

Subject: Request for Detailed Technical and Commercial Quotation

<p>Requirement</p>	<p>IRADe invites techno-commercial quotations from Original Equipment Manufacturers (OEMs), Authorized Distributors, and Service Providers for the supply and lease of Electric Vehicles (EVs) equipped with bidirectional charging (Vehicle-to-Load/V2L) capability, under an Odisha Government collaborative infrastructure pilot project–related engagement with IRADe.</p> <p>This leasing initiative uses electric vehicles with bidirectional charging (V2L) so they can provide both transport and backup power when needed.</p>
<p>Location</p>	<p>Puri, Odisha</p>
<p>Scope of Work, Leasing Terms and Conditions</p>	<ul style="list-style-type: none"> • <u>Vehicle Requirement:</u> One (01) vehicle shall be leased under this engagement. The detailed mandatory vehicle specifications are set out in “Annexure 1.” • <u>Leasing Terms and Conditions:</u> <ol style="list-style-type: none"> a) The lease period shall be for a duration of three (03) months from the date of vehicle deployment, tentatively commencing from 1st June 2026. b) The lease shall be structured as a Dry Lease (without driver). c) The pricing model shall be based on either (i) fixed monthly lease charges with applicable variable costs (including tolls, parking, and fuel/electricity), or (ii) a kilometre-based quota model. d) The selected vehicle(s) shall be deployed within fifteen (15) days from the date of execution of the Agreement. • <u>Operational Requirements:</u> <ol style="list-style-type: none"> a) The vehicle supplied shall be new and compliant with all applicable standards. b) The vendor shall provide comprehensive charging infrastructure, including wall-mounted AC chargers with a minimum cable length of 10 metres. c) The vendor shall ensure availability of 24×7 roadside assistance and emergency support services. d) Comprehensive insurance coverage, including Third-Party Liability, Own Damage, and Zero Depreciation, shall be maintained throughout the lease period.

	<p>e) Scheduled maintenance and preventive servicing shall be carried out in accordance with OEM specifications.</p> <p>f) A digital vehicle management system with GPS tracking and telematics shall be provided.</p> <p>g) The vendor shall demonstrate technical training for operators on Vehicle-to-Load (V2L) functionality and safe load management practices.</p> <p>h) The vendor shall provide on-site installation, testing, and commissioning support at the deployment location.</p>
<p>Documentation Requirements from Interested Vendors</p>	<p>The documentation requirements shall be classified under the following categories: Technical, Compliance, Commercial, Warranty & Support, and Legal. Such requirements shall include, inter alia, detailed vehicle specifications and OEM-issued documentation (including certification of V2L capability), applicable statutory and regulatory compliance certificates, comprehensive financial proposals and lease pricing details, warranty and maintenance provisions along with insurance and safety documentation, and a duly executed lease agreement.</p> <p>The detailed list of document requirements is set out in “Annexure 2.”</p>
<p>Submission Address</p>	<p>Interested vendors are requested to submit their Expression of Interest (EoI) along with the commercial quotation at the earliest, and before EoD of (15-05-2026), to the address provided below.</p> <p>Mr. B.K. Sarkar Chief Administrative Officer, IRADe C-80, Shivalik, Malviya Nagar, New Delhi – 110017, India; Phone: +91-11-2667 6180-81; Email: bk.sarkar@irade.org, nmehta@irade.org, rchaudhuri@irade.org</p>

Annexure 1: Vehicle Specifications

S.N	Parameter	Specification
1	Vehicle Type	4-Wheeler Electric Passenger Vehicle (Sedan/SUV/Hatchback) based on advanced EV architecture
2	Battery Technology	LFP (Prismatic cells) or equivalent, with advanced BMS (cell monitoring, fault isolation, discharge control)
3	Nominal Battery Voltage	300V – 350V DC (minimum 300V compliant architecture)
4	Battery Capacity	Minimum 45 kWh usable capacity
5	Driving Range	Minimum 300 km per full charge
6	Bidirectional Capability	V2L (Active) and V2V (Enabled)
7	V2L Output Power	3.3 kW (continuous), 230V AC, 50 Hz
8	V2V Transfer Capacity	Up to 5 kVA
9	V2L Output Interface	External socket via dedicated adapter
10	V2L Control Logic	PWM sine wave control with phase control
11	Load Detection Protocol	Manual load detection
12	SOC Cut-off (V2L)	15 - 20% minimum SOC threshold
13	Traction Inverter	SiC-based PWM bidirectional inverter
14	Conversion Efficiency (V2L)	88 - 92%
15	AC Charging (OBC)	3.3 kW / 7.2 kW (Type 2 compatible)
16	DC Fast Charging	Up to 60 kW (CCS preferred)
17	Thermal Management	Liquid-cooled battery pack + heatsink-based inverter cooling
18	Safety – BMS	HV BMS with real-time monitoring and protection
19	Safety – Interlock	HV contactor with plug detection (V2L safety interlock)
20	Overcurrent Protection	Electronic protection + fuse
21	Ground Fault Detection	Available
22	Isolation Monitoring	Available
23	Appliance Compatibility	Supports standard 230V AC appliances
24	Disaster Relief Suitability	Suitable for backup power and emergency energy supply applications
25	OEM Warranty (Recommended)	Battery: \geq 8 years / 160,000 km; Vehicle: \geq 3 years / 100,000 km

Annexure 2: Documents Required

Sl. No.	Document Category	Required Document
1	Technical Documentation	<ul style="list-style-type: none"> Detailed Technical Specification Sheet (Complete vehicle specs including battery, range, charging, V2L capability) Product Brochure / Datasheet (OEM-issued brochure highlighting features and V2L functionality)
2	Compliance	<ul style="list-style-type: none"> V2L Capability Certificate (Certificate from OEM or authorized agency) OEM Authorization Letter BIS Compliance Certificate (Compliance with Bureau of Indian Standards for EV safety) CMVR Compliance Certificate
3	Commercial	<ul style="list-style-type: none"> Financial Proposal (Detailed pricing including lease model, escalation, and cost components) OEM Price Confirmation (Ex-showroom price certificate from OEM) Lease Pricing Breakdown (month-wise lease charges with escalation terms)
4	Warranty & Support	<ul style="list-style-type: none"> Warranty Documents (Battery and vehicle warranty terms and conditions) Service & Maintenance Plan Insurance Policy Details (Coverage details (TP + OD + Zero Depreciation)) SOPs (Operator material for EV operation and V2L usage) Safety & Protection Documentation (Details of BMS, isolation, grounding, and protection systems) Vehicle Registration Documents (RC, registration details in client name) (at deployment) Charger Installation Documents (at deployment) Handover Documents (Keys, manuals, warranty cards, and acceptance certificate) (at time of deployment)
5	Legal	Copy of lease agreement document