

# Request For Expression of Interest For

Seeking proposals for Supply, Installation,  
Commissioning and Maintenance of Free Space  
Optic Links

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## 1 INTRODUCTION

ERNET India, an Autonomous Scientific Society under Department of Electronics & Information Technology, Ministry of Communications & Information Technology, Govt. of India, is a Class 'A' Internet Service Provider for the Education and Research community in India. ERNET India pioneered Internet to the country and has been a self-sustaining organization. ERNET has been supporting in proliferating Internet in the country and has been upgrading its infrastructure as per latest state of art technologies. ERNET India as a technology consultant implemented various projects by commissioning ICT infrastructure for teaching aid, Campus Network, Wi-Fi & other IT infrastructure for various ministries, departments, academic & research institutions/universities/colleges/schools under central and state Governments. ERNET India is also providing Internet & other VPN access services to various Institutions, universities, colleges, departments and organizations of central / state government. ERNET India also provides of "C" Band based VSAT based connectivity to the remote unconnected areas. ERNET India is operating Smart Virtual Classrooms across 07 States (Tamil Nadu, Andhra Pradesh, Haryana, Himachal Pradesh, Rajasthan, Tripura and Gujarat).

Under its initiatives for identifying newer technologies and testing them on real ground level fields, ERNET INDIA is in the process of finalizing the Bill Of Material for establishing links using technologies that uses narrow beam of focussed invisible light to deliver high-speed, high-capacity connectivity over long distances. ERNET India would like to invite Expression of Interest (EoI) for providing the connectivity by using Free Space Optics (FSO) based technologies to the remote areas where geographical obstacles, such as rivers, hills etc. are hindrance which would otherwise cause delay/prevent fiber optic cable expansion, and lead to significantly increased deployment costs. It is anticipated that FSO based solution will help in achieving the high throughputs of multiple Gbps across long distances.

### **Invitation of "Expression of Interest" Details:**

Sealed Proposals/offers are therefore, invited from the reputed manufacturers or their authorized representatives w.r.t Finalization of Bill of Material and technical specifications against the scope of work defined in this EOI and thereby seeking techno-commercial proposals from the shortlisted participants for Supply, Installation, Commissioning and Maintenance of links using beam of light technologies. Interested parties may download the EoI from CPP portal/ERNET India Web site or collect it in person. In case parties download the soft copy of EoI from CPP portal/ERNET India Web site, they shall submit Demand Draft / Banker's Cheque (as per below details) along with the EoI response. Parties can also collect the EoI in person against a Demand Draft or Banker's Cheque of Rs. 15,000/- drawn in favour of "ERNET India", **New Delhi from Shri. Kishor Lala, Addl. Director(Tech), ERNET India, 5th Floor, Block – I, A Wing, Delhi IT Park, Shastri Park, Delhi-110053, Ph: 011-22170876** as per the schedule detailed below.

Interested applicants are requested to submit Expression of Interest with **a covering letter and necessary supporting** documents as mentioned in section 2 in line with minimum eligibility criteria and other documentary proofs mentioned in this EoI.

<b>S. NO.</b>	<b>Information</b>	<b>Details</b>
1	EoI No.	EI-D/TECH-FSO/1-1/2018
2	EoI Publishing / Purchase Start Date	13-Sep-2018
3	Last Date of Collection / Purchase of EoI	28-Sep-2018
4	Last Date & Timings for submission of EoI proposal	09-Oct-2018 03:00 PM
5	Address at which proposal ( response to EoI) is to be submitted	Shri. Kishor Lala, ERNET India, 5th Floor, Block-I, A Wing, Delhi IT Park, Shastri Park, Delhi-110053
6	Opening of EoI Responses	09-Oct-2018 03:30 PM
7	Venue	ERNET India , 5th Floor, Block-I, A Wing, Delhi IT Park, Shastri Park, Delhi-110053

The EoI submitted by telegram / fax / e-mail etc. shall not be considered. ERNET India shall not be responsible for any postal delay or non-receipt / non delivery of the documents. No further correspondence on the subject will be entertained.

Submission of an EoI in response to this notice shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.

## 2 MINIMUM ELIGIBILITY CRITERIA (MEC)

The invitation of bids is open to all entities registered in India who fulfil the criteria as specified below.

S. No.	Basic Requirement	Documents to be submitted
1.	<p><b>Legal Entity</b> The bidder company should be a company registered under Indian Companies Act 1956/2013; or a registered partnership firm under The Partnership Act 1932/LLP Act, 2008. The bidder entity or its parent company<sup>Note</sup> should have been in existence for a period of at least 3 years on the date of application.</p>	<p>1. Copy of Certificate of Incorporation issued by the Registrar of Companies, India / Certificate of commencement of business.</p> <p style="text-align: center;"><b>or</b></p> <p>1. Certificate of registration and partnership deed for LLP and partnership firm.</p> <p style="text-align: center;"><b>and</b></p> <p>2. List of partners, directors and principle place of business, as applicable.</p>
2.	<p><b>Turnover and Net Worth</b> i. The bidder company or its parent company<sup>Note</sup> should have a global turnover of not less than Rs. 25 Crore in the preceding three financial years i.e. 2017-18, 2016-17, 2015-16 from business activities related to products in IT/Communication sectors.</p> <p>ii. The bidder or its parent company<sup>Note</sup> should be profit making company in at least one of the last three financial years with positive net worth as on 31.03.2018.</p>	<p>Certificate(s) from the statutory auditor/practising CA/CS on his letter head confirming Turnover, Net worth &amp; Profits.</p> <p>In case bidder company's existence in India is less than three years, refer note below.</p>
3.	<p><b>Debarment</b> The bidder or its parent company<sup>Note</sup> should not have been under sanction, cross-debarred, blacklisted/ debarred by ERNET INDIA or any State or Central Government in India or autonomous body, State government undertakings CPSUs/ any other government organisation or its undertakings at the time of bidding.</p>	<p>Self-declaration duly signed by the authorized signatory.</p>
4.	<p>Equipment being supplied should be an end commercial product.</p>	<p>Undertaking to this to be submitted from OEM.</p>
5.	<p>The equipment/accessories being supplied by the bidder should not have been declared as "end-of-sale" and "end-of-support".</p>	<p>Undertaking to this to be submitted from OEM.</p>
6.	<p>Previous Experience for at least one or more Successful FSO Installation and Commissioning in India or globally.</p>	<p>1. Undertaking shall be provided by bidder with site details.</p>

		<p>2. A Statement of Work done / Government order / work order.</p> <p>3. Details of the Outcomes achieved from such projects should also be submitted.</p>
7.	Bidder or its parent company <sup>Note</sup> should have office in India to provide support services for the faulty systems/subsystem of equipment in conformity with the SLA as defined in this EoI document	Relevant proofs may be attached.
8.	Bidder should be able to demonstrate the working of technology deployed in India or globally	Undertaking to be submitted by bidder.
9.	All offered equipment, software & components should support seamless inter-operability among them and with the other Network devices and any communication medium.	Undertaking to be submitted by OEM.
10.	<b>Integrity Pact</b> The bidders must comply with the Integrity Pact (IP) as mandated by CVC, Government of India.	Signed Integrity Pact (IP) as per the format given.
11.	Compliance to the EOI terms.	Signed copy of EOI. Technical point by point compliance should be attached.
12.	Undertake that the support, not only limited to spares, patches, upgrades for the products proposed for solution, shall be available for next three years from the date of successful installation and acceptance.	Undertaking to be submitted by OEM.
13.	Undertake on-site warranty/ support & maintenance for one year.	Undertaking to be submitted by Bidder.
14.	Undertake that equipment supplied by the OEM should be transferrable to any other government agency at a later date along with warranty/AMC benefits. Also such an agency may use AMC rates achieved through RFP for the period of 3 years from expiry of warranty.	Undertaking to be submitted by OEM.
15.	Authorization for bidder to bid against this EoI and RFP. This clause is <b>not applicable</b> for OEMs bidding in this EoI/RFP.	Bidders need to submit an undertaking from OEM that they authorize the bidder to bid for this EoI and RFP.

**Note :** In case bidder company existence in India is less than three years, Bidder's parent company global presence can be considered with following conditions.

1. Parent company should not be LLP/Partnership firm(s).
2. Original signed Certificate(s) from practising CA and/or CS should be submitted, declaring that Indian company existence in India is less than three years and Indian company is 100% subsidiary of parent company. This certificate shall be on the letter head of the practising CA/CS and all the relevant documents (summarizing turnover, profitability & net worth) to be enclosed on the basis of which certificate has been issued.
3. Bidder company should submit the document stating the parent company constitution, nature of business, country of incorporation, incorporation year and mainline of business.

### 3 SCOPE OF WORK

- i) The successful bidder after the completion of RFP will be fully responsible for supply, installation, commissioning & maintenance of Free Space Optics (FSO) based connectivity provisioning at various locations anywhere across India. The locations will be specified by ERNET India in consultation with MeitY/DoT. The period for monitoring, support / maintenance shall be referred in the support and maintenance subsection.
- ii) The Free Space Optical connectivity will also have to be integrated with an existing Internet connectivity and enable the sites to access internet.
- iii) **Offline Survey**
  - a. Each site will have to be offline surveyed and a detailed survey report will have to be submitted within five days of intimation of site(s). As FSO is LoS based, the bidder will conduct an offline survey of all project sites asked by ERNET INDIA and submit sites feasibility report for all sites.
  - b. This feasibility report should focus on :
    1. Reporting of parameters that help in making the decision about the FSO installation at a particular location.
    2. It must include data about visibility conditions, Line of sight availability information & its respective metadata files to be used with any open source GIS tool with appropriate labels/markings etc., distances between the sites , repeater configuration to be used , technical rationale behind the repeater usage (if required) and any other information considered relevant by bidder w.r.t Feasibility report.
  - c. Only after the successful offline survey the necessary forward steps would be taken by ERNET India. Final locations shall be chosen from any of the offline surveyed project sites based on feasibility report submitted by bidder and other criteria's by ERNET India and/or further discussions with MeitY/DoT.
- iv) **Physical Survey**

The bidder will be responsible to visit the each final identified project location within one week of site finalization. This will aim at submitting following information for each respective site in a week:

  - a. **Project Implementation Plan (PIP).** It shall consist of at least following inputs
    - a. **Site Completion Schedule** with planned dates for milestones such as
      1. Civil Work Completion, Materials Arrival, Backhaul Availability
      2. Installation begins, Installation Complete, Commissioning Complete.
      3. Bidder Testing Complete.
      4. ERNET INDIA acceptance Testing Start (Acceptance testing process to be specified in RFP and shall be agreed to by bidder)
      5. Review & Rework of documentation and reports -Training , Maintenance

Start

6. Equipment availability at site, etc.
  - b. Action Items(Dependencies, Any other) for State, ERNET India, or any other stakeholders with expected date of completion/meeting of dependency
  - c. The bidder must plan to accomplish the physical site surveys, material procurements, civil & electrical works, installation, commissioning of free space optics equipment and its integration with backhaul within the ten weeks of finalization of the site.
  - d. Bidder may add more relevant inputs / information to PIP.
  - e. The PIP shall be submitted as a Gantt chart in MS Excel.
- b. **Site survey reports:** It shall consist of at least following inputs.
- a. Site Details site(s) coordinates, applicability of repeater, distance between sites.
  - b. Pole height, elevation angle for each FSO equipment used
  - c. Backhaul connectivity provider and its local contact details, the bandwidth (in mbps) intended to be provided by backhaul infrastructure, interfaces planned for backhaul connectivity, backhaul equipment details, any specific backhaul interfaces to be requested etc.
  - d. Details if such as any Right of way is required, details about the prevalent visibility conditions upon the visit in meters,
  - e. Network topology/diagram , Finalization of Pit Location for Pole(s), Recording the Tentative Pole Length , FSO Angle(s) for each site
  - f. Any other relevant inputs bidder may want to add
- v) **Civil and Electrical Works & Transportation**
- a. The bidder will be responsible for all the necessary civil works such as pit making, masonry works and pole installation. It must be noted that site's originality shall be maintained. The pit making and pole installation request along with relevant details must be submitted to State for necessary approval from local authorities / states and must share a copy of same for purpose of information. The same must be attached as a part of Installation and Commissioning Report.
  - b. The bidder will be responsible for all necessary electrical related jobs to be conducted at the site relevant for FSO installation including essential earthing, lightning arrestor / other electrical safety equipment pertaining to installations etc.
  - c. The bidder will be responsible for all the relevant material transportations required for FSO E2E integration & maintenance (including all the materials required for civil, electrical, networking etc.)
- vi) **Installation**
- In order to install the FSO equipment on pole:
- a. Bidder will make necessary survey related to alignment of FSO equipment to accurately measure the angle of elevation to its far end & vice versa, height of the pole(s) to place the FSO, the required depth of pole inside the civil structure/ground to ensure the steadiness of pole during various environmental conditions depending upon various types of earth surfaces encountered for each site.
  - b. Bidder will ensure the safe, steady & durable mounting and installation of FSO on the pole(s).
  - c. The bidder will be responsible for placing the equipment (L2 switches, UPS, Batteries etc.) in a metallic safe rack with lock and key. It must be noted that all the equipment must be labelled and labels shall include IP address for applicable components.
    - i. The provisioning of rack safety, steadiness and hence its appropriate placement shall be ensured indoor and outdoor conditions.
    - ii. The rack shall have an End to End Setup Diagram picture with clear IP addresses in use



- vii) **Integration**
  - a. The bidder will perform the integration of its FSO equipment with L2 Switches; L2 switches connected to with the backhaul interfaces & L3 wireless routers as required.
  - b. All offered equipment; software & components should support seamless inter-operability among them.
- viii) To ensure “zero downtime” due to lack of electrical power supply, electrical power to the complete system must be connected via UPS with battery backup for uninterrupted continuous connectivity.
- ix) **Acceptance Testing**
  - a. The bidder is responsible for showcasing the 100% successful pass result during user acceptance testing (UAT) to ERNET INDIA team.
  - b. The bidder shall create a UAT result report and share the appropriate logs for each of the test cases as a result of UAT.
- x) **Long Run Stability Tests**
  - a. The bidder shall share the results & logs for Long Run Stability Tests by showcasing end to end high throughputs (defined by ERNET INDIA) for continuous duration of more than 120+ hours. This report shall also provide the CPU and memory consumptions and downtimes / failures or loss of data that happened during the testing.
  - b. Successful Long Run Stability acceptance tests shall require 98% uptime with up to successful 95% data transfer rate achieved.
- xi) **Training and Handover**
  - a. This will include the submission of System Operation User Manual, Configuration & Maintenance Guide containing at least the following :
    - i. E2E setup diagram with configured IPs, components details and information, default settings/configurations, how to configure, restore the components & system.
    - ii. Information and snapshots of successful restoration of various components.
    - iii. Information about the LED indicators on all components in the system including FSO equipment & guidelines to find out successful restoration of each of them.
    - iv. FAQs about the failures scenarios & its recovery mechanisms, do’s and don’ts during emergency conditions, contact details of responsible engineers for support and maintenance.
    - v. Steps for system software upgrades/downgrades for various components.
  - b. Bidder shall coordinate and organize hands on demo session as a part of training and handover on per site basis.
  - c. The training shall include the basic operations of installed equipment, supporting testing tools if any, day-to-day handling of equipment and basic level troubleshooting to the maximum of two member of each project location for one day. All the training materials will be provided by the bidder.
  - d. As a part of handover, bidder shall share the list of materials and physically cross verify the same with the nominated state representative.
- xii) **Analysis & Recommendation Reports** – To be submitted as per details mentioned in section “**LIST OF DELIVERABLES**”
- xiii) **Support and Maintenance**
  - a. The bidder will ensure the availability of services from professionally qualified team

during implementation of the work order and to provide the required on-site warranty/ support & maintenance for one year after the acceptance tests.

- b. The bidder shall arrange for maintenance for a period of warranty from the dates of installation of the project with regard to rectification/removal of defects if any observed during this period.
- c. Warranty shall include free maintenance of whole equipment supplied with complete system including free replacement of faulty equipment/parts, free software upgrades/ updates/ renewals/ replacement of batteries. Any issue reported from site shall be attended to on immediate basis within the defined timeline in the SLA Clause.
- d. The bidder shall provide comprehensive AMC of two years on per year basis after warranty period is over. The Comprehensive AMC includes onsite warranty for the complete supplied system including but not limited to installed equipment, parts, passive materials such as poles, rack, wires and software updates/ upgrades/ renewals/ batteries replacement.
- e. Free Space Optics equipment at sites should be capable of performing following task under the operation and maintenance
  - i. Fault Detection & Reporting, Automatic Configuration & Automatic Link Recovery
  - ii. Recording and Reporting of Throughput Statistics
  - iii. Performance (CPU Usage , Run Time Memory, Operating Temperature ) Logging
  - iv. In Built Visibility distance vs throughput logging Functionality
- f. During this period of support and maintenance bidder should plan bi-monthly visit to the sites as a part of preventative maintenance. Bidder must submit counter signed copy of a visit report duly signed by the nominated state officials.

xiv) **Service Level Agreement**

After commissioning & acceptance, during warranty & AMC, the bidder shall be responsible for minimum uptime of 98% on 24x7. The minimum uptime will be evaluated on a monthly basis for the end to end system provided by bidder. Successful bidder shall enter into this SLA upon RFP phase evaluation. The SLA shall be finalized & detailed during RFP.

#### 4 LIST OF DELIVERABLES

Following is the list of deliverables anticipated from this project:

S.No	Phase /Task	Deliverable
1	<b>Offline Survey</b>	Sites Feasibility Report
2	<b>Site Finalization</b>	Project implementation plan ( with Site Completion Schedule & Site survey report)
3	<b>Implementation Phase</b>	Materials at site Availability Report, Civil Works Completion Report Electrical Work Completion Report Installation And Commissioning Report Bidder Testing Completion Report
4	<b>Acceptance Testing</b>	UAT Results, Logs and Showcase of E2E execution of test cases
5	<b>Long Run Stability Testing</b>	Long Run Stability Test reports with logs
6	<b>Training Phase</b>	1. System Operation User Manual 2. Configuration & Maintenance Guide 3. Operational Training Session
7	<b>Handover Phase</b>	Demo List of All Materials categorized into Networking, Electrical, Civil, Others
8	<b>Throughout the Operations and Maintenance Period</b>	1. Daily, Weekly & Monthly Faults or Alarms Reports containing faults related to categories such as Configuration/Software/Hardware/Backhaul/others. Reports shall have with real time stamps and their fault status at current reporting time with Occurred Time, Acknowledgement time and Released Time of alarms.  2. Daily, Weekly, Monthly Reports of Throughput at various visibility levels. The throughput reported shall be at the frequency of minute.  3. Daily, Weekly, Monthly Performance Reports containing (CPU Usage, Run Time Memory, and Operating Temperature of the device) Logged with visibility & throughput details with real time stamps.
9	<b>Analysis &amp; Recommendation Reports</b>	1. This report shall consist of graphs, analysis and recommendation of Free space optics technology at a particular site. The recommendation shall be derived from the monthly reports & data shared during “Throughout the operations and maintenance period” and any other related inputs from bidder.  2. The recommendation shall take into account E2E throughputs at various visibility levels at a site at various times of the day(s) in a year. It shall share the detailed analysis of performance of Free space Optics solution based on a combination of minimum following factors such as :

		<p>i. rain conditions (heavy, moderate, low)</p> <p>ii. fog conditions (dense, moderate, light)</p> <p>iii. temperature</p> <p>iv. smog</p> <p>iv. dust</p> <p>v. along with other factors such as availability and unavailability of internet connectivity from backhaul connections,</p> <p>vi. Free space optics equipment downtime due to h/w or s/w or configuration or upgrade issues or any other issues.</p> <p>Some of the envisaged report will have graphs such as visibility vs. data throughput with appropriate Alarms etc. mapped w.r.t Time stamps , the durations when backhaul wasn't available may be marked in different colour to distinguish its impact. The bidder may use their skills further to arrive at their recommendations.</p> <p>3. These reports need to be <b>submitted monthly</b> immediately after the completion of Installation and Commissioning of equipment. This report shall be submitted for a period of 12 months to ERNET India team and for 24 months period to state officials based on the 24 months support and maintenance contract with state.</p> <p>4. It must be noted that these are very important reports to gauge the impact of weather in Indian climatic conditions</p>
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## 5 MINIMUM TECHNICAL SPECIFICATIONS

The bidders, who satisfy minimum eligibility criteria, will be considered for further evaluation based on technical specifications sought.

The following table shows the minimum technical specifications sought for shortlisting of bidders during evaluation phase. The bidder is also expected to submit a detailed technical proposal where bidder can include more specifications to detail the impact due to rainfall, fog, smog, snow etc. Hence bidders are explicitly asked for providing such details.

The OEM/SI may also add any specification(s)/ parameter(s) as a technical parameter(s) for evaluation which they consider is important part/criteria of their solution for evaluation. Such new specification(s)/ parameter(s) should be appended only **at the end of the table**.

Specifications & Parameters	Required Documentation / Proof
<b>Data Throughput in full visibility conditions.</b>	The applicable capability with its value and units (wherever applicable) shall be specified and the same must be highlighted in the relevant submitted documentations.
<b>Supported Distance Range (without any repeater in between, within One Link) in full visibility conditions.</b>	
<b>Data Throughput &amp; Transmission related Errors in Moderate Visibility Conditions (Bidders shall provide the visibility range, throughput &amp; along with this any other parameter(s) &amp; its value(s) may be added which has can create its dependency on throughput).</b>	
<b>Data Throughput &amp; Transmission related Errors rates in Poor Visibility Conditions (Bidders shall provide the visibility range , throughput &amp; along with this any other parameter(s) &amp; its value(s) may be added which has can create its dependency on throughput)</b>	
<b>Describe the visibility values in terms of range, fog, rain,dust,smog,snow etc. when the FSO Link has zero throughputs or does not work.</b>	
<b>Available Optical and Ethernet Interfaces.</b>	
<b>Health Safety Compliance especially Eye w.r.t Lasers.</b>	
<b>Operating Temperature (in degree Celsius).</b>	
<b>Lens Operations</b>	Auto/Manual Lens Heating
	Auto/Manual Lens Defroster
	Auto Lens Angle Adjustments
<b>Operations &amp; Maintenance</b> <i>Adjacent column contain details about the tentative minimum expected O&amp;M features, bidders need to share the necessary documentation for proof of compliance to these important features.</i>	Fault Detection & Reporting , Automatic Configuration & Automatic Link Recovery
	Recording and Reporting of Throughput Statistics
	Performance (CPU Usage , Run Time Memory, Operating Temperature ) Logging
<b>Visibility and Throughput Recording</b>	In Built Visibility distance vs throughput logging Functionality
<b>Remote Recording and Remote Operations.</b> <i>Adjacent column contain details about the tentative minimum expected Remote operations, bidders need to share the necessary documentation for proof of compliance to these important features.</i>	Remote Interface to show and record Periodic information of all O&M information (Faults, Performance) at a server / designated machine as a daily / weekly / monthly report
	Remote Interface to show & record Periodic Throughput Stats with Visibility and Time stamps
<b>IPv6 Compliance</b>	
<b>Any other(s) relevant functions / features/operations which bidder may like to specify</b>	Documentary proof for same is required.

**Note:**

- a. Bidder shall submit the detailed proposal in line to specifications as provided in evaluation criteria.
- b. Each of the listed specification / parameter in first column of Evaluation Criteria should be supported with documentary proof.
- c. The detailed proposal should also contain the unpriced Bill of Materials of the items to be used.

## 6 PROPOSAL EVALUATION PROCESS

- a. ERNET INDIA will constitute an Evaluation Committee to evaluate the responses of the bidders.
- b. The Evaluation Committee constituted by ERNET INDIA shall evaluate the responses to EoI and all supporting documents and documentary evidence. The committee may seek additional documents / presentation as it deem necessary.
- c. Bidders who satisfy all the minimum eligibility criteria(s) as mentioned in section 2 will be considered for Proposal Evaluation Phase.

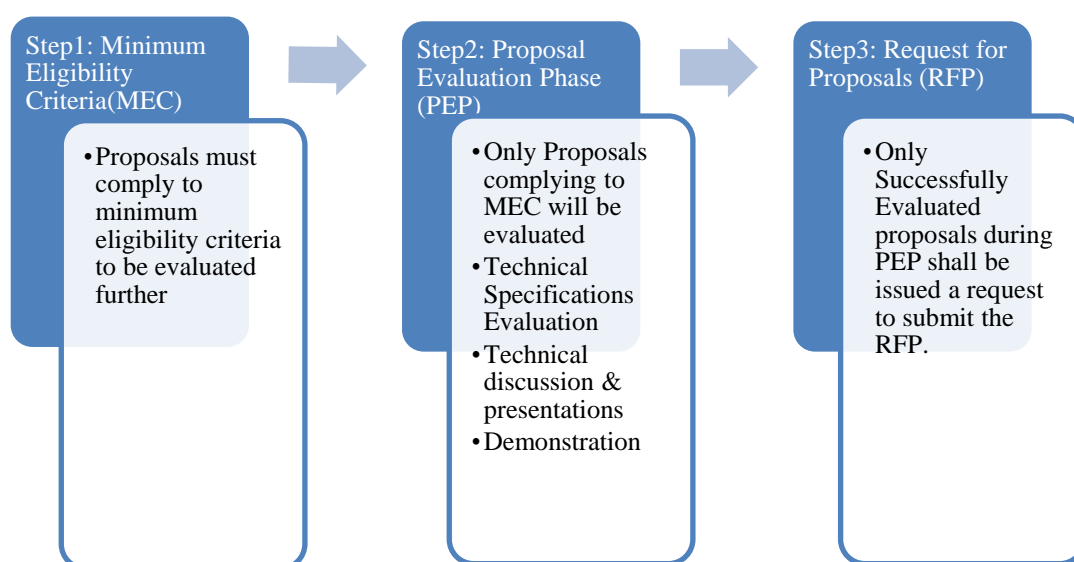


Figure 1 : High Level Steps to Process FSO EoI Response(s)

- d. The Proposal evaluation shall include :
  - i. Technical evaluation of the proposals based on specifications / necessary documentations/proof provided.
  - ii. The committee may also ask the bidders to come for Technical discussion & presentation of solutions to committee at a short notice of three days.
  - iii. The committee may also ask the bidders to demonstrate the proposed solution. Bidders must be prepared for same on a notice of three days.
- e. After the proposal evaluation by Evaluation Committee, Request for Proposal (RFP) will be issued only to successful bidder(s).

- f. The decision of the Evaluation Committee in the evaluation of EoI responses shall be final. No further correspondence(s) will be entertained in this regard.

## 7 EOI PROPOSAL PREPARATION COSTS & RELATED ISSUES

The Applicant is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in preparation of proposal, PoC (Proof Of Concepts) demonstration at sites, and participation in meetings / discussions. ERNET India in no case will be responsible or liable for these costs, regardless of the conduct or outcome of the EoI process.

## 8 EARNEST MONEY DEPOSIT

- (i) Response to EoI must be accompanied by **Earnest Money Deposit(EMD) of Rs. 20,00,000/- (Rupees Twenty Lacs only) which shall be in the form of Demand Draft/Pay Order/EM Fixed deposit/Bank Guarantee of any Nationalized/Scheduled commercial Bank taken in the name of ERNET India, New Delhi.**
- Bank Guarantee should be valid minimum for a period of 360 days from the final due date of the EoI & be submitted in compliance with the clause no. (v) of this section. The Performa for submission of BG is enclosed in this document.
  - In case if EoI due date is extended, Bank Guarantee should be valid minimum for a period of 360 days from the extended due late.
  - Response received without Earnest Money Deposit or short of value confirming to the above and /or with short period of validity are liable to be rejected.
- (ii) Earnest Money is liable to be forfeited and bid is liable to be rejected, if the bidder withdraw or amends, impairs or derogates from the EoI or RFP in any respect within the period of validity of the EoI and RFP.
- (iii) The EMD submitted during EoI shall remain applicable for successful and participating bidder(s) during the RFP stage and the earnest money will be returned to all the unsuccessful bidders after completion of respective evaluation phases i.e. EoI and RFP.
- (iv) EMD submitted in the form of fixed deposit/BG will be returned as it is. In case of EMD in the form of DD/Pay order, No interest will be payable by ERNET India on the Earnest Money Deposit.
- (v) If the successful bidder fails to submit the performance bank guarantee after the RFP process as mentioned in the EOI, the EMD of the successful bidder shall be liable for forfeiture.
- (vi) In view of guidelines issued from ministry of finance, it is mandatory that all the Bank Guarantees submitted must be routed through Structured Financial Messaging System (SFMS) from issuing Bank to our Bank by sending IFN 760 COV Bank Guarantee Advice Message. Thereafter only physical Bank Guarantee will be acted upon. Our bank details for this purpose are: -

1	Beneficiary Name & Address	ERNET India 5th Floor, Block I A Wing <b>DMRC IT Park, Shastri Park, Delhi-110053</b>
2	Bank Name	Bank of India

3	Bank Branch & Address	Electronics Niketan 6 CGO complex New Delhi – 110003
4	Beneficiary Account No	604810100002033
5	IFSC code	BKID0006048

(vii) Bidders have to ensure submission of all BGs as per the latest RBI guidelines.

## 9 TERMS & CONDITIONS

- a. The successful bidder shall indemnify the ERNET India/End-user departments against all third party claims of infringement of patent, trademark/copyright or industrial design rights arising from the use of the supplied items and related services or any part thereof. ERNET India/End-user department stand indemnified from any claims that the bidder's manpower may opt to have towards the discharge of their duties in the fulfilment of the purchase orders. ERNET India/End-user department also stand indemnified from any compensation arising out of accidental loss of life or injury sustained by the bidder's manpower while discharging their duty towards fulfilment of the purchase orders. The bidder shall solely responsible for any damage, loss or injury which may occur to any property or to any person by or arising out the execution of the works or temporary works or in carrying out of the contract otherwise than due to the matters referred to in this agreement hereinbefore. The bidder would ensure for observance of all labour and other laws applicable in the matter and shall indemnify and keep indemnified the ERNET INDIA/its customers against the effect of non-observance of any such laws.
- b. After the RFP process, the successful bidder shall submit a Performance Security of 10% of the cost of the purchase order at every occasion within 15 days of the placement of purchase order. The Performance Security may be in the form of Demand Draft/Pay Order/Bank Guarantee of any nationalized/scheduled bank. The Bank Guarantee should be valid for the minimum period of its service liability (i.e. delivery & warranty period) + 3 months in respect of individual purchase orders. In case supplier fails to deliver the items/services within delivery/ installation/warranty period, the Performance Security submitted by the firm is liable to be forfeited. Performance Security shall be released immediately after the service liability period is over. No interest will be payable by ERNET India on the Performance Security.
- c. After the RFP process, if the selected bidder fail to complete the delivery, installation, commissioning, integration and testing of the ordered equipment/component along with imparting of training by the date/dates specified in the RFP or any extended period, ERNET India may at its discretion withhold any payment, as liquidated damages (and not by way of penalty) at the rate of 2% of the PO value per week or a part of a week subject to a maximum of 10%. The amount towards Liquidated Damage would be recovered from the performance security or the amounts due to bidder. In case the cumulative delay is beyond 7 weeks during the implementation period, ERNET India reserves the right to cancel the purchase order and forfeit all due payments including forfeiture of Security Deposit/ performance BG, besides initiating legal action as per rules/laws and/or debarring / blacklisting the bidder concerned for at least three years, for further dealings with ERNET India.
- d. Non submission of performance security as per above schedule may lead to cancellation of work order. Also any payment due on ERNET INDIA w.r.t work done by the bidder till such date will be forfeited.



- e. The methodology of installation work, to be adopted, has to ensure minimum damage to the existing finish and no loss to the aesthetic beauty of the sites. Any damage to the existing structures due to the execution of work order, under and above the ground, at sites (Poles, flooring / walls etc.) shall be made good by the bidder.
- f. All materials submitted by the bidder(s) through this EoI will become the property of ERNET India.
- g. The successful bidder shall provide industrial grade L2 switches, L3 routers & networking accessories. This is to ensure the high probability of system availability in extreme weather / climatic conditions.
- h. All authorizations & undertaking from the OEM should be in original ink signed and stamped.
- i. All the other documentary proofs should be self-attested by authorized person.
- j. During the process of evaluation, ERNET India reserves the right to seek clarifications from bidders, wherever needed.
- k. This EoI does not commit ERNET India to award a contract or to engage in negotiations. ERNET India reserves the right to cancel/stop the process of EoI at any point of time without assigning any reasons thereof. The decision of the ERNET India is final and binding on the applicants.
- l. The bidder shall solely be responsible for obtaining required legal/statutory clearance, as may be necessary for establishing such links.
- m. The detailed payment terms will be illustrated in the RFP floated amongst the shortlisted bidders through this EOI process.

**Registrar & CPO**

**ERNET India**

## 10 TEMPLATES AND FORMATS

The Proposals under this EoI shall be submitted in the following formats:

**Covering Letter from the Applicant**  
(On Company Letterhead)

**To**

[Date]

**The Registrar,  
ERNET India  
5th Floor, Block-I,  
A Wing, Delhi IT Park,  
Shastri Park, Delhi-110053**

Reference: To Supply, Install, Commission and Maintenance of Free Space Optic Links.

Dear Sir/Madam,

This is to notify you that our company intends to submit a proposal in response to the EoI seeking proposals for Supply, Installation, Commissioning and Maintenance of Free Space Optic Links.

Primary and Secondary contacts for our company with respect to this proposal are:

**Company Name:**

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading, we are liable to be dismissed from the EoI selection process or termination of the contract during the project.

We agree to abide by the conditions set forth in this EoI. We hereby declare that our proposal submitted in response to this EoI is made in good faith and the information contained is true and correct.

We also understand that this EoI does not commit ERNET India to award the contract. ERNET India reserves the right to cancel/stop the process of EoI at any point of time without assigning any reasons thereof. The decision of the ERNET India is final and binding on the applicants.

It is hereby confirmed that I/We are entitled to act on behalf of our corporation/company/firm/organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Sincerely,

[APPLICANT'S NAME]

Name

Title

Signature

(Name and Address of Company)

Seal/Stamp of the bidder

**Authorised Signatory**  
**Certificate of Authorised Signatory**  
(On Company Letterhead)

I, ....., certify that I am ..... of  
....., and that .....  
..... who signed the above response is authorized to bind the corporation by authority  
of its governing body.

(Seal here)

Date

## Self-Certificate of Non-blacklisting

(On Company Letterhead)

**To**  
**The Registrar,**  
**ERNET India**  
**5th Floor, Block-I,**  
**A Wing, Delhi IT Park,**  
**Shastri Park, Delhi-110053**

[Date]

*Reference: Undertaking of not being blacklisted*

Dear Madam/Sir,

This is to certify that << COMPANY NAME >> is not blacklisted by any Government or any of its agencies for any reasons whatsoever and not blacklisted by Central / any other State/UT Government or its agencies for indulging in corrupt or fraudulent practices or for indulging in unfair trade practices as on the proposal submission date, which is dd/mm/yyyy.

Company Secretary / Authorized Signatory

Name of Signatory:

Designation:

Company Name:

Date:

Place:

**MODEL BANK GUARANTEE FORMAT FOR FURNISHING EMD**

(To be stamped in accordance with stamp Act)

(The non-judicial stamp paper should be in the name of issuing Bank)

B.G. NO. \_\_\_\_\_  
Date of issue \_\_\_\_\_  
Amount (Rs.) \_\_\_\_\_  
Valid upto \_\_\_\_\_  
Claim Amount upto \_\_\_\_\_

To,  
ERNET India  
5th floor, Block-I, A Wing  
Delhi IT Park, Shastri Park, Delhi-110053

In consideration of the ERNET India, Ministry of Electronics & Information Technology (hereinafter referred as the '**Owner**', which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having issued a EoI

no. \_\_\_\_\_ dated \_\_\_\_\_ and  
M/s. \_\_\_\_\_ (name,  
constitution and address) (herein referred to as the '**Bidder**', which expression shall unless repugnant to the context of meaning thereof, include its successors, administrator, executors and assigns) having made a Bid for the above-mentioned EoI and the '**Bidder**' have agreed to give Earnest Money Deposit of Rs. \_\_\_\_\_ to abide with the below mentioned conditions of the EoI :

- (1) If the '**Bidder**' withdraws or amends, impairs or derogates from the EoI or RFP in any respect within the period of validity of bid.
- (2) If the '**Bidder**' having been notified of the acceptance of his bid by the Owner during the period of its validity:-
  - a) If the Bidder fails to furnish the Performance Security for the due performance of the contract.
  - b) Fails or refuses to accept/execute the contract.

We \_\_\_\_\_ (name of the Bank) having our Registered Office at \_\_\_\_\_ and Corporate/Head Office at \_\_\_\_\_ (hereinafter referred to as the '**Bank**', which expression shall, unless repugnant to the context or meaning thereof, include the successors, administrators, executors and assigns) do hereby guarantee and undertake to pay at any time up to \_\_\_\_\_ (day/month/year including claim period) an amount of Rs. \_\_\_\_\_; to the Owner, within ten (10) calendar days from the date of receipt by us of your first written demand through hand delivery or registered A.D. Post or by speed post or by

courier, stating that “Bidder” has failed to perform its obligations under the EoI or RFP. Aforesaid Payment will be made without any demur, reservation, contest, recourse or protest and/or without any reference to the **Bidder**. Any such demand made by the Owner to the Bank shall be conclusive and binding notwithstanding any difference between the Owner and Bidder or any dispute pending before any court, tribunal or any authority.

The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Owner and further agrees that the guarantee herein contained shall continue to be enforceable till the Owner discharges this guarantee. The owner shall have the fullest liberty, without affecting in any way the liability of the Bank under this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the **Bidder**, and to exercise the same at any time in any manner, and either to enforce or to forebear to enforce any covenants, contained or implied, in the EoI and RFP between the Owner and the **Bidder** or any other course of or remedy or security available to the Owner. The Bank shall not be relieved of its obligations under these presents by any exercise by the owner or by any other matters or thing whatsoever which under law would, but for this provision, have the affect of relieving the Bank. The Bank also agrees that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the **Bidder** and notwithstanding any security or other guarantee that the Owner may have in relation to the **Bidder's** liabilities.

Notwithstanding anything mentioned herein above our liability under this guarantee is restricted to Rs. \_\_\_\_\_ and it shall remain in force up to and including \_\_\_\_\_ shall be extended from time to time for such period as may be desired by the **Bidder** on whose behalf this guarantee has been issued.

WITNESS

BANK

Signature \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Name \_\_\_\_\_  
(Bank’s Rubber Stamp)

Seal, name & address of the Bank and address of the Branch

Designation with Bank Stamp

Attorney as per Power of Attorney No. \_\_\_\_\_

Date: \_\_\_\_\_

Place:

## **Integrity Pact**

ERNET India hereinafter referred to as "ERNET" And -----  
[bidder (s) participating in this EoI] hereinafter referred to as “The Bidder/Contractor”

### **Preamble**

ERNET India to monitor implementation of FSO solution projects under this contract through reputed system integrators who will be selected through the procurement process for Supply, Installation, Commissioning, Integration and Maintenance of FSO Infrastructure used for providing the connectivity to remote areas.

### **Section 1- Commitments of ERNET**

1. ERNET commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

- a. No employee of ERNET, personally or through family members, will in connection with the procurement process for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- b. ERNET will during the procurement process treat all Bidder(s) with equity and reason. ERNET will in particular, before and during the procurement process, provide to all Bidder(s) the same information and will not provide to any Bidder (s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the process or the contract execution.
- c. ERNET will exclude from the process all known prejudiced persons.

2. If ERNET obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, ERNET will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

### **Section 2- Commitments of the Bidder(s) / Contractor(s)**

1. The Bidder(s) / Contractor(s) commit himself to take all measures necessary to prevent corruption. The bidder commits himself to observe the following principles during his participation in the procurement process and during the contract execution:

a. The Bidder(s) / contractor(s) will not, directly or through any other persons or firm, offer promise or give to any of ERNET's employees involved in the procurement process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage or during the execution of the contract.

b. The Bidder(s) / Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

c. The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s) / Contractors will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by ERNET as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the bidder(s)/contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" as annexed and marked as Annexure.

e. The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

2. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

### **Section 3: Disqualification from procurement process and exclusion from future contracts**

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, ERNET is entitled to disqualify the Bidder(s)/Contractor(s) from the procurement process or take action as per the Government/ERNET India's procedure on banning of the business dealings/bidders/contractors, etc.

### **Section 4: Compensation for Damages**

a. If ERNET has disqualified the Bidder(s) from the procurement process prior to the award according to Section 3, ERNET is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security

b. If ERNET has terminated the contract according to Section 3, or if ERNET is entitled to terminate the contract according to Section 3, ERNET shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value and/or the amount equivalent to Performance Bank Guarantee.

### **Section 5: Previous Transgression**

a. The Bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the anti corruption approach or with any other public sector enterprise in India that could justify his exclusion from the procurement process.

b. If the bidder makes incorrect statement on this subject, he can be disqualified from the procurement process for action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

### **Section 6: Equal treatment of all Bidders/Contractors/Subcontractors**

a. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to ERNET before contract signing.

b. ERNET will enter into agreements with identical conditions as this one with all bidders, contractors and subcontractors.

c. ERNET will disqualify from the procurement process all bidders who do not sign this Pact or violate its provisions.



## **Section 7: Criminal charges against violation Bidder(s)/ Contractor(s)/Sub contractor(s)**

If ERNET obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if ERNET has substantive suspicion in this regard, ERNET will inform the same to the Chief Vigilance Officer.

## **Section 8: Independent External Monitor/Monitors**

1. ERNET appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Director General, ERNET.

3. The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all project documentation of ERNET including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality.

4. ERNET will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between ERNET and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of ERNET and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

6. The Monitor will submit a written report to the Director General, ERNET within 8 to 10 weeks from the date of reference or intimation to him by ERNET and, should the occasion arise, submit proposals for correcting problematic situations.

7. Monitor shall be entitle to compensation on the same terms as being extended to / provided to Director level in the ERNET India or as decided by Director General of ERNET India.

8. If the Monitor has reported to the Director General ERNET, a substantiated suspicion of an offence under relevant IPC/PC Act, and the Director General ERNET has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

9. The word 'Monitor' would include both singular and plural

## **Section 9 - Pact Duration**

1. This pact begins when both parties have legally signed it. It expires for the Contractor 10 months after the last payment under the contract and for all other Bidders 12 months from the contract has been awarded.

2. If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Director General of ERNET.

**Section 10 - Other provisions**

1. This agreement is subject to Indian Law, Place of performance and jurisdiction is the Registered Office of ERNET, i.e. New Delhi.

2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

3. If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For & on behalf of ERNET)  
(Office Seal)

(For & on behalf of Bidder/Contractor)  
(Office Seal)

Place-----

Place-----

Date-----

Date-----

Witness 1:  
(Name & Address)

\_\_\_\_\_

\_\_\_\_\_

Witness 2:  
(Name & Address)

\_\_\_\_\_

\_\_\_\_\_

**Organization Profile:**

Details of the Organization		
1	Name	
2	Postal Address and E-mail of the Registered Office in India	
3	Postal Address and E-Mail of the Headquarters	
4	Status of the Company (Public Ltd/ Pvt. Ltd)	
5	Incorporation of the Company	<b>Date :</b>
6	Commencement of Business	<b>Date :</b>
7	Service tax/GST registration no., if available	
8	Name & Designation of the contact person to whom all references shall be made regarding this EOI	
9	Telephone No. a. Mobile number b. Office land line number ( along with STD Code )	
10	E-Mail of the contact person:	
11	Fax No. (with STD Code)	
12	Website	
13	Other Relevant Information	

**Financial details for turnover (as per audited balance sheet):**

Name of the Organization:			
Financial Information			
(in INR Crores)	FY 2017-18	FY 2016-17	FY 2015-16
Total Turnover			
Turnover from products in IT/Communication sectors			

The above information has to be duly certified by Statutory Auditor/CA of the organization

**Organization Project Experience:**

Total value of the projects related to communication infrastructure including Free Space Optics taken up by the agency since 01/04/2013

The details of each of the project to be provided in the following format:

<b>Experience in implementing Projects related to Communication Infrastructure Since 01/04/2013</b>	
<b>Client Information</b>	
Name of the client	
Details of the Client's contact person for reference. Please include name, designation, postal address, contact phone, fax number and e-mail id	
Any relevant details about the client organization	
<b>Project Details</b>	
Nature of the Project	
Total Contract Value of the project	
Please provide a description of the project including the goals of the project, scope of the project, uniqueness of the project, complexity of the project, significant achievements and any other detail considered significant.	
Geographical Locations of Implementation	
Present status of the project	
Number of Locations/Units at which the project is Implemented	
Date of commencement of the project	
Date of successful completion of the project. If the project is not completed, please provide dates of key milestones already achieved and target dates for upcoming key milestones up to and including the expected date of completion.	
Scope of Engagement	
Duration of maintenance support	
<b>Details of the Solution</b>	
Number of Instances of deployment of the solution	
Technical Details of the solution (software & hardware):	
Other Relevant Information	