI)

6.2 STU/ Authority

- 1 Issuance of LOA and Signing of Concession Agreement with the Selected Bidder.
- 2 Open an Escrow account and execute an escrow agreement with the Operator and Bank.
- 3 Deposit amount equivalent to 1-month estimated monthly revenue in the Escrow Account.
- 4 Authority shall provide adequate vacant land at the depot, free from encumbrances, along with road connectivity and Right of Way.
- 5 Civil and electrical works and electric connection at available HT metering level (11/22/33/66 kV connection) including onsite sub-stations for stepping down voltage to 415 Volt.
- 6 All requisite permissions, approvals and licenses in relation to the utilization by the Operator of such electricity connection.
- 7 The following minimum depot infrastructure shall be provided by Authority:

- a) Proper drainage system at the depot to avoid stagnation of water.
 - b) The depot pavement shall be concretized or blacktopped.
 - c) Adequate parking area (approx. 150 sq.m. per bus including basic depot requirements, such as parking, workshops, staff amenities, administrative block, etc.)
 - d) Civil infrastructure facilities that include security booths, office with adequate space, first-aid facility and rest room, canteen, spare parts store, Effluent treatment plant (ETP), Street light, septic tank, workshop sheds (for washing facilities, maintenance / service pits @ 2 pits per 50 buses).
 - e) Boundary wall: approx. 2 m height with 0.6m railing.
- 8 Ensure revenue collection on the Buses.
 - 9 Monitor operations and track infractions.
 - 10 Make monthly payments for the kilometers operated to selected bidders at the discovered prices in line with the terms of the concession agreement and stipulated timelines.
 - 11 Support, cooperate with and facilitate the Operator in the implementation and operation of the Project.

6.3 Selected Bidder/ Operator

- 1 Design, manufacture, procurement, and supply of buses along with chargers confirming to the Specifications and Standards set forth and timely deployment of e-Buses as per the schedule provided by the STU in the Concession Agreement.
- 2 Daily Maintenance of Electric Buses.
- 3 Procurement of Chargers and any other charging related equipment
- 4 Civil and electrical works for installation of charging infrastructure
- 5 The Operator shall provide for real time data monitoring and provide the Authority access to the raw feed of the monitoring system pertaining to the performance of the Operator. The Operator shall insure integration with the State interface.
- 6 The Operator will install on-board devices to enable the Authority to access real time location and status of the buses. The data collected for the ITS may also be stored on a server for analytical purposes.
- 7 Ensure operation of e-buses on the routes specified and in adherence to all SLAs under concession agreement.
- 8 Get the OEM to execute the Product Warranty Undertaking and Comprehensive Maintenance Agreement at the time of signing of the Concession Agreement.
- 9 Undertake mid-life bus refurbishment and battery replacement.
- 10 Obligation relating to appointment of Drivers and Staff:
 - a) The Operator shall provide a driver with valid driving license and having experience of Bus driving of minimum 2 years.
 - b) The Operator shall have to make payment to the driver's bank account through RTGS/ NEFT mode only.
 - c) The Operator should ensure compliance of Minimum Wages Act and provision of

- ESI Act, EPF Act, Bonus Act and Employees Compensation Act, ESI registration.
- d) Operator should submit CA certified PF compliance certificate annually.

7. EOI SUBMISSION

Eligible entities as per the parameters stated in section 2 may submit their proposal for deployment of electric buses through PM E-DRIVE in response to this Eoi as per the subscription letter mentioned in Annexure-A & Annexure-B

ANNEXURE-A

(To be given in the letter head of the organization)

Subscription Letter

To

CGM (Contracts)
Convergence Energy Services Limited
Core-3, 2nd Floor, SCOPE Complex,
Lodhi Road, New Delhi-110003

Subject: Proposal for participation in PM E-DRIVE through Aggregation model for Deployment of Electric Buses on Gross Cost Contract Wet Lease Model

Sir,

Reference to Expression of Interest issued on for inviting proposals from STUs/Authority for **participation in PM E-DRIVE through Aggregation model For Deployment of Electric Buses on Gross Cost Contract Model issued by CESL**, we are hereby submitting our Expression of Interest, in the prescribed format, for consideration of CESL. We agree to abide by the conditions set forth in the said EOI.

As a part of this program, we express our demand for E buses here under:

1. Demand for Type I buses :

Type	AC		Non-AC	
	Standard Floor	Low Floor	Standard Floor	Low Floor
Number of Buses (7m)				
Number of Buses (9m)				
Number of Buses (12m)				

Sincerely,

Signature: _____

Name: _____

Designation: _____

AUTHORISED SIGNATORY'S SIGNATURE WITH SEAL

ANNEXURE-B

Additional information needed to be submitted by cities/STUs in response to EOI

A. General details:

Parameter	Details
Name of STU/Authority:	
Details of nodal person: <ul style="list-style-type: none">NameDesignationPhone numberE-mail ID	
Power Tariff applicable (final landed cost) for Electric buses (Rs. per unit). Tariff guidelines to be attached.	
Total no. of buses currently in operation	
No of buses in operation <ul style="list-style-type: none">a) CNGb) Diesel	
No of e-buses in operation	
No of vehicles running on GCC model <ul style="list-style-type: none">a) CNGb) Diesel	
No of e-buses on GCC model	
Age of buses for scrapping	
No of Buses to be scrapped in FY 2024-25	
No of Buses to be scrapped in FY 2025-26	
No of Buses to be scrapped in FY 2026-27	
No of depots identified for e-buses to be deployed under this program	
Number of buses Authority is planning deploy in next 3 years – <ul style="list-style-type: none">a) Year 1b) Year 2c) Year 3	

B. List of depots identified for proposed electric buses to be deployed and no of buses (type wise) per depot under: (this information will be disclosed in the RFP)

i. GCC Model

S. No.	Depot Name	No of proposed Buses	Bus type* (7/9/12 meter bus)	Area (sq.m)

*Authority is advised to allocate minimum of 50 buses in a depot for each type of bus

C. Details about arrangement of upstream electricity supply for charging of electric buses.

i. GCC Model

S. No.	Depot Name	No of Buses	Sanctioned load capacity	Sanctioned load source (6/11/33/66 KV)	Additional load requirement (if any)

D. Any other information in support of proposal submitted by STU/Authority

Name:

Designation:

Signature:

AUTHORISED SIGNATORY'S SIGNATURE WITH SEAL

ANNEXURE-C

Direct Debit Mandate Format for PM e-Bus Sewa PSM Scheme

MANDATE

FORM FOR IRREVOCABLE LETTER OF AUTHORITY TO BE FURNISHED BY THE STATE/ UNION TERRITORY(UT) of (Name of the State/UT) IN FAVOUR OF RESERVE BANK OF INDIA for availing the PSM Scheme Fund under PM-eBus Sewa- Payment Security Mechanism Scheme (herein after called as the 'Scheme') of Ministry of Heavy Industries (MHI), Government of India implemented through CONVERGENCE ENERGY SERVICES LIMITED (CESL).

The Chief General Manager, Reserve Bank of India
Central Accounts Section (CAS) Nagpur

Dear Sir/ Madam,

Place:- Date:-

Recovery of the funds disbursed (including Late Payment Surcharge, if any) from PM-eBus Sewa- PSM Scheme Fund (herein after called as the 'Scheme Fund') of MHI implemented through CESL.

- a) The Scheme, provides payment security (in case of payment default by the PTA(s)), to ensure the PTAs monthly fee obligation to the OEM(s)/operator(s) of e-buses contracted under all Gol sponsored schemes for procurement and operation of e- buses.)
- b) At our request and/ or upon guarantee given by us, the Scheme has agreed to provide a payment security, as per para (a), In consideration thereof, we are required to furnish an irrevocable letter of authority (Mandate) duly executed by the State /UT of (Name of the State/UT) and registered with the RBI / Principal Banker, unconditionally authorising MHI, Gol to advise RBI / Principal Banker to debit forthwith such amount as may be requested by MHI, Gol in regard to repayments of the funds disbursed from Scheme Fund and/or LPS from the account(s) of the State/UT of (Name of the State/UT) maintained with RBI/ Principal Banker and credit the same to the bank/FI account of Scheme Fund or to such accounts as MHI, Gol may specify, in the event of default by the State /UT PTAs in honouring its repayment obligations to the Scheme Fund during the entire duration of the 'Scheme'.
- c) Accordingly, we hereby authorise and request you that as and when a written requisition is received by you from MHI, Gol and notwithstanding any dispute that may exist on issues between us and MHI/Gol/ PM-eBus Sewa-PSM Scheme /CESL, you may, without reference to us, debit our current account / Principal Government Deposit Account (PGDA) / Inter Government Transitory Account (IGTA) maintained with you, with such sums as may be specified by MHI, Gol in its written request and, pay the same to Scheme Fund or to such accounts as MHI, Gol may specify in such manner as they desire under advise to us.
- d) We agree that the RBI will honour the direct debit under this Mandate subject to availability of clear and sufficient balance in the account at the time of executing the mandate. Clear balance in the account of State /UT means the amount held in such account excluding minimum balance, operating limit under special drawing facility, authorised limit under ways and means advances and overdraft. Further, such repayments shall be provided for in the State Budget. If at any time, the clear balance in the State /UT account maintained with RBI is inadequate to meet the aforesaid debit, its account may be debited to the extent of availability of funds, and the remaining amount may be debited subsequently and to the extent funds become available in its account
- e) We agree to the fact that the MHI, Gol has approached you in writing for debiting our current account with you shall be conclusive proof that default has arisen in respect of payment of the sums by us to the Scheme Fund and it shall not be necessary for us to admit to the fact of default by means of separate advice to you or MHI/CESL.

- f) This letter of authority shall also be enforceable against any current account /Principal Government Deposit Account (PGDA) / Inter Government Transitory Account (IGTA), which may be opened with you by our successors or assigns.
- g) This letter of authority shall not be revoked by us except with the prior concurrence of the MHI, Gol/ and RBI may act upon this authority until such time this authority is revoked and a written communication thereof is received by the Chief General Manager/ General Manager, Reserve Bank of India.
- h) It is clarified that this letter of authority ('Mandate') does not countermand or affect in any way the existing authorities on mandates already given by us to you in the past and they shall not be deemed to have been substituted by this Mandate.
- i) The scope of authority given in this Mandate shall be valid and enforceable only for recovery of the disbursed amount from Scheme Fund and/or, LPS against such disbursements under the Scheme.

Please acknowledge receipt of this letter and also return the duplicate copy thereof confirmed by you to MHI, Gol/ CESL.

Yours faithfully,

For and on behalf of the Governor of the State/ Administrator of UT of

ANNEXURE-D

Confirmation of the RBI on the duplicate copy of the letter of authority

Returned to the Governor of the State/ Administrator of UT of.....

The Reserve Bank of India (RBI), hereby, acknowledges the receipt of the Mandate/Letter of Authority dated..... issued by the State /UT of for recovery of the funds disbursed from PM-eBus Sewa -PSM Scheme of Ministry of Heavy Industries (MHI) implemented through Convergence Energy Services Limited (CESL) and/or, Late payment surcharge against such disbursement to the OEM(s)/Operator(s), on account of a payment default by the concerned PTAs of the State/UT. ...

RBI, hereby, confirms that it shall take action as required in terms of the said Mandate/Letter of Authority.

For Reserve Bank of India,

Authorized Official

Place:

Date: