



**INVITATION OF
EXPRESSION OF INTEREST FOR EMPANELMENT OF
CONTRACTORS FOR SUPPLY, ERECTION AND
COMMISSIONING OF ROOFTOP SOLAR PV PROJECTS**

INKEL Ltd.
7/473ZA – 5 & 6, 1st and 2nd Floor, Ajiyal Complex,
Kakkanad, Cochin, Pin: 682030 (Kerala)
Phone: 0484 2978101
Email: solartender@inkelkerala.com

1. ABSTRACT

Title	Invitation of Expression Of Interest For Empanelment of Contractors For Supply, Erection And Commissioning Of Rooftop Solar PV Projects
Reference No.	IL-SOLAR-EOI-RTSP/2020
Location of work	Various locations within Kerala
Capacity of Solar Plants	1kWp to 1000kWp
Type of Solar Plants	On Grid and Off Grid Rooftop Plants
Date of release of EOI	21/09/2020
Last date & Time of submission of EOI	15/10/2020 up to 2.00 PM
Application Fee	Nil
Mode of Application	Offline
Validity of Empanelment	1 year
Contact details for clarification	<ul style="list-style-type: none">• Senior Manager (Solar) - 0484-2978101(Extn 302)• AGM Solar - 0484-2978101 (Extn 300)• Email: solartender@inkelkerala.com
Date and time of opening of EOI	15/10/2020 at 4.00 PM

Interested contractors shall download the EOI documents from INKEL website (www.inkel.in) and submit the application for at the following address anytime during working hours before the deadline mentioned above.

**1st Floor Ajiyal Complex,
Kakkanad, Cochin Pin :- 682030
Phone: 0484-2978101, 0484-2978103**

**Kakkanad
09-07-2020**

**S/d
AGM-Solar**

2. PREAMBLE

- 1.1. INKEL LIMITED (INKEL) is a public-private partnership (PPP) company promoted by Government of Kerala. INKEL is an innovative PPP initiative which brings together Government Agencies, prominent global investors, NRI Industrialists and businessmen. It is engaged in setting up sustainable infrastructure models to address all the infrastructure requirements of industrialists and entrepreneurs in the state of Kerala.
- 1.2. INKEL is on track to emerge as a one stop destination for meeting the requirements of implementing large scale infrastructural projects that will be self-sustaining and an instrument for fast track development of the State's economy.
- 1.3. INKEL Ltd offers services ranging from Project Concept development to the Completion and Handing over stage covering Sectors like Construction, Road & Bridges, Development of Industrial/Business Park, Engineering Design and Consultancy, PMC, Advisory & Management Consultancy, Education and Skill development, Health & Hospitality, Power, Facilities Management, Hi-Tech Agro and Solar Energy.
- 1.4. Solar is one of the core departments of INKEL Limited and is involved in the implementation of grid connected and off grid solar PV projects throughout Kerala.
- 1.5. INKEL desires to empanel reputed vendors/Contractors who have capability to engineer, supply and also execute the site E&C works including O&M of Solar PV Plans ranging from 1kWp and above at any location in Kerala.
- 1.6. The Contractors can be a firm or company based anywhere in INDIA. However, the contractor should have a functional office and service center in Kerala. The office should have been functional for at least a year prior to the EOI date.
- 1.7. The projects can be anywhere in KERALA. Hence the bidders are required to be aware of various statutory, regulatory requirements of state and are required to follow the various stipulations called for during the execution of project. The details of works generally to be carried out are as per Annexure-1.

3. EMPANELMENT PROCESS

- 3.1. Contractor have to express their interest for empanelment to INKEL by submitting application in the prescribed format along with required documents for getting listed as an empaneled agency.
- 3.2. INKEL will be evaluating the Contractor on all the parameters as per their credentials submitted and shortlist based on a ranking methodology. INKEL shall intimate the shortlisted contractors for further discussions, presentations before empaneling. INKEL decision on this will be final. INKEL at their discretion shall inspect the contractor works/premises/sites for evaluation.
- 3.3. INKEL has the right to accept or reject any or all the applications without assigning any reason there of and their decision will consider as final.
- 3.4. The indicative scope of work is detailed in Annexure 1. However, INKEL may split the scope of work between contractors to meet client requirements.
- 3.5. After empanelment further procurement and tendering process shall be as per INKEL policy and guidelines. Limited quoted will be called from these empaneled contractors on

- project-to-project basis and work will be awarded to the lowest qualifying contractor.
- 3.6. The empanelment will be for a period of 1 year. During this period the contractor performance will be evaluated on a continuous basis on works executed in INKEL project sites. INKEL reserves the rights to disqualify a vendor/Contractor based on their adverse performance levels if any during this period.
- 3.7. The eligibility of capacity for installation of single plant and total allocation per batch (allotment) will be based on the ranking done by INKEL after evaluating the EOI submitted by contractors.
- 3.8. This expression of Interest is not an agreement and is not an offer or invitation to enter into an agreement of any kind with any party by INKEL.
- 3.9. Contractors will be empaneled into four categories as follows:

Category	Capacity of Single Project that can be awarded	Technical Experience Criteria	
		Cumulative	Single Plant
A	Up to 1000kWp	2500kWp	500kWp
B	Up to 500kWp	1000kWp	100kWp
C	Up to 100kWp	500kWp	50kWp
D	Up to 50kWp	250kWp	25kWp

- 3.10. The max value of works awarded to a contractor will be limited to 1.5 times the average turnover of the contractor in the last 3 financial years.
- 3.11. Empanelment will be valid for 12 months from date of empanelment.

4. REQUIREMENTS

- 4.1. The Contractor desiring for empanelment should have experience in the electrical works of Substations/Commercial buildings/Industrial units/Switchyards/ grid connected or off grid solar PV power plants. Contractor shall have minimum experience of two (2) years in the works listed above as on the date of this EOI opening date. The contractors must furnish details about their company particulars regarding the operation, facilities, manpower, number of projects executed since inception and other experiences with necessary credentials in support of their claim by furnishing completion certificates from the customer certifying the Scope of works and the time lines for various activities including the work order released by the customer for the projects executed.
- 4.2. The contractor should have a fully functional office in Kerala. Further, the contractor should preferably have at least one service center each in the Northern, Central and Southern regions of Kerala (This can be in the form of authorized service partner).
- 4.3. Bidder should not have been blacklisted by any Govt, Agency. Declaration should be furnished.
- 4.4. The Contractor should preferably have their own Tools, Plant and machinery for carrying out the civil, mechanical and electrical works (a typical list enclosed in Annexure-2) and should have capability for mobilizing additional Tools, Plant and machinery at short notice for simultaneous works at various fronts to meet the short schedule of works. The contractor shall have on their roll qualified Engineers and supervisors of different discipline who shall be monitoring the works carried out by skilled and unskilled labor force. The contractor shall have capacity to arrange sufficient labor so that the project schedule is not affected in any way.
- 4.5. The Contractor shall furnish the details of manpower and machinery owned by them. A

typical activity plan for executing the EPC works in a time line of maximum 3 months from the zero date for 100kW Grid connected Solar PV Plant shall be submitted. The Contractor may also furnish the details of the same in the projects executed by them if any for the above exercise.

- 4.6. The Contractor should have adequate financial strength to carry out the works awarded to them. The Contractor shall submit the financial information particulars for the previous 3 years or from the date of commencement operation whichever is later in the format enclosed. Contractor should have achieved annual average financial turnover of Rs 1.0 crores per annum during the above period as evidenced by the audited financial results.
- 4.7. The vendor/Contractor shall be required to engineer and supply the requirement based on the customer specification and submit the drawings, datasheets and calculations for INKEL approval
- 4.8. INKEL in turn may require the contractor support in getting Customer approval for the design drawings, calculation etc. The contractor shall have design tools, software required for this purpose. Sufficient trained manpower shall be on the roll preferably. Contractors who do not have these facilities but have outsourced the same shall furnish the details of the partner firms for various activities outsourced.
- 4.9. The firm shall have on their roll a planning team for project monitoring and for logistic support. The Contractor shall also have a team of professionals in Quality and HSE on their roll for overseeing the site works in multiple location at times. The site team will coordinate with INKEL team at site and ensure that all the works are certified by the customer meeting the specification requirement. The contractor may furnish their quality plan/standards followed by them for various works including HSE practices/plan.
- 4.10. The vendor/Contractor shall bring out their concurrent commitments on various projects and the status of their resource usage to be indicated.
- 4.11. INKEL will be executing the projects based on customer specifications, tender terms and conditions. The same will be applicable to the contractor.
- 4.12. Contractor to furnish all details in INKEL furnished format covering the following details.
 - 4.12.1. Company profile & organizational information.
 - 4.12.2. Ownership information
 - 4.12.3. Registration particulars
 - 4.12.4. GST, PAN
 - 4.12.5. PF, ESI details
 - 4.12.6. List of service centers in Kerala.
 - 4.12.7. Manpower details with qualification and experience.
 - 4.12.8. Other particulars (ISO certificate, ANERT empanelment, Electrical contractor license, etc. if any).
 - 4.12.9. Bank details of the Company
 - 4.12.10. Quality Systems
 - 4.12.11. Financial Information for the previous 3 years (Audited Balance sheet and Net worth details).
 - 4.12.12. Resources owned by the company-Formats A) and B)
 - 4.12.13. Work Experience in the field of solar projects or similar electrical works in last 5 years as on the date of opening of EOI.

- 4.13. All columns are to be filled up in the space provided for. Separate sheets may be attached if the space provided is insufficient or if additional information to be given.
- 4.14. The contractor shall send the application for empanelment to “The Assistant General Manager -Solar, INKEL Limited, 1st Floor Ajiyal Complex, Kakkanad, Cochin, Pin :- 682030, Phone: 0484-2978101, 0484-2978103. The last date for receipt of applications in sealed cover is 15/10/2020, 14:00Hrs. The vendor shall specify on the envelope “Application for Empanelment of Contractors for Supply, Erection and Commissioning of Rooftop Solar PV Projects”

ANNEXURE 1**INDICATIVE SCOPE OF WORK (Typical list)**

1. Supply of SPV Modules/Inverters, MMS and/or BOS components as per scope of work.
2. Unloading and storage of all materials and materials supplied by INKEL (as applicable).
3. Installation of MMS including civil work and PV Module laying.
4. DC/AC Cabling.
5. Installation of DCDB/ACDB/Solar PCU/Energymeters/LT Panels, etc.
6. Installation of earthing system as per standards
7. Installation of lightning protection system as per standards
8. Installation of batteries and associated systems in case of off grid systems
9. Supply and installation of Fire protection system and equipment.
10. Obtaining Clearances from statutory agencies and government bodies for the PV Plant readiness for operation and commissioning.
11. Testing and commissioning of the plants.
12. Operation and maintenance of the PV Plant as per scope.

The above list is indicative and may vary as per site location, project requirement and scope division between contractors.

The installation of solar power plants should be as per the technical compliance and installation practices of MNRE, ANERT, CEA and all other statutory regulations specified. Any amendments/ modification issued time to time, in this regard will be incorporated.

The detailed technical specifications and scope of work for each project will be specified in the respective Notice inviting quotations from empaneled contractors.

ANNEXURE-2**INDICATIVE LIST OF EQUIPMENT, TOOLS AND TACKLES, INFRASTRUCTURE
TO BE OWNED/ARRANGED.****13. Site Assessment Tools**

- a. 50-100 ft. tape measure
- b. Solar Pathfinder (evaluates the solar energy potential at a site)
- c. Compass (not needed if you're using a Solar Pathfinder)

14. Basic Tools Needed for Installation

- a. Angle finder
- b. Torpedo level
- c. Fish tape
- d. Chalk line
- e. Cordless drill (14.4V or greater), multiple batteries
- f. Unibit and multiple drill bits (wood, metal, masonry)
- g. Hole saw
- h. Hole punch
- i. Torque wrench with deep sockets
- j. Nut drivers (most common PV sizes are 7/16", 1/2", 9/16")
- k. Wire strippers
- l. Crimpers
- m. Needle-nose pliers
- n. Lineman's pliers
- o. Slip-joint pliers
- p. Small cable cutters
- q. Large cable cutters
- r. AC/DC multimeter
- s. Hacksaw
- t. Tape measure
- u. Blanket, cardboard or black plastic to keep modules from going "live" during installation
- v. Heavy duty extension cords
- w. Caulking gun
- x. Fuse Pullers
- y. Insulation resistance tester

15. Additional Tools to Consider (especially for multiple installations)

- a. DC clamp-on ammeter
- b. Reciprocating saw / Jig saw
- c. Right angle drill
- d. Conduit bender
- e. Large crimpers
- f. Magnetic wristband for holding bits and parts
- g. C-clamps
- h. Stud finder
- i. Pry bar

16. Tools for Battery Systems

- a. Hydrometer or Refractometer
- b. Small flashlight (to view electrolyte level)
- c. Rubber apron
- d. Rubber gloves
- e. Safety goggles
- f. Baking Soda (to neutralizer any acid spills)
- g. Turkey Baster
- h. Funnel
- i. Distilled Water
- j. Voltmeter

ANNEXURE-3

GUIDELINES TO CONTRACTORS FOR FILLING UP THE REGISTRATION FORM

1. Registration Form may be obtained from INKEL website www.inkel.in.
2. Any clarification with respect to procedure for registration may be obtained from the INKEL office at the contact numbers/e-mail mentioned in the EOI Notice.
3. The Contractor Registration Form has three sections:
 - a. Section-I: COMPANY PROFILE AND GENERAL INFORMATION
 - b. Section-II : RESOURCES OWNED BY THE COMPANY
 - c. Section-III : WORK EXPERIENCEFor each of the Work experience format filled up, the following needs to be attached:
 - i. Self-attested Copy of Work Order/Award letter and allied documents containing interalia (a) Brief Description of work, (b) Value of Contract and (c)Time schedule
 - ii. Completion Certificates (Any one of the following):
 - a. Self-attested copies of Work Completion Certificates issued by Owner or agency who has awarded the contract. INKEL reserves the right to verify the authenticity of the document from the originator. Hence kindly see that all contractual details are available in the completion certificates to lend easy verification if required.
 - b. Self-attested copies of Work Order/Invoice.
 - iii. Relevant documents for each „WORK EXPERIENCE“ format being filled up are to be submitted.
4. All columns are to be filled up properly in the space provided for. Wherever it is not applicable, please mention “Not Applicable”. The form is to be signed by the authorised signatory.
5. A separate sheet may be attached if the space provided is insufficient or additional information is to be given. Please put proper identification tag on the separately attached sheet.
6. Any information / clarification required by INKEL during evaluation must be given expeditiously.
7. Please ensure that all required enclosures are attached with the filled up Contractor Registration Form and list of enclosures is given as required.
8. Incomplete forms will be rejected.
9. Please fill up the check- list given below and send along with the Contractor Registration Forms to INKEL.
10. Please note that if you are registered and participate in Tender process and qualify to get order from INKEL, your performance based on Quality of your product/work, delivery performance and service rendered will be evaluated time to time.
11. If you are attaching a document in a language other than English/Malayalam, a self-attested English translated document may please be also attached.

Sl.No.	Check-Point	Yes/No
1.	Information against all points under “Organizational Information” has been given.	
2.	All enclosures and supporting documents have been enclosed.	
4.	All the parts of the form & enclosures have been signed by Authorized Signatory.	

Date :

Signature & seal

(Authorised Signatory)

Note: This check list is to be attached with the filled-up Contractor Registration Form.

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1. General Information

SI No	Detail / Particular	Remarks By INKEL, if any
1.1	<u>Name of Company Seeking registration :</u>	
1.2	Nature of work for which the contractor is interested (tick as applicable) <ul style="list-style-type: none"> • EPC (Engineering Procurement and Construction) of Solar Power Plants <input type="checkbox"/> • Supply of BOS Items + I&C of Solar Plants <input type="checkbox"/> • I&C of Solar Plants <input type="checkbox"/> 	
1.3	Date of Incorporation / Establishment :- (Please attach certificate of incorporation)	
1.3	Registered Office Address:- <ul style="list-style-type: none"> • Tel No: • Email ID : • Website : 	
1.4	Office Address in Kerala (if different from regd. address) :- <ul style="list-style-type: none"> • Tel No: • Email ID : • Website : 	
1.5	Officer to be contacted for clarification on contractor empanelment Name : Designation : <ul style="list-style-type: none"> • Tel No: • Email ID : 	



**ANNEXURE – 4
CONTRACTOR REGISTRATION FORM**

No: IL-SOLAR-EOI-RTSP/2020

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1.6 a	Service Centre – North Kerala:- Address <ul style="list-style-type: none">• Contact Person• Tel No:• Email ID :	
1.6 b	Service Centre – Central Kerala:- <ul style="list-style-type: none">• Contact Person• Tel No:• Email ID :	
1.6 c	Service Centre – South Kerala Kerala :- <ul style="list-style-type: none">• Contact Person• Tel No:• Email ID :	

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2. Ownership Information

2.1	Type of Company (Tick any one)	Document to be submitted	Remarks By INKEL
i	Govt of India Undertaking		
ii	State Govt Undertaking		
iii	Public Limited Company	Memorandum and Articles of Association	
iv	Private Limited Company	Memorandum and Articles of Association	
v	Co-Operative Society	Society Rules and Byelaws	
vi	Partnership Firm	Partnership deed	
vii	Proprietorship	Professional Tax registration & Municipal Registration	
viii	Any Other (specify)	Supporting Documents	

2.2	Director / Partner / Owner / Proprietor Information	Position Held in Company	Remarks By INKEL
i			
ii			
iii			
iv			

2.3	Director / Partner if related to INKEL Employee	Remarks By INKEL
i	Name : Designation : Department : Relationship :	

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3. Registration Particulars

SI No	Description	Documents to be submitted	
3.1	Income Tax (Permanent Account Number) :	Copy of certificate	
3.2	Service Tax Registration :	Copy of certificate	
3.3	PF registration :	Copy of certificate	
3.4	CPWD / Government Organization :	Copy of certificate	
3.5	Contractors License for Electrical Works from any State / Union Territory of India	Copy of Certificate	
3.6	Registration under MSME	Copy of Certificate	

4. Manpower

SI No					Remarks By INKEL
4.1	Organizational Strength in number (Please submit organization chart)				
4.2	List of Key persons on rolls of company				
	Category	No of Persons	Qualification	Total work experience	
i	Managers				
ii	Project Engineers				
iii	Site Engineers (Erection Commissioning)				
iv	Site Engineers (Quality)				
v	Site Safety coordinators				
vi	Site Supervisors				
vii	Technicians				
viii	Skilled Workmen				
ix	Others				

NOTE : May be submitted as a separate sheet if required.

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5. Quality Systems

5.1	Quality systems	Certificate Number & valid upto	Document to be submitted	Remarks By INKEL
i	Accreditation to ISO 9001		Copy of accreditation certificate or copy of table of contents of Quality manual	
ii	Accreditation to ISO 14000		Copy of accreditation certificate or copy of table of contents of Quality manual	
iii	Accreditation to OHSAS 18000		Copy of accreditation certificate or copy of table of contents of Quality manual	
iv	In House Quality systems		Copy of Quality Manual	

6. Banking details

The following information of Bank Account of the Company (required for Electronic Fund Transfer –EFT/RTGS) is to be submitted.

1. Name of the Company
2. Name of Bank
3. Name of Bank Branch
4. City/Place
5. Account Number
6. Account type
7. IFSC code of the Bank Branch
8. MICR Code of the Bank Branch
9. Details of other Bankers (for reference purpose only)

NOTE :

Suppliers who have already submitted the above information are requested to submit a copy of the same.

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7. Financial Information for Previous three Years

a. FINANCIAL STATEMENT

a. Information from Balance Sheet			
Year			
Total Assets			
Total Liabilities			
Net Worth			
Current Assets			
Current Liabilities			
b. Information from Income Statement			
Year			
Total Revenue			
Profit before Tax			
Profit after tax			

b. TURNOVER

Year	Amount
Average	

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(B) Summary			
SI No	Description	Value	Supporting Documet
1	Total EPC experience:	kWp	
2	Total I &C Experience:	kWp	
3	Largest single capacity projects executed as EPC:	kWp	
4	Highest value of single order executed at a time:	(INR)	