

BIRLA VISHVAKARMA MAHAVIDYALAYA

An Autonomous Charutar Vidya Mandal Institute

SSIP CELL

Review NOTE

Subject: Proceedings of the Virtual Review Meeting of SSIP 2.0 Proof of Concept (PoC) Projects

Date	Monday, 28 September 2026
Meeting	Virtual Review Meeting of SSIP 2.0 Proof of Concept (PoC) Projects
Purpose	Review of technical progress, implementation status, fund utilization, challenges and future action plan
Mode	Online / Virtual

1. Background and Purpose

A Virtual Review Meeting of SSIP 2.0 Proof of Concept (PoC) Projects was conducted on 28 September 2026 to review the progress of approved PoC projects. The review focused on the technical development achieved so far, utilization of SSIP assistance, procurement status, implementation challenges, market/application potential and the proposed roadmap for further development.

2. Project-wise Proceedings

2.1 Eco-Efficient Hydraulic Generator System for Mobile Industrial Applications

The project team presented an eco-efficient hydraulic generator system intended for mobile and off-grid applications such as rescue operations, construction, farming and other utility applications. The proposed system seeks to reduce dependence on separate diesel generator sets by utilizing the vehicle prime mover to operate a hydraulic pump and motor arrangement coupled with an electrical generator.

The team informed that SSIP assistance of ₹2.00 lakh had been utilized for procurement of major components including the generator, hydraulic pump and motor, regulators, valves, cooling system and filtration system. A prototype/test arrangement consisting of the prime mover, hydraulic pump, hydraulic motor, generator, control system, sensors, tank, cooler and electrical load was demonstrated.

The proposed next-stage activities include system improvement, mounting/integration of the system on a vehicle, pilot testing under different operating conditions and development of a hybrid electromechanical configuration aimed at further reducing fuel consumption and carbon emissions.

2.2 Smart Solar Charge Controller for Off-Grid Mobility Applications

The second project focused on development of a smart solar-based onboard charging and power-management system for commercial and utility vehicles. The proposed configuration combines solar photovoltaic generation with an alternator-based backup source and an LFP battery system. Potential applications identified include EVs, utility vehicles, food and refrigeration trucks, camping vehicles, welding/service vehicles and other off-grid applications.

The team proposed an integrated high-frequency PWM-based smart charge controller with load sharing and IoT connectivity. The system is intended to reduce grid dependency, provide onboard power and, where applicable, support charging of electric vehicles.

At the time of review, approximately ₹31,852 had been utilized against the sanctioned SSIP assistance of ₹2.00 lakh. The balance was proposed for procurement of an LFP battery, permanent-magnet alternator, inverter components, DC-link capacitors and other power-electronic components.

The team clarified that the complete targeted system would require substantially higher investment, with an estimated overall project requirement of approximately ₹11–12 lakh. The reviewers advised the team to explore additional government, startup and external funding schemes and to expedite implementation to avoid escalation of project cost and delays in technology validation.

The team indicated its intention to complete the project and undertake vehicle-level implementation/testing by approximately March 2027, subject to availability of the required resources.

2.3 Gig2.com – Job/Service Platform

The project Gig2.com was presented as a platform intended to connect job/service seekers with job providers, particularly for temporary, event-based and domain-specific requirements. The platform provides different user roles and facilitates job posting, profile creation, job applications and related interactions.

The team informed that more than 200 persons had clicked the website link following outreach to BVM alumni and students; however, complete user registration remained limited. The team also indicated that potential job-provider requirements had been identified across Surat, Ahmedabad, Gandhinagar, Rajkot and Jamnagar.

The reviewers emphasized the importance of marketing, user acquisition and promotional activities for successful adoption. The team proposed strengthening digital marketing and social-media promotion. The discussion also covered API/OTP integration, DLT registration, intellectual-property protection, website development and operational requirements.

The team was advised to clearly distinguish one-time development expenditure from recurring operational and maintenance expenditure while preparing future financial requirements.

3. Key Observations of the Review

- The project teams demonstrated technical initiative and continued efforts towards development of their respective PoCs.
- The hydraulic generator project has progressed to a working prototype/test setup, with vehicle-level integration proposed as the next stage.
- The smart solar charging project has established its proposed system architecture and is progressing towards procurement and prototype development.
- The smart solar charging project requires substantial additional funding for complete system development and vehicle-level testing.
- The teams were advised to explore additional government, startup and external funding schemes beyond the initial SSIP-supported PoC stage.
- Greater emphasis is required on timely implementation, market validation, pilot testing and commercialization potential.
- The Gig2.com project requires focused efforts towards user acquisition, marketing, platform engagement and conversion of visitors into registered users.
- Future financial planning should clearly distinguish one-time capital expenditure and recurring operational expenditure.

5. Conclusion

The Virtual Review Meeting provided an opportunity to assess the technical progress, financial utilization, implementation challenges and future roadmap of the SSIP 2.0 PoC projects. The reviewers provided constructive inputs concerning technical validation, funding, market adoption, implementation timelines and commercialization.

The concerned project teams were advised to incorporate the observations and recommendations discussed during the review and proceed towards timely completion, validation and further development of their respective PoCs. The teams were also encouraged to explore appropriate funding and industry-support mechanisms for subsequent stages.

Attendance:

Following members attended the meeting (As per screen-shot)

1. Dr. Rashesh Mehta , Dean III
2. Dr. Darshan Dalwadi, Assco. Dean III
3. Dr. Ronak Vashi, SSIP Coordinator,
4. Mr. Utsav and his team
5. Mr. Rushabh
6. Mr. Ansh
7. Mr. Fenil Modi
8. Mr. Dipak shah, CEO LynxAI
9. Mr. Sachin Patel, CEO & MD Stellarsight Technology Solutions Pvt. Ltd.
10. Tushar S Deochakke, Founder - President Pinvest Inc.
11. Anant Upendrabhai Joshi, Managing Partner TENETIX Calibration Systems
12. ASHISH KUMUDCHANDRA RANADIVE, Founder/ Director HEALTHCARE
INFORMATICS PVT.LTD. (HIPL)