JOB DESCRIPTION

Product Head – EV Product Development, Licensing & Homologation

Company: Satviga Solutions Pvt. Ltd. **Location:** Bhubaneswar, Odisha

Department: Product Development / Engineering / Regulatory Affairs **Reporting To:** CEO

Employment Type: Full-Time **Experience:** 8–15+ years **Industry:** Electric Vehicles / Automotive

1. Position Summary

Satviga Solutions Pvt. Ltd. is looking for an experienced **Product Head – EV Product Development, Licensing & Homologation** to lead the complete product lifecycle of electric two-wheelers, from product conceptualisation and engineering validation through **ARAI / ICAT type approval, homologation, registration readiness and production launch**.

The incumbent will be the single-point owner for product compliance and homologation, coordinating with Satviga management, overseas OEM/technology partners, engineering teams, component suppliers, testing laboratories, regulatory authorities and manufacturing teams.

2. Mandatory ARAI / ICAT Type Approval Experience

MANDATORY SELECTION CRITERION: The candidate must have personally handled and successfully obtained **ARAI and/or ICAT Type Approval for at least two (2) electric two-wheeler models**, preferably electric scooters, from prototype/application stage through testing, observation closure, re-testing where required and issuance of the final Type Approval Certificate.

• Candidates whose experience is limited to documentation support, coordination or assisting another homologation lead should not be considered unless they can demonstrate direct ownership of successful type-approval projects.

3. Key Responsibilities – EV Product Development

• Lead end-to-end development of electric scooters/two-wheelers from concept to commercial production.

• Define product specifications, Product Requirement Specifications (PRS), performance targets and regulatory requirements.

• Coordinate with overseas OEM/technology partners on vehicle design, battery, BMS, motor, controller, VCU, charger, DC-DC converter, display, wiring, braking, suspension, tyres and chassis.

• Review technical drawings, BOMs, specifications and engineering changes and ensure design-for-manufacturing and design-for-homologation.

4. Homologation & Type Approval

• Own the complete ARAI / ICAT homologation programme for every Satviga EV model and variant.

• Determine vehicle category and applicable CMVR/AIS requirements.

• Prepare model-wise compliance matrices and identify component certification requirements.

• Prepare and control the complete type-approval documentation package.

• Coordinate application submission, prototype submission, testing schedules, technical meetings, observations, non-conformities, corrective actions and re-testing.

• Obtain final Type Approval Certificates within the approved project timeline.

5. Regulatory Compliance

• Maintain current knowledge of CMVR, AIS, BIS and applicable MoRTH, MHI and EV safety requirements.

• Monitor regulatory amendments and assess their impact on existing and future products.

• Ensure continued compliance of certified models and variants.

6. EV Battery & Electrical Compliance

• Own compliance of lithium-ion battery pack, cells, BMS, motor, controller, VCU, charger, DC-DC converter, wiring harness, connectors, protection systems, display and related electronics.

• Coordinate battery safety, electrical safety and EMI/EMC testing and certification.

• Verify component certificates and test reports from recognised agencies/laboratories.

7. Vehicle Testing & Validation

• Develop and execute validation plans covering maximum speed, acceleration, gradeability, range, energy consumption, charging, braking, steering, tyres, lighting, electrical safety, environmental durability and EMI/EMC.

• Ensure all validation results meet applicable regulatory and product requirements before formal homologation.

8. Prototype & Configuration Control

• Own homologation prototype preparation and configuration control.

• Ensure prototype configuration exactly matches submitted specifications, including VIN/chassis identification, motor, battery, software/firmware and critical components.

• Maintain a Prototype Configuration Control Sheet for every homologation vehicle.

9. Technical Documentation

• Prepare/review technical specifications, drawings, layouts, electrical schematics, BOMs, component certificates, test reports, software/firmware details, WMI/WMC documentation and manufacturer declarations.

• Ensure complete document accuracy and revision control.

10. Variant & Engineering Change Management

• Control base model, variants, battery/motor/controller options, feature changes, software changes and supplier changes.

• Conduct homologation-impact assessments before approving engineering changes and determine whether extension, partial approval or re-certification is required.

11. Supplier & OEM Technical Management

• Evaluate overseas OEMs and component suppliers technically.

• Approve component specifications, drawings and certification evidence.

• Manage supplier changes, technical issues, sample approval and localisation planning without compromising compliance.

12. Manufacturing & COP Readiness

• Work with Production and Quality to ensure production vehicles conform to the approved type.

• Establish approved BOMs, critical component lists, inspection requirements, assembly specifications and end-of-line testing.

• Lead readiness for Conformity of Production (COP) after type approval.

13. ARAI / ICAT Interface

• Act as Satviga's primary technical interface with ARAI, ICAT, approved testing laboratories and certification agencies.

• Handle technical meetings, applications, testing coordination, observations, clarifications, re-testing and certificate closure.

14. Project, Cost & Timeline Management

• Create and maintain model-wise homologation master plans, milestone trackers, responsibility matrices, risk registers, testing calendars, certification trackers and budgets.

• Ensure homologation is completed within approved Cost + Quality + Time targets.

15. Post-Homologation Responsibility

• Own type-approval extensions, new variants, battery/motor/controller/software changes, supplier changes and regulatory updates.

• Support COP, field-quality feedback, warranty technical issues and corrective actions.

16. Key Deliverables / KPIs

• Successful type approval within approved timeline.

• High first-time test pass rate and rapid observation closure.

• 100% completeness and accuracy of technical documentation.

• Controlled homologated BOM and product configuration.

• COP readiness and timely commercial launch of certified models.

17. Educational Qualification

Essential: B.E./B.Tech in Mechanical, Automobile, Electrical, Electronics, Mechatronics or Automotive Engineering.

Preferred: M.Tech/MBA or certification/training in Automotive Homologation, CMVR, AIS, EV technology or vehicle certification.

18. Experience

Essential: 8–15+ years in automotive product development, EV engineering, homologation, certification, validation or vehicle testing.

Mandatory: Successful ARAI and/or ICAT Type Approval experience for a minimum of two electric two-wheeler models.

Preferred: Direct experience with electric scooter homologation and complete ownership from prototype to Type Approval Certificate.

19. Technical Competencies

• EV architecture; lithium-ion battery systems; BMS; BLDC/PMSM motors; controllers; VCU; automotive electronics; CAN/diagnostics; braking; suspension; chassis; vehicle dynamics; electrical safety; EMI/EMC; CAD; EBOM/MBOM; DFMEA/PFMEA; DVP&R; root-cause analysis; 8D; engineering change management; CMVR/AIS compliance.

20. Behavioural Competencies

• Strong ownership, regulatory mindset, analytical capability, attention to detail, project management, communication, vendor management, negotiation, problem solving, cross-functional leadership and ability to work under certification deadlines.

21. Preferred Candidate Background

• EV OEMs, automotive OEMs, EV component manufacturers, vehicle certification/testing organisations, ARAI/ICAT/testing laboratories or automotive homologation consultancies.

• Direct experience dealing with ARAI / ICAT Type Approval of electric two-wheelers is mandatory.

22. Reporting Structure

• **CEO** → Product Head – EV Product Development & Homologation → Product Development / Homologation / Validation / Battery-BMS / Electrical / Documentation team.

• Cross-functional interfaces: OEM/China Technical Team, ARAI/ICAT, Suppliers, Manufacturing, Quality, Purchase and Sales.

23. Immediate 90-Day Mandate

• Complete regulatory gap analysis; finalise model classification and homologation strategy; prepare CMVR/AIS compliance matrix; audit component certificates; close documentation gaps; freeze homologation BOM; establish

prototype configuration control; finalise ARAI/ICAT roadmap; prepare testing budget and schedule; initiate certification; establish internal validation and COP-readiness protocols.

24. Authority

• Reject non-compliant components; stop release of changes that may compromise certification; require supplier corrective action; freeze homologation specifications; recommend prototype rework; escalate regulatory risks directly to the CEO; and recommend specialist testing/homologation support.

25. Critical Success Factor

• The successful candidate must be capable of independently taking an EV from **Concept** → **Engineering Freeze** → **Homologation Prototype** → **ARAI/ICAT Testing** → **Observation Closure** → **Type Approval** → **Production Readiness** → **COP Compliance** → **Commercial Launch.**

26. Candidate Screening – Mandatory

• Candidate must provide details of at least **two EV models** for which he/she was directly responsible for obtaining ARAI/ICAT Type Approval, including model, employer/OEM, testing agency, year of approval and specific role.

• Only candidates who can demonstrate actual successful Type Approval ownership should be shortlisted.

Approved / Issued By:

CEO

Satviga Solutions Pvt. Ltd.