

**Empanelment and Rate Contract of supplier for
Solar Urja Lamp (SOUL) Kit**



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

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Sealed Tenders are invited by the Joint Registrar (MM), Indian Institute of Technology Bombay, Powai, Mumbai- 400 076, for the Rate Contract of Solar Urja Lamp Kit. Non transferable tender forms containing terms and conditions can be downloaded from our website www.iitb.ac.in/en/tenders/active and submit EMD along with the form of Demand Draft or Bank Guarantee in favour of "The Registrar, IIT Bombay" payable at Mumbai. The Tender No. & brief description of the item is given below:

Section 1 – Invitation of Bids

Tender No	MMD/ESE/SOUL/KIT/L/2019-20
Tender Date	03 rd April 2019
Advt No.	MMD – 24/18-19
Item Description:	Empanelment and Rate Contract for Solar Urja Lamp (SOUL) Kit
Pre-bid Meeting Date & Time	22 nd April 2019 @ 11.00 am
Pre-bid Meeting Place :	Materials Management Division, IIT Bombay Powai, Mumbai – 400 076.
Last date & time of submission of tender:	15 th May 2019 at 1.00 p.m.
Place of Submission Bids :	Materials Management Division, Ground floor, Main Bldg, Indian Institute of Technology Bombay, Powai, Mumbai-76
Tender Type:	Two Bid System : The two bid system will be followed for this tender. In this system bidder must submit their offer in separate sealed envelopes as –Technical Bid and Commercial Bid. Both the Technical Bid and Commercial Bid envelopes should be clearly marked as "Envelope No. 1 - Technical Bid " and "Envelope No. 2 – Commercial Bid " and both these sealed covers are to be put in a bigger cover which should also be sealed and duly superscribed with our Tender No. & Due Date and to be submitted to the concern department/section mentioned in tender document.
Opening Date & Time of tender	15th May 2019 at 3.00 p.m.
Place of opening Tender	Materials Management Division, Ground floor, Main Bldg, Indian Institute of Technology Bombay, Powai, Mumbai- 400 076.
Earnest Money Deposit	Earnest Money Deposit of Rs. 30,00,000/-(Rs.

	Thirty Lakhs Only) in the form of Bank Guarantee or in the form of Demand Draft in favour of "The Registrar, IIT Bombay" payable at Mumbai to be submitted in technical bid.
Technical Clarification	Name : Prof. C.S. Solanki Dept : Dept. of Energy Sci. &Engg. Email : chetanss@iitb.ac.in harshad@soulsiitb.in Contact No. : 022-2576 7895
Any other Clarification	Name : Joint Registrar (MM) Dept. : Materials Management Division Email : drmm@iitb.ac.in Contact No. : 022-2576 8800
Signing Authority	Joint Registrar (MM)

Introduction

- **Context**

Today, the world is on the crossroads of the energy contradiction, wherein, on one hand, there are billions who do not have access to energy and on the other hand use of energy is resulting in climate change. According to the International Energy Agency (IEA) Report, more than 1 billion people lack access to electricity while over 2.8 billion people lack access to clean cooking. As per the IPCC report of Oct. 2018, we need to have a **“rapid and far-reaching” transition in energy usage**. For mitigating climate change, there is an urgency to reduce the carbon emissions, and the world has to become net carbon zero by the year 2050, an extremely difficult task to achieve. In case the world fails to mitigate climate change, the global temperature is expected to rise up to 5°C by the end of this century in business as usual scenario, in which condition human existence itself will come under threat.

- **SoULS Initiative**

At Indian Institute of Technology (IIT) Bombay through its Solar Urja through Localization for Sustainability (SoULS, www.soulsiitb.in) initiative has been working on the facilitating localized solar solutions involving local communities in assembly, distribution, repair and maintenance, and even manufacturing of the solar products. These localized solar solutions can be a solution to both the issues of energy access as well as the mitigating the climate change. Through this SoULS Initiative, over 5 million families have benefitted through Solar Urja lamp project and more than 9,000 local people, particularly women, have earned some income through technology-based livelihoods. The SoULS Initiative is currently being implemented in 10 Indian states, covering the most marginalized families living in geographically isolated and remote areas. In addition, the initiative also helps local to open solar marts and even set up manufacturing units. The SoULS initiative has been working to develop open source hardware for solar based products. It has also developed solar PV based cooking solutions. Overall SoULS initiative has been working to **provide 24x7 solar energy solutions by locals for locals**.

- **The Idea of Energy Swaraj**

In the backdrop of energy access and climate change, an idea of **“Energy Swaraj”** or localized energy self-sufficiency has been conceptualized. Solar energy is infinite and use of solar energy to fulfil ALL our energy needs locally through the local operations of assembly, manufacturing, installation and maintenance, as much as possible, is energy swaraj. It is a condition of localized energy self-sufficiency, it is localized self-reliance of energy. In order to propagate Energy Swaraj, **Gandhi Global Solar Yatra** (GGSY, www.ggsy.in) is planned not only in India but across the globe. The young generation, who will bear the maximum burden of climate change, has to be an integral part of this clean energy revolution. A workshop on 2nd Oct. 2019 is being organized across the globe to make millions of people, especially students, a Students Solar Ambassadors.

Student Solar Ambassador workshop, 2nd Oct. 2019

The Student Solar Ambassador Workshop, the seed concept of the Gandhi Global Solar Yatra, aimed to sensitize the young (future) generations who will be bearing the maximum burden of climate change. Their sensitization and participation as solar ambassadors in climate mitigation efforts are important. Therefore, a workshop to train students and sensitize them towards solar energy is being organized on 2nd October 2019, marking the 150th birth anniversary of Mahatma Gandhi, who epitomized the cause of non-violence (principles). This will be a mega-global event, wherein more than 1 million students from over 180 countries will get hands-on training to assemble their own solar study lamp. The workshop is expected to happen in at least 10,000 locations. 2nd Oct. 2019 is marked as 150th birth anniversary of Mahatma Gandhi, which is also celebrated as the International Day of Non-Violence. All the Students Solar Ambassador on 2nd Oct. will also take a pledge of Non-Violence towards Environment. A similar workshop was also organized by IIT Bombay (Guinness World Record event) on 2nd Oct. 2018 across India wherein more than 1.30 lakh students from 857 schools assembled their own solar study lamps.

Target

The target of Student Solar Ambassador workshop of 2nd Oct. 2019 is to conduct hands-on training for **2.5 million** students in India and about **0.5 million students** outside India.

Section 2 – Eligibility Criteria

The bidder should provide the following relevant documents, failing which their applications shall be summarily rejected:

1. The bidder has to be operational for last three years in India – (Copy of Certificate of Incorporation / Registration of firm to be enclosed).
2. The bidder should provide **PAN CARD** of the firm. (copy to be enclosed).
3. The bidder should provide **Valid GST Registration Certificate** (copy to be enclosed).
4. The bidder must not be blacklisted / Suspended or any service related dispute with any Organization / Govt org/ PSU /Private Sector inside India or outside India. Declaration to be submitted as per **Annexure A1**.
5. The Bidder's should accept Tender Terms & Condition **Annexure A2**.
6. The Bidder should submit filled Income Tax Return acknowledgment for last two years i.e. A.Y.2017-2018 (F.Y. 2016-17) & A.Y.2018-2019 (F.Y. 2017-18) **Annexure A3**.
7. Duly filed Bidder's Information **Annexure – A4**.
8. The Organization should have produced and sold more than 10,000 solar LED lamps – copy of (purchase orders to be enclosed) **Annexure – A5**.
9. The bidder should duly fill the compliance sheet and submit the same as **Annexure – A6** (Mandatory)

Section 3 - Instructions to Bidders

A) Submission of Tenders:

1. Tender should be submitted on the schedule with your covering letter in the enclosed form duly signed. Your quotation must be submitted in two envelopes Technical Bid and Commercial Bid superscribing on both the envelopes the tender no. and the due date and both these sealed covers are to be put in a bigger cover which should also be sealed and duly superscribed with our Tender No. & Due Date.
2. The Bid should be dropped in the tender box kept in the office of concerned Department / Section mentioned in the tender. No tender is to be handed over to our staff personally unless otherwise specified. All communications are to be addressed to the undersigned only. In case due date happens to be holiday the bid will be accepted and opened on the next working day.
3. The bid can be submitted in person or through post/ courier (IIT Bombay shall not be responsible for any postal delays or any other reason for not submitting the bid in the specified time and resulting in disqualification / rejection of any bid) so as to reach on or before the due date and time.
4. The leaflets catalogue, etc. should be sent invariably so that a proper evaluation of the solar items offered is possible.

B) COST OF BIDDING :

1. The Bidder shall bear all costs associated with the preparation and submission of its Bid and the Purchaser shall not be responsible or liable for those costs regardless of the conduct or outcome of the bidding process.

C) VALIDITY OF THE BID :

1. 180 Days from the date of submission of bid.

D) AMENDMENT OF BIDDING DOCUMENTS :

- 1 At any time prior to the deadline for submission of bids, IIT Bombay may, for any reason, whether on its own initiative or in response to the clarification request by a prospective BIDDER may modify the bid document.
- 2 All prospective BIDDER's who have downloaded the bidding document may visit IIT Bombay website for amendments / modifications which will be binding on them.

E) DEADLINE FOR SUBMISSION OF BIDS :

1. Bids must be received by IIT Bombay before the due date and time at the address specified in the tender document. In the event of the specified date for the submission of bids being declared as a holiday for IIT Bombay the bid-closing deadline will stand extended to the next working day up to the same time.

F) BID OPENING PROCESS:

1. In two envelope cover bid system, the Technical Bid will be opened in the first instance in the presence of representatives of the bidders at IIT Bombay.
2. Financial bids of only those bidders, whose bids are found technically qualified, by the Technical Evaluation Committee, will be opened in the presence of the vendor's representatives subsequently at later date for further evaluation.
3. One authorized representative of each of the bidder would be permitted to be present at the time of aforementioned opening of the bids.
4. The authorized representatives of bidders, present at the time of opening of the bids shall be required to sign an attendance register as a proof of having attended the bid opening meetings.

G) LATE BIDS :

1. IIT Bombay will not be responsible:
 - a. For delayed / late quotations submitted / sent by post / courier etc.
 - b. For submission / delivery of quotations at wrong places other than the mentioned in the tender.
 - c. Any bid inadvertently received by IIT Bombay after the deadline i.e. due date & time for submission of bids, will not be accepted and returned.
 - d. Fax / E-mail / Telegraphic / Telex tenders will not be considered.

H) SUPPLEMENTARY OFFER /MODIFICATION OF ORIGINAL BID:

1. Tender submitted against Notice Inviting Tender (NIT) shall not be returned in case the tender opening date is extended / postponed. Bidder desirous to modify their offer / terms may submit their revised / supplementary offer (s) within the extended Tender Opening Date (TOD) by clearly stating to the extend of updation done to the original bid. The purchaser reserves the right to open the original offer alongwith the revised bid (I).

I) CONFIDENTIALITY :

1. Information relating to the evaluation of bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.
2. Notwithstanding, from the time of Bid opening to the time of Contract award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, it shall do so in writing.

J) EVALUATION OF BID :

1. IIT Bombay evaluate technical and commercial acceptable offers on landed net Price basis.
2. In case any BIDDER is silent on any clauses mentioned in this tender documents, IIT Bombay shall construe that the BIDDER has accepted the clauses as per the invitation to tender and no further claim will be entertained.
3. No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.
4. Bidders have to submit samples for inspection as mentioned in technical specification.

K) COMMERCIAL BID :

1. Quoting of Price (s) : Price quoted should be in Indian Rupees for Commercial Bid -I .
2. Commercial Bid II is for Logistics cost for specified countries and should be quoted in relevant currency. The logistics cost should include all allied expenditure, handling materials & transportation cost for supplying to the material to the specified delivery location. **It is mandatory to quote for all the countries.**
3. COMMERCIAL BID must be submitted in enclosed Commercial Bid Form only.If the price is not quoted in Price Bid Form only provided in tender document then, IIT Bombay will reject bid.
4. Tender will be taken as exclusive of all Taxes. Taxes to be mentioned separately in Taxes column.
5. If supplier wish to give pricing details it may be attached in separate sheet.

L) TRANSFER AND SUBLETTING :

1. The seller shall not sublet, transfer, assign or otherwise part with the acceptance to the tender or any part thereof, either directly or indirectly, without the prior written permission of the Purchaser.

M) CANCELLATION OF TENDER :

1. Not withstanding anything specified in this tender document, Purchaser / IIT Bombay in his sole discretion, unconditionally and without assigning any reasons, reserves the rights: MMD, IIT Bombay
 - a) To accept OR reject lowest tender or any other tender or all the tenders.
 - b) To accept any tender in full or in part.
 - c) To reject the tender offer not confirming to the tenders terms.
2. To give purchase preference to Public Sector undertakings when applicable as per Govt. Policy/Guidelines.
3. Offer which deviates from the vital conditions (as illustrates below) of the tender shall be rejected:
 - a) Non-submission of complete offers.
 - b) Receipt of offers after due date and time and or by email / fax (unless specified otherwise).
 - c) Receipt of offers in open conditions.

4. Conditional Tenders and Unsigned Tenders will also be rejected.

N) Exemption from submission of EMD:

1. Bidders registered with any of the following agencies/ bodies as per Public procurement policy for Micro & Small Enterprises (MSME) order 2012 are exempted categories from payment of EMD provided that the registration certificate issued by any one of these below mentioned agencies must be valid as on close date of tender. Micro small or medium enterprises who have applied for registration or renewal of registration with any of these agencies/bodies but have not obtained the valid certificate as on close date of tender are not eligible for exemption.

i) Khadi and Village Industries Commission (KVIC)

ii) National Small Industries Corporation (NSIC)

iii) Any other body specified by Ministry of MSME/GOI

To avail exemption it is mandatory to submit valid certificate copy along with technical bid which certificate must be mention activity .

Section 4 – Terms and Conditions

A) Award of Contract :

1. IIT Bombay shall award the contract to the technically qualified eligible BIDDER whose bid (commercial bid-I & commercial bid-II) has been determined as the lowest evaluated commercial bid for all the countries.
2. If more than one BIDDER happens to quote the same lowest price, IIT Bombay reserves the right to award the contract to more than one BIDDER or any BIDDER.
3. If L1 bidder withdraws the contract then L2 bidder will be awarded the contract on L1 rates if accepted and L1 bidder will be debarred.
4. The selected supplier will abide by all the Terms & Conditions of the Tender Document.

B) Earnest Money Deposit & Performance Bank Guarantee :

1. Quotations exclusively submitted in the enclosed performa will only be considered. However, it should be sent along with a covering letter and Bank Guarantee of Rs. 30,00,000/- (Rupees Thirty Lakhs only) as Earnest Money Deposit as per enclosed.
2. Earnest Money Deposit will be returned to the unsuccessful vendors within 30 days after the award of the contract.
3. EMD of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or derogates from the tender in any respect within the period of validity of its tender.
4. Further, if the successful tenderer fails to furnish the required performance security within the specified period, its EMD will be forfeited.
5. We reserve the full right to reject any offer without assigning any reason.
6. IIT Bombay reserves the right to add more suppliers during the rate contract if necessary and the rate contract vendors should have no objection on the same.
7. We may remove or add any vendor during the contract.
8. Any Vendor currently engaged in litigation with other Organizations, must inform their status in writing.
9. **Performance Guarantee Bond is mandatory.**
10. Successful tenderer/ bidder should submit performance guarantee as prescribed above to be received in the office of Deputy Registrar, Materials Management Division on or before 30 days from the date of issue of Rate contract copy . The performance guarantee bond to be furnished in the form of Bank Guarantee as per proforma or annexure of the tender documents, for an amount of Rs. 1 crore.

11. The Performance Guarantee Should be established in favor of **“REGISTRAR IIT Bombay”** through any Bank Situated at Mumbai or Outstation with a clause to enforced the same on their local branch at Mumbai.
12. Performance Guarantee Bond shall be for the due and faithfully performance of the contract and shall remain binding, notwithstanding such variations, alterations for extensions of time as may be made, given, conceded or agreed to between the successful tenderer and the purchaser under the terms and conditions of acceptance to tender.
13. The successful tenderer is entirely responsible for due performance of the contract in all respects according to the speed, intent and meaning of the terms and conditions and specification and all other documents referred to in the acceptance of tender.
14. The performance guarantee bond shall be kept valid during the period of contract and shall continue to be enforceable for a **period of one year from the date of order acknowledgment or upto warranty period whichever is later.**

C) Terms of Payments :

1. 100% Payment within 30 days after delivery and acceptance of the material.
2. GST extra as applicable.
3. Price should be valid for at least One year from the date on which Rate Contract is entered into.
4. In the event of any dispute over this contract, IIT Bombay's decision shall be final and binding.

D) Quantity ordered and Delivery Schedule

Quantity order – The order for SoUL kits will be placed in the multiples of 25 kits, as per the project requirements. One Purchase Order (PO) will not exceed 100,000 kits. The minimum number of kits to be bought through this tender is 50 thousand which may be increased up to 3 lakh lamp kits.

For every 25 lamp kits, 1 toolkit will be supplied by the vendor. The list of the toolkit components is as follows:

Toolkit Components include:	Qty per kit
Multimeter	1
Soldering Iron 25 Watt (Bevel Tip)	1
Soldering Iron.Stand	1
Soldering Wire S.W.G 22/20	1
Screw Driver	5
Adhesive (cyano-acrylyte) 0.5gm	5
LiFePo ₄ AC battery charger (5 port) (For international toolkits)	1

E) Order delivery locations:

- i. 50 Thousand to 1 Lakh SoUL kits will be sent to multiple Indian Embassies globally. 1 location per country for around 180 countries
500 Lamp kits (inclusive of 20 toolkits) will be supplied to every Indian Embassy which has accepted the invitation and will be taking part in the event.
- ii. 1.5 Lakh to 2 Lakh Lamp kits will be supplied to special schools within India.
- iii. **There is no guarantee of minimum order for a selected rate contract.**
Actual order quantity for each vendor will depend on quantity and quality of supply, timely delivery and capacity of supplier.

F) Order Lead Time –

For a given PO, multiple delivery locations with different quantity and delivery date can be given.

The time of delivery of order to the specified location should not be more than 15 days from the scheduled delivery date.

G) Penalty clause for delay – In case of delay beyond contractual delivery date, penalty will be applicable at 0.5% per week of the basic order value.

H) Location of delivery -

The kits have to be delivered as per requirement across the globe to several countries and to all districts in India.

I) Delivery Location

The SoUL kits, along with spare components, toolkits, warranty cards, operation manual, etc will be delivered across the globe to several countries and to all districts in India.

IMPORTANT NOTE: Specific locations in different countries and within India will be available after the vendor is selected.

J) Delivery Timing – The consignment of SoUL kits must reach the destination on working days, between 9:00am – 5:00pm.

K) Missing components, Physical and technical defective components - If the number of missing, physical and technical defective components exceeds 2%, and when identified and notified through due inspection process at the delivered location has to be replaced by the vendor within 10 working days for national consignment and 60 working days for International consignment . The number of missing, physical and technical defective components (all put together) in any consignment of an order delivered at any location should not exceed given

percentage of 2% for any single component. If the number of such components exceeds 2%, the vendor will have to replace the missing, physical and technical defective material and penalty will be applicable at 0.5% per week of the basic order value.

- L) Mode of Transport** - The mode of transport is at vendor's discretion.
- M) Packaging-** The consignment packaging should be as per the specifications mentioned at the time of placing the order.
- N) Spare Components** - Spare components shall be made available to carry out replacement activities during the workshop. The spare components will be provided free of cost by the vendors along with the SoUL kit. The proportionate spare components as listed in the table below will be delivered by the vendors as per instructions from IIT Bombay. Additional spares ,if any, as specified during the course of the project must be made available to permit uninterrupted service of lamps. The spares and the replacements of defective components should be done within 10 working days for national and 60 working days for international consignments from the day of reporting the defect. The cost of spares and replacements which includes all cost freight and taxes to be borne by the vendor.

Name of the lamp kit component	No. of Spare Parts for every 25 kits delivered
Base bottom	2
Base top	2
LED Cap	2
Reflector	2
LED face	2
Gooseneck	2
Switch cap	5
Screws	5*3 screws - Small 5*4 screws - Big
Battery	3
PCB	3
Load LED	2
Solar Panel	1
Load Wire	2

Packaging Boxes (Lamp and Panel)	2
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(For example: for supply of each 25 batteries, 3 additional batteries as spare parts should be supplied)

O) Warranties and Guarantees

1. Solar Module: Minimum 5 years warranty from the date of Delivery to the respective location.
2. Batteries: Minimum 5 year warranty from the date of Delivery (however as per the technical specification battery is expected to work for minimum 1000 cycles).
3. Electronic accessories (PCB, Switch, Socket, LED, wires): Minimum 1.5 year warranty from the date of Delivery to the respective location.
4. 2% or above material, if received defective will have to be replaced by the vendor. Any physical damaged or technical defects to SOUL kit/components as and when identified through due inspection process at the delivered location has to be collected and replaced by the vendor within:
 - i) 10 working days (within India)
 - ii) 60 Working days (Outside India)
 With all cost including freight and taxes borne by the vendor.

IMPORTANT NOTE: Warranty and guarantee not applicable to physically damaged SOUL kit during assembly process and usage.

Section 5 – Scope of Work and Technical Specification

For execution of “Student Solar Ambassador Workshop” across the globe, the scope of work for the vendor would be following: (NOTE: Vendors meeting the selection criteria will be submitting technical and commercial bids for SoUL kit supplies. Selected vendors will be based on meeting the requirements laid down by IIT Bombay will enter into rate contract with IIT Bombay) Procurement or manufacturing of SoUL components as per technical specifications mentioned in the contract

1. Testing of SoUL kit components, as per technical specifications mentioned in the contract
2. Liaison with IIT Bombay staff for inspection at the work site of lamp components
3. Packaging and labeling of SoUL kits as per IIT Bombay's requirement
4. Delivery of SoUL kits to the specified locations across the globe as and when mentioned in order placed by IIT Bombay.
5. Provide proportionate spare components for repair and maintenance along with the order of SoUL kit supply in a separate packing
6. Carry out replacement of faulty SoUL kit components during warranty period in liason with IIT Bombay
7. Complete the delivery of kits/spares/replacements within specified time period
8. **Provide prototype of five SoUL kits (assembled) and five SoUL kits (disassembled form) along with 1 sample of toolkit and 1 sample of 5 port battery charger to be supplied with the kits for testing.**

Technical Specifications Of Solar Urja Lamp Kit

1. The disassembled kit is divided in five parts which include following:
 1. Solar PV module
 2. Battery
 3. PCB with components, load wire and LED
 4. Lamp body with goose neck and screws
 5. Packaging
2. There should be a provision to print logos or text on the SoUL and its packaging box as per requirement. The supplier should not have his or her own logo on the lamp or on the box.

TECHNICAL SPECIFICATION OF SOLAR URJA LAMP (SoUL) KIT**1. Specification of PV module**

Cell Type	Mono or Polycrystalline Silicon solar cells
	Module should be manufactured in India
Lamination	Toughened glass cover and EVA sheets
Module Frame	ABS or Ultra High Impact Polystyrene (Jet Black Colour)
No. of Solar Cells in the Panel	10 cells - Solar module to satisfy the technical specifications provided in tender doc. & the same will be tested at the time of proto-type submission for testing at IITB.
Max. Power rating	$V_{mp} \times I_{mp} \geq 2.5W_p$
Voltage at maximum power point	$\geq 5 V$
Connecting cable –Type	PVC Dual Sheated, 2 Core, 0.25sqmm (Each conductor) Copper Cable
Connecting cable – Length	3.5 Mtrs
Electrical Data*(Nominal):	Under STC
Warranty:	Minimum 5 Years from the date of delivery
Supplier should put logo of SSA as per design provided by IIT bombay.	
Supplier should print their company name on Panel .The panel front should include Vendor name, SSA Logo, text “Made in India”, Quality check sticker before Lamination. The back of the panel should have printed the technical specifications with manufacturing month and expiry month/warranty (years) mentioned before Lamination. The above mentioned details should be in readable form to all. The logo design shall be provided to the empanelled supplier.	

2. Specification of Battery

Battery chemistry type	Rechargeable LFP (LiFePO ₄) battery
Nominal Operating Voltage	3.2 V (minimum 2000 mAh) measured at Standard condition
Tolerance	3.2V±5%
Temperature	10°C to 50°C
Battery casing	22650
Minimum Number of charge-discharge cycles	2000
D o D	Up to 85-90%
Warranty	Minimum 5 year from the date of delivery
Vendor should print their company name on the battery with manufacturing month and expiry month/warranty (years) mentioned. The above mentioned details should be in readable form to all.	

3. Specification of Circuit and LED

Circuit		
Dimension	Refer www.openhardware.soulsiitb.in	
Reverse current protection	To be included	
Short Circuit Protection	To be included	
Battery upper voltage cut-off	3.6± 0.1 V	
Battery lower voltage cut-off	3± 0.1 V	
LED driver type	Constant current	
Driving Current	Mode 1	40 mA
	Mode 2	130 mA @150 Lux
Stand by/Leakage current	< 1 mA	
Indication	Red	ON @ low voltage = 3 V
	Green	Blinking while charging
		ON @ fully charged = 3.6 V
Circuit Efficiency	80-85%	
Warranty	Minimum 1.5 year from the date of delivery	
Vendor should print company name on Circuit with manufacturing month and expiry month/warranty (years) mentioned. The above mentioned details should be in readable form to all.		

LED		
Technology	White Light Emitting Diode (W-LED)	
Operating Voltage	6.3 V	
Power Consumption (Pmax)	≤ 1.5 Watt (Max)	
Illuminance	Mode 1	Minimum 50 Lux when measured at the periphery of the 45 cm diameter from height of 30 cm.
	Mode 2	Minimum 150 Lux when measured at the periphery of the 45 cm diameter from height of 30 cm.
Luminous performance of LED (Efficacy)	Minimum 150 Lumen per Watt	
Operating Temperature	30°C to 85°C	
Color rendering and appearance	CCT: between 5700K to 6500K	
Warranty	Minimum 5 year from the date of delivery	
Polarity marking (+/-) and solder tinning should be mentioned on the LED plate. The above mentioned details should be in readable form to all.		

4. Specification of lamp body and screws

GENERAL	
Design	Refer www.openhardware.soulsiitb.in Annexure-1
Lantern housing material	<p>1) SoUL Lamp Body: Material: ABS (Matte Finish) Color: Yellow-CM 606 (Reference by Bhansali Engineering Polymers)</p> <p>2) Transparent LED Cover: Material: Poly Carbonate with matte finish of 20 mm Dia circle to be provided on the transparent cover, central axis of this circle should pass through the center of LED. Color: Transparent Water Color</p> <p>3) Plastic Plate to cover LED (Reflector): Material: ABS (Gloss Finish) Color: IFB White / Parker White</p>
Ingress Protection (IP)	IP 33 Special protection is required for preventing dust entering from the switch or through any other part into the body of the lamp.
Lamp look	As per the design provided by IITB in Annexure -1
Operating manual in 3 languages (for beneficiary)	1 per SoUL kit (5-6) folded A4 size colour printed 100 GSM paper). The artwork will be provided to selected bidders by IITB.
Screws and Gooseneck	
Size	Refer www.openhardware.soulsiitb.in

5. Specification of Packaging

Maximum size of Lamp packaging box	Lamp Box –(75mm x 120mm x 110mm), Panel Box - (150mm x 215mm)). The size provided is for reference. (There will be 2 packaging box. One for assembled lamp and one for panel)
Packaging material	3 ply cardboard box
Printing on package	High quality colour printing (4 colors) on Package should be possible. 1 SSA Logo(Size L(15 mm) x b (45 mm)) and text to be Printed on both boxes. The artwork will be provided by IITB to final bidders.
Polythene Cover	1 per SoUL Kit
Operating Manual	1 per SoUL kit (5-6) folded A4 size colour printed 100 GSM paper). The artwork will be provided to selected bidders by IITB.
SSA Logo	1per SoUL kit (Size L (15 mm) x b (45 mm)). The details will be provided to selected bidders by IITB.

Mother box(Delivery Boxes) Packaging material	8 Ply Packaging Box. Quality colour printing (3 colors) on package should be possible. Printing of contents of box on boxes should be possible. The detailed artwork and colour format will be provided by IITB to final bidders. The Boxes should be horizontal. The Size of box is upon the discretion of vendor. The Box should accommodate 25+spares kits in following manner: Box A: All Solar Panel Box B: All other lamp kit components and toolkit
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Note:

Vendor should supply some additional free spare components along with ordered components.

Spare Components - Spare components shall be made available to carry out replacement activities during the workshop. The spare components will be provided free of cost by the vendors along with the SoUL kit. The proportionate spare components as listed in the table below will be delivered by the vendors as per instructions from IIT Bombay. Additional spares, if any, as specified during the course of the project must be made available to permit uninterrupted service of lamps.

All the components provided as spare parts should be packed separately and supplied to specified locations, as and when intimated by IIT Bombay.

Name of the lamp kit component	No. of Spare Parts for every 25 kits delivered
Base bottom	2
Base top	2
LED Cap	2
Reflector	2
LED face	2
Gooseneck	2
Switch cap	5
Screws	5*3 screws - Small 5*4 screws - Big
Battery	3
PCB	3
Load LED	2
Solar Panel	1

Load Wire	2
Packaging Boxes (Lamp and Panel)	2

(For example: for supply of each 25 batteries, 3 additional batteries as spare parts should be supplied)

TECHNICAL SPECIFICATION OF TOOLKITS

No	Items Name	Quantity	Reference Brand Names	Specifications	Use
1	Multimeter	1	DT 830D Digital multimeter	Basic dc accuracy 0.5% , AC/DC Voltage 0-1000V, AC/DC Current of 0-10A and Resistance 0-2M, 3 digit auto ranging digital multimeter with LCD display, Single rotary switch operation, Diode and continuity test with buzzer , Small lightweight design for one-handed use , Rugged, durable design , Battery should easy to replace.	To measure the AC/DC Voltage, AC/DC Current and wire Continuity.
2	Soldering Iron	1	Soldron	25Watt, Bevel Tip	To solder the wire electrical components
3	Soldering Iron Stand	1	GEC	Compatible to keep the above soldering iron	Holder for soldering iron
4	Solder Metal Wire	1	Tripp Gold	S.W.G. 20/22, (40 grams)[Used in electrical and electronics solder parts like circuit board electronics devices and others.
5	Screw Driver	5	TAPARIA- 803	2 in 1 type Screw driver with Tip Dimension – 3*0.5mm. The blade is made from high grade Silicon - Manganese steel The blade tip is magnetized to lift small screw etc. from confined spaces or to hold the screw in position	Assembling the Lamp Kit of SoUL lamp and PCB with Lamp kit.
6	Adhesive	5	Anabond /Tiger bond/Tuff bond/bond king	0.5gms	Used to connect the gooseneck with lamp body
7	LiFePo ₄ AC battery charger (5 ports)	1	At vendors discretion	Charge Supply/input voltage – 110V/230V AC, 50Hz/60Hz · No of output charging ports – 5	To charge the discharged LiFePO ₄ batteries. Note: Charger will be sent

			<ul style="list-style-type: none"> · Charge maximum output voltage per port – 5V · Charge maximum output current per port – 0.5A · Battery charging cut-off per port– 50 - 60% (3.3-3.4V) · Output connector should be compatible to battery connector · Proper indications should be provided in charger – Bi-colour LED indicator (2/3mm), during charging indicator LED should glow with red and it should glow with green when charging completes · Separate indicator LED for each port 	only internationally.
--	--	--	--	-----------------------

Note: Vendor should be able to supply one toolkit along with the set of 25nos solar lamp kits. Toolkit components are listed below. Toolkit can be supplied in plain white 3-ply cardboard box with the SSA logo.

Terms and Conditions:

1. The participating organizations will be both National and International (other than India).
2. 1 toolkit for every 25 lamp kits should be supplied by the vendor, along with the material.
3. Pre-dispatch inspections will be carried out by IIT Bombay.
4. All the material for the respective organizations will be delivered by the vendor and the shipping and delivery of the material will be end to end delivery.
5. Price bid will be generated for end to end delivery of the material for respective countries. A list of all the countries along with capital cities is attached for the same.

Quantity ordered and Delivery locations

Quantity order – The order for SoUL kits will be placed in the multiples of 25 kits, as per the project requirements. For every 25 lamp kits, 1 toolkit will be supplied by the vendor. The list of the toolkit components is as follows:

Toolkit Components include:	Qty per kit
Multimeter	1
Soldering Iron 25 Watt (Bevel Tip)	1

Soldering Iron.Stand	1
Soldering Wire S.W.G 22/20	1
Screw Driver	5
Adhesive (cyano-acrylyte) 0.5gm	5
LiFePo ₄ AC battery charger (5 port) (For international toolkits)	1

Testing will be done of the following components:

Components	Parameters	Comments
Solar Lamp Kit	Make of components	
General (including Lamp Body)	Lamp housing material	
	Ingress Protection	
	Portability	
	Physical condition	
Light Emitting Diode(LED)	Make	
	Colour rendering and appearance	
	Light appearance	
	Light distribution	
	Operating Voltage	
	Power Consumption (P max)	
	Illuminance	
	Luminous performance of LED	
	Operating Temperature	
	Energy Storage System	Battery chemistry type
Make		
Nominal Operating Voltage (D.C.)		
Battery capacity (mAh)		
D o D		
Connectivity		

	Physical condition	
Solar Panel	Make	
	Cell Type	
	Max. Power rating	
	Connecting cable length	
	Maximum module Area	
	Electrical Data*(Voc, Isc, Wp, Imp, Vmp):	
	Physical condition	
Printed Circuit Board (PCB)	Operating Voltage(D.C): - PV module point - Battery Point - LED point - Switch point	
	Physical Condition	
	Connectivity/ soldering points	
	Indications for battery charge	
	Indicator LED	
Switch	Physical condition	
	Number	
	Connectivity	
Wires	Number	
	Connectivity	
Screws	Number	
	Physical condition	

Socket	Number	
	Physical condition	
	Connectivity	
Spare Components	Number	
	Technical check	
	Physical Condition	

One set of following must be supplied to IITB within 10 days for inspection, if vendor is selected as rate contract:

1. Operating manual for user of SoUL in 5 languages (English, Hindi, Spanish, French and Portuguese) at the time of placing the order to selected vendors.
2. Printing and labeling on boxes

Technical Bid Deliverables

1. Solar module specifications
2. LED specifications
3. Battery specifications
4. Solar lamp output specifications (LUX level, operating hours at two specified light levels)
5. 10 prototypes (includes 5 assembled SOUL and 5 disassembled SOUL (SOUL Kit))
6. 1 set of toolkit
7. Documents as proof for eligibility criteria
8. Any other details related to lamp

(NOTE: Provide technical specifications as per Component Testing and Inspection Table)

Order delivery locations:

SoUL kits will be procured by various organizations directly through GeM portal (Govt. Organizations) or by Direct Purchase (other organizations). The rate of the lamp kits as fixed by the rate contract will be applicable to both the above mentioned purchase.

I	Country	Delivery city
1	Albania	Tirana
2	Andorra	Andorra la Vella
3	Antigua and Barbuda	Saint John's
4	Australia	Canberra
5	Bahamas	Nassau
6	Barbados	Bridgetown
7	Benin	Porto-Novo
8	Bolivia	Sucre (de jure), La Paz
9	Burkina Faso	Ouagadougou
10	Burundi	Gitega
11	Cabo Verde	Praia
12	Cameroon	Yaounde
13	Central African Republic	Bangui
14	Chad	N'Djamena
15	Comoros	Moroni
16	Congo, Republic of the	Brazzaville
17	Costa Rica	San Jose
18	Djibouti	Djibouti (city)
19	Dominica	Roseau
20	Dominican Republic	Santo Domingo
21	Ecuador	Quito
22	El Salvador	San Salvador
23	Equatorial Guinea	Malabo (de jure), Oyala (seat of government)
24	Eritrea	Asmara
25	Estonia	Tallinn
26	Eswatini (formerly Swaziland)	Mbabane (administrative), Lobamba (legislative, royal)
27	Gabon	Libreville
28	Gambia	Banjul
29	Georgia	Tbilisi
30	Grenada	Saint George's

31	Guinea	Conakry
32	Guinea-Bissau	Bissau
33	Haiti	Port-au-Prince
34	Honduras	Tegucigalpa
35	Kazakhstan	Astana
36	Kenya	Nairobi
37	Kiribati	Tarawa
38	Kosovo	Pristina
39	Kuwait	Kuwait City
40	Kyrgyzstan	Bishkek
41	Laos	Vientiane
42	Latvia	Riga
43	Lebanon	Beirut
44	Lesotho	Maseru
45	Liberia	Monrovia
46	Libya	Tripoli
47	Liechtenstein	Vaduz
48	Lithuania	Vilnius
49	Luxembourg	Luxembourg (city)
50	Marshall Islands	Majuro
51	Mauritania	Nouakchott
52	Moldova	Chisinau
53	Monaco	Monaco
54	Montenegro	Podgorica
55	Nauru	Yaren District (de facto)
56	Nicaragua	Managua
57	Niger	Niamey
58	North Korea	Pyongyang
59	Pakistan	Islamabad
60	Palau	Ngerulmud
61	Paraguay	Asunción
62	Rwanda	Kigali
63	Saint Kitts and Nevis	Basseterre
64	Saint Lucia	Castries
65	Saint Vincent and the Grenadines	Kingstown
66	Samoa	Apia
67	San Marino	San Marino
68	Sao Tome and Principe	São Tomé
69	Sierra Leone	Freetown

70	olomon Islands	Honiara
71	Somalia	Mogadishu
72	South Korea	Seoul
73	Taiwan	Taipei
74	Timor-Leste	Dili
75	Togo	Lomé
76	Tonga	Nuku'alofa
77	Tuvalu	Funafuti
78	Uruguay	Montevideo
79	Vanuatu	Port Vila
80	Vatican City (Holy See)	Vatican City
81	Afghanistan	Kabul
82	Algeria	Val d`Hydra
83	Angola	Luanda
84	Argentina	Buenos Aires
85	Armenia	Yerevan
86	Austria	Vienna
87	Azerbaijan	Baku
88	Bahrain	Manama
89	Bangladesh	Dhaka
90	Belarus	Minsk
91	Belgium	Brussels
92	Bhutan	Thimphu
93	Botswana	Gaborone
94	Brazil	Brasília
95	Brunei Darussalam	Bandar Seri Begawan
96	Bulgaria	Sofia
97	Cambodia	Phnom Penh.
98	Canada	Ottawa
99	Chile	Santiago
100	China	Beijing
101	Colombia	Bogotá
102	Congo [Democratic Republic]	Kinshasa
103	Cote d Ivoire [Ivory Coast]	Abidjan
104	Croatia	Zagreb
105	Cuba	Havana
106	Cyprus	Nicosia

107	Czech Republic	Praha
108	Denmark	Copenhagen
109	Egypt	Cairo
110	Ethiopia	Addis Ababa
111	Fiji	Suva
112	Finland	Helsinki
113	France	Paris
114	Germany	Berlin
115	Ghana	Accra
116	Greece	Athens
117	Guatemala	Guatemala
118	Guyana	Georgetown
119	Hungary	Budapest
120	Iceland	Reykjavik
121	Indonesia	Jakarta
122	India	All States
123	Iran	Tehran
124	Iraq	Baghdad
125	Ireland	Dublin
126	Israel	Jerusalem
127	Italy	Rome
128	Jamaica	Kingston
129	Japan	Tokyo
130	Jordan	Amman
131	MADAGASCAR	Antananarivo
132	Malawi.	Lilongwe
133	Malaysia	Kuala Lumpur
134	Maldives	Malé
135	(Mali)	Bamako
136	Malta	Santa Venera
137	Mauritius	Louis
138	Mexico	Polanco

139	Mongolia	Ulaanbaatar
140	Morocco	Rabat
141	Mozambique	Maputo
142	Myanmar	Naypyidaw
143	Namibia	Windhoek
144	Nepal.	Kathmandu
145	Netherlands	Amsterdam
146	New zealand	Wellington
147	Niamey	Niger
148	Nigeria	Abuja
149	Norway	Oslo
150	Korea (DPR)	Pyongyang
151	Korea (ROK)	Seoul
152	Oman	Muscat
153	Palestine	Ramallah
154	Panama	Panama
155	Papua New Guinea	Moresby
156	Peru	Lima
157	Philippines	Metro Manila
158	Poland	Warsaw
159	Portugal	Lisbon
160	Qatar	Doha
161	Romania	Bucharest
162	Russia	MOSCOW
163	Saudi Arabia	Riyadh
164	Senegal	Dakar
165	Serbia	Belgrade
166	Seychelles	MAHE
167	Singapore	Singapore
168	Slovak Republic	Bratislava
169	Slovenia	Ljubljana
170	South Africa	Pretoria
171	South Sudan	Juba

172	Spain	Madrid
173	Sri Lanka	COLOMBO
174	Sudan	Khartoum
175	Suriname	Paramaribo
176	Sweden	Stockholm
177	Switzerland	Berne
178	Syria	Damascus
179	Tajikistan	Dushanbe
180	Tanzania	Dodoma
181	Thailand	Bangkok
182	Trinidad and Tobago	Spain
183	Tunisia	Tunis
184	Turkey	Cankaya
185	Turkmenistan	Ashgabat
186	Uganda	Kampala
187	Ukraine	Kyiv
188	United Arab Emirates	Abu Dhabi
189	United Kingdom	London
190	United States of America	NW Washington
191	UN-PMI (CD)Geneva	Switzerland
192	UN-PMI(Geneva)	dRue u Valais
193	UN-PMI(New York)	Long Island
194	Uzbekistan	Tashkent
195	Venezuela	Caracas
196	Vietnam	Hanoi
197	Yemen	Djibouti
198	Zambia	Lusaka
199	Zimbabwe	Harare

COMMERCIAL BID -I**Tender No . :- MMD/ESE/SOUL/KIT/L/2019-20****Due Date: 15th May 2019**

Sr. No.	Description of Items & Specification	Qty in Units	Unit Price In Rs.	G.S.T %	Total Price in Rs.
1.	Solar Urja Lamp (SoUL) Kit (Details & Specification as per Section-5)	1 No.			
2.	Cost of toolkit (1 toolkit per 25 lamps) Details & Specification as per Section-5)	1 No.			
3.	Cost of 5 port battery charger (1 per 500 lamp kits for international consignments only)	1 No.			

Delivery Mode : Delivery at site only.

Note: Total bid price in the above column should be inclusive of all taxes and levies transport, loading, unloading etc.

Delivery Period :..... days.

Validity Date: Minimum 180 days from the date of submission of quotation/tender.

Payment Term: 100% Payment within 30 days after delivery and acceptance of the material.

PAN No. _____

GST Registration No. _____

Signature : _____

Name : _____

Place:

Business Address : _____

Date:

Affix Rubber Stamp : _____

Note: Price Bid should be submitted in given format only.

**COMMERCIAL BID – II
Countries**

Tender No.:- MMD/ESE/SOUL/KIT/2019-20**Due Date: 15th May 2019**

Sr. No. (I)	Country	Delivery city	Currency of quote	Logistics Cost for 500 Units*
1	Albania	Tirana		
2	Andorra	Andorra la Vella		
3	Antigua and Barbuda	Saint John's		
4	Australia	Canberra		
5	Bahamas	Nassau		
6	Barbados	Bridgetown		
7	Benin	Porto-Novo		
8	Bolivia	Sucre (de jure), La Paz		
9	Burkina Faso	Ouagadougou		
10	Burundi	Gitega		
11	Cabo Verde	Praia		
12	Cameroon	Yaounde		
13	Central African Republic	Bangui		
14	Chad	N'Djamena		
15	Comoros	Moroni		
16	Congo, Republic of the	Brazzaville		
17	Costa Rica	San Jose		
18	Djibouti	Djibouti (city)		

19	Dominica	Roseau		
20	Dominican Republic	Santo Domingo		
21	Ecuador	Quito		
22	El Salvador	San Salvador		
23	Equatorial Guinea	Malabo (de jure), Oyala (seat of government)		
24	Eritrea	Asmara		
25	Estonia	Tallinn		
26	Eswatini (formerly Swaziland)	Mbabane (administrative), Lobamba (legislative, royal)		
27	Gabon	Libreville		
28	Gambia	Banjul		
29	Georgia	Tbilisi		
30	Grenada	Saint George's		
31	Guinea	Conakry		
32	Guinea-Bissau	Bissau		
33	Haiti	Port-au-Prince		
34	Honduras	Tegucigalpa		
35	Kazakhstan	Astana		
36	Kenya	Nairobi		
37	Kiribati	Tarawa		
38	Kosovo	Pristina		
39	Kuwait	Kuwait City		
40	Kyrgyzstan	Bishkek		
41	Laos	Vientiane		
42	Latvia	Riga		
43	Lebanon	Beirut		
44	Lesotho	Maseru		
45	Liberia	Monrovia		
46	Libya	Tripoli		
47	Liechtenstein	Vaduz		

48	Lithuania	Vilnius		
49	Luxembourg	Luxembourg (city)		
50	Marshall Islands	Majuro		
51	Mauritania	Nouakchott		
52	Moldova	Chisinau		
53	Monaco	Monaco		
54	Montenegro	Podgorica		
55	Nauru	Yaren District (de facto)		
56	Nicaragua	Managua		
57	Niger	Niamey		
58	North Korea	Pyongyang		
59	Pakistan	Islamabad		
60	Palau	Ngerulmud		
61	Paraguay	Asunción		
62	Rwanda	Kigali		
63	Saint Kitts and Nevis	Basseterre		
64	Saint Lucia	Castries		
65	Saint Vincent and the Grenadines	Kingstown		
66	Samoa	Apia		
67	San Marino	San Marino		
68	Sao Tome and Principe	São Tomé		
69	Sierra Leone	Freetown		
70	Solomon Islands	Honiara		
71	Somalia	Mogadishu		
72	South Korea	Seoul		
73	Taiwan	Taipei		
74	Timor-Leste	Dili		
75	Togo	Lomé		
76	Tonga	Nuku'alofa		
77	Tuvalu	Funafuti		
78	Uruguay	Montevideo		

79	Vanuatu	Port Vila		
80	Vatican City (Holy See)	Vatican City		
81	Afghanistan	Kabul		
82	Algeria	Val d`Hydra		
83	Angola	Luanda		
84	Argentina	Buenos Aires		
85	Armenia	Yerevan		
86	Austria	Vienna		
87	Azerbaijan	Baku		
88	Bahrain	Manama		
89	Bangladesh	Dhaka		
90	Belarus	Minsk		
91	Belgium	Brussels		
92	Bhutan	Thimphu		
93	Botswana	Gaborone		
94	Brazil	Brasília		
95	Brunei Darussalam	Bandar Seri Begawan		
96	Bulgaria	Sofia		
97	Cambodia	Phnom Penh.		
98	Canada	Ottawa		
99	Chile	Santiago		
100	China	Beijing		
101	Colombia	Bogotá		
102	Congo [Democratic Republic]	Kinshasa		
103	Cote d Ivoire [Ivory Coast]	Abidjan		
104	Croatia	Zagreb		
105	Cuba	Havana		
106	Cyprus	Nicosia		
107	Czech Republic	Praha		
108	Denmark	Copenhagen		
109	Egypt	Cairo		

110	Ethiopia	Addis Ababa		
111	Fiji	Suva		
112	Finland	Helsinki		
113	France	Paris		
114	Germany	Berlin		
115	Ghana	Accra		
116	Greece	Athens		
117	Guatemala	Guatemala		
118	Guyana	Georgetown		
119	Hungary	Budapest		
120	Iceland	Reykjavik		
121	Indonesia	Jakarta		
122	India	All States		
123	Iran	Tehran		
124	Iraq	Baghdad		
125	Ireland	Dublin		
126	Israel	Jerusalem		
127	Italy	Rome		
128	Jamaica	Kingston		
129	Japan	Tokyo		
130	Jordan	Amman		
131	MADAGASCAR	Antananarivo		
132	Malawi.	Lilongwe		
133	Malaysia	Kuala Lumpur		
134	Maldives	Malé		
135	(Mali)	Bamako		
136	Malta	Santa Venera		
137	Mauritius	Louis		
138	Mexico	Polanco		
139	Mongolia	Ulaanbaatar		
140	Morocco	Rabat		
141	Mozambique	Maputo		
142	Myanmar	Naypyidaw		

143	Namibia	Windhoek		
144	Nepal.	Kathmandu		
145	Netherlands	Amsterdam		
146	New zealand	Wellington		
147	Niamey	Niger		
148	Nigeria	Abuja		
149	Norway	Oslo		
150	Korea (DPR)	Pyongyang		
151	Korea (ROK)	Seoul		
152	Oman	Muscat		
153	Palestine	Ramallah		
154	Panama	Panama		
155	Papua New Guinea	Moresby		
156	Peru	Lima		
157	Philippines	Metro Manila		
158	Poland	Warsaw		
159	Portugal	Lisbon		
160	Qatar	Doha		
161	Romania	Bucharest		
162	Russia	MOSCOW		
163	Saudi Arabia	Riyadh		
164	Senegal	Dakar		
165	Serbia	Belgrade		
166	Seychelles	MAHE		
167	Singapore	Singapore		
168	Slovak Republic	Bratislava		
169	Slovenia	Ljubljana		
170	South Africa	Pretoria		
171	South Sudan	Juba		
172	Spain	Madrid		
173	Sri Lanka	COLOMBO		
174	Sudan	Khartoum		
175	Suriname	Paramaribo		

176	Sweden	Stockholm		
177	Switzerland	Berne		
178	Syria	Damascus		
179	Tajikistan	Dushanbe		
180	Tanzania	Dodoma		
181	Thailand	Bangkok		
182	Trinidad and Tobago	Spain		
183	Tunisia	Tunis		
184	Turkey	Cankaya		
185	Turkmenistan	Ashgabat		
186	Uganda	Kampala		
187	Ukraine	Kyiv		
188	United Arab Emirates	Abu Dhabi		
189	United Kingdom	London		
190	United States of America	NW Washington		
191	UN-PMI (CD)Geneva	Switzerland		
192	UN-PMI(Geneva)	dRue u Valais		
193	UN-PMI(New York)	Long Island		
194	Uzbekistan	Tashkent		
195	Venezuela	Caracas		
196	Vietnam	Hanoi		
197	Yemen	Djibouti		
198	Zambia	Lusaka		
199	Zimbabwe	Harare		

*** - Logistic cost includes all the other allied expenditure, material handling & transportation cost, which will be borne by the Vendor.**

Section 7 : Annexures
Annexure – I : Declaration Regarding Clean Track by Bidder
 (On Company / firm's Letterhead)

Date :

To,
 The Joint Registrar
 Materials Management Division
 I.I.T. Bombay,
 Powai, Mumbai – 400 076.

Sir,
Ref: Tender No.MMD/ESE/SOUL/KIT/L/2019-20 dated 3rd April 2019 for “Empanelment and Rate Contract for Solar Urja Lamp (SOUL) Kit.”

I've carefully gone through the Terms & Conditions contained in the above referred Tender. I hereby declare that my company / firm is not currently debarred / black listed by any Government / Semi Government Organizations / Institutions in India or abroad. I further certify that I'm competent officer in my company / firm to make this declaration.

Or

I declare the following

No.	Country in which the company is debarred / blacklisted / case is pending	Black listed / debarred by Government/ Semi Government Organizations/ Institutions	Reason	Since when and for how long

(NOTE : In case the company / firm was blacklisted previously, please provide the details regarding Period for which the company / firm was blacklisted and the reason/s for the same)

Yours faithfully

(Signature of the Bidder)
 Printed Name
 Designation
 Seal
 Date

ANNEXURE A2 : Declaration for Acceptance of Tender Terms & Conditions
(On Company / firm's Letterhead)

Date :

To,
The Joint Registrar
Materials Management Division
I.I.T. Bombay,
Powai, Mumbai – 400 076.

Sir,

**Ref: Tender No.MMD/ESE/SOUL/KIT/L/2019-20 dated 3rd April 2019 for
'Empanelment and Rate Contract for Solar Urja Lamp (SOUL) Kit.'**

I've carefully gone through the Terms & Conditions as mentioned in the above referred Tender document. I declare that all the provisions of this Tender are acceptable to my company. further certify that I'm an authorized signatory of my company and therefore, competent to make this declaration.

Yours faithfully,

(Signature of the Bidder)
Printed Name
Designation
Seal

ANNEXURE A3 : Declaration Of Income Tax Return
(On Company / firm's Letterhead)

Date:

To,

The Joint Registrar
Materials Management Division
I.I.T. Bombay,
Powai, Mumbai – 400 076.

Sir,

Ref: Tender No. MMD/ESE/SOUL/KIT/L/2019-20 dt.3rd April 2019 “Empanelment and Rate Contract for Solar Urja Lamp (SOUL) Kit.

- 1) I/we hereby declare that, our firm had filed Income Tax Returns for last years i.e. A.Y. 2018-19 (F. Y. 2017 – 18) & A.Y. 2017-18 (F. Y. 2016 – 17). Supported by copies of ITR of two years.

Yours faithfully,

(Signature of the bidder)
Printed Name
Designation
Seal

Date :
Business Address :

Encl : As above

Anenexure –A4: Bidder’s Information

The Vendors must provide the following mandatory information & attach copies wherever mentioned:-

1	Name of the Firm	
2	Nature of Firm (Ltd., Co./Partnership etc.) (Attach Attested Copy of Partnership Deed/Certification of Incorporation)	
3	Registration No. if any / Trade License No.(Attach photocopy)	
4	Registered Office address	
5	Address for communication	
6	Name of the contact person	
7	Telephone No.	
8	Email Id	
9	Permanent Income Tax Account No. (Attach photocopy)	
10	GST No. (Attach photo Copy)	
11	Name of Bankers with Full address & A/c No. (in case of e-transfer/e-payment)	
12	Are you associated with IIT Bombay. If yes. Give details	

ANNEXURE A5 : Client Work Experience
(On Company / firm's Letterhead)

Date :

To,
The Joint Registrar
Materials Management Division
I.I.T. Bombay,
Powai, Mumbai – 400 076.

**Ref: Tender No. MMD/ESE/SOUL/KIT/L/2019-20 dated 3rd April, 2019 for
“Empanelment and Rate Contract for Solar Urja Lamp (SoUL) Kit”**

Details of Client Work Experience as per Point No.8 of Section 2 (Copy of Purchase Order / Work Completion to be enclosed):

Sr. No.	Name of Organization	Purchase Order / Rate Contract Detail	Purchase Order / No & dt.	Purchase Order amount	Client contact Person Name and Designation	Client contact Details with e-mail

Yours faithfully

(Signature of the bidder)
Printed Name
Designation

Sign and Seal

Date : Business Address :

Encl : As above

ANNEXURE A6 - Compliance Sheet

1.1 Basic information

Particulars	Response
Name of the company	
Address	
Registration Number	
CEO Name	
Key contact person	
Contact details	

1.2 Production capacity

Particulars	Compliance	Remarks
Lamp plastic body should be manufactured in-house	Yes/No	
Name of the other lamp components that are manufactured in-house*		
Name of the lamp components procured from third party*		
Monthly Production Capacity of the vendor of all the components is 1,50,000 kits & Above?	Yes/No	
What is the expected utilization capacity of the manufacturing unit (in %)?		

1.3 Technical expertise

Particulars	Compliance	Remarks
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Vendor has supplied more than 10,000 Solar lamps?*	Yes/No	
Vendor has supplied other Solar products like Solar Lanterns, Solar Homelights, Solar Water Pumps, etc?	Yes/No	
What is the Mould Fabrication Capability of the supplier/Partner per day?*		

1.4 Quality & Compliance

Particulars	Compliance	Remarks
In-house pre-dispatch Inspection conducted by the vendor with self-declaration from the vendor for every dispatch?*	Yes/No	
Does Management Review the Quality System of the organization?*	Yes/No	
In-house quality control lab with necessary equipment to check the quality of the components?*	Yes/No	
In-house facility to check the Lux of the Solar Study Lamp?*	Yes/No	
In-house facility to check the efficiency of the PCB?	Yes/No	
In-house facility to check the technical parameters (Voc and Isc) of Solar Panels?	Yes/No	
Vendor ready to provide the technical datasheets and performance report of all the components (batch report of in-house as well as procured material)?	Yes/No	

Clean and sufficient facility available for material storekeeping?	Yes/No	
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1.6 Project Specific

Particulars	Response	Remarks
Manual counting as well as weight oriented mechanism is in place to ensure quantity of the material?*	Yes/No	
Readiness of the supplier (In the scale of 1 to 10)		
Would supplier share the information about the inventory status?*	Yes/No	
Logistic vendor details* (Can be more than one)	Name: Address:	
Does the supplier have the system to track the shipment?	Yes/No	

* indicates critical parameters and non-compliance may lead to disqualification of the vendor.

Note: Initial factory/site inspection may be done to assess the quality and production capacity of the manufacturing plant during technical evaluation.

Name:

Place:

Signature with stamp

Section 8 – Formats

1.Format for Earnest Money Deposit / Bid Bond

(To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONALISED BANKS (WHETHER SITUATED AT MUMBAI OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT MUMBAI OR ANY SCHEDULED BANK (OTHER THAN NATIONALISED BANK) SITUATED AT MUMBAI. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED)

LETTER OF GUARANTEE

To,
Registrar,
Indian Institute of Technology Bombay
Powai, Mumbai – 400 076

IN ACCORDANCE WITH YOUR TENDER for supply of,
M/s. (hereinafter called the "Bidder") having its Registered Office at,
wish to participate in the said bid for the supply as an irrevocable
Bank Guarantee against Earnest Money Deposit for an amount of Rs.
(Rupees.....) valid up to **(180 days from the date of issue of Bank
Guarantee)**, is required to be submitted by the bidder as a condition precedent for participating in the said
bid, which amount is liable to be forfeited by the Purchaser on (1) the withdrawal or revision of the offer by
the bidder within the validity period, (2) Non acceptance of the Letter of Indent / Purchase order by the
Bidder when issued within the validity period, (3) failure to execute the contract as per contractual terms
and condition with in the contractual delivery period and (4) on the happening of any contingencies
mentioned in the bid documents.

During the validity of this Bank Guarantee :

We,(Bank name) having its registered Office atguarantee and
undertake to pay immediately on first demand by the amount of Rs.....
(Rupees.....) without any reservation, protest, demur and recourse. Any such demand
made by the IIT Bombay shall be conclusive and recourse. Any such demand made by the purchaser
shall be binding on the Bank irrespective of any dispute or difference raised by the Bidder.

The Guarantee shall be irrevocable and shall remain valid up to(180 days from the
date of issue of Bank Guarantee) If any further extension is required, the same shall be extended to such
required period on receiving instruction form the Bidder, on whose behalf the is Guarantee is issued.

Notwithstanding anything contained herein :

- * Our liability under this Bank Guarantee shall not exceed Rs..... (Rupees.....)
- * This Bank Guarantee shall be valid up to(date).
- * We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee Only
and only if you serve upon us a written claim or before (date).

This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our
branch office at situated at (Address of local branch).

Yours truly,

Signature and seal of the guarantor:
Name of Bank:
Address:
Date:

Instruction to Bank: Bank should note that on expiry of Bond Period, the Original Bond will not be returned to the Bank.

Bank is requested to take appropriate necessary action on or after expiry of bond period.

2. Format of Performance Guarantee

(To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT MUMBAI OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT MUMBAI OR ANY SCHEDULED BANK (OTHER THAN NATIONALISED BANK) SITUATED AT MUMBAI. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.)

To,
Registrar
Indian Institute of Technology Bombay
Powai, Mumbai – 400 076

Letter of Guarantee

WHEREAS Indian Institute of Technology Bombay (Buyer) have invited Tenders Vide Rate contract No. _____ Dated for the purchase of items under rate contract AND WHEREAS the said tender document requires that any eligible successful tenderer (seller) wishing to supply the equipment / Kits / Machinery etc. in response thereto shall establish an irrevocable performance Guarantee Bond in favour of “**The Registrar, Indian Institute of Technology Bombay**” in the form of Bank Guarantee for Rs. One Crore and valid till **one year or upto warranty period of kits whichever is later** from the date of issue of performance guarantee Bond.

NOW THIS BANK HEREBY GUARANTEES that in the event of the said tenderer (seller) failing to abide by any of the conditions referred in tender document / Rate Contract / performance of the equipment / Machinery / Kits etc. this bank shall pay to Indian Institute of Technology, Bombay on demand and without protest or _____ demur Rs. (Rupees Only)

This bank further agrees that the decision of Indian Institute of Technology Bombay (Buyer) as to whether the said tenderer (seller) has committed a breach of any of the conditions referred in tender document / Rate Contract shall be final and binding

We, (Name of the bank and branch) hereby further agree that the Guarantee herein contained shall not be affected by any change in the constitution of the tenderer (seller) and / or Indian Institute of Technology Bombay (buyer)

Not with Standing anything contained herein

1. Our liability under this bank Guarantee shall not exceed Rs. _____ (Indian Rupees Only)
2. This Bank Guarantee shall be valid up to (date) and
3. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if IIT Bombay serve upon us a written claim or demand on or before date

This Bank further agrees that the claims if any, against this bank guarantee shall be enforceable at our branch office at situated at (Address of local branch)

Yours truly,

Signature and seal of the guarantor

Name of the bank :

Address :

Date :

Instruction to bank: Bank should note that on expiry of band period, the original bond will not be returned to the bank. Bank is requested to take appropriate necessary action on or after expiry of bond period

Section 9- Checklist

Technical bid Cover:

This Envelope should contain the following information:

- i. Tender Document duly sealed and signed by the authorized signatory on every page.
- ii. Earnest money deposit for an amount of Rs.30,00,000/-
- iii. Eligibility Criteria Responses.
- iv. All relevant documents as per technical bid deliverables mentioned in the tender document.
- v. Product catalogues, information brochures, etc as per the tender document.
- vi. **Provide prototype of five SoUL kits (assembled) and five SoUL kits (disassembled form) along with 1 sample of toolkit and 1 sample of 5 port battery charger to be supplied with the kits for testing.**

Commercial bid Cover:

This Envelope should contain the following information:

- i. Commercial Bids