

**Consolidated Pre-Bid Queries from prospective bidders and reply/remarks from the Request for Proposal (RFP) to setup Centre of Excellence in electric mobility laboratory at Govt. ITI, Rourkela and Govt. ITI, Barbil under OMBADC districts of Odisha (DTE&T/2023-24/18739; Dated: 26.12.2023)**

<b>L&amp;T Edutech</b>				
<b>SL No</b>	<b>RFP Document Reference(s) (Section &amp; Page Number(s))</b>	<b>Content of RFP requiring Clarification(s)</b>	<b>Points of clarification</b>	<b>Technical Experts Remarks/Comments</b>
1	Page 9 clause 2.2 - III & IV	<p><b><u>2.2 Point III</u></b> EV Lab readiness requirement details (Civil works, electrical works, table &amp; chairs etc) to be shared by the selected bidder within their technical bid. DTE&amp;T Odisha will complete those requirements in close coordination with the Principals of the respective institutes</p>	<p>We understand from clause 3 that civil works, electrical works, tables and chairs, etc., are not within the bidder's scope. However, there seems to be a contradiction in the subsequent point (IV) listed below. We request clarification on both of these points.</p>	<p>Civil works, electrical works, supply of furniture etc. are coming under the scope of DTE&amp;T Odisha. The bidder company shall submit the design, drawing of the labs, charging stations, specifications of Civil Works (i.e. flooring, wall painting, required electrical, civil and plumbing works and furnishing of the labs etc.)</p>
2		<p><b><u>2.2 Point IV</u></b> The design and setup of the Laboratory &amp; Charging Stations and other necessary facilities shall be the responsibility of selected Technology Partner/Bidder. Supply, Installation &amp; Commissioning of all the equipment/materials will be done by the Technology Partner//Bidder to build the electric mobility laboratory to fulfill the required objectives. The RFP includes planning, design, preparation of working drawing for interior, tentative budget of the bidder for all the activities involved, and execution of works.</p>		
3	Page 9 clause 2.2 - V	<p><b><u>2.2 Point V</u></b> Required space, furniture, electrical points, water supply etc. will be provided by DTE&amp;T Odisha.</p>	<p>i.Requesting for SQFT Size (L*B) of the COE setup, as the bid pricing and design may vary based on the lab size ii.Need Clarification to visit the proposed campus and the allocated space for the CoE. Please Confirm</p>	<p><b>Govt. ITI Barbil</b> : (21X10) Mtr <b>Govt. ITI Rourkela</b> : (18X27) Mtr Moreover, open space available in both the ITIs. Bidders are requested to visit the ITIs before preparation of their proposal.</p>

4	Page 19 Special Conditions	<p><b><u>E. Special Conditions:-</u></b> Bidder shall provide technical manpower (Minimum One Expert for each CoE) to provide training for 1 year. Minimum educational qualification for the technical expert is Diploma/ B.Tech or Mtech in Mechanical Engineering with more than 05 years of work experience in Electro Mobility industry. The person must be able to demonstrate, conduct TOT Programs and regular training programs on EV technology.</p>	<p>i. Requesting DTET to appoint a dedicated staff with a minimum qualification of a diploma/B.Tech or M.Tech in Electrical/Mechanical Engineering to conceive and grasp technical concepts during the handholding process. Please confirm ii. We also need clarification that the knowledge transfer will be conducted in English, as our trainers may not be able to communicate in the regional language.</p>	<p>DTE&amp;T Odisha shall nominate trainers from Govt. ITIs and Polytechnics for ToT/hand-holding training and these trainers already have requisite minimum educational qualification.</p>
5	Page 28 clause 4.16 & 4.17	<p><b><u>Execution of the Agreement</u></b> After acknowledgement of the LoA (Letter of Award of contract) by the selected Bidder, a performance guarantees amounting to 10% of Total Bid Value has to be deposited in the form of Bank Guarantee of any nationalized/scheduled bank drawn in the name of Director of Technical Education &amp; Training, Odisha, the performance guarantee shall be valid for a period of 44 months from the date of award of Contract as specified in the RFP document. The selected Bidder shall sign the Agreement within 30 (thirty) days from the issuance of LoA (Letter of Award) of Contract.</p> <p><b><u>Duration of Contract</u></b> The assignment of the work shall be valid initially for a period of 42 months.</p>	<p>i. After the issuance of LOA, the setup will be completed within 60 days. Considering the TOT will happen for 12 months, clarification is needed on the scope of work for the remaining 30 months. What is the envisaged job for the partner during this period.</p>	<p>The complete Lab Setup for both the ITIs to be completed within 6 months of signing the contract agreement and after that hand-holding training to given started for 12 months. The warranty period of 36 months will be started after the complete lab setup (supply, installation, and commissioning of all equipment/machines at the respective CoE). The contract agreement will cover these warranty period also. That's why total contract duration is kept as 42 months and the Performance Bank Guarantee for 44 months (2 months extra from the expiration of the contract agreement).</p>

## ISIE INDIA

SL No	RFP Document Reference(s) (Section & Page Number(s))	Content of RFP requiring Clarification(s)	Points of clarification	Technical Experts Remarks/Comments
1	Sr. No. 1,3 (IX) and 4.	1. Electric Vehicle Powertrain Training System (4 - Wheeler) 2. High Voltage Measuring Equipments and Tools - EV Simulator 3. Basic Power Electronics Workbench Trainer		Already clarified.

## Techmech Engineers

SL No.	RFP Document Reference(s) (Section & Page Number(s))	Content of RFP requiring Clarification(s)	Points of clarification	Technical Experts Remarks/Comments
1	1. Sector Specificity:	Our research aligns with your understanding of the EV job landscape, where the Manufacturing Sector comprises approximately 5% of total employment, and the After Market employs the remaining 95%.		We are also looking for After Market employment.
2	2. Didactic Elements and Equipment Specifications:	We have carefully reviewed the suggested equipment and their specifications. Our observation indicates a potential gap in incorporating sufficient didactic elements crucial for skill development in both EV Manufacturing and EV After Market segments.	In response, we've proposed an alternate list, enclosed herewith, aligning with current international After Market curriculum standards and relevant to industry. We are open to a detailed discussion during the conference to address any concerns or modifications.	The list of equipment and their minimum technical specifications have been incorporated in the RFP after a detailed consultation with the Technical Experts and DTE&T Odisha. We have proposed minimum requirement for the CoEs, keeping the budget constraint in our mind.

3	3. ITI Student Exposure to EV Programs:	Acknowledging the need to expose current ITI students to valuable EV programs that relate to industry, we seek your guidance on specific curriculum preferences. We are prepared to align with your requirements or share details of our short international curriculum for your consideration.		We have already asked bidders to design the curriculum and share it with their technical bids. It will be considered during technical bid evaluation.
4	4. Certification Process:	Our proposal includes a comprehensive assessment plan for certifying students. We are open to discussing the feasibility of a joint certification process to ensure alignment with your organization's standards and expectations.		Please share your plan in the technical bid. It will be considered during technical bid evaluation.
5	5. Medium of Instruction:	We would like to confirm the preferred medium of instruction for the EV training program. Labtech is adaptable to various modes, and we are committed to accommodating your preferences to optimize the learning experience.		Medium of instruction will be in "English" to the trainers. "Hindi/Odia" to the trainees.
6	6. Alternative Approaches and Manpower Requirements:	We are eager to discuss the alternative approaches outlined above, and we have a dedicated team ready to collaborate with you to ensure the seamless execution of the proposed training programs. Our preparedness includes detailing the manpower required to effectively run these programs.		We request to submit your suggestions/inputs with your technical bid proposal.
7	7. Alternative attachment	Please find attached specification for EV Lab and details.		Technical Experts have taken a call after careful discussion and requirement of DTE&T Odisha.
8	8. Delivery Extension	We require a delivery extension. since everything is custom created to order.		The last date for submission of bids may be extended till 31.01.2024 by 5PM.
9	9. List of equipment	Please confirm the BOQ for the two sets.		List of equipment given in the RFP document is for 1 ITI. Similar set of equipment to be delivered at both the Govt. ITIs.

# ARAI

SL No	RFP Document Reference(s) (Section & Page Number(s))	Content of RFP requiring Clarification(s)	Points of clarification	Technical Experts Remarks/Comments
1	<b>1. Introduction:</b> 1.1 Background Page 8	DTE&T invites proposals from the leading Auto OEM Manufacturers/Authorised Partner of Auto OEM/Renowned Training Centres having exposure in Electric Mobility to setup Centre of Excellence on electro mobility laboratory for a capacity of 30 students at Govt. ITI, Rourkela and Govt. ITI, Barbil	As this RFP is for two ITIs at two locations, it is understood that Bidder has to provide two sets of the equipments listed in the table on Page 10 & 11 of the RFP document. Please confirm.	Yes, Bidder has to provide two sets of the equipments listed in the table on Page 10 & 11 of the RFP document.
2	<b>1.2 Project overview and objectives:</b> Page 8	DTE&T will provide the lab with required space to setup the CoE. The role of the successful bidder shall be to design and set up the CoE on turnkey basis. (including complete setup of CoE, supply and installation of equipment/machineries, commissioning & maintenance, and provide hand-holding support for minimum 1 (one) year.	It is requested to provide the schedule for completion of the civil work of the lab and building facilities at each ITI.	Within 4 months from signing the contract agreement and before supply of equipment/machines.
3	2.2 Scope of the Successful Bidder Page 9	The Steps involved for Setup of the Laboratory and Charging Stations at the respective ITI/Polytechnic Institute are primarily lies within the scope of the Selected Bidder only.	The said charging station is considered to be used for the laboratory purpose only.  Developing a Charging station for commercial use will involve more space requirement, higher cost and stringent safety aspects.	The said charging station will be used for the laboratory purpose only. Not for any commercial use.
4	2.2 Scope of the Successful Bidder Step 1: Setup of the Laboratory and Charging Stations at Govt. ITI Rourkela Section IV. Page 9 & 10	The RFP includes planning, design, preparation of working drawing for interior, tentative budget of the bidder for all the activities involved, and execution of works.	ARAI will design, prepare and provide the layout drawings for interior.  Planning, budgeting and execution of the interior related work will not be in the scope of ARAI.	Yes, Planning, budgeting and execution of the interior related work will be the scope of DTE&T Odisha.

5	<p>2.2 Scope of the Successful Bidder Step 1: Setup of the Laboratory and Charging Stations at Govt. ITI Rourkela Section XIII. Page 10</p>	<p>The selected bidder and the respective institute shall provide joint certificates to the successfully trained and passout students. The selected bidder shall provide support in placement of the certified candidates</p>	<p>ARAI will provide the joint certificates and support in placement of the certified candidates for the first batch only.</p>	<p>Minimum 4 batches (with 30 students maximum) and 1 batch of Trainers (nominated by DTE&amp;T Odisha) to be trained by the selected bidder within 12 months of hand-holding period at each CoE. Moreover, the selected Bidder will provide the necessary supports and conduct the skilling, upskill/re-skill training to the employees from the industries etc.</p>
6	<p>2.2 Scope of the Successful Bidder Step 1: Setup of the Laboratory and Charging Stations at Govt. ITI Rourkela Section XIV. Page 10</p>	<p>Selected Bidder shall be responsible to create a network with nearby industries to generate internal revenue (IRG) by utilizing the equipment/machineries of the CoEs, providing the skilling, upskill/re-skill training to the employees from the industries etc.</p>	<p>It is proposed that DTET or the respective ITI shall be responsible to create a network with nearby industries to generate internal revenue (IRG) by utilizing the equipment/machineries of the CoEs. Bidder will provide the necessary supports and conduct the skilling, upskill/re-skill training to the employees from the industries etc. for maximum 10 batches in the first year only.</p>	<p>Yes, DTET or the respective ITI shall be responsible to create a network with nearby industries to generate internal revenue (IRG) by utilizing the equipment/machineries of the CoEs. Bidder will provide the necessary supports and conduct the skilling, upskill/re-skill training to the employees from the industries etc. for maximum 10 batches in the first year only.</p>
7	<p>2.2 Scope of the Successful Bidder Step 2: Supply of equipment for the laboratory. Equipment list for each CoE in Electric Mobility SL. NO. 7, 8 &amp; 9 Page 10 &amp; 11</p>	<p>7. One working EV two Wheeler with Lithium -Iron battery and Charger  8. One working EV Three Wheeler with Lithium -Iron battery and Charger  9. One working EV Four Wheeler with High Voltage System with Lithium -Iron battery and Charger</p>	<p>The EV two wheeler, EV three wheeler and EV four wheeler are to be registered in the name of DTET or respective ITI at the time of procurement.</p>	<p>The EV two wheeler, EV three wheeler and EV four wheeler are to be registered in the name of the respective institute.</p>

8	<p>Minimum Technical Specifications: Sr. No. 3 High Voltage Measuring Equipments and Tools Page 13</p>	<p>EV Simulator (1No): 3Phase External load and 15Amp.</p>	<p>It is understood that the "EV Simulator" shall have 3-phase traction motor and it will be powered by 15A power socket". Kindly clarify.</p>	<p>EV simulator supports successful commissioning and periodic testing of charging stations. The user of the EV-Simulator can simulate the connection of the EV and the power demand of the EV. The charging station should respond by locking the plug and providing power respectively. It will have 3 Phase External load and 15Amp</p>
9	<p>Minimum Technical Specifications: Sr. No. 3 High Voltage Measuring Equipments and Tools Page 13</p>	<p>Cell Charger(1No):NMC&amp;LFP compatible configuration</p>	<p>The Cell Chargers mostly available in market are for 18650 type Li-ion cells (NMC&amp;LFP compatible). ARAI will provide the same Cell Charger. Please confirm.</p>	<p>It can charge, Perform Capacity testing and IR testing for various series of 18650, 32700, 26650 etc. for NMC and LFP chemistry for prismatic, Cylindrical shape cells with Data Acquisition system</p>
10	<p>Minimum Technical Specifications: Sr. No. 6 Automotive Electrical Lighting Circuit Trainer Kit Page 15</p>	<p>Motor -1000 W, Controller -50 Amp – 48V, Charger - 48V, DC - DC Converter - Electrical MC4, 48V-12V-10A, Power Source - 48V, Indicator, Lighting, Horn, Circuit Breaker &amp; Brake Pedal etc.</p>	<p>In the specification, "Electrical MC4" is mentioned. This does not have any significance for working and functioning of the Kit. This can be removed from the specification.</p>	<p>The MC4 connector is UL rated PV Cable. MC4-Evo 2 has both UL and IEC certification ratings and is required for making Automotive Electrical Lighting Circuit Trainer workbench.</p>
11	<p>Minimum Technical Specifications: Sr. No. 9 One working EV Four Wheeler with High Voltage System with Lithium -Iron battery and Charger Page 16</p>	<p>Working 4 wheeler EV from Tata Motors/Mahindra Electric/Hyundai/Nissan/MG Motors. Acceleration (0-100 kmph) - 9.2 seconds Fuel Type – Electric Max Motor Performance - 127 bhp 215 Nm Transmission - Automatic, Paddle Shift, Sport Mode Battery - 30 - 40kWh, Lithium Ion, Battery Placed Under Floor Pan Electric Motor - 2 Permanent magnet synchronous Placed At Front Axle Regenerative Braking, Idle Start/Stop, Pure Electric Driving Mode and Charger</p>	<p>In the specifications, "Electric Motor - 2 Permanent magnet synchronous Placed At Front Axle" is mentioned. The available EV models meeting the given specifications from the specified OEMs have only one Electric Motor. The specification may be revised accordingly.</p>	<p>Ok. "Electric Motor - 2 Permanent magnet synchronous Placed At Front Axle" removed from the specifications.</p>

12	Minimum Technical Specifications: Sr. No. 10 10kWattCharging station with AC slow/moderate charging( CCS-2) Page 16	10kWattCharging station with AC slow/moderate charging( CCS-2)	The given specifications are of Bharat AC 001 AC Charger. The word "(CCS-2)" mentioned at the end of the title indicates a totally different charging system. "(CCS-2)" may be removed	Ok. "CCS-2" removed
13	Minimum Technical Specifications: Sr. No. 11 Electrical battery managementsystem (BMS): Page 16 & 17	<b>Product composition</b>  12. BMSshouldconformtoIEC61851-1,21,23,24, IS 17017-1,2,21,22,23,24,25, IS 15118	The specified standards are applicable for charger, not for BMS. These may be removed.	Ok. The specified standards have been removed.
14	Minimum Technical Specifications: Sr. No. 14 DCFastChargers (1Set each) Page 17	A. 3.3 kW, on a 15A socket and charging power levels upto 220 volts B. 4 kW C. 7.2 kW	The Chargers available in the market for EV 2-wheeler and EV 3-wheeler are of 3.3 kW AC type. The Charger available in the market for 4-wheeler EV is of 7.2 kW AC Fast charger type. There is no such charger available in the market having 4 kW capacity. ARAI proposes to provide 3.3 kW AC Charger (2 No.) and 7.2 kW AC Fast Charger. Please confirm and revise the specifications.	Ok. Necessary changes incorporated in the technical specifications.
15	<b>Minimum Technical Specifications:</b>	Lithium battery charging and discharging machine havingvoltage9V-99Vwithchargingof 10Aand dischargingof20A	The Battery Discharger having voltage 9V-99V is available from the manufacturers/countries sharing land boundary with India.Hence, it is proposed to provide a system with voltage range of 48V, 60V & 72V with 10A Charging & 20A discharging which will suffice the need. Please confirm and revise the specifications.	Ok. Lithium battery charging and discharging machine having voltage range of 48V, 60V & 72V with 10A Charging & 20A discharging.



16	<b>Special Conditions:-</b> d. Page 19	The selected technology partner shall conduct a skill gap analysis and shall design the advancedskill training curriculum with NSQF level 5 or above, like Mechanic Electric Vehicle specified by NCVT, GoI in addition as per the demand of the industries should be included.Preparation of Training Modules for Train the Trainers and Trainees will be the responsibility of the selected technology partner.	NSQF level 5 or above curriculum and Training Modules for Train the Trainers and Trainees will be prepared by the Bidder based on the skill gap analysis. All the approvals from NCVET for the courses to be obtained by DTET or the respective ITI. The application and other charges for the approval will be borne by DTET or the respective ITI.	The selected technology partner shall conduct a skill gap analysis and shall design the advancedskill training curriculum with equivalent to NSQF level 5 or above, like Mechanic Electric Vehicle specified by NCVT, GoI in addition as per the demand of the industries should be included. The selected bidder shall have a detailed discussion with DTE&T Odisha and CoE Management Committee before finalisation of Course Curriculum.
17	<b>Special Conditions:-</b> e. Page 19	Bidder shall provide technical manpower (Minimum One Expert for each CoE) to provide training for 1 year. Minimum educational qualification for the technical expert is Diploma/ B.Tech or Mtech in Mechanical Engineering with more than 05 years of work experience in Electro Mobility industry. The person must be able to demonstrate, conduct TOT Programs and regular training programs on EV technology.	Following two options are proposed:  Option-1: ARAI will appoint its trained person at the COE and he/she will be guided by ARAI experts time to time.  OR  Option-2: DTET to appoint/designate their personnel who will be trained by ARAI at ARAI facilities. He/she will be responsible to conduct TOT & training programs at the COE. All the expenses of the DTET personnel at ARAI and COE are to be borne by DTET.	ARAI (if selected) will appoint its trained person at the COE and he/she will be guided by ARAI experts time to time.
18	3. Terms of the RFP: 4. Page 20	Only OEMs'/Authorised Partner of OEM having exposure in Auto Manufacturing or Training Centres of national repute having expertise in electric mobility lab, are invited to bid. JV/Consortium biddings are not allowed	ARAI prefers to have a consortium arrangement where OEMs will supply the equipments directly to DTET. This arrangement can be finalized at the time of executing the contract, if ARAI is selected for successful award of the assignment.	DTE&T Odisha shall sign contract agreement with ARAI (if selected) and ARAI should raise the invoices after successful completion of every deliverables. DTE&T shall pay to ARAI only but will not be able to pay OEM/supplier of ARAI.

19	<b>6. Deliverable and Payment Schedule</b>  Page 39 & 40	"The specified Table"	Advance Payment would be required against Bank Guarantee. Time Lines for Deliverable Milestones need to be revisited. Advance payment is required as there would be cash outflow towards the equipment suppliers for procurement. Time Line revision is required based on minimum delivery time of the equipments and processing time.	Advance Payment against Bank Guarantee of similar amount may be given to ARAI as per the guidelines of Odisha Government Finance Rules (OGFR) and after necessary approval may be accorded from Government.
----	--	-----------------------	---	---

Sd/-  
Director of Technical Education and  
Training, Odisha