



## Terms of Reference (TOR)

### Installation of Remote Monitoring System at Health Facilities

<b>Title</b>	<b>Installation and Commissioning of Remote Monitoring System to Solar Photovoltaic Systems at Health Facilities</b>
<b>Timeline</b>	Installation to be completed within 30 days for Meghalaya and Mizoram respectively and 60 days for Karnataka on receipt of RMS devices and other related materials at State Capitals.
<b>Expected area of expertise</b>	Karnataka, Meghalaya and Mizoram state
<b>Email and website</b>	<a href="https://forms.gle/oTNriN7zmmcFbhiR7">https://forms.gle/oTNriN7zmmcFbhiR7</a>

#### About SELCO Foundation:

SELCO Foundation's mission is to create a platform of solutions that use sustainable energy as a catalyst to bridge environmental sustainability and poverty alleviation. With holistic development as the primary focus, the organization strives to create equitable societies, where services are accessed by all communities. The interventions of SELCO lead to a sustainable delivery model of essential services like livelihoods, education, and health till the last mile. (Read more about SELCO here: <http://www.selcofoundation.org/>)

#### 1. Summary of the project:

This project refers to the scope of installation and commissioning of Remote Monitoring System (RMS) to the Solar Photovoltaic Systems under the Energy for Health program and support establishing a fully functional dashboard to monitor the DRE Solutions at Public Health Facilities in Karnataka, Mizoram and Meghalaya. The RMS devices along with gateway and other accessories will be supplied at the respective state capitals that need to be installed towards the inverter output side at the health facilities wherever the DRE systems are installed.

2.

## DEFINITIONS

**Real-time monitoring and data collection:** A remote monitoring system aims to collect real-time data from solar equipment and transmit this data to a central location or database for analysis and monitoring purposes.

**Increased operational efficiency:** By remotely monitoring critical systems, processes, or assets, it will become easy to identify potential issues or anomalies before they escalate into major problems. This proactive approach helps minimize downtime, reduce maintenance costs, and improve overall operational efficiency.

**Enhanced safety and compliance:** Remote monitoring systems play a crucial role in ensuring safety and can detect and alert operators or authorities about potential hazards, breaches, or deviations from set standards.

**Predictive maintenance:** By continuously monitoring equipment performance and analysing historical data, remote monitoring systems can help implement predictive maintenance strategies. This involves identifying potential equipment failures before they occur and scheduling maintenance activities accordingly, thereby reducing unplanned downtime and extending the lifespan of assets.

**Resource optimization:** Remote monitoring systems can provide valuable insights into resource utilization, mainly energy consumption. This information can be used to optimize resource allocation and improve overall efficiency.

**Remote access and control:** In certain applications, remote monitoring systems may also allow authorized personnel to access and control equipment or systems remotely. This capability is particularly useful in scenarios where physical access is limited or impractical, such as remote sites or hazardous environments.

**Data-driven decision making:** The data collected by remote monitoring systems can be analysed and used to inform decision-making processes. This data-driven approach can lead to better-informed decisions, improved strategies, and more effective resource allocation.

## 2. Goals and Objectives

The primary goals and objectives of a remote monitoring system are as follows:

Hence, to ensure the above, the primary objective under this project is to:

ensure quality installations and commissioning of the overall RMS system towards the inverter output side within the agreed timelines.

provide active and timely support in coordination with the RMS supplier in case of any repair or replacement required.

conduct basic checks like loose wirings, resolving network failure issues, cleaning of dusts, etc. during the schedule maintenance visits.

### 3. Purpose of this ToR:

SELCO Foundation is deploying Remote monitoring system of 1874 units at public health facilities across 3 states in India. The purpose of this TOR is to agencies/enterprises who could responsibly install the Remote monitoring system in all public health facilities and operate in the regions in the 3 below listed states.

The number of the health centers for three different states:

Name of the State	Total No of Units with Single Phase AC Meter	Total No of Units with Three Phase AC Meter
Karnataka	1073	15
Meghalaya	441	19
Mizoram	326	-
<b>Total</b>	<b>1840</b>	<b>34</b>

The agencies/enterprise are supposed to share separate quotations for individual state as mentioned above.

### 4. Scope of Work

1. RMS hardware partner will supply the material at central location within state. Transit of materials within the state to be taken care by the installation partner.
2. Damage of the material during transit are under installation partner scope. Material Safety concerns needs to be taken care during the transit.
3. The agency/enterprise should have skilled persons with proven expertise in installing and commissioning of the preconfigured RMS devices. The agency/enterprise should have a dedicated team to configure the data from the hardware to the dashboard server and agree to customize the dashboard as per client's requirement.
4. The agency/enterprise will be provided with adequate capacity building to undertake such activity either online or offline or both.
5. The agency/enterprise shall have a dedicated team for the troubleshooting/repair/replacement/service assistance. A point of contact shall be notified to SELCO Foundation along with the document. SELCO Foundation shall have the right to make a

written request for a change in such skilled personnel in any circumstance and the Agency/enterprise shall ensure such personnel is changed in two days time.

6. The agency/enterprise shall have the capacity to install a minimum quantity of 1000 units/month.
7. The agency/enterprise shall submit a detailed project completion report along with photographs after completion of installation activities at each health facilities in the state as per the pre-defined reporting template. The agency/enterprise shall mandatorily submit the report as per the given template after completion of installation and commissioning at every 15 sites.
8. The agency/enterprise shall be available locally within the state for necessary coordination and support in repair, service and maintenance of the RMS devices during the post-installation phase at least for 5 years. The agency/enterprise shall conduct basic checks like loose wirings, resolving network failure issues, cleaning of dusts, etc. during the schedule maintenance visits.
9. The agency/enterprise should ensure the standard installation such as cable management with proper conduit pipe protection, fixing the external sensors and gateways with enclosure box. Ensure the system functionality post installation of Remote Monitoring system.
10. Agency/enterprise shall ensure that there is no tampering with the existing solar components while installing the RMS hardware.
11. Pre request has been made to the health facility prior to installing the RMS in which such installation should not affect the daily routine activities of the health centre.
12. Installation agency/enterprise should ensure that data are flowing properly in the dashboard before moving into another site in co-ordination with SELCO team.
13. Installation plan to be shared by the agency/enterprise team for coordination with the health facility and making the local team availability to ensure the installation of the RMS is going as per the plan.

#### 5. Service Level Agreements:

This is a Service Level Agreement (SLA\*) between [Customer] and [Service Provider]. This document identifies the services required and the expected level of services between DD/MM/YYYY to DD/MM/YYYY.

Sl. No	Security Level	Description	Target Response
1	Informational	Inquiry for information	Within 24 hours
2	Damage/Burnt of device or gateway or cables or enclosures	Material to be dispatched by the agency/enterprise to concerned agreed location for repair within or outside the respective state.	Within 48 hours of complaint

3	Damage/Burnt of device or gateway or cables or enclosures	Replacement of material shall be dispatched by the agency/enterprise with preconfigured device	Within 2 days on receipt of the material
4	Network Connectivity	Any network related issues that needs device to restart or bringing back the network availability into normal stage	Within 48 hours of complaint

### 6. Timelines:

Installation and commissioning of the remote monitoring system within 30 days from the date of receipt of the materials. For service/repair/replacement related timeline, refer section 5, above.

### Selection Criteria:

The agency/enterprise should have previous work experience on solar installations for a minimum of 3 years.

Preference will be given to the agency/enterprise who have previous work experience in the installation of remote monitoring systems.

The agency/enterprise should have done business worth 1crore in the last financial year.

The agency/enterprise should have local office present within the state and have the skilled team available locally to undertake the project within the agreed timeline.

### 7. Payment Terms:

Disbursement	Milestone
30%	Advance payment
20%	At 50% installation completion
20%	At 75% installation completion
20%	After 100% completion of installation
10%	After 1 month of final installation and syncing data into dashboard

**Note: For every tranche of payment, bidder must raise an invoice**

### Proposal Format:

SL No	Particular	Qty	Rate	GST	Total
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1.	Installation Charges	1874			
2.	Transportation Charges	1874	As per actuals		

Any ad-hoc service or repairs that arise would be paid as per the submission of actual bills/invoices consolidated monthly.

## 8. To apply

Interested consultants / organizations, with relevant experience (please include samples and/or references of the previous similar work as proof of experience) and based out of India are requested to reach out with a detailed proposal giving a brief on the methodology and the process they will uptake for this project, including budgets (with break-ups and explanation), timelines and milestones and submit the same to google form <https://forms.gle/oTNriN7zmmcFbhiR7> on before 15/05/2024.

Any further queries please write to [procurement@selcofoundation.org](mailto:procurement@selcofoundation.org) and cc to [energyforhealth@secofoundation.org](mailto:energyforhealth@secofoundation.org) with a subject line: "Installation and Commissioning of Remote Monitoring System to Solar Photovoltaic Systems at Health Facilities" (Name of Project)

### Refer Terms and Condition:

- 1. Sub-contracting:** In the event that the Consultant requires the services of subcontractors to perform any obligations under the Contract, the Consultant shall obtain the prior written approval of the Foundation. Any rejection or non-performance of the subcontractor shall not, in and of itself, entitle the Consultant to claim any delays in the performance, or to assert any excuses for the non-performance, of any of its obligations under the Contract, and the Consultant shall be solely responsible for all services, obligations and deliverables performed by its subcontractors
- 2. Quality Assurance**  
The data submitted to Selco Foundation should be accurate, complete, reliable and relevant. Consulting agency shall establish additional layers for data cleaning and submission.
- 3. Financials & Reporting**  
TDS will be deducted on the fixed amount as per Income Tax Act and Rate of Percentage. In accordance with the Central Board of Direct Taxes circular No. 7 of 2022 dated 30th March, 2022 in relation to the clarifications with respect to Section 114AAA of the Income-tax Rules, 1962, failure to link Aadhar number to the PAN card and/or failure by any person, who falls within the income tax bracket or otherwise, to file tax returns in relation to payment of TDS for any service (in accordance with Section 206AB and 206AA) and/or an inoperative PAN card will result in a 20% tax deduction.

#### **4. Indemnification**

Both parties shall indemnify and hold its Trustees, Directors and representative officers, employees, agents harmless from and against any and all claims, demands, actions, losses, liabilities, charges, damages, costs and expenses (including but not limited to reasonable attorney's fees) arising out of or resulting from (1) any claims arising in connection with activities undertaken by both parties in connection with the project or (2) Consultant's gross negligence or willful misconduct or breach of any undertaking, covenant, representation or warranty contained in this agreement and/ or the actual infringement of any patent, trademark, copyrights, trade secret or any other intellectual property right of the third party.

#### **5. Patent, Copyright and other Proprietary Rights**

- (i) Except as is otherwise expressly provided in writing in the Contract, the Foundation shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials which the Consultant has developed for the Foundation under the Contract and which bear a direct relation to or are produced or prepared or collected in consequence of, or during the course of, the performance of the Contract. The Contractor acknowledges and agrees that such products, documents and other materials constitute works made for hire for the Foundation.
- (ii) Subject to the foregoing provisions, all documents, reports, recommendations, documents, and all other data compiled by or received by the Consultant under the Contract shall be the property of the Foundation, shall be made available for use or inspection by the Foundation at reasonable times and in reasonable places, shall be treated as confidential, and shall be delivered only to the Foundation's authorized officials on completion of work under the Contract
- (iii) The Consultant will treat all information given to him/her as information with proprietary value and will not disclose the same to competitors or any outsiders. The Consultant will not at any time, except under legal process, divulge any trade or business secret relating to the Foundation or any customer or agent of the Foundation, which may become known to him by virtue of his position as consultant, save in so far as such disclosure shall be necessary in the interest and for the benefit of the said Foundation and will be true and faithful to the Foundation in all dealings and transactions whatsoever relating to the said Foundation.
- (iv) Reports or other data that are developed specifically for the performance of this Contract shall be the property of the Foundation and the Consultant shall deliver reports and data to the Foundation as per the milestones. Dissemination of the reports and any information from the said contracts shall be done with written approval from the Foundation.

**6. Publicity, use of name & Logo of the Foundation:** The Consultant shall not advertise or otherwise make public for purposes of commercial advantage or goodwill that it has a contractual relationship with the Foundation, nor shall the Consultant, in any manner whatsoever use the name, emblem, logo or official seal of the Foundation or that of SELCO in connection with its business or otherwise without the written permission of the Foundation.

**7. Observance of Law:**

- (i) The Consultant shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the Contract.
- (ii) The Consultant represents and warrants that neither it, its parent entities, partners or subcontractors nor any of its subsidiary or affiliated entities (if any) is engaged in any practice inconsistent with the rights set forth in the *Child Labour (Prohibition and Regulation) Act of 1986*, which, *inter alia*, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.
- (iii) The Consultant represents and warrants that it shall adhere to the mandates prescribed under the *Sexual Harassment of Women (Prevention, Prohibition & Redressal) Act, 2013*, which requires all workplaces to have a Policy and Internal Committee to address complaints of sexual harassment that women may face at the workplace

#### **8. Termination:**

Either party may terminate this contract by giving a notice in writing to the other party stating their intention to terminate the same on the expiration of Seven (7) days from the date of such notice. In addition, the Foundation may also terminate this contract forthwith in the event of any fraud, misconduct or neglect of duties on the part of the Consultant. Any notice to be given hereunder shall be sufficiently given to the Consultant if forwarded by registered post or by Courier Service to the last known postal address of the Consultant and shall be sufficiently given to the Foundation if similarly forwarded to the registered office. Upon the termination of this contract and payment of the said fees due up to such termination, and payment of all disbursements and out-of-pocket expenses incurred up to the date thereof (provided the same have been incurred after obtaining prior approval), the Consultant shall deliver all deeds, documents and paper in his possession relating to the business of the Foundation or as the Foundation shall direct, and shall continue to afford him all reasonable assistance for concluding pending matters at the date of such termination without making any charge thereof.

#### **9. Force Majeure:**

- (i) *Force majeure* as used herein means any unforeseeable and irresistible act of nature, any act of war (whether declared or not), invasion, revolution, insurrection, terrorism, or any other acts of a similar nature or force, *provided that* such acts arise from causes beyond the control and without the fault or negligence of the Consultant
- (ii) In the event of and as soon as possible after the occurrence of any cause constituting *force majeure*, the affected Party shall give notice and full particulars in writing to the other Party, of such occurrence or cause if the affected Party is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under the Contract. The affected Party shall also notify the other Party of any other changes in condition or the occurrence of any event which interferes or threatens to interfere with its performance of the Contract. Not more than fifteen (15) days following the provision of such notice of *force majeure* or other changes in condition or occurrence, the affected Party shall also submit a statement to the other Party of estimated expenditures that will likely be incurred for the duration of the change in condition or the event of *force majeure*.
- (iii) On receipt of the notice or notices required hereunder, the Party not affected by the occurrence of a cause constituting *force majeure* shall take such action as it reasonably



considers to be appropriate or necessary in the circumstances, including the granting to the affected Party of a reasonable extension of time in which to perform any obligations under the Contract.

- (iv) If the Consultant is rendered unable, wholly or in part, by reason of *force majeure* to perform its obligations and meet its responsibilities under the Contract, the Foundation shall have the right to suspend or terminate the Contract on the same terms and conditions as are provided for in this Contract.

**10.** Both the Foundation and the Consultant fully and freely intend to create an independent Contractor relationship under this Contract. Nothing herein shall be deemed to establish a partnership, joint venture, association or employment relationship between the parties. Both parties agree that the consultant has the right to sole and exclusive control over the manner and means employed in performing their activities under this Contract.

**11. Settlement of disputes:**

- (i) The Parties shall use their best efforts to amicably settle any dispute, controversy, or claim arising out of the Contract or the breach, termination, or invalidity thereof.

Any dispute, controversy, or claim between the Parties arising out of the Contract or the breach, termination, or invalidity thereof, unless settled amicably, within sixty (60) days after receipt by one Party of the other Party's written request for such amicable settlement, the matter shall be referred by either Party to arbitration in accordance with the Arbitration and Conciliation Act, 1996. The venue of the arbitration shall be at Bangalore. Likewise, the jurisdiction will vest with courts in Bangalore.