

**F.No. 1(06)/2019-NAB-II (Auto) (21349)**

**Dated 12th October 2020**

**Expression of Interest**

**Inviting**

**Proposals for availing incentives under Fame India Scheme Phase II**

**for deployment of EV charging infrastructure on**

**Highways/Expressways**

**Last date of Submission of Proposal**

**7th December 2020**

**Department of Heavy Industry**

**Ministry of Heavy Industries and Public Enterprises**

**Government of India**

**Udyog Bhawan**

**New Delhi**

# **Expression of Interest Inviting Proposals for availing incentives under Fame India Scheme Phase II for deployment of EV charging infrastructure on Highways/Expressways**

## **Background:**

Government of India has approved Phase-II of FAME India Scheme [Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India], for 3 years commencing from 1<sup>st</sup> April 2019. Its main focus is the electrification of public & shared transportation. The detailed notification of the scheme is available at [www.dhi.gov.in](http://www.dhi.gov.in).

Under Phase-II of the FAME India Scheme, Government of India (GoI) intends to support the development of EV charging infrastructure by extending capital grant to organizations for promoting the use of Electric Vehicles (EVs).

**Department of Heavy Industry had invited an Expression of Interest dated 28th Aug 2019 from public and private entities for setting up EV charging stations within cities. After evaluation of proposals received, the Government sanctioned 2877 EV charging stations to 22 public entities.**

This EOI is being issued for inviting proposals from **any Govt. Organization/Public Sector Undertaking (PSU) (State/Central)/Govt DISCOM/ Oil Public Sector Undertaking and similar other Public/Private entities** to build and operate Public EV charging infrastructure on major Highways/Expressways. For simplicity, these bodies/corporations are referred to as ‘entity’/ ‘entities’ in subsequent paragraphs of this EOI.

## **2. Coverage:**

Proposals for installation of charging stations are invited from entities that intend to build and operate charging infrastructure in any of the following highways/expressway for the complete stretch of the highway/expressway (Full Coverage):

List of Expressways/Corridors, as defined in Ministry of Power's revised guidelines/standards dated 1st October, 2019

Sr. No.	Name of Corridor/Expressway	Total KM of the Highway (approx)	Minimum no of charging stations*
1	Mumbai - Pune Expressway	100	10
2	Ahmadabad - Vadodara Expressway	100	10
3	Delhi Agra Yamuna Expressway	200	20
4	Bengaluru Mysore Expressway	150	14
5	Bengaluru Chennai Expressway	300	30
6	Surat - Mumbai Expressway	300	30
7	Agra - Lucknow Expressway	300	30
8	Eastern Peripheral expressway	150	14
9	Hyderabad ORR Expressway	175	16
Total		1775	174

List of Highways as defined by Ministry of Road Transport and Highways

Sr. No.	Name of Highways	National Highway	Total KM of the Highway (approx)	Minimum no of charging stations*
1	Delhi - Srinagar Highway	NH 44	800	80
2	Delhi – Kolkata Highway	NH 19	1600	160
3	Agra - Nagpur Highway	NH 44	800	80
4	Meerut to Gangotri Dham Highway	NH-34	400	40
5	Mumbai - Delhi Highway	NH 48	1250	124
6	Mumbai-Panaji Highway	NH 66	600	60
7	Mumbai - Nagpur Highway	NH 53 & NH 60	700	70
8	Mumbai - Bengaluru Highway	NH 48	1000	100
9	Kolkata - Bhubaneswar Highway	NH 16	450	44

Sr. No.	Name of Highways	National Highway	Total KM of the Highway (approx)	Minimum no of charging stations*
10	Kolkata - Nagpur Highway	NH 6	1200	120
11	Kolkata - Gangtok Highway	NH 12	700	70
12	Chennai-Bhubaneswar Highway	NH 16	1200	120
13	Chennai - Trivendram Highway	NH 44, NH 32	750	74
14	Chennai-Ballary Highway	NH 716	500	50
15	Chennai - Nagpur Highway	NH 44	1150	114
16	Mangaldai (Assam) –Wakro (Arunachal Pradesh)	NH-15	670	64
Total			13370	1370

\*Installation of Minimum one charging station at every 25 kms on both sides of Highway/Road and minimum one Long Range/Heavy Duty charging station at every 100 kms on both sides of Highway/Road, as mentioned under para 4.

The Expressways/Highways are also shown in the Map of India at Annexure-C

### 3. Definitions:

- a. **Electrical Vehicle Supply Equipment (EVSE):** Electric Vehicle Supply Equipment (EVSE) includes the electrical equipment external to the electric vehicle that provides a connection for an electric vehicle to a power source for charging and is also equipped with advanced features like Smart Metering, Cellular Capability and Network Connectivity.
- b. **EV Charging Station:** For this EOI, EV Charging Station is defined as a station with a set of Electrical Vehicle Supply Equipment (EVSE) equipped with advanced features like Smart metering, Cellular capability and Network connectivity capable of fast charging or slow charging of electrical vehicles, along with associated upstream electrical infrastructure and conforming to National or International standards in force.

4. **EV Public charging stations,** identified to be installed as in Para 2 and as defined in Ministry of Power's revised guidelines/standards dated 1st October, 2019, are earmarked for deployment on Highways/Expressways, as per the coverage stated above. These charging stations will be considered for

sanction to different entities after evaluation of the proposals received under this EOI.

Type of EV Chargers mandatory at each charging station (atleast one at every 25 kms on both sides of Highway/Roads)	Type of EV Chargers Optional
<b>Fast chargers -</b> At least one CCS II (Minimum 50 KW) or CHAdeMO (Minimum 50 KW) or higher capacity and one DC 001 (15 KW)	<ul style="list-style-type: none"> <li>• Bharat AC-001 (10 KW)</li> <li>• Type 2 AC (22 KW)</li> </ul>

At least one charging station comprising of at least one CCS II (Minimum 50 KW) Charger & one DC001 (15KW) and at least one charging station comprising of at least one CHAdeMO (Minimum 50 KW) Charger & one DC001 (15KW) is to be installed in each interval of four Charging Stations.

**Long Range/Heavy Duty EV Charger:** At least one charger of minimum 100 kW (200-750 V or higher), each of different specification if more than one, (CCS/CHAdeMO or any fast charger as approved by DST/BIS for above capacity) with single connector gun to be installed after each of three Charging stations as mentioned in the table above.

## 5. Essential requirements for submitting a proposal under this EOI:

- In order to promote fast charging at major highways/expressways, installation of 50 KW (Minimum) fast charger and 15 KW Bharat DC-001 charger is mandatory at each location proposed by the entity; however, installation of 10 KW Bharat AC 001 and 22 KW Type 2 AC charger is optional and would depend upon actual site requirements and business potential to ensure best use of resources and maximization of ease of charging for the EV owners. The proposed Charging Stations can start their operations with the minimum number of chargers to cater to the initial requirements specified in Para-4 above; and can add more number of chargers of appropriate capacities as and when new makes of EVs are introduced and business volume increases.
- Each entity shall install at least one charging station at every 25 kms on both sides of the Highway and also atleast one Charging Station for Long Range/Heavy Duty EVs at every 100 kms on both sides of the Highway, in

accordance with the Ministry of Power's revised guidelines/standards for charging infrastructure for Electric Vehicles (EVs), dated 01st October, 2019.

- c. Entities shall conduct locational assessment survey and identify feasible locations / stretches along the identified highways to set up charging stations. Bidders are required to submit primary locational assessment survey report (with GPS Coordinates) along with their proposal to DHI.
- d. Entities may submit their proposal in a consortium. Such a consortium may have a maximum of 4 members and the consortium shall be required to identify a lead member which may be a Govt. Organization/PSU/DIS COM/Oil PSU or a Private Entity. In such a case, subsidy shall be disbursed to the lead member of the consortium on behalf of the consortium as a whole.
- e. The maximum Demand incentive available from DHI under FAME India Scheme Phase II is 70% of the cost of EVSE which is capped at 70% of the Bench Mark Price of each EVSE, (will be communicated separately).

**Note:** Cost of upstream electrical infrastructure, including the cost of transformer required for bringing power supply to EV charging station, will not be covered as cost of EVSE.

- f. It is advised that, where feasible, charging stations may be connected with renewable energy source of required capacity, as per MNRE guidelines, so as to ensure grid stability and green energy for electric vehicles. Such Public Charging Stations (PCSs) may also be connected to the Grid to ensure round the clock operation.
- g. In such cases where the Public Charging Stations (PCSs)/Fast Charging Stations (FCSs) have been installed with Government Incentive (Financial or otherwise), State Nodal Agency /State Government/Appropriate Commission shall fix the ceiling for Service Charge to be charged by such PCSs/FCSs as per "Charging Infrastructure for Electric Vehicles (EVs)-Revised Guidelines and Standards" dated 01.10.2019 issued by MoP.

## **6. Information to be submitted:**

6.1 State/States under whose jurisdiction the highway/expressway is located.

6.2 Detailed business plan for operation and maintenance of the proposed charging stations; Financial Status of the entity; brief write up about capability of the entity to execute the project in minimum timeframe.

6.3 Primary locational assessment survey report (with GPS Co-ordinates) of the proposed site for installation of the charging station.

## 7. Selection Procedure:

- a. DHI will form a Screening Committee for evaluation of the proposals submitted by the entities under the chairmanship of Joint Secretary, DHI, with members from NITI Aayog, M/o Power, ARAI, BEE etc.
- b. Entities are required to submit the proposal for the full stretch of a highway.
- c. The proposals would be evaluated based on the information sought in para 6, in the following two stages:

### Stage-I –

S.No	Information	Maximum score	Evaluation criteria
1	Financial status of entity	50	Turnover of over Rs. 50 crore – 100% score. Turnover between Rs. 1-50 crore – proportional score keeping Rs. 50 crore as denominator
2	Capability	50	More than 20 public charging stations deployed – 100% score. 01-20 charging stations – proportional score with 20 as denominator

The top 3 entities of each highway are to be empaneled for Stage-II.

Stage-II- final selection: The empaneled entities for each highway will be given 8 weeks time to conduct locational assessment with GPS coordinates.

The information that needs to be submitted at this stage is as below:

S. No	Information to be submitted	Remarks
1	Locational assessment	Detailed location assessment of the entire highway (on both sides) for which empaneled, with GPS coordinates. MoU/in principle agreement for land indicated in the location assessment with the land owning entity

S. No	Information to be submitted	Remarks
2	Approach and methodology	-Land acquisition/ renting arrangements- Execution plan to meet the timelines indicated in stage-I
3	Capital subsidy asked for per charging station – benchmark subsidy to be indicated and charging fee cap indicated in the bidding document	Any bid with subsidy requirement more than benchmark price is liable to be rejected.

- d. The entities with the lowest requirement of subsidy will be considered for sanction for installation and operation of charging stations at the Expressways/Highways. Final recommendations of the Screening committee will be placed before the Project Implementation and Sanctioning Committee (PISC) for approval.
- e. With the approval of PISC, the proposal will be processed in the Department of Heavy Industry for approval of competent authority.
- f. After the approval of competent authority, each applicant entity will be informed about the total number of charging stations sanctioned for the selected highways / expressways, with a request to initiate the procurement process.
- g. DHI reserves the full right regarding sanction of total number of Charging Stations to the entity depending upon their detailed business plan for operation and maintenance of proposed Charging Stations.

## **8. Methodology to be followed by selected entities**

- a. Each entity should ensure completion of the procurement process for the the approved number of EV Chargers and issue supply order to the selected bidder within 12 weeks from the issue of sanction order. Failure to stick to this timeline may result in cancellation of the sanction order without any further notice.
- b. Each entity will be responsible for ensuring that all procured EV chargers are supplied and put in operation within a maximum period of 9 months from the date of issue of supply order.
- c. The EV Charger (EVSE) shall carry comprehensive warranty of three years.
- d. Electric Vehicle Supply Equipment (EVSE) shall be type tested by an agency/lab accredited by National Accreditation Board for Testing and

Calibration Laboratories (NABL) from time to time. Further, the entities must comply with technical and safety standards/measures, and meter Regulations of Central Electricity Authority (CEA) for charging station of electric vehicle.

## **9. Applicable Incentive and incentive disbursement mechanism**

The applicable incentive will be decided based on the price of the charging equipment as indicated in the Supply Order issued by the entity/entities. However, Department of Heavy Industry reserves the right to further restrict the incentives based on pricing of different types of chargers discovered through competitive bidding, (to be informed separately). Once the applicable incentive is finalized and conveyed, the Department of Heavy Industry will release the same as per following:

Installment No	The Milestone to be completed	Percentage of Demand Incentive to be Released by DHI
1	After the issue of Supply Order as mobilization advance	20%
2	After commissioning of EVSEs, as per bid documents	80%

The PISC shall have full powers to alter the percentage of incentive, depending upon the availability of funds under the Union Budget.

## **10. Procedure for submitting the proposal under this EOI:**

- a. Each entity is required to submit a detailed proposal to the Department of Heavy Industry, with a copy to the respective authority under whose jurisdiction the highway/expressway is located, to avail incentives under phase II of FAME India scheme.
- b. Each entity is required to submit a primary locational assessment survey report (with GPS Co-ordinates), along with their proposal, to DHI. The entity/entities, before submitting the proposal, are required to identify suitable locations (with GPS Co-ordinates) for installation of EV charging stations, and the same should be included in the proposal. It will be the responsibility of the concerned entity to arrange the land/place/location for installation of EV Charging Stations, in collaboration with respective authority, under whose jurisdiction the highway/expressway pertains, or owner of such land.

- c. The proposal submitted by the entity/entities should have a covering letter, as mentioned at Annexure-A, along with other necessary information, as mentioned at Annexure-B.
- d. The complete proposal, along with relevant documents, shall be submitted to the Under Secretary (AEI), D/o Heavy Industry at the following address:

The Under Secretary (AEI)  
Department of Heavy Industry  
Room No. 387, Udyog Bhawan, New Delhi – 110011  
Tel. No. 011-23061340

And complete proposal, along with relevant documents may also be sent to the email [thanglian.lal@gov.in](mailto:thanglian.lal@gov.in), [aei-dhi@nic.in](mailto:aei-dhi@nic.in)

### **11. Performance monitoring mechanism**

The selected agency for the development of charging station has to tie up with at least one real time EVSE Network Management Software Platform Provider to enable advance remote/online booking of charging slots by EV owners. Such real time information to EV owners should also include information regarding location, type, the number of chargers installed, cost of charging, available slots, etc. (cost has to be borne by the entity itself).

All such entities are also mandatorily required to share this information with the Department of Heavy Industry for a common Charging Station App being developed by DHI for all charging Stations in the country.

### **12. Timeline to be followed by selected agencies for deployment of charging infrastructure**

All selected agencies will be required to follow the following timeline for the deployment of charging infrastructure:

S.No	Activity	Timeline
1	Issue of EOI for charging Infrastructure	T <sub>0</sub>
2	Last date of submission of interest in response to EOI, to DHI	T <sub>0</sub> +8 weeks

S.No	Activity	Timeline
3	Finalization of selection process and issue of sanction letter by DHI	T <sub>0</sub> +20 weeks, say T
4	Issue of Tender for inviting bid	T + 3 weeks
5	Last date of submission of bid by the interested bidder/supplier	T + 9 weeks
6	Finalization of Bidding Process and issue of supply order	T + 12 weeks Say M
7	Completion of installation of all chargers as per the approved DPR(s)	M+9 months(Maximum)

### 13.Resolution of Disputes

Any dispute shall be resolved by mutual discussion and reconciliation. In case of difference of opinion, the decision of the Department of Heavy Industry shall be final.

**ANNEXURE- A**

Format of Covering Letter  
(To be given on the letterhead of the organization)

To  
The Under Secretary (AEI)  
Department of Heavy Industry  
Room No. 379, Udyog Bhawan, New Delhi – 110011

Subject: Proposal for setting up EV charging stations in response to EOI issued by  
DHI dated \_\_\_\_\_

Sir,

Please refer to Expression of Interest issued by Department of Heavy Industry's dated XX/XX/XXXX for inviting proposals for extending demand incentives for deployment of charging stations under FAME India scheme Phase II.

In response to this EoI, we are hereby submitting our proposal, in the prescribed format, for consideration of the Department of Heavy Industry.

We agree to abide by the conditions outlined in the said EOI.

We hereby declare that our proposal submitted in response to this EOI is made in good faith and the information contained is true and correct to the best of our knowledge and belief. If any of the information provided here is found to be misleading, we are liable to be disqualified from the EOI selection process.

Sincerely,

Name:

Designation:

Signature:

AUTHORISED SIGNATORY'S SIGNATURE WITH SEAL

## ANNEXURE-B

Format for proposals to be submitted by tan entity in response to EOI

A. General details, along with documentary proof:

- Vehicular density on highway (No of vehicles passing on the highway per day)
- Details about the existing tariff of electricity for charging of Electric vehicles.

B. Description of Project Proposal: Detailed business plan for operation and maintenance of the proposed charging stations; Financial Status of the entity/Consortium (details of each entity of the consortium); brief write up about capability of the entity to execute the project in minimum timeframe.

C. State/States under whose jurisdiction the highway/expressway is located.

D. Primary locational assessment survey report (with GPS Co-ordinates) of the proposed site for installation of the charging station.

E. The number of EV chargers for which funding is sought under the scheme:

Maybe attached as a separate sheet.

Name of Corridor/Expressway/Highways	Charging Station Number	Type of EV charger	Location	Power requirement and its availability	Number of EV chargers
		Total			----- - no of EV chargers

For example:

Charging Station Number	Type of EV charger	Location	Number of EV chargers
1	CCS & Chademo- 1Nos DC-001 1 nos		2
2	CCS & Chademo - 1Nos DC-001 1 nos Ac001 1 nos		3
3	CCS & Chademo - 1Nos DC-001 5 nos Type 2 AC-1 nos		7
4	Total		12

F. Funding commitment:

The selected agency needs to inform as to how they plan to arrange the remaining fund required for the project over and above the demand incentive available from DHI.

G. Details about the arrangement of upstream electricity supply for EV charging.

H. Any other information in support of proposal

I. Details of Annexures

Based on the information collected, the final allotment of EV chargers to selected entities will be informed by the Department of Heavy Industry. Once the entity receives the allotment letter, it needs to initiate the procurement process, which needs to be completed in a time bound manner, as per the timelines mentioned, and supply order issued to the selected bidder.

Name:

Designation:

Signature:

AUTHORISED SIGNATORY'S SIGNATURE WITH SEAL

# ANNEXURE-C

