F.No 12(27)/2015-AEI (FAME-TAG)
Government of India
Ministry of Heavy Industries and Public Enterprises
Department of Heavy Industry

New Delhi 11011
Dated 1st February 2016

Office Memorandum

Subject: Setting up of DHI-DST Technology Platform for Electric Mobility (TPEM) under the National Mission for Electric Mobility

1 Government of India approved the National Electric Mobility Mission Plan 2020 in 2013, and the Department of Heavy Industry (DHI) has formulated a scheme namely FAME – India (Faster Adoption and Manufacturing of [Hybrid &] Electric Vehicles in India) for the initial period of two year starting from 1st April 2015.

2 The FAME India scheme will implement *"demand driven R&D to achieve desirable target specs"* to increase domestic capacities of product and technology development aimed at making the xEV market self-sustaining. The Technology development shall be taken up through a collaborative approach with the industry and academia.

3 Accordingly, in order to strengthen and institutionalize the collaboration between the Department of Heavy Industry (DHI) and Department of Science and Technology (DST) in R&D and Technology Development in Electric Mobility, it has been decided to set up a Technology Platform for Electric Mobility (TPEM) - a joint program of DHI and DST as under.

4 Scope of Collaboration:

4.1 As notified in FAME India Scheme, a nodal body, the DHI-DST Inter-Ministerial Technology Advisory Group (TAG) on Electric Mobility" (IM-TAG) will be set up for consideration and recommendation of proposals received under Technology Platform for support. Recommendations of IM-TAG would be considered by the DHI's Project Implementation and Sanctioning Committee (PISC) under the FAME India Scheme for final approval.

4.2 Secretary DHI and Secretary DST will jointly decide the IM-TAG constitution/ revision, and will review TPEM activities annually, or as necessary.

4.3 The IM-TAG member-secretary will be from DST and co-member secretary will be from DHI. Both officials will be part of the PISC of DHI. The TPEM cell comprising of 5-6 officers/ consultants will function from DST premises.

4.4 IM-TAG would evolve guidelines/ formats for proposal submission, evaluation and monitoring of projects in accordance with the framework outlined in the EFC & Gazette Notification for the FAME India Scheme.

5 **Role of DST:**

5.1 Department of Science and Technology will administer the TPEM and coordinate organization of IM-TAG deliberations, and undertake follow up activities as decided by the IM-TAG as per the terms described in Annexure.

5.2 DST would provide a full time officer at Scientist G or Scientist F level to act as Member Secretary of the IM-TAG, and will bear all expenses related to the organisation of meetings (TA/DA, honorarium etc.) of IM-TAG and any sub-group constituted under it as per Government norms.

5.3 DST will leverage its International S&T Cooperation mechanism to facilitate global linkages relevant for the TPEM

5.4 DST would consider the recommendations of IM-TAG for co-supporting basic research proposals related to TPEM under its relevant schemes, along with DHI.

6 **Role of DHI:**

6.1 DHI would indicate annual budgetary allocation for funding of the proposals under TPEM to facilitate IM-TAG to recommend only such proposals which can be funded by the DHI in a particular financial year.

6.2 The DHI (PISC) will consider the Projects recommended by the IM-TAG for funding support expeditiously, preferably within 2 months after receipt of the recommendation of IM-TAG.

6.3 All financial matters for IM-TAG recommended projects would be handled by the DHI.

7 This arrangement of Technology Platform for Electric Mobility (TPEM) has the concurrence of Secretary, Department of Heavy Industry and Secretary, Department of Science and Technology. Order for Constitution of IM-TAG is being issued separately.

8 This issues with the approval of the compentant autority.

01-02-16

Rajesh Kumar Singh
Joint Secretary

Annexure : "TPEM Goals & Mechanisms",

To,

1. PPS to Secretary, DHI
2. PPS to Secretary, DST
3. Chairman, NAB,
4. Additional Secretary and Financial Advisor, DHI
5. Additional Secretary and Financial Advisor, DST
6. Joint Secretary, Auto Division, DHI
7. Head, TDT Division, DST

Annexure: "TPEM Goals & Mechanisms

1 Main goal of TPEM is to develop technologies & products that specifically address India's needs, for rapid development of Electric Mobility and to develop a global competitive edge in select technologies of Electric Mobility.

2 In order to implement the programs under Technology Roadmap of 'National Mission on Electric Mobility' and 'FAME India', the various mechanism that can be followed by TPEM will be

2.1 To create Centers of Excellence (CoE) and Testing Facilities

2.2 Formation of Industry Technology Consortia (ITC) led by automotive & component companies, with significant academic participation.

2.3 To encourage innovation Program to support scientific research by academia/ laboratories and to support new product development by private companies.

3 **Functions and responsibility of TPEM**

3.1 Keep updated the Technology Roadmap & a prioritized list of R&D programmes ; Develop "white papers" on critical technologies, where intellectual property protection will enhance the position of industry.

3.2 Project identification:

3.2.1 Institute a Project Development Mechanism to bring the stakeholders together and develop the Consortia Projects.

3.2.2 Pro-actively identify individuals/ institutions who can take up project proposals, consult with experts from academia and industry, and oversee the implementation of the projects till their completion through suitable mechanisms.

3.3 Implementation:

3.3.1 Evaluate, select and guide R&D programmes (as per the priority list) to be conducted cooperatively between academia and industry.

3.3.2 In this context, the committee may also recommend inter-institutional collaboration, market surveys, study visits, and participation in international workshops for enrichment of the R&D programme.

3.3.3 Recommend mid-course corrections, short-close projects that cease to be viable, recommend additional funding where required, add or remove members from Consortia Projects etc.

3.3.4 Projects will be considered completed or closed when the IM-TAG takes a decision to that effect.

Criteria

4.1 Grant in aid funding will be provided to the Consortium Projects, for the technology work undertaken both by academia and industry in-house labs recognized by the DSIR.

4.2 User-industry partners (vehicle & component manufactures) are expected to contribute resources and expert manpower, equipments, facilities etc. In the projects.

4.3 Since Technology Development Assistance has a risk-underwriting aspect, the Industry contribution shall typically be 20% to 40% of project cost, higher the risk, higher the percentage of Government support.

5 **R&D Contracts will be as follows**

5.1 Projects undertaken solely by academic or research establishments will be commissioned through a Sanction Letter from DHI.

5.2 Consortia Projects involving multiple companies and academic institutions will be commissioned through the Standard 'Technology Development Assistance Agreement' (TDAA), accepted by both Departments.

5.3 Larger Projects and Centers of Excellence may be registered as appropriate entities / or instituted as special purpose vehicles with a formal structure that can receive funds from the Government, and manage the shared resources in the academia-industry collaboration, including the know-how results and its licensing, and for acquiring specific technologies or equipment from abroad etc.