

# **RAILTEL CORPORATION OF INDIA LTD**

(A GOVT. OF INDIA ENTERPRISE)

UNDER MINISTRY OF RAILWAYS

## **Registered Office:**

Plate-A, 6th Floor, Office Block Tower-2,  
East Kidwai Nagar, New Delhi-110023

## **Regional Office (Western Region):**

Western Railway Microwave Complex  
Senapati Bapat Marg, Near Railway Sports Ground,  
Mahalaxmi, Mumbai – 400013

## **Invitation for Expression of Interest Document for**

**“Implementation (Design, Laying,  
Testing, Commissioning), Operations and  
Maintenance of State-Wide Fiber Optic Cable  
(OFC) Network in the State of Goa”**

**EoI Reference No: RCIL/WR/MUMBAI/Mktg/22-23/06**

**Date: 03.10.2022**

## **Expression of Interest – Notice**

**RailTel Corporation of India Ltd  
Western Railway Microwave Complex  
Senapati Bapat Marg, Near Railway Sports Ground,  
Mahalaxmi, Mumbai – 400013**

**EoI Reference No: RCIL/WR/MUMBAI/Mktg/22-23/06 Dt: 03.10.2022**

RailTel Corporation of India Ltd invites EoIs from RailTel's Empanelled Partners (referred to as 'Bidder') for the selection of suitable partner as Exclusive pre-bid teaming arrangement for work mentioned in the Scope of this EoI. The EoI copy is sent along with this EoI Notice. The technical solution bid shall be submitted through E-Mail in password protected sealed packet as a PDF documents up to the end date & time mentioned below.

<b>Sr No</b>	<b>Description</b>	<b>EoI Fees (Non Refundable)</b>	<b>End date &amp; Time for Bid Submission</b>
1	Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa	INR 8,475/- + 18% GST	06.10.2022 at 12.00hrs

The prospective Bidders should submit their suggestions/observations, if any, in writing/ email. Any modification of the EoI documents, which may become necessary as a result of suggestions/ observations, shall be made by RailTel exclusively through the issue of an addendum/corrigendum.

Prospective applicants are required to direct all communications related to this EoI, through the below mentioned Nominated Point of Contact persons:

### **1. Level 1**

Contact Name : Sh. Viplovnath Mishra  
Designation : Deputy General Manager/ Marketing  
E-Mail Address : viplovmishra@railtelindia.com  
Mobile No : +91- 9004444124

### **2. Level 2**

Contact Name : Sh. Ravikant Prasad  
Designation : General Manager/ Mumbai Territory  
E-Mail Address : ravi@railtelindia.com  
Mobile No : +91- 9004444109

**NOTE: Every page of the submitted documents should be duly signed by the Authorized Signatory with Company seal.**

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## **1. RailTel – Introduction**

RailTel Corporation of India Limited, a Public Sector Undertaking under the Ministry of Railways, Govt. of India, and is a national telecom service provider having NLD, IP2 and ISP licenses and IP1 registration and have built nation-wide optical fiber network. RailTel's objective is to create a nation-wide broadband telecom and multimedia network.

RailTel Corporation of India Limited (RailTel) an ISO 20000-1:2018, ISO/IEC 27001:20013 and CMMI Level-4 certified organization for its quality management systems, information security management systems, and service management systems, respectively. The Corporation was formed in Sept 2000 with the objectives to create nationwide Broadband Telecom and Multimedia Network in all parts of the country, to modernize Train Control Operation and Safety System of Indian Railways and to significantly contribute to realization of goals and objective of national telecom policy 2012. RailTel is a Public Sector Undertaking under the administrative control of Ministry of Railways, Govt. of India.

RailTel is building state of the art multimedia telecom network using SDH/DWDM based transmission systems and high end MPLS-IP routers. RailTel has extensive expertise in building telecom networks. Moreover, RailTel draws its manpower from signal and telecom branch of Indian Railway which has been in the business of construction, operation and maintenance of telecom systems for more than 50 years.

RailTel has created countrywide state of the art SDH/DWDM backbone optical transport network using latest technology. Presently, the optic fiber network of RailTel covers over 61000+ route kilometers and covers 6102+ railway stations across India. Our citywide access across the country is 21000+ kms.

RailTel's backbone Transport Network has been configured in multiple 'Self-Healing' Ring architectures which provide for redundancy by automatically redirecting and switching traffic from failed/ degraded routes for an uninterrupted service ensuring maximum up time and service reliability. The network supports multiple ring protection schemes. The network has been designed in such a way that full redundancy is available for bandwidth between any two points.

The whole network is managed by centralized network management system (NMS) and backup facilities located across India. RailTel has got unique advantage to offer the best quality service(QoS) from a single unified network with PAN India presence. This state of art network enables point and click provisioning of the bandwidth and other services from anywhere to anywhere in the country. It enables provisioning of traffic in any granularity from 2 MBPS to multiple of Gbps (n x Gbps) from its country wide strong backbone network.

RailTel has implemented and currently implementing projects of national importance. Few of the Projects are as follows:

**Railway Station Wi-Fi project:** RailTel has implemented Free Wi-Fi services at 6,102 + Railway stations.

**Hospital Management Information System (HMIS):** Indian Railways, with the objective of bringing hospital management on a single architecture to prevent pilferage and making operations seamless has entrusted RailTel with implementation of hospital management information system (HMIS). RailTel has implemented this integrated clinical information system across 699 health facilities of Indian Railways across India for improved hospital administration and patient healthcare.

**National Optical Fiber Network (NOFN):** Democratizing Information through Broadband to Panchayats. BBNL has allotted 11 states comprising of 36,000 panchayats to RailTel which includes the states of Gujarat, Daman & Diu, Dadar & Nagar Haveli in West, Tamil Nadu and Puducherry in South and Meghalaya, Mizoram, Tripura, Arunachal Pradesh, Manipur, Nagaland in North-East.

**NE-I and NE-II under USOF:** The program envisages to lay OFC cable (at least 24 F underground) and provide minimum 2.5 Gbps bandwidth capacity upgradeable up to 10 Gbps.

**National Knowledge Network:** National Knowledge Network (NKN) envisages connecting all higher centres of learning and research by bringing together all stakeholders from science, technology, higher education, healthcare, agriculture and governance to a common platform. RailTel have been selected as one of the implementing partner of the network by providing high capacity bandwidth pipes for the NKN project.

**Enterprise Specific IT & ITES projects:** RailTel has implemented numerous Telecom & IT related projects in the country for various customers across the spectrum incl. Govt/PSU, Enterprises Scope of Work.



## **2. Invitation of Bids**

### **Project Objective**

RailTel is planning to participate in a EoI Floated by Department of Information Technology (DOIT) Government of Goa for Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa vide EoI Reference No: 11/5/DOIT/2022-23/GBBN2.0/845 Dated. 29.08.2022.

Through this EoI RailTel intends to select an Implementation Agency for Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa.

Further, the solution received in this EoI would hold good for deployment of various components irrespective of the finalized locations. At this juncture, end customer of RailTel ie DOIT Goa has floated EoI for technical proposal from interested parties. However RailTel through its EoI (RCIL/WR/MUMBAI/Mktg/22-23/06 Dt: 03.10.2022) intends to shortlist and engage a suitable consortium partner, from its empaneled BA partners, for the purpose of participation in end customers EoI floated and RFP as well which will be floated subsequently by DOIT Goa.

### **Bid Document Notice**

- Bidder agencies are advised to study this EoI document and subsequent references of RailTel's client (DOIT Goa) carefully before submitting their bids in response to the Bid Notice. Submission of a bid 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.
- This bid document is not transferable.
- Bidder (authorized signatory) shall submit their offer through packet encompassing complete technical (including prequalification documents) solution.

The Bid Inviting Authority, of RailTel invites the bidders to submit their technical proposals for the project of Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa in accordance with conditions and manner prescribed in this EoI and subsequent references.

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### **3. Prequalification, Technical Criteria and Instructions to Bidders (ITB)**

#### **Prequalification criteria**

The qualification criteria laid within this document shall be met by the bidder, as a Single Firm. A bidder who submits more than one EoI shall be summarily disqualified. The 'Bidder', shall be primarily accountable for the supply, implementation, testing and maintenance of the entire scope of the project.

<b>Sr No</b>	<b>Qualification Criteria</b>	<b>Documentary Evidence</b>
1.	The bidder should be a company registered under Indian Companies Act, 1956 and 2013 or a Partnership Firm registered under Indian Partnership Act, 1932 or a Proprietorship firm or Limited Liability Partnership Firm under Limited Liability Partnership Firm Act 2008.	Copy of Certificate of Incorporation signed by Authorized Signatory of the Bidder/ certified deed of partnership
2.	The Bidder or its parent firm should have cumulative annual turnover of at least INR 500 Crores over the last five financial years (i.e. 2017-18, 2018-19, 2019-20, 2020-21, 2021-2022)	Audited Profit & Loss Statements for last five financial years (2017-18, 2018-19, 2019-20, 2020-21, 2021-2022) from the certified chartered accountant clearly stating average turnover.
3.	Bidder should have positive net worth as on 31st March 2022.	Certificate from the Chartered Accountant clearly stating the net worth.
4.	The Bidder should have executed or currently executing project/s of below mentioned value in OFC cable laying and associated works in the last five financial years (i.e. 2017-18, 2018-19, 2019-20, 2020-21, 2021-2022) in India <b>1. At least one project with a value of Rs. 500 Cr OR</b> <b>2. At least two projects with a value of Rs. 250 Cr OR</b> <b>3. At least three projects with a value of Rs. 175 Cr</b> <i>(One project does not imply one PO. A single project can have multiple POs)</i>	Copy of Work Order and/or Work Completion certificate of the project from respective client clearly stating the scope, current status (percentage completion) and the contact details of the authority.
5.	The bidder must have experience in laying (underground/aerial) of Optical Fibre Cable network of minimum 20000 Km	Copy of Work Order and/or Work Completion certificate

Sr No	Qualification Criteria	Documentary Evidence
6.	The sole bidder should not be insolvent, in receivership or bankrupt as on the date of bid submission.	Self-declaration to be submitted on bidders letter head.
7.	The Bidder should have valid documentary proof of GST registration number and PAN Card.	Copy of GST registration number and PAN card
8.	The Bidder should not have been blacklisted by any Central/State Government Organization or Department in India at the time of submission of the bid.	Declaration by the Bidder as per format given in the bid document
9.	The Bidder should have valid ISO 9001:2008/ ISO 9001:2015 certification for Quality Management System which should be valid as on bid submission date.	Copy of Certificate
10.	The Bidder should have minimum CMMI Level 3 certification	Copy of Certificate

#### Technical Criteria

Sr No	Qualification Criteria	Documents required and Marking System
1.	The Bidder or its parent firm should have cumulative annual turnover of at least INR 250 Crores over the last five financial years (i.e. 2017-18, 2018-19, 2019-20, 2020-21, 2021-2022)	Audited Profit & Loss Statements for last five financial years (2017-18, 2018-19, 2019-20, 2020-21, 2021-2022) from the certified chartered accountant clearly stating average turnover. Cumulative Revenue: 250 Cr – 10 Marks 350 Cr – 15 Marks 500 Cr – 25 Marks
2.	The Bidder should have executed or currently executing project/s of below mentioned value in OFC cable laying and associated works in the last five financial years (i.e. 2017-18, 2018-19, 2019-20, 2020-21, 2021-2022) in India  1. At least one project with a value of Rs. 500 Cr OR 2. At least two projects with a value of Rs. 250 Cr OR 3. At least three projects with a value of Rs. 175 Cr	Copy of Work Order and/or Work Completion certificate of the project from respective client clearly stating the scope, current status (percentage completion) and the contact details of the authority. Number of Projects: 3 Projects of 175 Cr – 10 Marks 2 Projects of 250 Cr – 15 Marks 1 Project of 500 Cr – 25 Marks



	<i>(One project does not imply one PO. A single project can have multiple POs)</i>	
3.	The bidder must have experience in laying (underground/aerial) of Optical Fibre Cable network of minimum 20000 Km	Copy of Work Order and/or Work Completion certificate Route Km of OFC laying: 20000 Km – 10 Marks 30000 Km – 15 Marks 40000 Km – 25 Marks
4.	The Bidder should have valid ISO 9001:2008/ ISO 9001:2015 certification for Quality Management System which should be valid as on bid submission date.	Copy of Certificate Certificate: 9001:2008 – 5 Marks 9001:2015 – 10 Marks
5.	The Bidder should have minimum CMMI Level 3 certification	Copy of Certificate Certificate: CMMI Level 3 – 5 Marks CMMI Level 4 – 10 Marks CMMI Level 5 – 15 Marks

**Note:** Minimum passing score will be 75 Marks.

#### **Instructions to Bidders (ITB)**

<b>Sr No</b>	<b>Information</b>	<b>Details</b>
<b>A. Introduction</b>		
1.	Project Name	Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa
2.	EoI Reference No	RCIL/WR/MUMBAI/Mktg/22-23/06
3.	Bid Type	Limited EoI (for empaneled partners only)
4.	EoI Fees (Non-Refundable)	INR 8,475 + 18% GST to be Paid by RTGS/NEFT/Net Banking
5.	Earnest Money Deposit (EMD)	Not Applicable for RailTel's EoI however as this arrangement is for finalization of consortium partner for implementation of the work as outlined in DOIT Goa's EoI and subsequent RFP. Therefore selected consortium partner/partners will need to submit the EMD back to back as per DOIT Goa's RFP as and when intimated by RailTel.
6.	EoI Fees Submission Due Date & Time	06.10.2022 up to 12.00Hrs
7.	Bank Details of RailTel for the EoI Fees & EMD to be submitted	<b>Account Name:</b> RailTel WR Collection Account

	Online	<b>Bank Name:</b> Union Bank of India <b>Branch Name:</b> Mahalaxmi Branch <b>Account Number:</b> 317801010036605 <b>IFSC Code:</b> UBIN0531782 <b>MICR Code:</b> 400026031
8.	Performance Bank Guarantee as Performance Security	In accordance and back-to-back with the RFP document that may/may not be floated of DOIT Goa. To be issued within timeframes intimated by RailTel.
<b>B. Preparation of Bids</b>		
9.	Language of Bid	English
10.	Bid Validity Period	120 Calendar Days from the Date of Opening of Bid or back to back whichever is later.
11.	Performance Security Validity Period	Valid upto the entire contract period including defect liability period or payment of final bill whichever is later
<b>C. Bid Presentation</b>		
12.	Last date for submission of written queries for clarifications	04.10.2022 up to 15.00Hrs
13.	Query Submission	To be submitted via e-mail only. Kindly refer EoI notice for E-mail Address.
14.	Contact Person for clarification of Queries	Deputy General Manager/Marketing RailTel Corporation of India Ltd Western Railway Microwave Complex Senapati Bapat Marg, Near Railway Sports Ground, Mahalaxmi, Mumbai – 400013
15.	Contact Information	<b>Contact No:</b> +91-9004444124 <b>E-mail:</b> viplovnishra@railtelindia.com
16.	Last date (deadline) for receipt of proposals in response to EoI notice	06.10.2022 up to 12.00 Hrs <b>E-Mail Address for Bid Submission:</b> eoi.wr@railtelindia.com
17.	Place, Time and Date of opening of Technical proposals received in response to the EoI notice	06.10.2022 at 12.30 Hrs <b>Address for Technical Opening:</b> RailTel Corporation of India Ltd Western Railway Microwave Complex Senapati Bapat Marg, Near Railway Sports Ground, Mahalaxmi, Mumbai – 400013
18.	Signing of Consortium Agreement by RailTel and shortlisted partner	06.10.2022 at 12.30 Hrs
<b>D. Evaluation of Bids and Awarding of Contract</b>		
20.	LOI Placement	Will be sent through E-Mail to winning party only

21.	Signing of Contract Agreement	30 days after placement of LOI
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### **Bid Preparation Cost**

The Bidder is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in the conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of bid, in providing any additional information required by RailTel to facilitate the evaluation process, and in negotiating a definitive Contract or all such activities related to the bid process. RailTel will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

This bid does not commit RailTel to award a contract. Further, no reimbursable cost may be incurred in anticipation of award. All materials submitted by the Bidder shall become the property of RailTel/ Stakeholders/ Partners/ Patrons and may be returned at its sole discretion.

### **Amendment of Bid Document**

At any time before the deadline for submission of bids, RailTel, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the bid document by an amendment. All the amendments made in the document would be informed to all the participating bidders through email. RailTel also reserves the rights to amend the dates mentioned in this bid for bid process. It will be assumed that the amendments have been taken into account by the Bidder in its bid. In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, RailTel may, at its discretion, extend the last date for the receipt of Bids.

### **Rights to Terminate the Process**

RailTel may terminate the bid process at any time and without assigning any reason. RailTel makes no commitments, express or implied, that this process will result in a business transaction with anyone.

This bid document does not constitute an offer by RailTel. The Bidder's participation in this process may result in RailTel selecting the Bidder to engage in further discussions and negotiations towards execution of a contract. The commencement of such negotiations does not, however, signify a commitment by RailTel to execute a contract or to continue negotiations. RailTel may terminate negotiations at any time without assigning any reason.

### **Earnest Money Deposit (EMD) and Refund**

EMD is to be submitted as per ITB A Pt 5. EMD can be submitted through RTGS/NEFT/Net Banking on or before the deadline mentioned. In case the selected BA fails to submit EMD as mentioned above then RailTel reserves the right to reject the bid without providing opportunity for any further correspondence to the Bidder concerned.

The EMD shall be denominated in Indian Rupees only. No interest shall be paid by RailTel towards the deposited EMD.

The EMD may be forfeited in any of the following cases:

1. If a Bidder withdraws its bid or increases its quoted prices during the period of bid validity or its extended period, if any

2. In the case of a successful Bidder, if the Bidder fails to sign the Contract or to furnish Performance Bank Guarantee within specified time in accordance with the format given in this bid document
3. During the bid process, if a Bidder indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization
4. During the bid process, if any information is found wrong / manipulated / hidden in the bid.

The decision of RailTel regarding forfeiture of the EMD and rejection of bid shall be final and shall not be called upon question under any circumstances. Unsuccessful bidder's EMD shall be returned to the unsuccessful bidder within 120 days from the date of opening of the Commercial bid. EMD of Successful bidder will be returned after the award of contract and submission of the performance Bank Guarantee and compliance & completion of all contractual formalities within specified time.

**Language of Bids**

The Application and all related correspondence and documents in relation to the Bidding Process shall be in English language. Supporting documents and printed literature furnished by the Applicant with the Application may be in any other language provided that they are accompanied by translations of all the pertinent passages in the English language, duly authenticated and certified by the Applicant. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the Application, the English language translation shall prevail.



### Documents comprising of Bids

Below table is provided as the guideline for submitting various important documents along with the bid. E-Mail subject will have EoI Reference No and description of EoI as subject line along with Company Name. It will contain two file attachments with headings Packet A containing respective documents as mentioned in below table.

Sr No	Type of Envelope	Documents to be submitted
01	Pre-Qualification & Technical Bid Folder (Packet A)	<ul style="list-style-type: none"><li>• Cover Letter</li><li>• Board Resolution authorizing the Bidder to sign/ execute the bid as a binding document and also execute all relevant agreements forming part of bid or Power of Attorney executed by the Bidder in favor of the Principal Officer or the duly Authorized Representative, certifying him/her as an authorized signatory for the purpose of this bid(If not submitted would result in summary rejection of the offer)</li><li>• Bidder's Particulars as per specified format</li><li>• All the documentary evidence required as per pre-qualification criteria mentioned in 'Pre-Qualification Criteria' and 'Technical Criteria' section of this bid</li><li>• Declaration cum Indemnity Bond</li><li>• Valid proofs of EoI Fees Submission (Snapshots of Bank Statement indicating Payment of the same)</li><li>• Technical Bid in the format specified</li><li>• Project Details</li><li>• Other Documents (as per requirements of the bid)</li><li>• Complete Technical Solution along with presentation</li></ul>

Bidders shall furnish the required information on their Pre-Qualification & technical bid in enclosed formats only. Any deviations in format may make the bid liable for rejection.

### Withdrawal of Bids

A Bidder wishing to withdraw its bid shall notify to RailTel by e-mail prior to the deadline prescribed for bid submission. The notice of withdrawal shall be addressed to RailTel at the address named in the Bid Data Sheet, and bear the Contract name, the <Title> and < Bid No.>, and the words "Bid Withdrawal Notice." Bid withdrawal notices received after the bid submission deadline will be ignored, and the submitted bid will be deemed to be a valid submitted bid.

No bid can be withdrawn in the interval between the bid submission deadline and the expiration of the bid validity period specified in the Bid Data Sheet. Withdrawal of a bid during this interval may result in the forfeiture of the Bidder's EMD.

### Evaluation Process

The evaluation process of the bid proposed to be adopted by RailTel is indicated in



this section. The purpose of this section is to provide the Bidder an idea of the evaluation process that RailTel may adopt.

RailTel shall appoint a Bid Evaluation Committee (BEC) to scrutinize and evaluate the technical bid received. The BEC will examine the Bids to determine whether they are complete, responsive and whether the bid format conforms to the bid requirements. RailTel may waive any informality or non-conformity in a bid which does not constitute a material deviation according to RailTel.

Any attempt by a bidder to influence the bid evaluation process may result in the rejection of Bid and forfeiture of EMD.

### **Evaluation of Bids**

1. Consortium is not permitted.
2. Sub-contracting is not permitted. However, the Bidder shall seek prior approval from RailTel for sub-contracting any work, if not already specified in the bid. Such sub-contracting shall not relieve the Bidder from any liability or obligation under the Contract. If approved, however the Bidder shall be solely responsible for the work carried out by subcontracting under the contract.
3. The Pre-Qualification & Technical stage will be evaluated as per the evaluation criteria in this clause by the Bid Evaluation Committee (BEC). The Financial Bids of only those Bidders will be requested, who are finalized by scoring the highest score in the Technical Criteria. Minimum passing score of Technical criteria is 75 marks.
4. The BEC may require verbal/written clarifications from the Bidders to clarify ambiguities and uncertainties arising out of the evaluation of the Bid documents (to be stated precisely as it should be in RailTel's interest).
5. RailTel reserves the right to further negotiate with the shortlisted BA post the Price Opening.

### **Opening of Technical Bid**

1. RailTel shall open the Technical Bids in public, in the presence of Bidders' designated representatives and anyone who chooses to attend, at the address, and at the date and time specified.
2. Only bids that are opened and read out at the bid opening and whose EoI Fees & EMD has been paid shall be considered further.
3. All the bids shall be opened one at a time, reading out the name of the Bidder, submission of EoI Fees, and any other details as RailTel may consider appropriate.
4. RailTel shall prepare a record of the bid opening that shall include, at a minimum: the name of the Bidder and the presence or absence of Fees. The Bidders' representatives who are present shall be requested to sign the attendance sheet.
5. Authorization letter in the name of the person attending bid opening meeting needs to be submitted on the letterhead of the Bidder during bid opening.
6. Once the bids are opened each bid will be checked for pre-qualification and technical criteria along with Technical solution.

### **Opening of Commercial Bid**

1. RailTel shall prepare a record of the bid opening that shall include, at a minimum: the



name of the Bidder and the bid Price, and any other details as RailTel may consider appropriate. The Bidders' representatives who are present shall be requested to sign the attendance sheet.

2. Authorization letter in the name of the person attending bid opening needs to be submitted on the letterhead of the Bidder during bid opening.
3. The Commercial Bids will be evaluated by RailTel for completeness and accuracy.

#### **Rights to Accept/Reject any or all Bids**

1. Notwithstanding anything contained in this EoI, RailTel reserves the right to accept or reject any Application and to annul the Bidding Process and reject all Applications/ Bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefore. In the event that the Authority rejects or annuls all the Bids, it may, in its discretion, invite all eligible Bidders to submit fresh Bids hereunder.
2. RailTel reserves the right to reject any Application and/ or Bid if:
  - a. at any time, a misrepresentation is made or uncovered, or
  - b. the Applicant does not provide, within the time specified by the Authority, the supplemental information sought by the Authority for evaluation of the Application.
3. In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof including the concession thereby granted by RailTel, that one or more of the pre-qualification conditions have not been met by the Bidder, or the Bidder has made any misrepresentation or has given any incorrect or false information, the Bidder shall be disqualified forthwith if not yet appointed as the Successful Bidder either by issue of the LOA (Letter of Approval) or entering into of the Agreement, and if the Bidder has already been issued the LOA or has entered into the Concession Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this EoI, be liable to be terminated, by a communication in writing by RailTel to the Bidder, without Bidder being liable in any manner whatsoever to the Bidder and without prejudice to any other right or remedy which RailTel may have under this EoI, the Bidding Documents, the Concession Agreement or under applicable law. RailTel reserves the right to verify all statements, information and documents submitted by the Bidder in response to the EoI. Any such verification or lack of such verification by RailTel shall not relieve Bidder of its obligations or liabilities hereunder nor will it affect any rights of RailTel there under.
4. The bid shall be rejected if the bidder-
  - a. Stipulates the validity period less than 120 days.
  - b. Stipulates own condition/conditions.

#### **Amendment of Bid Document**

At any time prior to the deadline for submission of Application, RailTel may, for any reason, whether at its own initiative or in response to clarifications requested by any Bidder, modify the EoI by the issuance of Addendum. Any Addendum thus issued will be sent in

writing/ Fax/ Email to all those to whom EoI is issued by RailTel. In order to afford the Bidder a reasonable time for taking an Addendum into account, or for any other reason, RailTel may, in its sole discretion, extend the Submission Due Date.

### **Notifications of awards and Signing of Contract**

Prior to the expiration of the period of bid validity, the Bidder will be notified in writing or by FAX/email that their bid has been accepted. At the time RailTel notifies the successful Bidder that its bid has been accepted, RailTel will send the Bidders the proforma for Contract, incorporating all clauses/agreements between the parties. The successful Bidder shall sign and date the Contract and return it to RailTel. Draft Format of the contract has been included in the bid document.

### **Performance Bank Guarantee**

The Bidder shall at his own expense, deposit with RailTel, an unconditional and irrevocable Performance Bank Guarantee (PBG) from nationalized banks as per the format given in this bid, payable on demand, for the due performance and fulfillment of the contract by the Bidder.

This Performance Bank Guarantee will be submitted within 30 days of the notification of award of the contract/ Letter of Acceptance (LOA) issuance whichever is earlier. If PBG is not submitted within this time frame a delayed PBG penalty will be attracted. Post 30 days and upto 60 days from date of notification of award of the contract/ Letter of Acceptance (LOA) issuance a penalty at 15% per annum interest of LOA amount will be levied as delayed PBG penalty and this penalty will be deducted from the Invoices & EMD of the Bidder. After these 60 days if PBG is not submitted then it will be assumed that the Bidder is not interested in submitting PBG and the Amount of PBG along with the delayed PBG penalty calculated will be retained from Invoices & EMD of the Bidder. Non submission of PBG can also lead to cancellation of contract and the decision with respect to whether, to retain the PBG Amount and penalty from Invoices & EMD or cancellation of contract, will be at the sole discretion of RailTel. In the event of cancellation of contract EMD will be forfeited. If PBG is retained from Invoices & EMD then the PBG Amount only and not the penalty attracted will be paid to the Bidder in such a case post the contract period plus three months(expected PBG validity date) are over after deducting any applicable deductions (eg: Poor service, etc).

This Performance Bank Guarantee will be in accordance and back to back with the document referred in scope of work (DOIT RFP that will be subsequently floated at a later stage). All charges whatsoever such as premium, commission, etc. with respect to the Performance Bank Guarantee shall be borne by the Bidder. The Performance Bank Guarantee format can be found in this document.

The Performance Bank Guarantee may be discharged/ returned by RailTel upon being satisfied that there has been due performance of the obligations of the Bidder under the contract. However, no interest shall be payable on the Performance Bank Guarantee.

In the event of the Bidder being unable to service the contract for whatever reason, RailTel would invoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of RailTel under the Contract in the matter, the proceeds of the PBG shall be

payable to RailTel as compensation for any loss resulting from the Bidder's failure to complete its obligations under the Contract. RailTel shall notify the Bidder in writing of the exercise of its right to receive such compensation within 30 days, indicating the contractual obligation(s) for which the Bidder is in default.

The 30days' notice period shall be considered as the 'Cure Period' to facilitate the Implementation Agency to cure the breach. The PBG shall be invoked only if the breach is solely attributable to the bidder and the bidder fails to rectify the breach within the 'Cure Period'.

RailTel shall also be entitled to make recoveries from the Bidder's bills, performance bank guarantee, or from any other amount due to the Bidder, the equivalent value of any payment made to the Bidder due to inadvertence, error, collusion, misconstruction or misstatement.

#### **Failure to agree with the Terms and Conditions of the Bid/Contract**

Failure of the Bidder to agree with the Terms and Conditions of the bid/Contract shall constitute sufficient grounds for the annulment of the award of contract, in which event the contract may be awarded to the next most responsive Bidder. In such a case, RailTel shall invoke the PBG of the most responsive Bidder and forfeit EMD.

#### **Terms and Conditions of the Bid**

Bidder is required to go through thoroughly the complete EoI document, for all the terms and conditions to be adhered by the successful Bidder during Project Implementation and Post implementation period.



#### **4. Scope of Work:**

##### **Project Objective**

RailTel wishes to engage an agency (referred to as “Service Provider”) for, Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa according to the requirements, specifications and bill of quantities in the bid document.

RailTel is planning to participate in a Tender Floated by Department of Information Technology (DOIT) Government of Goa for Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa vide EoI Reference No: 11/5/DOIT/2022-23/GBBN2.0/845 Dated. 29.08.2022.

##### **Summary of Scope**

Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa

##### **Proposed Scope of Work**

RailTel wishes to utilize the services of an Implementation Agency (hereafter referred to as “Implementation Agency”/“IA”/“Selected Agency”/“Vendor”/“Bidder”) for Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa. The project is envisaged to be implemented in a period as specified in the referred tender and any of its addendums/corrigendums/additional documents as encompassed in the tender. The Technical details of Scope encompassed may be referred in the DOIT Goa EoI, its addendums/corrigendum/ any other documents published by DOIT Goa issued vide Tender Reference No: 11/5/DOIT/2022-23/GBBN2.0/845 Dated. 29.08.2022.

**In case of any discrepancy or ambiguity in any clause / specification pertaining to scope of work area, the RFP released by end customer organization shall supersede and will be considered sacrosanct. (All associated clarifications, response to queries, revisions, addendum and corrigendum, associated prime service agreement (PSA/MSA/SLA also included.)**

**Special Note:** RailTel may retain some portion of the work mentioned in the end organization RFP, where RailTel has competence so that overall proposal becomes most winnable proposal.

## **5. Payment Terms, Timelines & SLA**

All the Payment Terms, Timelines and SLA will be back to back as per End Customer RFP document referred in Scope of Work. However following clauses override this EoI, its corrigendum and any other documents/its addendums/corrigendum referred in this EoI:

- 1) Payments will be processed post furnishing appropriate Invoices which are compliant as per statutory norms
- 2) Once RailTel receives payment from its DOIT Goa the Payments appropriately as per Invoices received will be processed and released after 45 days.
- 3) No payments will be made in Advance.





## **6. Annexure I: Instructions & Pre-Qualification Bid Formats**

### **Pre-Qualification Cover Letter**

**Date:** dd/mm/yyyy

To  
Deputy General Manager/ Marketing  
RailTel Corporation of India Ltd  
Western Railway Microwave Complex  
Senapati Bapat Marg, Near Railway Sports Ground  
Mahalaxmi, Mumbai – 400013

**Sub:** Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa

**Ref:** Bid No: <No> Dated <DD/MM/YYYY>

Dear Sir,

Having examined the EoI Document (and the referred documents/ clarification / corrigendum issued thereafter, if any), the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide the professional services as required and outlined in the Bid Document for Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa.

We attach hereto our responses to pre-qualification requirements and technical proposals as required by the Bid Document. We confirm that the information contained in these responses or any part thereof, including the exhibits, and other documents and instruments delivered or to be delivered to RailTel and its end customers, is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the department in its short-listing process.

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

We agree for unconditional acceptance of all the terms and conditions set out in the Bid Document (& referred Documents, subsequent clarification / addendums / corrigendums, if any) document and also agree to abide by this EoI response for a period of 120 days from the date fixed for bid opening. We hereby declare that in case the contract is awarded to us, we shall submit the contract performance guarantee bond in the form prescribed the Bid Document.

We agree that you are not bound to accept any EoI response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products/



services specified in the EoI response.

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

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone and Fax :

E-mail address :



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### Format to share Bidder's Particulars

Sr. No	Description	Details(to be filled by the responder to the Bid)
1.	Name of the company	
2.	Official address	
3.	Phone No. And Fax No.	
4.	Corporate Headquarters Address	
5.	Phone No. And Fax No.	
6.	Web Site Address	
7.	Details of Company's Registration (Please enclose copy of the company registration document)	
8.	Name of Registration Authority	
9.	Registration Number and Year of Registration	
11.	GST registration No.	
12.	Permanent Account Number (PAN)	
13.	Company's Revenue for last 5 years (Year wise)	
14.	Company's net worth for the last year (Year wise)	

Please submit the relevant proofs for all the details mentioned above along with your bid response.

#### Contact Details of officials for future correspondence regarding the bid process:

Details	Authorized Signatory	Secondary Contact
Name		
Title		
Company Address		
Phone		
Mobile		
Fax		
E-mail		

**Format for Declaration by the Bidder for not being Blacklisted / Debarred**

(On Stamp Paper of Rs 500/-)

**DECLARATION CUM-INDEMNITY BOND**

**Date:** dd/mm/yyyy

I, \_\_\_\_\_ of, \_\_\_\_\_ do hereby declared and undertake as under.

1. I declared that I have submitted certificates as required to the Authority at the time of registration of my firm / company \_\_\_\_\_ and there is no change in the contents of the certificates that are submitted at the time of registration.
2. I declared that I \_\_\_\_\_ in capacity as Manager / Director / Partners / Proprietors of \_\_\_\_\_ has not been charged with any prohibitory and /or penal action such as demotion, suspension, black listing / de- registration or any other action under the law by any Government and / or Semi Government and/ or Government Undertaking.
3. I declared that, I have perused and examined the EoI document including addendum, condition of contract, specification, drawings, bill of quantity etc. forming part of EoI and accordingly, I submit my offer to execute the work as per EoI documents at the rates quoted by me in capacity as \_\_\_\_\_ of \_\_\_\_\_.
4. I further declared that if, I am allotted the work and I failed to carry out the allotted work in accordance with the terms and conditions and within the time prescribed and specified, RailTel is entitled to carry out the work allotted to me by any other means at my risk and cost, at any stage of the contract.
5. I also declared that I will not claim any charge / damages / compensation for non-availability of site for the contract work at any time.
6. I Indemnify RailTel and its stakeholders/ partners/ patrons for any Damages, Loss, or Injury, any legal suit, proceeding or legal action whatsoever that may be caused at any time by me or any other staff of \_\_\_\_\_ company, for the work undertaken and all such damage, damages, injury or loss, legal suit, legal action, I shall be solely responsible in individual as well as official capacity and such loss, damages, injury shall be made good and/ or as the case may be shall be paid immediately by me / Company to the satisfaction of the RailTel and its stakeholders/ partners/ patrons.

Dated \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_

Identified by me

Before me

<Advocate>

## **7. Annexure II: Instructions & Technical Bid Document Formats**

### **General Instructions for the Technical Bid**

Bidders have to submit a very structured and organized technical bid, which will be analyzed by the Technical Evaluation Committee for different compliances with regards to the requirements of the project.

Bidder is expected to divide its Bid in following sections / documents:

#### **A. Bidder's Competence to execute the project**

This document should bring about the capability of the firm to execute this project. Some of the required documents are as follows:

- Financial Capability of the Bidder and supporting documents
- Experience of Bidder of implementing similar/same applications or in supply of similar/same hardware components
- Quality of similar domain experts available with the firm

#### **B. Proposed Team for the Project**

Bidder may propose different people for different skill-sets required and different responsibilities (during Project Implementation and Post-Implementation). Following documentation is expected in this section:

- Overall Project Team (for both Project Implementation and Support phases)
- Escalation Chart for the entire Project Duration
- Summary Table giving Qualification, Experiences, Certifications, Relevance

#### **C. Technical Solution Proposed for the Project**

Broad areas to be covered in the Technical Solution documentation are given below:

- Bill of Material: This document should give details of all the proposed components, without specifying the costs. Please note that the bid shall get disqualified if Bidder gives price details in the technical document.
- Describe the proposed Technical Solution in a structured manner. Following should be captured in the same:
  - Clear articulation and description of the design and technical solution and various components
  - Reasoning for selection of the proposed technology over other options.
  - Extent of compliance to technical requirements specified in the scope of work
- Strength of the Bidder to provide services including examples or case-studies of similar solutions deployed for other clients
- Clearly articulate the Strategy and Approach and Methodology for Installation, Configuration and Implementation of the project.
- Approach and Methodology for Management of SLA Requirements specified in the bid. Bidder is required to clearly articulate how the SLA requirements would be adhered.
- Detailed Project Plan with timelines, milestones etc. for supply, installation and commissioning of the various project components.

### Format to share Project Details

<b>Name of the Project:</b>	
<b>General Information</b>	
Client for which the project was executed	
Name of the client contact person(s)	
Designation of client contact person(s)	
Contact details of the client contact person(s)	
<b>Project Details</b>	
Description of the project	
Scope of work of the Bidder	
Deliverables of the Bidder	
Technologies used	
Current Status of the project	
<b>Other Details</b>	
Total cost of the project	
Total cost of the services provided by the Bidder	
Duration of the project (number of months, start date, completion date, current status)	
Other Relevant Information	
<b>Mandatory Supporting Documents:</b>	
Work order / Purchase order / Contract for the project/ Client Certificate giving present status of the project and view of the quality of services by the Bidder	

**Note:** The Bidder is required to use above format for all the projects referenced by the Bidder for the pre- qualification criteria and technical bid evaluation.

**8. Annexure III: Instructions & Commercial Bid Formats (To be submitted while requesting Commercial Proposal)**

**Commercial Bid Cover Letter**

**Date:** dd/mm/yyyy

To

Deputy General Manager/ Marketing

RailTel Corporation of India Ltd

Western Railway Microwave Complex

Senapati Bapat Marg, Near Railway Sports Ground

Mahalaxmi, Mumbai – 400013

**Sub:** Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa

**Ref:** BidNo:<No> Dated <DD/MM/YYYY>

Dear Sir,

We, the undersigned Bidders, having read and examined in detail all the bidding documents in respect of “Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa” do hereby propose to provide services as specified in the bid referred above.

**1. PRICE AND VALIDITY**

- All the prices mentioned in our bid are in accordance with the terms as specified in the bid documents. All the prices and other terms and conditions of this bid are valid for a period of 120 calendar days from the date of opening of the Bids and back to back as per scope of work whichever is later.
- We hereby confirm that our bid prices include all taxes. Taxes are quoted separately under relevant sections, as specified in the bid formats.
- We have studied the clause relating to Indian Income Tax and hereby declare that if any income tax, surcharge on Income Tax, Professional and any other Corporate Tax in altered under the law, we shall pay the same.

**2. UNIT RATES**

We have indicated in the relevant schedules enclosed, the unit rates for the purpose of payment as well as for price adjustment in case of any increase to / decrease from the scope of work under the contract.

**3. DEVIATIONS**

We declare that all the services shall be performed strictly in accordance with the bid documents and there are no deviations.

**4. QUALIFYING DATA**

We confirm having submitted the information as required by you in your Instruction to Bidders. In case you require any other further information/documentary proof in this regard before evaluation of our bid, we agree to furnish the same in time to your



satisfaction.

**5. BID PRICE**

We declare that our Bid Price is for the entire scope of the work as specified in the bid document. These prices are indicated in the subsequent sub-sections of this Section.

**6. CONTRACT PERFORMANCE GUARANTEE BOND**

We hereby declare that in case the contract is awarded to us, we shall submit the contract Performance Bank Guarantee in the form prescribed in the bid.

We hereby declare that our bid is made in good faith, without collusion or fraud and the information contained in the bid is true and correct to the best of our knowledge and belief.

We understand that our bid is binding on us and that you are not bound to accept a bid you receive. We confirm that no Technical deviations are attached here with this commercial offer.

Thanking you,

Yours faithfully,

(Signature of the Authorized Signatory)

Name:

Designation:

Seal:

Date:

Place:

Business Address:

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## **Commercial Bid Format and Instructions**

The Bidder has to quote the rate in the BoQ table. The price shall be inclusive of Goods & Services Tax as applicable under the relevant Laws of India.

BoQ Table will be as per formats specified in subsequent RFP floated by DOIT Goa including all of its addendums / corrigendums / additional documents as mentioned in Scope of Work.

### **Note:**

1. Bidder is required to do POC of the hardware during the technical evaluation or post Award of contract as per RailTel's discretion.
2. The Bidder will quote both for Implementation cost and the Operations and Maintenance cost.
3. RailTel to scale up and scale down resources based on requirements. Any line items may be removed from the scope based on RailTel's discretion.
4. All the prices are to be entered in Indian Rupees ONLY.
5. Prices indicated in the schedules shall be inclusive of all taxes, Levies, duties etc. It is mandatory to provide breakup of all Taxes, Duties and Levies wherever asked for.
6. During the payment stage, RailTel reserves the right to ask the Bidder to submit proof of payment against any of the taxes, duties, levies indicated.
7. The Bidder needs to account for all Out of Pocket expenses due to Boarding, Lodging and other related items. No additional/separate payment shall be made regarding the same.
8. For the purpose of evaluation of Commercial Bids, RailTel shall make appropriate assumptions to arrive at a common bid price for all the Bidders. This however shall have no co-relation with the Contract value or actual payment to be made to the Bidder.
9. The Contract Price shall be firm and not subject to any alteration.
10. The Bidder should be deemed to have satisfied itself as to the correctness and sufficiency of the contract price, which shall, except as otherwise provided for in the contract, cover all its obligations under the contract.
11. Please note invitation of price discovery rate for future requirements does not imply guarantee of any additional work or any increase in scope. The price discovery rates are being invited to meet any exigency requirements if a need emerges during the period of contract with respect to deployment of additional manpower resources.
12. Wherever present, the items mentioned as Lump Sum in above table will have quantity as 1. However, the bidder should consider the same as Lump Sum and submit the commercials.
13. No advance payment shall be made towards any activity

## **9. Annexure IV: Complete EoI Examination & Nil Deviation Certificate**

To  
Deputy General Manager/ Marketing  
RailTel Corporation of India Ltd  
Western Railway Microwave Complex  
Senapati Bapat Marg, Near Railway Sports Ground  
Mahalaxmi, Mumbai – 400013

**Sub:** Complete EoI Examination & Nil Deviation Certificate

**Ref:** RailTel EoI Number: \_\_\_\_\_ Dated: \_\_\_\_\_

Dear Sir,

We <Bidder Name> having completely examined the referred EoI, its corrigendum and any other documents/its addendums/corrigendum referred in this EoI, conclude that we have understood the Terms & Conditions of the EoI and its subsequent addendums & corrigendum (if any) and any other documents/its addendums/corrigendum referred in this EoI. We declare that we have sought all clarifications for the same from RailTel or its end customer for anything contained in this EoI & any other documents/its addendums/corrigendum referred in this EoI and have been satisfied with the clarifications to the fullest extent and there are no terms, clauses, conditions, etc which are ambiguous.

We also declare that there is no deviation from adhering to anything that is contained in this EoI and any other documents/its addendums/corrigendum referred in this EoI and that any deviation later raised by us shall lead to forfeiture of the Bid/Contract at complete discretion of RailTel.

Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone and Fax :  
E-mail address :

## **10. Annexure V: Back to Back Compliance Certificate**

To  
Deputy General Manager/ Marketing  
RailTel Corporation of India Ltd  
Western Railway Microwave Complex  
Senapati Bapat Marg, Near Railway Sports Ground  
Mahalaxmi, Mumbai – 400013

**Sub:** Complete back to back Compliance Certificate

**Ref:** 1) RailTel EoI Number: \_\_\_\_\_ Dated: \_\_\_\_\_  
2) DOIT Goa EoI Reference No: 11/5/DOIT/2022-23/GBBN2.0/845 Dated. 29.08.2022 and all of its corrigendums/addendums and subsequent RFP and its corrigendums/addendums

Dear Sir,

Considering reference 1 & 2 we would like to declare that we have read and understood RailTel's and DOIT Goa's EoI, its corrigendum and any other documents/its addendums/corrigendum published thoroughly. We would like to give you our back to back compliance for all the terms and conditions, clauses, timelines, deliverables and anything explicitly mentioned in RailTel's and DOIT Goa's EoI and subsequent RFP, any other documents/its addendums/corrigendum that are or will be published at a later stage by DOIT Goa.

Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone and Fax :  
E-mail address :

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## **11. Annexure VI: Draft Non-Disclosure Agreement**

(On Stamp Paper of Rs 500/-)

This Non-Disclosure Agreement (“Non-Disc”) is made and entered into \_\_\_\_\_ day of \_\_\_\_\_ month \_\_\_\_\_ year (effective date) by and between \_\_\_\_\_ (“Department”) and \_\_\_\_\_ (“Company”). Whereas, Department and Company have entered into an Agreement (“Agreement”) \_\_\_\_\_ effective \_\_\_\_\_ for \_\_\_\_\_ and

Whereas, each party desires to disclose to the other party certain information in oral or written form which is proprietary and confidential to the disclosing party, (“CONFIDENTIAL INFORMATION”).

NOW, THEREFORE, in consideration of the foregoing and the covenants and agreements contained herein, the parties agree as follows:

### **1. Definitions. As used herein:**

- a. The term “Confidential Information” shall include, without limitation, all information and materials, furnished by either Party to the other in connection with citizen/users/persons/customers data, products and/or services, including information transmitted in writing, orally, visually, (e.g. video terminal display) or on magnetic or optical media, and including all proprietary information, customer and prospect lists, trade secrets, trade names or proposed trade names, methods and procedures of operation, commercial or marketing plans, licensed document know-how, ideas, concepts, designs, drawings, flow charts, diagrams, quality manuals, checklists, guidelines, processes, formulae, source code materials, specifications, programs, software packages, codes and other intellectual property relating to the disclosing party’s data, computer database, products and/or services. Results of any tests, sample surveys, analytics, data mining exercises or usages etc. carried out by the receiving party in connection with the Department’s information including citizen/users/persons/customers personal or sensitive personal information as defined under any law for the time being in force shall also be considered Confidential Information.
- b. The term, “Department” shall include the officers, employees, agents, consultants, contractors and representatives of Department.
- c. The term, “Company” shall include the directors, officers, employees, agents, consultants, contractors and representatives of Company, including its applicable affiliates and subsidiary companies.

### **2. Protection of Confidential Information:** With respect to any Confidential Information disclosed to it or to which it has access, Company affirms that it shall:

- b. Use the Confidential Information as necessary only in connection with Project and in accordance with the terms and conditions contained herein;
- c. Maintain the Confidential Information in strict confidence and take all reasonable steps to enforce the confidentiality obligations imposed hereunder, but in no event take less care with the Confidential Information than the parties take to protect the



confidentiality of its own proprietary and confidential information and that of its clients;

- d. Not to make or retain copy of any commercial or marketing plans, citizen/users/persons/customers database, Bids developed by or originating from Department or any of the prospective clients of Department except as necessary, under prior written intimation from Department, in connection with the Project, and ensure that any such copy is immediately returned to Department even without express demand from Department to do so;
  - e. Not disclose or in any way assist or permit the disclosure of any Confidential Information to any other person or entity without the express written consent of the other party; and
  - f. Return to the other party, or destroy, at Department's discretion, any and all Confidential Information disclosed in a printed form or other permanent record, or in any other tangible form (including without limitation, all copies, notes, extracts, analyses, studies, summaries, records and reproductions thereof) immediately upon the earlier to occur of (i) expiration or termination of either party's engagement in the Project, or (ii) the request of the other party therefore.
  - g. Not to discuss with any member of public, media, press, any or any other person about the nature of arrangement entered between Department and Company or the nature of services to be provided by the Company to the Department.
- 3. Onus.** Company shall have the burden of proving that any disclosure or use inconsistent with the terms and conditions hereof falls within any of the foregoing exceptions.
- 4. Exceptions.** These restrictions as enumerated in section 1 of this Agreement shall not apply to any Confidential Information:
- a. Which is independently developed by Company or lawfully received from another source free of restriction and without breach of this Agreement; or
  - b. After it has become generally available to the public without breach of this Agreement by Company; or
  - c. Which at the time of disclosure to Company was known to such party free of restriction and evidenced by documentation in such party's possession; or
  - d. Which Department agrees in writing is free of such restrictions.
  - e. Which is received from a third party not subject to the obligation of confidentiality with respect to such Information;
- 5. Remedies.** Company acknowledges that
- (a) any actual or threatened disclosure or use of the Confidential Information by Company would be a breach of this agreement and may cause immediate and irreparable harm to Department;
  - (b) Company affirms that damages from such disclosure or use by it may be impossible to measure accurately; and
  - (c) injury sustained by Department may be impossible to calculate and remedy fully.
- Therefore, Company acknowledges that in the event of such a breach, Department shall be entitled to specific performance by Company of Company's obligations contained in this Agreement. In addition, Company shall indemnify Department of the actual and



liquidated damages which may be demanded by Department. Moreover, Department shall be entitled to recover all costs (including reasonable attorneys' fees) which it or they may incur in connection with defending its interests and enforcement of legal rights arising due to a breach of this agreement by Company.

- 6. Need to Know.** Company shall restrict disclosure of such Confidential Information to its employees and/or consultants with a need to know (and advise such employees of the obligations assumed herein), shall use the Confidential Information only for the purposes set forth in the Agreement, and shall not disclose such Confidential Information to any affiliates, subsidiaries, associates and/or third party without prior written approval of the disclosing party.
- 7. Intellectual Property Rights Protection.** No license to a party, under any trademark, patent, copyright, design right, mask work protection right, or any other intellectual property right is either granted or implied by the conveying of Confidential Information to such party.
- 8. No Conflict.** The parties represent and warrant that the performance of its obligations hereunder do not and shall not conflict with any other agreement or obligation of the respective parties to which they are a party or by which the respective parties are bound.
- 9. Authority.** The parties represent and warrant that they have all necessary authority and power to enter into this Agreement and perform their obligations hereunder.
- 10. Dispute Resolution.** If any difference or dispute arises between the Department and the Company in connection with the validity, interpretation, implementation or alleged breach of any provision of this Agreement, any such dispute shall be referred appropriately to RailTel/ stakeholders/ partners/ patrons
  - a. The arbitration proceedings shall be conducted in accordance with the (Indian) Arbitration and Conciliation Act, 1996 and amendments thereof.
  - b. The place of arbitration shall be Mumbai.
  - c. The arbitrator's award shall be substantiated in writing and binding on the parties.
  - d. The proceedings of arbitration shall be conducted in English language.
  - e. The arbitration proceedings shall be completed within a period of 180 days from the date of reference of the dispute to arbitration.
- 11. Governing Law.** This Agreement shall be interpreted in accordance with and governed by the substantive and procedural laws of India and the parties hereby consent to the exclusive jurisdiction of Courts and/or Forums situated at Mumbai, India only.
- 12. Entire Agreement.** This Agreement constitutes the entire understanding and agreement of the parties, and supersedes all previous or contemporaneous agreement or communications, both oral and written, representations and under standings among the parties with respect to the subject matter hereof.
- 13. Amendments.** No amendment, modification and/or discharge of this Agreement shall be valid or binding on the parties unless made in writing and signed on behalf of each of the parties by their respective duly authorized officers or representatives.
- 14. Binding Agreement.** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.
- 15. Severability.** It is the intent of the parties that in case any one or more of the provisions contained in this Agreement shall be held to be invalid or unenforceable in any respect,

such provision shall be modified to the extent necessary to render it, as modified, valid and enforceable under applicable laws, and such invalidity or unenforceability shall not affect the other provisions of this Agreement.

**16. Waiver.** If either party should waive any breach of any provision of this Agreement, it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision hereof.

**17. Survival.** Both parties agree that all of their obligations undertaken herein with respect to Confidential Information received pursuant to this Agreement shall survive till perpetuity even after any expiration or termination of this Agreement.

**18. Non-solicitation.** During the term of this Agreement and thereafter for a further period of two (2) years Company shall not solicit or attempt to solicit Department's employees and/or consultants, for the purpose of hiring/contract or to proceed to conduct operations/business similar to Department with any employee and/or consultant of the Department who has knowledge of the Confidential Information, without the prior written consent of Department. This section will survive irrespective of the fact whether there exists a commercial relationship between Company and Department.

**19. Term.** Subject to aforesaid section 17, this Agreement shall remain valid up to \_\_\_\_\_ years from the "effective date".

IN WITNESS HEREOF, and intending to be legally bound, the parties have executed this Agreement to make it effective from the date and year first written above.

For Department

Name:

Title:

WITNESSES:

1. \_\_\_\_\_

2. \_\_\_\_\_

For Company

Name:

Title:

WITNESSES:

1. \_\_\_\_\_

2. \_\_\_\_\_

## **12. Annexure VII: Performance Bank Guarantee Format**

(For a sum of in accordance and back to back with the document referred in scope of work)  
(Stamp Duty to be confirmed by RailTel in co-ordination with RailTel's Legal Department)

Ref. No. :  
Date :  
Bank Guarantee No. :

To  
<Insert complete postal address>

THIS INDENTURE made this <current date> day of< current Month> 2022, BETWEEN THE <Bank Name>, a Company incorporated and registered under the Indian companies act, 1913 and deemed to exist within the companies Act 1956, and governed by the Banking Regulation Act, 1949 and having its registered office at <Address>, and its corporate office at <Address>, India and having one of its Branch Office at <Mumbai Branch Office> (hereinafter referred to as "the Bank" which expression shall be deemed to includes its successors and assigns) of the first part and <Bidders Company Name> a company incorporated under the Indian Companies Act 1956 having its Registered Office at <Address>, Corporate Office at <Address> and its Regional Office at <Mumbai Office Address> (hereinafter referred to as 'the Contractor/s') of the second part and RailTel Corporation of India Ltd (hereinafter referred to as 'RailTel') of the third part WHEREAS the Contractor/s have submitted to RailTel EoI/Quotation for the execution of Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa Dated <Date of EoI> and the terms of such EoI/Tender/Quotation/contract require that the Contractor/s shall deposit with RailTel as the security a sum of Rs. <Amount>/- (in figures and words<in words> only Including all Taxes and contingencies and any other costs mentioned as per LOI and RailTel Terms)AND WHEREAS if and when any such EoI/Tender/Quotation is accepted by RailTel the contract to be entered into in furtherance thereof by the Contractor/s will provide that such deposit shall remain with and be appropriated by RailTel towards the security deposit to be taken under the contract and be redeemable by the Contractors/ if they shall duly and faithfully carry out the terms and provision of such contract and shall duly satisfy all claims properly chargeable against them there under AND WHEREAS the Contractor/s are constituents of the Bank and in order to facilitate the keeping of the accounts of the Contractor/s, the Bank with the consent and concurrence of the Contractor/s has requested RailTel to accept the Guarantee of the Bank hereinafter contained, in place of the Contractor/s depositing with RailTel the said sum as security as aforesaid AND WHERE AS accordingly <Bank Name>has agreed to accept claim from RailTel upon demand in writing, whenever required by him, from time to time upto <Date (contract period + 3 months)> so to do, a sum not exceeding in the whole Rs. <Amount>/- (in figures and words <in words> only incl of Tax) under the terms of the said EoI/Tender/Quotation and/ or the Contract. The Bank Guarantee is valid up to<Date (contract period + 3 months)>.

Notwithstanding anything what has been stated above, <Bank Name> liability under the above guarantee is restricted to Rs. <Amount>/- (in figures and words <in words>only incl of Tax) and guarantee shall remain in force up to <Date (contract period + 3 months)> unless the demand or claim under this guarantee is made on us and we receive in writing on or before <Date (contract period + 3 months)> all your rights under the above guarantee shall be forfeited and we shall be released from all liabilities under the guarantee thereafter whether or not the original bank guarantee is returned to us.

In witness whereof the Bank, through its authorized Officer, has set its hand and stamp on this ..... day of 2022 at .....

For <Bank Name>

For<Company Name>

Authorized Signatories

EMP No. \_\_\_\_\_

Authorized Signatories

EMP No. \_\_\_\_\_

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### **13. Annexure VIII: Contract Agreement**

(To be executed on Rs. 500/- Stamp Paper post award of Contract within 30 days of placement of LOI)

#### **1. Overview:**

The document below Dated ..... describes the Agreement between the RailTel Corporation of India Limited a company having its registered office at Plate-A, 6th Floor, Office Block Tower-2, East Kidwai Nagar, New Delhi-110023 and Regional Office at Western Railway Microwave Complex, Senapati Bapat Marg, Mahalaxmi, Mumbai – 400013 called herein after “BUYER/ PURCHASER/ RailTel” and <Company Name> having its office at <Address> as “SELLER/ SERVICE PROVIDER”. It includes the critical success factors and performance indicators to help evaluate Seller’s effort in providing the desired results.

#### **2. Scope of Work:**

The Scope of Work includes Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa as per Supply Order/ LOI issued vide Buyer’s letter No.<LOI No> dt <Dated>.

#### **3. Term of the Contract Agreement**

The term of this Contract Agreement shall be a period of <specify period of contract> years from the date of execution of this Agreement. This includes the time required for Implementation and Operations and Maintenance Support.

In the event of implementation period getting extended beyond the stipulated time, for reasons not attributable to the Service Provider, RailTel reserves the right to extend the term of the Agreement by a suitable period without mutual consensus to allow validity of contract from the date of operational acceptance.

#### **4. Payment, Taxes & Claims**

Under no circumstances whatever the Service Provider shall be entitled to any compensation from RailTel on any account unless the Service Provider shall have submitted a claim in writing to RailTel within 30 days of the case of such claim occurring.



It is agreed that the RailTel or its representative or Officer shall not be liable to pay any interest or damage with respect of any moneys or balance which may be in its or its representative's or officer's hands owing to any dispute or difference or claim or misunderstanding between the RailTel or its representative or Officer on the one hand and the Buyer on the other, or with respect to any delay on the part of the RailTel or representative or Officers in making periodical or final payments or in any other respect whatever.

### **Variations**

RailTel shall, having regard to the scope of the Works and the sanctioned estimated cost, have power to order, in writing, Variations within the scope of the Works RailTel considers necessary or advisable during the progress of the Contract. Such Variations shall form part of the Contract and the Service Provider shall carry them out and include them in updated Programmes produced by the Service Provider. Written confirmations of such variation of orders will be given.

### **Payment for Variations**

The rates for Variation items as specified in the Bill of Quantities will be considered as base and the Service Provider shall carry out such work at the same rate.

## **5. Proprietary data**

All documents and other information supplied by the Authority or submitted by a Service Provider to RailTel Authority shall remain or become the property of RailTel/ Stakeholders/ Partners/ Patrons. Service Provider are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Application. RailTel Authority will not return any Application or any information provided along therewith.

## **6. Taxes**

G.S.T. and other state levies/ cess which are not subsumed under GST will be applicable. It is clearly understood that RailTel will not bear any additional liability towards payment of any Taxes & Duties.

Rates accepted by RailTel shall hold good till completion of work and no additional individual claim shall be admissible on account of fluctuations in market rates, increase in taxes/ any other levies/ tolls etc. Except that payment/ recovery for overall market situation shall be made as per price variation.

## **7. Publicity**

Any publicity by the Service Provider in which the name of RailTel is to be used should be done with the explicit written permission of Executive Director/ Western Region of RailTel Corporation of India Ltd.

## **8. Force Majeure**

The Service Provider shall not be liable for forfeiture of its Performance Guarantee, imposition of liquidated damages or termination for default, if and to the extent that its delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure. For purposes of this Clause, “Force Majeure” means an event beyond the “reasonable” control of the Service Provider, not involving the Service Provider’s fault or negligence and not foreseeable. Unforeseen circumstances or causes beyond the control of the Implementation Agency include but are not limited to acts of God, war, riot, acts of civil or military authorities, fire, floods, accidents, terrorist activity, strikes or shortages of transportation facilities, fuel, energy, labor or material.

For the Service Provider to take benefit of this clause it is a condition precedent that the Implementation Agency must promptly notify RailTel, in writing of such conditions and the cause thereof within five calendar days of the arising of the Force Majeure event. RailTel, or the consultant / committee appointed by RailTel shall study the submission of the Service Provider and inform whether the situation can be qualified one of Force Majeure. Unless otherwise directed by RailTel in writing, the Service Provider shall continue to perform its obligations under the resultant Agreement as far as it is reasonably practical, and shall seek all reasonable alternative means for performance of services not prevented by the existence of a Force Majeure event.

In the event of delay in performance attributable to the presence of a force majeure event, the time for performance shall be extended by a period(s) equivalent to the duration of such delay. If the duration of delay continues beyond a period of 30 days, RailTel and the Service Provider shall hold consultations with each other in an endeavor to find a solution to the problem.

Notwithstanding anything to the contrary mentioned above, the decision of RailTel shall be final and binding on the Service Provider.

## **9. Arbitration & Governing Laws:**

Any dispute between the parties shall be resolved mutually by the parties.

If the dispute cannot be resolved by mutual consultation between the parties, the same shall be resolved by an Arbitrator who shall be the Chief Managing Director of the Seller.

This agreement shall be covered and constructed in accordance with Laws of India including without limitation, the relevant Central and State Acts and Rules, Regulations and Notifications issued and amended there under from time to time.

All disputes shall have jurisdiction of courts at Delhi, unless otherwise provided under the terms of agreement for arbitration or other recourse.

## **10. Termination of contract**

RailTel may, without prejudice to any other remedy under this Contract and applicable law, reserves the right to terminate for breach of contract by providing a written notice of 30 days stating the reason for default to the Service Provider and terminate the contract either in whole or in part:

- i. If the Service Provider fails to deliver any or all of the project requirements / operationalization / Operational Acceptance of project within the time frame specified in the contract; or
- ii. If the Service Provider fails to perform any other obligation(s) under the contract.

Prior to providing a notice of termination to the Service Provider, RailTel shall provide the Service Provider with a written notice of 30 days instructing the Service Provider to cure any breach/ default of the Contract, if RailTel is of the view that the breach may be rectified.

On failure of the Service Provider to rectify such breach within 30 days, RailTel may terminate the contract by providing a written notice of 30 days to the Service Provider, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to RailTel. In such an event the Service Provider shall be liable for penalty imposed by RailTel.

In the event of termination of this contract for any reason whatsoever, RailTel is entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective continuity of the services which the Service Provider shall be obliged to comply with and take all available steps to minimize the loss resulting from that termination/ breach, and further allow and provide all such assistance to RailTel and/ or succeeding vendor, as may be required, to take over

the obligations of the Service Provider in relation to the execution/ continued execution of the requirements of this contract.

## **11. Termination for Convenience**

RailTel, by notice sent to Service Provider, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for RailTel's convenience, the extent to which performance of the Service Provider under the Contract is terminated, and the date upon which such termination becomes effective.

The deliverables/ Services that are complete and ready for delivery within twenty-eight (28) days after the Service Provider's receipt of notice of termination shall be accepted by RailTel at the Contract terms and prices. For the remaining deliverables/ services, RailTel may elect:

- i. to have any portion completed and delivered at the Contract terms and prices; and/or
- ii. to cancel the remainder and pay to the Service Provider an agreed amount for partially completed deliverables and Related Services.

## **12. Miscellaneous Terms:**

### **Sub Contracts**

Sub-contracting is not permitted. The Service Provider shall seek prior approval from RailTel for sub- contracting any work, if not already specified in the bid. However, such sub-contracting shall not relieve the Service Provider from any liability or obligation under the Contract. If approved, however the Service Provider shall be solely responsible for the work carried out by subcontracting under the contract.

### **Waiver**

A waiver of any provision or breach of this Agreement must be in writing and signed by an authorized official of the Party executing the same. No such waiver shall be construed to affect or imply a subsequent waiver of the same provision or subsequent breach of this Agreement.

### **Confidentiality**

"Confidential Information" means all information including Project Data (whether in written, oral, electronic or other format) which relates to the technical, financial and operational affairs, business rules, citizen information, design rights, know-how and

personnel of each Party and its affiliates which is disclosed to or otherwise learned by the other Party or its subcontractors (whether a Party to the contract or to the SLA) in the course of or in connection with the contract (including without limitation such information received during negotiations, location visits and meetings in connection with the contract or to the SLA) or pursuant to the contract to be signed subsequently.

Except with the prior written permission of RailTel, the Service Provider (including all partners) and its Personnel shall not disclose such confidential information to any person or entity not expected to know such information by default of being associated with the project, nor shall the Service Provider and its Personnel make public the recommendations formulated in the course of, or as a result of the project. In matters pertaining to privacy of data, the Service Provider (including all partners) shall not use any data for analytical/commercial reasons whatsoever.

The Service Provider recognizes that during the term of this Agreement, sensitive data will be procured and made available to it, its Sub contractors and agents and others working for or under the Service Provider. Disclosure or usage of the data by any such recipient may constitute a breach of law applicable causing harm not only to the Department whose data is used but also to its stakeholders. The function of RailTel/ Stakeholders/ Partners/ Patrons requires the Service Provider, its Subcontractors and agents to demonstrate utmost care, sensitivity and strict confidentiality. Any breach of this Article will result in RailTel and its nominees receiving a right to seek injunctive relief and damages, from the Service Provider.

The restrictions of this Article shall not apply to confidential information that:

- i. Is or becomes generally available to the public through no breach of this Article by the Recipient; and
- ii. Was in the recipient's possession free of any obligation of confidence prior to the time of receipt of it by the Recipient hereunder; and
- iii. Is developed by the Recipient independently of any of discloser's Confidential Information; and
- iv. Is rightfully obtained by the Recipient from third Parties authorized at that time to make such disclosure without restriction; and
- v. Is identified in writing by the Discloser as no longer proprietary or confidential; or
- vi. Is required to be disclosed by law, regulation or Court Order, provided that the recipient gives prompt written notice to the Discloser of such legal and



regulatory requirement to disclose so as to allow the Discloser reasonable opportunity to contest such disclosure.

To the extent that such disclosure is required for the purposes of this Agreement, either Party may disclose Confidential Information to:

- i. Its employees, agents and independent contractors and to any of its affiliates and their respective independent contractors or employees; and
- ii. Its professional advisors and auditors, who require access for the purposes of this Agreement, whom the relevant Party has informed of its obligations under this Article and in respect of whom the relevant Party has informed of its obligations under this Article has used commercially reasonable efforts to ensure that they are contractually obliged to keep such Confidential Information confidential on terms substantially the same as set forth in this Article. Either Party may also disclose confidential Information or any entity with the other Party's prior written consent.

The provisions of this Article shall survive the expiration or any earlier termination of this Agreement.

This Agreement is being executed in two originals, one copy to be retained by each of the parties of this Agreement.

In WITNESS THEREOF, the parties hereto have caused this Agreement to be duly executed on the day, month and year endorsed below:

Authorized Signatory & Seal:

Authorized Signatory & Seal:

**RailTel Corporation Of India Limited**  
Western Railway Microwave Complex,  
Senapati Bapat Marg, Near Railway  
Sports Ground, Mahalaxmi  
Mumbai – 400013

<Bidder Company Name>  
<Bidder Company Address>

Date:

Place:

### **13. Annexure IX: Consortium Agreement**

The consortium Agreement will be as per the format laid in the RFP floated by DOIT Goa. The same shall be back to back. However RailTel reserves the right to modify the agreement as per its policies.



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**DEPARTMENT OF INFORMATION TECHNOLOGY (DOIT)**  
**GOVERNMENT OF GOA**

**Expression of Interest (EOI)**

**EOINo. No. 11/5/DOIT/2022-23/GBBN 2 .0 /845**

**Dated: 29.08.2022**

**for**

**IMPLEMENTATION (DESIGN, LAYING,  
TESTING, COMMISSIONING), OPERATIONS AND  
MAINTENANCE OF STATE-WIDE FIBER OPTIC CABLE (OFC)  
NETWORK IN THE STATE OF GOA**



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## **DISCLAIMER**

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The information contained in this Expression of Interest (EOI) or subsequently provided to the Applicant(s), whether verbally or in documentary or any other form by or on behalf of Department of Information Technology (DOIT) or any of its employees or advisors, is provided to the Applicant(s) on the terms and conditions set out in this EOI and such other terms and conditions subject to which such information is provided.

This EOI contains brief information about the Project and will assist the Authority to formulate the RFP for the process of selecting the Applicants during the RFP stage. This document is neither an agreement nor an offer by the purchaser/authority to the Applicants or any other person. The purpose of the document is to provide the Applicants with information to assist the formulation queries, feedback and suggestions towards the project.

The Authority, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Applicant under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this EOI or otherwise, including the accuracy, adequacy, correctness, sufficiency, completeness or reliability of this EOI and any assessment, assumption, statement or information contained therein or deemed to form part of this EOI.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Applicant upon the statements contained in this EOI.

The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this EOI.

The Applicant shall bear all costs associated with or relating to the preparation and submission of its queries, feedback and suggestions including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority, or any other costs incurred in connection with or relating to its Application. All such costs and expenses will remain with the Applicant and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Application.





## GLOSSARY

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Authority	:	Department of Information Technology (DOIT), Goa.
Systems Integrator (SI)	:	The Successful Bidder entering into an Agreement with the Authority for undertaking the Project.
Go-Live Date	:	The date as declared by the Authority on which the proposed solution becomes operational after successful conclusion of all acceptance tests to the satisfaction of the Authority.
NIT	:	Notice Inviting Tender
Project	:	Implementation (Design, Laying, Testing, Commissioning), Operations and Maintenance of State-Wide Fiber Optic Cable (OFC) Network in the State of Goa
RFP	:	Request for Proposal
RoW	:	Right of Way
ISP	:	Internet Service Provider
OFC	:	Optical Fiber Cable
PoP	:	Point of Presence
GP	:	Gram Panchayat
Licensed Service Area	:	The territory of State of Goa



## DESCRIPTION OF EOIPROCESS

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- 1) The stage of Expression of Interest (EOI) is undertaken as an industry consultation to determine credible Applicants having requisite capability for undertaking the Scope of Work, to provide their inputs on the key parameters, through Pre-NIT conference, to be adopted by the Authority which would help determining the terms and conditions of the RFP. Pre-qualification of Applicants will not be done at this stage.
- 2) Subsequent to this EOI and the finalization of the Project details, the Authority proposes to issue a Request for Proposal (RFP) for selection of interested “Bidders” for the Project.
- 3) The Authority does not, in any manner whatsoever, warrant or represent that it will subsequently proceed to release the RFP and/or initiate the RFP Stage of the Bidding Process. Accordingly, the information regarding the RFP made in this EOI are indicative in nature, purely informative, and non-binding.
- 4) The Authority in its absolute discretion may cancel, change, alter or replace the RFP Stage of the Bidding Process and/or the Project itself, without according any reason thereof or providing any prior notice to any person including the Applicants or Bidders, as the case may be.
- 5) For further details contact:  
Director, DIT  
2<sup>nd</sup> Floor, IT Hub, Altinho,  
Panaji - 403001, India  
Ph: (0832)2221505 / 2221509  
e-mail: [dir-dit.goa@nic.in](mailto:dir-dit.goa@nic.in)
- 6) The Applicants are required to send their written queries, feedback, or suggestions for Pre-NIT conference to:



## **SCHEDULE OF EOIPROCESS**

The Director, Department of Information Technology, Government of Goa, on behalf of Governor of Goa invites EOI in online mode only from eligible bidders for“IMPLEMENTATION (DESIGN, LAYING, TESTING, COMMISSIONING), OPERATIONS AND MAINTENANCE OF STATE-WIDE FIBER OPTIC CABLE (OFC) NETWORK IN THESTATE OF GOA”as detailed under:-

<b>Sr No</b>	<b>Item</b>	<b>Particulars</b>
1	Description of the work	IMPLEMENTATION (DESIGN, LAYING, TESTING, COMMISSIONING), OPERATIONS AND MAINTENANCE OF STATE-WIDE FIBER OPTIC CABLE (OFC) NETWORK IN THE STATE OF GOA
2	Mode of Tendering	E-Tendering
3	E-Tendering Website	eprocure.goa.gov.in
4	EOI Document Fee	Rs 5000/- Rupees five thousand only (Non-Refundable)to be paid through online through e-payment mode via NEFT/RTGS/net banking (Axis Bank)with pre-printedchallan available on e-tendering website and directly credit the amount to ITG account as generated by challan and upload the scanned copy of NEFT/RTGS/net banking (Axis Bank) challan along with document.
5	EOI Processing Fee	Rs 3000/- Rupees three thousandonly (Non-Refundable) to be paid through online through e-payment mode via NEFT/RTGS/net banking (Axis Bank) with pre-printed challan available on e-tendering website and directly credit the amount to ITG account as generated by challan and upload the scanned copy of NEFT/RTGS/netbanking (Axis Bank) challan along with document.
6	Advertisement for Expression of Interest (EOI) issued by DOIT	30/08/2022
7	Last date for submission of pre-bid queries on email for clarification.	12/09/2022 up to 5:00 PM
8	Date of Pre-bid meeting	19/09/2022 at 3:00 PM at the Department of Information Technology, Government of Goa, 2 <sup>nd</sup> floor, IT Hub, Althino, Panjim-Goa.
9.	Last date for submission of EoI	22/09/2022 at 3.00 P.M
10.	Opening of the EoI	23/09/2022 at 3.00 P.M



9	Date of Release of RFP for the Project.	To be communicated.
10	Contact details	Department of Information Technology, Government of Goa, 2nd Floor, IT Hub, Althino, Panjim-Goa, 403001 Phone Nos.: +91 (832) 2221505 / 2221509 Fax No.: +91(832) 2221490 Email Id's: (1) <a href="mailto:dir-dit.goa@nic.in">dir-dit.goa@nic.in</a> (2) <a href="mailto:harshad.pawar@nic.in">harshad.pawar@nic.in</a> For e-Tendering assistance: For e-Tendering assistance:0120-4001002  Email Id: support-eproc@nic.in

\*\*\*\*\*Any addendum/amendments/corrigendum to the EOI shall also be published on **eprocure.goa.gov.in** and **goa.gov.in**.



## 1. PROJECT BACKGROUND

- 1.1. Goa, located on the west coast of India, is its smallest state by area (3,702 Sq. Km.) and the fourth smallest by population (1,457,723 - Source: Census 2011). Goa is one of the popular tourist destinations in India. Goa is a small State with an area of 1,429 square miles (3,702 square km) divided into two districts; North Goa, with its headquarters (HQ) in Panjim and South Goa with its headquarter in Margao. Panjim also acts as the headquarter for the State of Goa. The two districts are comprised of 12 Talukas (6 in North Goa & 6 in South) and 13 Municipalities and a total of 419 villages.
- 1.2. Government of Goa envisions to create a reliable, accessible, secure and a fully connected digital services in the state that helps in offering Digital Infrastructure as a Utility to every Citizen, provision of Governance and Services on Demand and digital empowerment of Citizens.
- 1.3. Goa was the first state in India to successfully connect 100% Village panchayats i.e. 191 Village panchayats to its respective Taluka HQ @ 1 Gbps through network commissioned by Government of Goa under PPP model in 2009. The network consists of clustered partial mesh topology network (1 Gbps to 10 Gbps) of more than 1500 Kms of Optical Fiber was laid across the state. The network is used for communicating between the G2G, G2B, G2C, and other Government departments. Currently, all the equipment of the said existing network has either reached end of their life or out of warranty.
- 1.4. Accordingly, to realize the vision of GoI for usage of “Digital Infrastructure as a Utility to Every Citizen”, and to strengthen the reach of e-governance till grass root level, Govt. of Goa (GoG) through Department of Information Technology (DOIT) desires to provide new State-Owned OFC network in Goa with significantly higher bandwidth under state-led model.
- 1.5. The entire bidding process shall be based on EPC model wherein the Implementation of the project is by DOIT through a System Integrator who shall be responsible for Survey, Design, Plan, Supply, RoW applications, OFC laying, Installation, end to end integration, testing and commissioning of OFC (Underground and Aerial), installation and commissioning of Electronics, setting up and integration of NOC. SI would also be responsible for operations and maintenance of the network post 100% Go-Live.
- 1.6. The purpose of this EOI is to provide interested parties with the relevant information/invite regarding the project and understanding of the scope of the Project and invite feedback from interested private sector “Applicants”. The Applicants are advised to study this EOI document carefully before submitting their queries, feedback and suggestions in response to the EOI document. The feedback and suggestions received as part of the response from the industry participants to this EOI Document may or may not be used towards formalizing the RFP for the Project which is proposed to be released in the near future. No pre-qualification of Applicants is proposed to be done as part of this EOI.





## 2. PROPOSED PROJECT

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2.1. DOIT envisages to connect the State in two stages, to unlock the true digital connectivity potential in the state and to provide last mile internet connectivity:

- State Head Quarters in Panaji (“HQ”) to District HQ (North Goa and South Goa), 12 Talukas and 191 Gram Panchayats, at least 225 Govt. office building locations / termination points; and
- Extend the network from 191 Gram Panchayats to 228 villages in the state. Last mile connectivity of FTTX for every user.

2.2. The scope of work for the System Integrator will broadly include:

- A. **Creation:** Build network infrastructure across GP and Taluka locations and extend the network to connect villages.
- B. **Operations and Maintenance:** Maintain the newly deployed network infrastructure.

2.3. The estimated cost of the project in the Licensed area is INR 740 crore. The detailed scope of work is given below



## 2.4. Scope of Work of Systems Integrator

The Systems Integrator is required to undertake the following scope of work.

### A. Creation of the OFC Network

- The Systems Integrator shall be responsible for survey, planning, design, supply, installation, civil construction, end-to-end integration, and commissioning of newly deployed network infrastructure including Optical Fiber Cable (OFC) network (underground and aerial), radio network or any alternate medium as per site requirement along with electronics infrastructure including Network Operation Centre (NOC).
- The Systems Integrator shall prioritize to connect the villages and GPs. The Systems Integrator shall deploy new network infrastructure and shall not be allowed to leverage any other network infrastructure for providing connectivity from Taluka to GPs/villages.

### 1. Site Survey and Planning

- The Systems Integrator shall conduct the survey and finalize Bill of Quantity (BoQ). The Systems Integrator shall conduct an exhaustive site and route survey based on an optimal/shortest path to connect villages, GP and Taluka as defined under the scope of work and for preparing the Bill of Quantity (BoQ) for construction of the OFC network.
  - The Systems Integrator shall conduct an actual Geographic Information System (GIS)-based survey for the area under scope of work.
  - Systems Integrator shall carry out the site and route survey by capturing on-site coordinates at every 20-30 meters through GIS/Mobile application and related tools.
  - Data generated during site and route survey shall be shared with the Authority and shall be integrated with the GIS application of the Authority.
  - The data recorded by the Systems Integrator during site and route survey for the network to be created shall be developed into a suitable format such as KMZ/KML.
  - During the survey, the Systems Integrator shall take into account connectivity till villages based on the optimal path for fiber layout covering maximum population end-route.
  - A final exhaustive site survey report should be submitted including detailed BoQ for the network to be constructed.

### 2. Network Design

- The Systems Integrator shall deploy and connect the state through OFC connectivity, ensuring the following bandwidth:

Location	Minimum Bandwidth
State Headquarters	100 Gbps
District	100 Gbps
Taluka	100 Gbps
Gram Panchayats	10 Gbps scalable up to 40 Gbps
Villages	Up to 10 Gbps

- The Systems Integrator shall design a redundant and robust OFC network infrastructure connecting GPs and villages based on ring architecture/topology using Internet Protocol - Multi Protocol Label Switching (IP-MPLS) technology. Depending on the feasibility of OFC deployment, Systems Integrator may decide to deploy suitable network architecture other than ring architecture after the duly approval from authority. Performance requirements should not impact in any case.

- Priority of network connectivity media should be fiber. The Systems Integrator may decide to deploy suitable alternate technology for a maximum of 5% of village after the



approval from authority, however, ensuring the performance requirements should not impacted.

- i. For any case, the Systems Integrator shall take approval from the Authority on case-by-case basis. In case the Systems Integrator selects to deploy alternate technology through wireless medium (licensed or unlicensed band radio), a provision of minimum 10Gbps bandwidth scalable up to 40 Gbps shall be made at each GP and villages.
  - ii. For deployment of alternate technology, license fee, spectrum charges or any other charges, shall be borne by the Systems Integrator.
- 2.4 The System Integrator shall deploy the OFC Network & infrastructure in such a way to support 5G during 5G Implementation.
- 2.5 The Systems Integrator shall design a robust, fault-tolerant and high-performance carrier-grade network based on the survey report, potential usage & subscription, and uptime KPIs as per Annexure C. The network architecture must also be deployed to meet the following:
- i. Redundancy across nodes and links (ports) to maintain higher uptime
  - ii. Optimal link utilisation
  - iii. Flexibility to allow easy insertion of new node/cards
  - iv. The network shall be designed to have the capability for seamless integration including but not limited to State-wide Area Network (SWAN), National Knowledge Network (NKN) etc and should be scalable to meet end user requirements.

### 3. OFC Implementation

3.1 The project implementation shall follow underground topology across the state. This includes:

- i. Minimum 96 Core underground fiber to be deployed to connect State SHQ to DHQ with two cut not out facility.
  - ii. Minimum 96 Core underground fiber to be deployed to connect DHQ to THQ.all respective Taluka with two cut not out facility.
  - iii. Minimum 96 Core underground fiber to be deployed to connect State Taluka to respective GPs in ring topology. SI may plan multiple ring depend on the size of Taluka and respective GPs.
  - iv. Minimum 48 Core underground fiber to be deployed to connect GPs to respective Villages in ring topology. SI may plan multiple ring depend on the size of GPs and respective villages after duly survey and understand the geographical condition and population.
  - v. Permit to use Aerial All-Dielectric Self-Supporting (ADSS) 12 core fiberfor last mile client connectivity from the feeder cable UG 48 Fiber to all client premises. Aerial cable should be in structure OH cable by using all required accessories.
  - vi. The Systems Integrator will lay one spare duct in different color with each fiber rings.
  - vii. The OFC connectivity should be given priority and the use of alternate technology should be minimised (subject to approval of Authority). A report on non-feasibility through OFC shall be shared with valid reason by the Systems Integrator post survey.
- 3.2 Based on the site survey report and network design, the Systems Integratoris required to initiate OFC implementation and comply with Specifications and Standards as provided by the Authority during RFP stage.The Systems Integrator shall be
- i. Responsible for supply, delivery, storage, warehousing and handling of optical fiber cable along with fittings and requisite items such as HDPE PLB duct, Pre cast RCC Chambers, FDMS, Joint Enclosures, Route Markers, Electronic Route Marker etc.
  - ii. The Systems Integratorwill lay the duct more than 90 % of project requirement through trenchless Technique (HDD) with the depth of entry and exit pit with 165 cm and intermediate depth should be less than 3 mtr.



- iii. The Systems Integrator may lay the duct for hard strata through Open Trench Technique (subject to approval of authority) with warning tape at the depth of 165 cm.
- iv. The Systems Integrator will use excel cutting Technique during splicing except straight joint to avoid unwanted loss of fiber.
- v. Complete implementation of all the sites along with connectivity till villages, within the stipulated time.
- vi. Conduct end-to-end testing of the OFC laid till villages along with TPA appointed by Authority. The Systems Integrator should submit all the detail and information like ABD, HDD Graph, OTDR Traces, LSPM, Blowing detail, ROW permission and NOC from concerned Authority to TPA/ Authority during PAT/FAT.

#### **4. Network Operations Centre (NOC) Implementation**

- 4.1 The Systems Integrator shall do civil construction (approximately 100 Sq mtr) for Equipment room, Server Room, UPS Room, NOC Room, Training Room with Manager Cabin and other required spaces at SHQ (Authority will provide the land). The Systems Integrator will provide Modular Technical Furniture & Chairs, Rodent Repellent system, CCTV System, Smoke Detector, Biometric access control systems, Electricity setup and operation, fire Alarm System, Structure Cabling on CAT-6 for inter connectivity, Falls Flooring & False Ceiling etc.
- 4.2 The Systems Integrator shall provide 50 KVA Silent DG with AMF Panel, 20 KVA Online UPS with battery bank, Required earth pits and electrical cables and accessories, Required Air Conditioner (Industrial Grade), Required 42 U Server Racks & 42 U Network racks with all accessories.
- 4.3 The Systems Integrator shall provide Network Operations Center (NOC) including Log server, Edge switch for local connectivity, Application Hosting for DC and DR on Cloud & security, OSS/BSS Server (for Billing etc.), Server for OFC monitoring, NMS Server, EMS Server, GIS Server, NOC Switch, Customized integrated EMS with integrated NMS for respective hardware to be monitored, Video Wall, Full HD (1920 x 1080) 50" matrix 3\*2, Video wall Controller, Workstation Desktop, i5 processor, 8 GB RAM, 500 GB HDD, Next Generation Firewall - (Throughput 40 Gbps with 10 gig interface), Infrastructure and electronics of NOC - DR etc. Including 10 year warranty of active component only. The Systems Integrator shall setup a centralized NOC for managing the network and shall be responsible for the deployment of all requisite hardware, software, and manpower for monitoring, helpdesk, troubleshooting, etc.
- 4.4 SI should also take the responsibility to securing entire infrastructure security prospective.
- 4.5 The scope shall also include design, supply, installation, testing, commissioning, documentation, operations and maintenance of NOC along with workforce deployment, training, etc.
- 4.6 The passive infrastructure deployed should be certified by EN/UL/ISO/BIS/ISI, whichever is applicable.
- 4.7 The Systems Integrator shall submit details such as APIs', protocols, version, attributes etc. to the Authority.
- 4.8 The NOC shall also be required to comply with Specifications and Standards as per Annexure A.

#### **5. Electronics Installation**



- 5.1 The Systems Integrator shall supply and install network solution or electronics infrastructure for the successful creation of a robust, redundant and carrier-grade network to facilitate high-speed internet, leased line and other similar network services.
- 5.2 The Systems Integrator shall provide Network and Infrastructure Elements at SHQ & DHQ, Core Router at SHQ, Core Router AT DHQ, Online UPS (5 KVA Capacity) at DHQ, Switch for connectivity to local end points, Aggregation Router (including SFP modules for connecting, THQs to DHQ,s), connectivity to local end points including horizontal institutions, Racks 42U floor mount with all accessories. Online UPS (5 KVA) per location, 16 Port OLT, ONT for FTTX connectivity in urban area, Horizontal connectivity for more than 225 govt offices, Access router including SFP modules for connectivity Taluka to GPs, Rack 15U wall mount with all accessories including 10 year warranty from the date of FAT.
- 5.3 The Systems Integrator shall provide all supply and installation including OLT, ONT/Terminal Equipment, Hardware for OF Cable and ONT/Terminal Equipment, PM WANI Access Point Hardware and associated equipment's, spares, other laying material, associated equipment/Material for GPs to Village connectivity Including 10 year warranty.
- 5.4 Adequate power back-up infrastructure shall be provided by the Systems Integrator subject to minimum 6 (six) hours of back-up, ensuring that the network up time is maintained as per defined SLA under Annexure C.
- 5.5 The Systems Integrator shall conduct acceptance testing of the electronics infrastructure created at villages. It shall also be required to comply with Specifications and Standards as provided in Annexure A.

## **6. Radio or Alternate Technology Implementation**

- 6.1 The Systems Integrator shall deploy radio or any alternate technology as a medium of connectivity only in those area, where Wi-Fi is required. Based on the survey and detailed report, wherever the radio media is to be set up, the Systems Integrator shall undertake the following:
  - i. Submit a detailed feasibility report to the Authority and Third Party Auditor (the Authority reserves the right to nominate a technically competent agency for conducting final Acceptance testing and certification, the cost of Third Party Auditor shall be borne by the Systems Integrator) for the GPs and villages where radio network or alternate technology based network is planned.
  - ii. Based on the technical validation from the Third Party Auditor and approval from the Authority, the Systems Integrator shall deploy and install the network infrastructure.
  - iii. Be responsible for supply, delivery, unloading, storing, warehousing and handling of radio or any other equipment along with ancillary items as required as per the approved feasibility report.
  - iv. Manage and perform end-to-end installation of poles/tower, radio network or any other equipment along with the required civil work.
  - v. Be responsible for end-to-end testing of the network link from Taluka to GP or GP to village.
  - vi. It shall also be required to comply with Specifications and Standards as per Annexure A.

## **B. Operations and Maintenance of the Statewide OFC Network**

1. The Systems Integrator shall undertake the responsibility for Operations & Maintenance (O&M) of the commissioned network and facilitate service provisioning through the same for the tenure of the project.



2. The O&M of the network shall be carried out as per the Key Performance Indicators (KPIs) provided as per Annexure C. The Systems Integrator shall be required to commence O&M for newly connected individual GPs/ villages immediately after the date of commissioning.
3. The Systems Integrator shall be solely responsible for ensuring network uptime and performance along with providing comprehensive support during the entire tenure of the project for the network created till village level. This shall also include the establishment of governance framework, and escalation procedures & matrix for network and customer support service on 365 x 24 x 7 basis.
4. As part of the maintenance, the Systems Integrator is required to maintain the up-time of the medium of connectivity, restoration of services, any other maintenance job required to meet the redundancy and KPIs.
5. The Systems Integrator shall extend access of the network management system or other equivalent systems along with network performance reports on a mutually agreed basis to the DOIT.
6. The services provided shall adhere and conform to applicable security policies and guidelines issued by DoT/TRAI/GoI.
7. The Systems Integrator shall prepare and maintain asset records listing the assets at site locations required for the performing the O&M and the same shall be shared with the Authority every quarter.
8. Systems Integrator shall undertake any replacement and upgrade of the OFC and equipment during the contract period (10 year), at its own cost.
9. The KPIs shall be monitored and reported by the Systems Integrator to the Authority on daily / monthly / quarterly basis, as required. Based on the performance of the network in the prior quarter, the penalty shall be computed as per the Annexure C and shall be payable by the Systems Integrator.

#### **10. Periodic Maintenance**

- 10.1 Once the Final Acceptance Testing (FAT) is completed by the Third Party Auditor, the Systems Integrator shall be solely responsible for the periodic maintenance of the network.
- 10.2 The corrective maintenance of the network shall also be done to ensure the network availability/ uptimes as per the KPI in Annexure C.
- 10.3 The KPIs shall be reviewed and updated by the Authority every year. In case the Systems Integrator needs to upgrade the network elements in order to meet a higher benchmark, then the Authority shall bear the cost required in upgrading the network. Any change in KPIs shall be done with the consent of both the Authority and the Systems Integrator.

#### **11. Capacity Augmentation**

- 11.1 Capacity augmentation shall happen at Systems Integrator's own assessment and risk and it shall be required to bear the cost for the same.
- 11.2 The Systems Integrator shall provide the required spares and service support for the supplied equipment in the Project. In case of any solution/ equipment reaching End of Life (EoL), the Systems Integrator shall be responsible for its replacement with equivalent / higher





specifications till the end of the contract period. In case of installation of products / material on account of capacity augmentation or replacement / repair the same shall be subject to Preliminary Acceptance Testing conducted by the Systems Integrator.

## **12. Quality of Service (QoS) Monitoring**

- 12.1 The Systems Integrator shall ensure provision of reliable services to the customers as per the Quality of Service (QoS) standards issued by TRAI or any amendment thereafter. The Systems Integrator shall adhere to such QoS standards and provide timely information as required therein to the Authority.
- 12.2 The Authority, Third Party Auditor or any Authority appointed agency may carry out performance tests and also evaluate the QoS parameters at any time during the concession period. The Systems Integrator shall provide KPIs and other support including documents, instruments, equipment etc. for carrying out such performance tests for evaluation of Quality-of-Service parameters.
- 12.3 The Systems Integrator shall be responsive to the complaints lodged by the customers. The deficiencies shall be rectified and record of each installation, statistics and analysis on the overall maintenance status shall be maintained.
- 12.4 The proper arrangement should be made by the Systems Integrator for reporting/ booking service-related complaints along with digital dashboards for monitoring, managing and reporting performance of network and operational status across the same. This includes but not limited to network faults, incident, performance and quality metrics, security, services along with customer base, etc. The Systems Integrator shall maintain a contact center or helpdesk to log customer complaints across both enterprise and retail services along with providing the following:
  - i. shall provide flexibility of logging incident manually via windows GUI and web interface.
  - ii. the web interface console of the incident tracking system would allow viewing, updating and closing of incident tickets
  - iii. allow categorisation on the type of incident being logged
  - iv. provide classification to differentiate the criticality of the incident via the priority levels, severity levels and impact levels
  - v. provide audit logs and reports to track the updating of each incident ticket
  - vi. shall be able to log and escalate user-based requests
  - vii. shall allow ticket logging by email, chat, SMS or telephone.

## **2.5. Applicable Permits**

The Systems Integrator shall obtain, as required under Applicable Laws, relevant Applicable Permits across access, data and carrier services as per DoT guidelines.

## **2.6. Terms of Reference**

The indicative steps to be undertaken by the Successful Bidder on successful selection by the Authority are as follows:

- a) **Project Management Office (PMO):** A Project Management office will be set up on selection of Successful Bidder.
- b) **Site (Route) and Right of Way:**



- The Authority will facilitate the Right of Way to be granted to the Systems Integrator, commencing from the Appointed Date from the State Governments(s) or its agencies.
- The Site (Route) of the Project shall comprise the Right of Way which shall be granted as per the existing agreement with the State Government and facilitated by the Authority through introduction letters for creation of New Network during the Development Period. This shall be done in coordination with concerned State or central agency, as requested by the Systems Integrator.
- For the Operation and Maintenance Period (after Go-Live), the Systems Integrator shall be facilitated Right of Way by the Authority as per existing agreement with the State Government, only for replacement and repair of existing fiber deployed to maintain the OFC Network. Such request for facilitation would be assessed periodically and approved by the Authority or any agency appointed by the Authority.
- The license granted with respect to the Site (Route) to the OFC Network shall terminate automatically without the need for any action to be taken by the Authority to terminate the license on completion of term of the Project or termination of the Project.

**c) Resource Requirement during Project Implementation Phase**

- System Integrator has to ensure that the necessary manpower is deployed during the project implementation phase. System Integrator will plan the resource deployment as per the Scope of Work and project approach.
- The table below provides the minimum qualification of a Project team for entire Project implementation phase. The below team should be placed onsite for entire Project implementation phase.

Sr.No	Designation	Desired Qualification
1	Project Manager	<ul style="list-style-type: none"> <li>• BE /B. Tech/M.Tech/MCA</li> <li>• Minimum 15 Years of Experience in large scale ICT infrastructure projects.</li> <li>• <b>Relevant Exp.:</b> Minimum 7 Years of experience as a project manager of large scale ICT infrastructure or WAN / MAN Projects.</li> <li>• Preference would be given to experts having PMP / Prince2 certification.</li> </ul>
2	Network Design Expert / Solution Architect	<ul style="list-style-type: none"> <li>• BE /B. Tech</li> <li>• Minimum 10 Years of Experience in large scale ICT infrastructure projects.</li> <li>• <b>Relevant Exp.:</b> Minimum 7 Years of experience in designing and implementing network solutions for at least 2 WAN / MAN projects.</li> <li>• Preference would be given to experts having CCNP certification.</li> </ul>
3	Site Manager	<ul style="list-style-type: none"> <li>• BE / B.Tech/ Diploma/ B. Sc. In computer Science, B. Sc. In IT</li> <li>• Minimum 5 Years of Experience in WAN / MAN projects.</li> </ul>



4	Site Engineers	<ul style="list-style-type: none"> <li>• BE / B.Tech/ Diploma/ B. Sc. In computer Science, B. Sc. In IT</li> <li>• Minimum 3 Years of Experience in WAN / MAN projects.</li> </ul>
5	NOC Experts	<ul style="list-style-type: none"> <li>• BE / B.Tech</li> <li>• Minimum 7 Years of Experience in WAN / MAN projects.</li> <li>• Should have experience in implementing BNG and CGNAT solutions.</li> </ul>

- The Project Manager should be full time deployed at the PMO for regular co-ordination and monitoring of the Project.
- Site Manager will report to the Project Manager, in order to ensure that the correct information is communicated from the commencement of the project until the hand-over of the network to the client. The appropriate number of Site Managers to be deployed by SI as per the project requirements.
- SI will also deploy site engineers and supervisors to continuously monitor the work being executed simultaneously in different areas of the state. The appropriate number of Site Engineers and Supervisors to be deployed by SI as per the project requirements. SI will ensure availability of manpower resources having experience in both domains – Construction of passive network elements like fiber& shelter and installation, commissioning, configuration & integration of all active elements like routers, switches, electrical utilities, core routers in NOC, server in Data Centre etc. They will perform following activities but not limited to:
  - Supervise ongoing work to ensure that all specifications, standards and quality norms are followed.
  - Preparation of ITP (Inspection and Test Plans) reports, splicing reports, LSPM and bi-directional OTDR reports, Material Reconciliation.
  - Provide progress reports to Site Manager along with critical field issues and support required. Insure all safety measure should be follow like hording, barricading, caution tape, first add Box etc.
  - Coordinate timely active and passive material delivery at site.
  - Coordinate availability of all resources like HDD machine (in fully working condition), Compressor for DIT, OFC blowing machine, splicing machine, testing tools, labours etc. as per requirement.
  - Installation and commissioning of all active elements with required specifications.
  - Supervise establishment of all major PoP inside existing facilities and any additional set up required in existing NOC and Data Centre etc.

**d) Operation & Maintenance (O&M) Team**

- O&M would entail undertaking all activities to ensure uptime of the network as per agreed SLAs defined. This shall also apply to the entire supporting infrastructure such as NOC, NMS, etc.

**Active Component:** Active component shall be covered under 3 years of warranty from direct OEM & 10 years of Comprehensive AMC



**e) Provision of the Operational Manpower at Network Operation Centre (NOC)**

- The SI is required to provide suitable manpower to monitor the data feeds & helpdesk support at NOC as per following:
  - **1st shift (6:00 AM to 2:00 PM)**
    - Resource– 5 relevant professional + one shift manager
  - **2nd shift / General Shift (2:00 PM to 10:00 PM)**
    - Resource – 6 relevant professional + one NOC manager
  - **3rd shift (10:00 PM to 06:00 AM)**
    - 5 relevant professional + one shift manager
- The SI will increase the strength if it is required by the Authority. SI shall be required to provide such manpower meeting following requirements:
  - All such manpower shall be BE / B.Tech / MCA with minimum 3 years of experience in handling NOC operation.
  - System Integrator shall have to replace any person, if not found suitable for the job.
  - All the manpower shall have to undergo training from the System Integrator for at least 15 working days on the working of project.
  - Operational manpower shall work in shifts, with no person being made to see the feeds for more than 8 hours at a stretch.
- SI shall prepare the detail operational guideline document during implementation which shall specify detail responsibilities of these resources and their do's & don'ts.

**f) Provision of the Field Operational Manpower and Resources**

- SI shall work out the model to estimate the required field staff to maintain a state wide Optical Fiber Network including active, passive elements and associated services like Internet and Intranet services. It is proposed to deploy minimum 3 personnel in O&M phase, however SI to estimate the exact number of personnel to maintain the SLA requirement. SI shall also work out the other resources required for maintenance of the network and get it pre-approved from the Authority. Resources for Operation and Maintenance of the active and passive network elements would include following but not limited to:
  - Field engineers responsible to handle five FRTs (Field Restoration Team) which are station at respective Taluka. He is responsible to manage MTTR & KPI.
  - Each FRT should have splicer, Asst. Splicer, Required labour & Vehicle with driver.
  - FRT should have required tools & tackle including Splicing M/C, OTDR, LSPM, Locator, Charging unit, general tools, and emergency light.
  - SI may use two-wheeler for patrolling and deployment of each patroller should be for 100 KM OFC Route.
  - SI should deploy each FRT on 200 KM OFC Route. teams having tools and mobilization of other necessary resources Communication devices to issue reporting and resolution.
  - Material storage locations with adequate capacity in different areas of the city to speed up material delivery during fault to reduce MTTR.



- Spare material including all required active and passive elements in adequate quantity to be maintained at all time at all storage locations.
- Field engineers with networking certification to maintain active elements of the network including replacement, installation, configuration and integration.



### 3. TERM OF PROJECT

- 3.1. The Systems Integrator shall be granted the right to conduct the project for a period of 10 (Ten) years ("Term of Project") from the Appointed Date (date of which Conditions Precedent are fulfilled).
- 3.2. The Systems Integrator shall fulfil the following conditions precedent within 120 (One hundred and twenty) days of signing the agreement.
  - a). Procure all the Applicable Permits / Licences / NOCs required for developing the OFC network.
  - b). conducted the route survey for the Project, finalised the bill of quantities and high level network design document for the Project and submitted such information and all relevant documents to the Authority, within 90 (ninety) days
  - c). developed a Project Execution Manual and Operation and Maintenance Manual (along with the asset lifecycle management process) and submitted it for the Authority's approval
  - d). provided details of the Specifications and Standards for major material / product intended to be procured for the Project
- 3.3. On or after the Appointed Date, the Systems Integrator shall undertake the Development Works and in conformity with the Specifications and Standards set forth in Annexure A. The 521<sup>st</sup> (five hundred and twenty one) day from the Appointed Date shall be the scheduled date for completion of the Development Works and for achieving the date of Go-Live (Go-Live) of the OFC network (**the "Scheduled Completion Date of the OFC Network"**) and the Systems Integrator agrees and undertakes that the Project shall be completed on or before the Scheduled Completion Date of the OFC Network.
  - a). On and from the Appointed Date, the Systems Integrator is permitted to apply for and obtain the Right of Way to the Site (Route) from the State Government, based on network survey and design, or any other activities that the Systems Integrator may deem necessary prior to the Appointed Date.
  - b). The Systems Integrator shall apply for and obtain the Right of Way to the Site (Route) of the New Network which shall include making and filing applications, paying associated costs, liaising with Government Instrumentalities and agencies etc. Charges of permission will be responsibility of authority.
  - c). The Systems Integrator shall submit to the Authority (or Third-Party Auditor) its detailed project plan including project tasks / activities, schedule of construction and Acceptance Testing (AT) timelines along with submission of detailed network designs and project dependencies for completion of the Project in accordance with the Project Completion Schedule as set forth in Clause 6.2 of this EOI;
- 3.4. In the event that the Development Works are not completed, and the Go-Live of the OFC Network does not occur within the time period mention in project schedule. Authority shall be entitled to impose the penalty and terminate the Project, unless the delay is on account of reasons attributable to the Authority, or due to Force Majeure. Penalty in delay of the project will as per annexure 'C'.





#### 4. MINIMUM ELIGIBILITY EXPERIENCE

4.1 During the RFP stage, the Applicant who fulfils the following minimum eligibility experience (“Eligible Bidder”) shall be considered by the Authority for technical evaluation of their bids.

a) **The Applicant should be a Legal Entity:**

Minimum Eligibility	Mandatory documents required in support of minimum eligibility
<ul style="list-style-type: none"> <li>Independent private legal entity incorporated / registered in India -proprietorship, partnership firm, Limited Liability Partnership (LLP), private limited company registered under Companies Act 1956/2013, public limited company registered under Companies Act 1956/2013 including government-owned entities.</li> <li>A group of entities (the “Consortium”), a combination of the above legal entities, with a formal intent to enter into a Consortium agreement subject to maximum of 3 (three) members.</li> <li>A foreign entity that is constituted under respective foreign law and not having a registered office / manufacturing facility / operation in India may participate in this tender as a member of consortium along with an Indian legal entity as specified above.</li> </ul>	<ul style="list-style-type: none"> <li>Certificate of Incorporation / equivalent proof of legal registration of entity.</li> <li>GST Registration certificate issued by GSTN authorities.</li> <li>PAN Card.</li> <li>Board Resolution (only in the case of Company) allowing the Company to participate in the EOI. The Board Resolution is not mandatory in case of Proprietorship and Partnership firms.</li> </ul>

b) **The Applicant should have prior experience of:**

Minimum Eligibility	Mandatory documents required in support of minimum eligibility
<ul style="list-style-type: none"> <li>The Applicant shall have experience of laying, installation, testing and commissioning of underground or aerial of Optical Fiber Cable anywhere in the world in the last 5 (five) years before the bid due date of                             <ul style="list-style-type: none"> <li>at least 2,000 (Two thousand) Kilometers own fiber network in India</li> </ul> </li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>at least 2,000 (two thousand) Kilometers of fiber network for other customers in India</li> <li>The Applicant shall have experience of implementation (install, commissioned and gone live) of at least 250 (two-hundred and fifty) Active Network Elements* anywhere in the world in the last 5 (five) years before the</li> </ul>	<ul style="list-style-type: none"> <li>In case of ownership of network**, Self-certification, along with the documentation demonstrating the Technical Capability in respect of quantity and successful performance of the project/network deployed.</li> <li>In case of non-ownership of network, Completion certificate to the extent of minimum requirement mentioned in the Technical Capability, issued and signed by the competent authority of the client entity demonstrating the Technical Capability and successful performance of the project along with the supporting documents such as contract/ work order/ purchase order.</li> <li>All documentary evidence for technical experience must be certified by Chartered Accountant.</li> </ul>



<p>bid due date.</p> <p><i>*Active Network Elements shall comprise of active nodes / network infrastructure components / devices visible on Network Operations Centre (NOC). This shall exclude equipment / devices installed at customer / last mile end user premises.</i></p> <ul style="list-style-type: none"> <li>The Applicant should have valid ISO9001:2008/ ISO 9001:2015 certification for Quality Management System which should be valid as on bid submission date.</li> </ul>	<ul style="list-style-type: none"> <li>For evaluation, any member of the Consortium exhibiting the highest relevant technical experience will be considered.</li> <li>In case, a consortium is formed for meeting technical experience, the applicant shall ensure that each of the technical experience criteria is met either by one of the members of consortium solely or by different members of consortium meeting individual criterion separately.</li> </ul>
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- In the event that the Applicant does not have the requisite experience as mentioned above, it shall enter into an agreement (before signing of the Service Agreement) with an entity having aforementioned experience (the “Technical Partner”) and shall submit an undertaking in this regard. It is hereby clarified that the Technical Partner shall not be required to be a Member of the Consortium, in case the Bidder is a Consortium or have any equity contribution in the Systems Integrator.
- In case separate Technical Partner(s) are engaged by the Bidder for meeting experience mentioned at (a) and (b) above, Bidder to ensure that each of the eligibility criteria is met either by one of the Technical Partner(s) solely or by different Technical Partner(s) meeting individual criterion separately.

*\*\* In case of single entities, Aggregating the financial and technical capability of any Associates of the Applicant for the purpose of meeting the respective Qualifications Criteria required by the Applicant shall be permitted. For the purpose hereof, the word “Associate” shall mean, in relation to the Applicant, an entity which controls the Applicant (i.e. Parent) or is controlled by the Applicant (i.e. subsidiary) or is under the common control with the Applicant (i.e. sister concern). As used here, the expression “control” means, with respect to Applicant entity which is a company, the ownership of common shareholders, directly or indirectly (i.e. together with one or more of its subsidiaries / Holding companies), of at least 50% of the voting shares / shareholding of the entity. As used here, the expression “control” means, with respect to applying firm which is a partnership, the rights of common partners to at least 50% of the profits of the firm in question.*

**g) The Applicant should have a minimum financial strength:**

Minimum Eligibility	Mandatory documents required in support of minimum eligibility
<ul style="list-style-type: none"> <li>Average turnover of any 3 (three) of the 5 (five) financial years i.e 2017-18, 2018-19, 2019-20, 2020-21 and 2021-22 should be at least INR 200,00,00,000/- (INR Two-hundred Crore only).</li> <li>Minimum Net Worth as on 31 March 2022 shall be INR 100,00,00,00/- INR One-hundred Crore only).</li> </ul>	<ul style="list-style-type: none"> <li>Chartered Accountant (CA) certificate certifying net worth</li> <li>In case of a Consortium, the combined Financial Capacity of only those Members, who shall have a share of at least 26% (twenty-six per cent) each in the subscribed and paid-up equity of SPV should satisfy the above condition of eligibility.</li> </ul>

**h) The Applicant should not have any pending litigations, conflict of interest or blacklisting as on bid due date:**

Minimum Eligibility	Mandatory documents required in support of minimum eligibility
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<p>The Applicant / technical partner / associate:</p> <ol style="list-style-type: none"><li>1) Should not be involved in any major litigation such as fraud, FEMA violations.</li><li>2) Should not be involved in any conflict-of-interest situation.</li><li>3) Should not have been blacklisted by any Central Government / State Government / PSU in India.</li><li>4) Should not have defaulted in any supply or O&amp;M contracts with any Government / Government entities or PSUs or private clients in the last 5 years.</li><li>5) Should not have been blacklisted / debarred by DOIT / any entity of Government of Goa in the past.</li></ol>	<ul style="list-style-type: none"><li>• Certificate from the Applicant / technical partner / associate</li></ul>
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## 5. FINANCIAL EVALUATION

5.1. During the RFP stage, the financial evaluation for the project shall be conducted based on the Least Cost/Lowest Cost for commissioning and maintenance of the state-wide OFC network.

5.2. The Bidders are required to quote as follows

### i. CAPEX

- Cost of Survey, Planning, Supply, Installation, end to end integration, testing and commissioning of Passive Components UG OFC material with all accessories in per mtr cost and total cost.
- Cost of Survey, Planning, Supply, Installation, end to end integration, testing and commissioning of Passive Components OH OFC material with all accessories in per mtr cost and total cost.
- Cost of Item-wise Supply, Installation, Testing and Commissioning of Active Components (NOC and Software Components).

### ii. OPEX

- Operation and Maintenance for Passive Components (OFC cable and Ducts) for 10 years.
- Operation and Maintenance for Active Components (NOC and Software Components) for 10 years.

5.3. To evaluation of the financial bid, Net Present Value (NPV) of the Maintenance for Passive Components (OFC cable and Ducts) and Maintenance for Active Components (NOC and Software Components) quoted for 10 years each shall be calculated. To arrive at 10-year NPV, a discounting rate of 10% shall be used.

5.4. For the purposes of evaluation only, the “Net Present Value of Fiber Connectivity” of the project shall be determined as follows:

$$\text{Net Present Value of Fiber Connectivity} = \text{CAPEX} + \text{NPV for OPEX}$$

5.5. The Qualified Bidder offering the Lowest Net Present Value of Fiber Connectivity shall be declared as the “SUCCESSFUL BIDDER”.

5.6. The proposed timeline for payment to the System Integrator is as follows:

Sr.No	Milestones	Payment Percentage
1	CAPEX against supply, installation and commissioning of Network Operating Center (NOC), SHQ, DHQ & Taluka	10%
2	CAPEX against supply of All Active Components other than NOC	10%
3	CAPEX against the Go Live of Core ring	40%
4	CAPEX against Go Live of Complete Network	30%
5	CAPEX in equal half yearly instalments in 1 year after Go Live of complete network	10%
<b>Total</b>		<b>100%</b>

5.7. The quarterly payment shall be due for OPEX at the end of every three months starting from the date of Go-Live of complete network.

5.8. The payments shall be subject to meeting of SLA's failing which the appropriate deductions as per SLA.



## 6. OTHER GENERAL CONDITIONS

6.1. The Systems Integrator shall affect and maintain at its own cost, during the term of the agreement, such insurances for such maximum sums as may be required under the Financing Agreements and Applicable Laws, and such insurances as may be necessary or prudent in accordance with Good Industry Practice.

6.2. The expected Project Completion Schedule for state-wide OFC network in as follows:

S.no	Project Milestones	Schedule
1	Signing of Agreement	T
2	Submission of Performance Security	T+45 days
3	Completion of GPS Survey by Systems Integrator and design the fiber route as per requirement and get the approval from Authority. Identify & finalized the warehouses, Apply ROW to authority for permission.	T+120 days
4	Procurement the required material and accessories. Arrangement of Tools & Tackle. Mobilization of team.	T+120 days
5	Commencement of Construction for Civil & OFC	T+120 days
6	Completion of construction of SHQ, NOC, DHQ and all THQ. Completion of Connectivity from SHQ to DHQ, DHQ to all THQ, all govt offices (225) and 100 priority GP's (DOIT will share the priority list)	T+ 8 Month
7	Completion of connectivity for balance GP's, All village connectivity from respective GP's, Last mile connectivity on OH fiber for all villages and users. Integration, commissioning & configuration. Operational of NOC etc. Hiring of resources, Training and GO live entire Network.	T+ 16 Month
8	Commencement of Maintenance for the Network created by the Systems Integrator. Joint Inspection with TPA/ DOIT. HOTO Activity	T + 17 Months
9	Joint Inspection for Hand Back	T + 137 months
10	Systems Integrator to receive list of required maintenance and repair work	T + 137 months
11	Transfer of Assets to Authority(DOIT)	T + 137 months

**Note:**

*A Any link or premises shall be considered completed when the Provisional Acceptance Certificate has been issued by the Authority.*

*All documentation generated during planning, installation and commissioning phase shall always be made available to the Authority.*

*The Systems Integrator shall complete the installation, commissioning, preliminary acceptance testing of the network infrastructure built and offer the Authority/TPA for acceptance with regards to the network element, link and ring based on designed topology.*

6.3. Any non-adherence to the above delivery schedule will attract fines / penalties as per Annexure C.



- 6.4. From the Go-Live, the Systems Integrator shall, no later than 5 (five) days after the close of each month, furnish a report stating in reasonable detail the compliance of the Project with all the Key Performance Indicators Annexure C along with an analysis of the reasons for failures, if any, and the strategies for addressing the same and for otherwise improving the operational performance of the Project.
- 6.5. The Systems Integrator shall ensure compliance to the Key Performance Indicators in Annexure C. In case of any shortfall in performance, not an account of Force Majeure, the Systems Integrator shall pay penalties as set out in Annexure C, subject to a maximum of 10% (ten per cent) of the Performance Security for each month.
- 6.6. Performance Bank Guarantee
- The successful bidder shall furnish the Performance Bank Guarantees towards faithful performance of the contract obligation and performance of the services during tenure of the Project.
  - The Successful Bidder has to submit two separate performance Bank Guarantees- one for the Project implementation phase valid till 100% Go-live of the project and the second one for the Operations and Maintenance Phase valid up to 180 days beyond the expiry of the tenure of the Project.

The value performance bank guarantee shall be provided during RFP stage

- 6.7. The Systems Integrator shall provide the Authority with a recommended exit management plan ("Exit Management Plan") which shall deal with at least the following aspects of exit management in relation to the Project Implementation, and the Operation and Management SLA.
- A detailed program of the transfer process that could be used in conjunction with a Replacement of Systems Integrator including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer.
  - Plans for the communication with such of the Systems Integrator's sub-contractors, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on the network operations as a result of undertaking the transfer.
- In the event of termination or expiry of MSA, and Project Implementation, each Party shall comply with the Exit Management Plan.
- 6.8. The quantity, if any, defined during the RFP shall be estimated and the actual quantity shall be executed based on the actual site survey by the System Integrator at the time of project implementation. The successful bidder shall not object to the upward or downward variation in quantities and the quoted rate shall remain unchanged.
- If required additional quantity over and above may be executed on later stage, the payment for such additional quantities shall be made at tender rates and the tender rates shall be valid for 5 years. After 5 year rates can be consider for revision by DOIT as per the industry standard.
  - No claim shall be entertained or become payable for price variation of differential quantities.
- 6.9. The terms conditions pertaining to Force Majeure, Termination, divestment, dispute resolution shall in line with the Service Agreement and shall be detailed out during the RFP stage.





## **7. RIGHT TO CANCEL THE EOI PROCESS**

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- 7.1. The Authority may cancel this EOI process at any stage without assigning any reasons whatsoever and will not be liable to compensate any Applicant on any grounds whatsoever. The Applicants shall not be entitled to refund of cost of documents or other costs in case the EOI is cancelled for whatsoever reason or without assigning any reason.



## 8. ANNEXURES

### 8.1 ANNEXURE A

#### Tentative Specifications and Standards

All material supplied shall conform to the technical specifications defined in their relevant Generic Requirements issued by the Telecommunication Engineering Centre New Delhi (TEC / GR) duly updated from time to time. Details of such GRs (not limited to the indicative list given below) are included in the table for reference. Any new GR published against the material proposed to be supplied in future under this contract shall also be applicable. In addition, equivalent / higher standards issued internationally by ITU/IEEE, ETSI can also be followed, subject to the approval of the Authority in case of major deviations.

#### Specifications and Standards

S. No.	Type of Material	Technical Specifications
1	Aerial OF Cable (ADSS Cable): 12F ADSS on own pole	Mention TEC GR No.
2	Underground OFC: 96/48F armored ribbon type OFC. 6 fiber per ribbon, two ribbon in one tube, 4 tube in 48 F cable & 8 tube in 96 Fiber Cable.	Mention TEC GR No.
3	Aerial Drop Optical Fiber for FTTH application	TEC GR No. TEC/GR/TX/OFC-026/01/APR-18 with latest amendments, if any.
4	Self-Supporting Metal Free Aerial Optical Fiber Cable (For Hilly & Rural Areas)	TEC GR No. TEC/GR/TX/OFC-003/04/APR-18 with latest amendments, if any.
5	Fixed Attenuator	GR No. TEC/GR/TX/OPA-003/03/Oct 14, with latest amendments if any.
6	Splitters (1:2, 1:4, 1:8, )	TEC GR No. TEC/GR/TX/OPT-001/01/ APRIL-12 with latest amendments.
7	Solar Panel	TEC/GR/FA/SPV-02/04.MAR 2016, with latest amendments if any.
8	Battery	TEC GR NO. GR / TX / BAT – 001/04 Jan 2011 with amendment dated 24.7.2012
9	Patch Cord	TEC GR no. TEC/GR/TX/OFJ-01/05/Nov-09, with latest amendments if any.
10	GPON equipment	TEC/GR/FA/PON-01/03.MAR 2017 with all amendments if any.
11	Radio Modem	TEC/GR/R/ISM-MOD-001/04.MAR2016 with all amendments if any.
12	Specification for Raw Material used in Manufacturing of Cables for 96F and 48F Metal Free Optical Fiber Cable with	TEC/GR/TX/ORM-001/05/DEC-17 with all amendments if any.



	Double HDPE Sheath (G.652D Fiber)	
13	Tools for installation & Operations of OFC & for assembly of the OF Splice Closures	GR No. GR/OFT-01/03. APR 2006 with all amendments if any.
14	Wooden Cable Drum for Telecom Cables	GR No. G/CBD-01/02. NOV 94 with all amendments if any.
15	Splice Closure for Optical Fiber Cables	GR No. TEC/GR/TX/OJC-002/03/APR-2010 with all amendments if any.
16	OTHER STANDARDS, as applicable (EIA/IEC/Bell Core/CISPR/ISO etc.)	
16.1	Generic Requirement for Optical Fiber Cable (Bell Core)	GR-20-CORE Issue4, 2013
16.2	ITU-T Recommendations	ITU-T G.652D
16.3	Test Methods for Optical Fibers	IEC 811-5-1, IEC 794-1-2-E1, IEC 794-1-2-E2, IEC 794-1-2-E3, IEC 794-1-2-E4, IEC 794-1-2-E7, IEC 794-1-2-E10, IEC 794-1-E11, IEC 794-1-2-F1, IEC 794-1-2-F3, IEC 794-1-2-F5, IEC 60793-1-30, IEC 60793-1-31, IEC 60793-1-32, IEC 60793-1-33, IEC 60793-1-34, IEC 60793-1-47, IEC 60793-1-51, IEC 60793-1-52, IEC-60793-1-53, IEC - 60793-2-50, EIA 598-C,
16.4	Colour Standard	
16.5	Test Method for Optical Fiber	EIA 455-104, EIA/TIA-455-73 EIA/TIA-455-181
16.6	ISO 9001-2000 Test Methods for Optical Fibers, International Quality Management System	ISO 175
16.7	Test Methods	FOTP-89, FOTP-181 & ASTM D-566
		ASTM D-790 ASTM D-1248
		ASTM D-4565
17	Patch Cord Optical Fiber Jumpers	TEC GR No TEC/GR/TX/OFJ-01/05. NOV 2009
18	Fiber Termination Box	TEC GR No. GR/TX/FTB-02/02 APR-2010
19	PLB HDPE Duct	TEC/GR/FA/CDS-008/04/AUG-19 with latest Amendments if any
20	PLB HDPE Duct Accessories Push fit Coupler	PLB GRTEC/GR/FA/CDS-008/04/AUG-19 with latest amendments if any
21	End Cap	PLB GRTEC/GR/FA/CDS-008/04/AUG-19 with latest amendments if any
22	Raw material used in the cable	TEC/GR/TX/ORM-001/05/DEC-17 with all amendments if any.
23	Installation Accessories and fixtures of Self-Supporting Metal free Optical Fiber Cable	TEC GR No. TEC/GR/TX/OAF-001/03 Mar 2017 with latest amendments if any



24	FDMS (Indoor)	As per TEC GR No. GR/FDM-01/02. APR 2007 with Amendment Dated 02.05.2012, with latest amendments if any.
25	FDMS (Outdoor) if required	GR No. TEC/GR/TX/FDM-003/01 MAR 2012
26	SJC	TEC GR No. TEC/GR/TX/OJC-002/03/APR-2010, with latest amendments if any
27	BJC	TEC GR No. TEC/GR/TX/OJC-002/03/APR-2010, with latest amendments if any
28	Tension Pole Assembly Set (Tubular)	TEC/GR/TX/OAF-001/03/MAR-17, with latest amendments if any
29	Tension Pole Assembly Set (RAIL)	TEC/GR/TX/OAF-001/03/MAR-17, with latest amendments if any
30	Suspension Pole Assembly Set (Tubular)	TEC/GR/TX/OAF-001/03/MAR-17., with latest amendments if any
31	SMPS Hybrid Solar Photo Voltaic Power Supply	TEC GR No. TEC/GR/TX/HPS-001/01/March-17 with latest amendments if any
32	Optical Router	TEC/GR/SA/DCA-22/03.MAR-11 with latest amendments if any
33	Data Storage Infrastructure	TEC/GR/IT/DSI001/04/DEC 2015 with latest amendments if any
34	Ethernet electrical to optical media converter	TEC/GR/IT/EOC-001/04/SEP 2014 with latest amendments if any
35	Firewall System	TEC/GR/IT/FWS-001/04/MAR-14 2014 with latest amendments if any
36	Lan Switch	TEC/GR/IT/LSW-01/05/MAR 2014 with latest amendments if any
37	Layer 4-7 Load Balancer Switch	TEC/GR/IT/LSW-002/03/MAR-2015 with latest amendments if any
38	Network Management System	TEC/GR/IT/NMS-003/01/NOV 2015 with latest amendments if any
39	MPLS Router	TEC/GR/IT/TCP-004/01.FEB2014 with latest amendments if any
40	Integrated Gateway Router	TEC/GR/IT/TCP-005/01. MAR 2014 with latest amendments if any
41	Suspension Pole Assembly Set (RAIL)	TEC/GR/TX/OAF-001/03/MAR-17, with latest amendments if any



### **Broader perspective of NOC**

1. The NOC should follow high-efficiency design in equipment type/ capacity selection to achieve high availability, flexibility, scalability and modularity.
2. The Systems Integrator shall ensure that the design of the NOC should meet the following industry standard:
  - a. Cooling standards
  - b. IEEE standards for electrical
  - c. NFPA, UL and local fire codes for Safety and security
  - d. ISO standards for processes and procedures
  - e. Tier – 3/4 redundancy
3. The NOC should be in protected premises with secured application and data server as Government data would be running on the network
4. Safety and Security requirement should be deployed as the best industry practice/ standards. Following components shall be included:
  - a. Software Addressable Fire Alarm System
  - b. Early smoke detection system
  - c. Fire Suppression System
  - d. Access Control System
  - e. Alarm System
  - f. Rodent Repellent System
  - g. Water Leak Detection System
5. NOC should be operational 24x7 with skilled manpower, adequate number of workstations, helpdesk with dedicated helpline/ IVRS number and Video wall for monitoring the network.



## 8.2 ANNEXURE B

### Inspection and Acceptance Testing

During the Project, Authority and Third-Party Auditor (TPA) shall have the right to inspect, test and audit the network infrastructure and modalities across processes to construct, operate, maintain and utilize the network till villages during development and operation period i.e. throughout the lifecycle of the project.

For determining that the Development Works conform to the Agreement and Specifications and Standards, the TPA shall require the Systems Integrator to carry out or cause to be carried out Tests, at such time and frequency and in such manner as may be specified by the Third-Party Auditor from time to time in accordance with Good Industry Practice, Specifications and Standards, and Acceptance Testing Template for quality assurance. These Tests would include testing of all the installed electronics and passive infrastructure along with its ancillary items deployed under creation of the network infrastructure as per the scope of work. This shall also include all network links along with testing of network traffic from the GP to Taluka and from GP to village, and further to NOCs and Authority's NOC and DR-NOC.

The Systems Integrator shall facilitate and perform the following with regards to testing activities.

- Before the Appointed Date, the Systems Integrator shall submit an undertaking to the Authority certifying that product / material supplied for the Project will adhere to Specifications and Standards as per Annexure A and design requirements. The Systems Integrator shall ensure to maintain relevant certificates from Original Equipment Manufacturers (OEM) in this regard. Further, the Systems Integrator shall also provide the Specifications and Standards of major material / product intended to be procured for the Project.
- During the Tenure of the Project, the Systems Integrator shall obtain from Original Equipment Manufacturers (OEM), the relevant certificates or documents with relevant test results, certifying that the product / material supplied for the Project conforms to the Specifications and Standards and submit the same to the Authority and the Third-Party Auditor within 7 days of receipt of such certificates or documents from OEMs. In case the product / material supplied for the Project does not conform to the Specifications and Standards or is deficient in terms of relevant certificates / documents / test results, as inspected by the Authority or Third-Party Auditor, then the costs to be incurred on any replacement of such product / material shall be borne solely by the Systems Integrator. Third Party Auditor shall have the right to check the material and its conformity to the Specifications and Standards.
- The Systems Integrator shall progressively self-conduct and perform Preliminary Acceptance Testing (PAT) for network infrastructure being created and shall utilize the network as per the scope of work
- Once the Systems Integrator performs the PAT, it shall offer network infrastructure within a Taluka subject to minimum 20% GPs / villages completed and visible on the NOC for testing purposes to the TPA for Final Acceptance Test (FAT).
- The schedule for such testing shall be based on a project plan and the timelines for the same shall be agreed between TPA and Systems Integrator. In case of any changes in the schedule or plan, Systems Integrator shall notify the TPA 10 (ten) working days prior to the scheduled date.
- The TPA shall perform tests in at least 10% of offered samples aggregated at Taluka level in accordance with Good Industry Practice, Specifications and Standards, and Acceptance Testing Template. Sample sites and its routes to be checked shall be decided by the Third-Party Auditor (TPA) and approved by Authority.





- Result of TPA's inspection and audit shall only be valid for GPs and villages which were offered for testing under a Taluka. If Systems Integrator offers a Taluka for inspection more than once, TPA and Authority reserves the right to include or exclude the test of previously completed villages and GPs as well.
- The overall result(s) of the FAT conducted by TPA shall be indicated as "Satisfactory" or "Unsatisfactory" as judged at the time of inspection on merits of each case. The results of the Test shall be jointly signed by the authorized personnel of the Systems Integrator and TPA. In case of classifying the work as "Unsatisfactory", the Systems Integrator shall highlight the reason for non-compliance as per the Specifications and Standards set forth under Annexure A along with design requirements under the scope of work. The results of the FAT conducted shall include submission of all relevant documents such as measurement book, Acceptance Testing Template report etc. Further, "Unsatisfactory" cases shall be communicated to the Systems Integrator by the TPA for its rectification.
- During a FAT, if more than 20% discrepancies across sampled site route or locations across GPs/villages are observed within a Taluka which may be attributed due to negligence on the part of the Systems Integrator, under such circumstances, the FAT may be rejected. Further, the Systems Integrator shall get the work redone in a time bound manner and re-submit FAT report compliance, upon which TPA shall have to recheck the sample, and may also extend the sample size of site route or location across SHQ/DHQ/Taluka/GPs/ villages for discrepancies and record its observations. However, if the discrepancies are less than 20% within a SHQ/DHQ/Taluka, then TPA shall provide a provisional acceptance, and issue a Provisional Acceptance Certificate. The Systems Integrator is obligated to rectify the outstanding item or Punch List in a time bound manner to receive a Final Acceptance Certificate. In this process, the Systems Integrator shall comply with the timelines of the construction milestone and shall be responsible for delays on the re-work on its scope.
- In case any inspected or tested components/site route fail to conform to the Specifications and Standards or design requirements, the Systems Integrator shall either replace the rejected components or make all alterations necessary to meet specification/ requirements without any additional cost to the Authority.
- If any equipment or any part thereof is found to be defective or fails to fulfil the requirements, the Authority shall give notice to the Systems Integrator setting forth details of such defects or failure and the Systems Integrator shall at their own cost make the defective equipment good or alter the same to make it comply with the requirements forthwith, within a period not exceeding one month of the initial report. These replacements shall be made by the Systems Integrator free of all charges at site and route locations.
- The cost of all associated works regarding testing as per the scope of work such as digging pits at sample sites for connectivity across SHQ/DHQ/Taluka/GPs and villages, its restoration, and arrangement of testing instruments such as OTDR etc. shall be borne by the Systems Integrator. Inspection work for FAT within a State shall be offered only after completion of PAT of the route and site location.
- All reasonable facilities and assistance like testing instruments and other test devices including access to drawings and other details shall be furnished, by the Systems Integrator to the TPA and the Authority.

### 8.3 ANNEXURE C

#### KEY PERFORMANCE INDICATORS

##### A. Construction



All the villages should be connected as per the scope of work defined. The Penalties applicable for not meeting the Key Performance Indicators (KPIs) as summarized below:

SNo.	Delay in meeting defined construction schedule	Penalty %
1	Up to 60 days	At the rate of 0.01% of the Performance Security for each month of delay for each incomplete Taluka/GPs/villages, until such Project Milestone is achieved.
2	From 61 days – 120 days	At the rate of 0.02% of the Performance Security for each month of delay for each incomplete Taluka/GPs/villages, until such Project Milestone is achieved
3	From 121 days – 180 days	At the rate of 0.03% of the Performance Security for each month of delay for each incomplete Taluka/GPs/villages, until such Project Milestone is achieved
4	Beyond 181 days	At the rate of 0.05% of the Performance Security for each month of delay for each incomplete Taluka/GPs/villages, until such Project Milestone is achieved. Delay in project beyond 181 days, DOIT has right to terminate the contract.

#### Illustrative - SLA calculation for Network Creation

Calculation of penaltyin% =  $\frac{\text{DHQ/Taluka/GPs/villages not connected as planned} \times 100}{\text{Total GP's / villages Targeted}}$

#### B. Operation and Maintenance

Following table depicts the penalty to be deducted, depending on network uptime. The penalties for Operation and Maintenance provided below shall not be applicable for the period of 17 months from Appointed Date. The KPIs shall be reviewed and updated by Authority every year.

##### i. SLAs for Active Network Elements connected on Ring topology

S.No	Uptime at taluka level	Penalty %
1	$\geq 99.9\%$	No Penalty
2	$\geq 85\%$ to $< 99.9\%$	Equal to 0.010% (zero point zero one per cent) of the amount of weighted Performance Security per taluka per month
3	$\geq 75\%$ to $< 85\%$	Equal to 0.02% (zero point zero one five per cent) of the amount of weighted Performance Security per taluka per month
4	$\geq 65\%$ to $< 75\%$	Equal to 0.030% (zero point zero two per cent) of the amount of weighted Performance Security per taluka per month. DOIT has right to terminate the agreement contract if uptime will be less than 65% uptime,

##### ii. SLAs for Active Network Elements connected on Spur (linear) topology UG/OH at Village

S.No	Uptime at taluka level	Penalty %
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1	$\geq 99.9\%$	No Penalty
2	$\geq 85\%$ to $< 99.9\%$	Equal to 0.010% (zero point zero one per cent) of the amount of weighted Performance Security per taluka per month
3	$\geq 75\%$ to $< 85\%$	Equal to 0.02% (zero point zero one five per cent) of the amount of weighted Performance Security per taluka per month
4	$\geq 65\%$ to $< 75\%$	Equal to 0.030% (zero point zero two per cent) of the amount of weighted Performance Security per taluka per month. DOIT has right to terminate the agreement contract if uptime will be less than 65% uptime,

**Note:**

Detail SLA and Penalty % will be dependent on UPTIME For each Last user/Village/Taluka/DHQ. Intent of DOIT is not the impose the penalty on System Integrator, but same time DOIT don't want to compromise on UPTIME. TPA/DOIT will mention in detail at time of RFP.

## 8.4 ANEXURE D

### LIST OF VILLAGES

a) North Goa



Aldona (CT)	Marna	Velguem	Cotorem	Edorem	Gancim
Calvim	Siolim (CT)	Agarvado	Govanem	Maloli	Carambolim
Corjuem	Siolim (CT)	Chopdem	Malpona	Nagargao	Chimbel (CT)
Ponolem	Sodiem	Alorna	Siranguli	Nanorem	Morambi-O-Grande (Merces) (OG)
Anjuna (CT)	Sircaim	Arambol (CT)	Sirsodem	Satorem	Ambarim
Arpora	Socorro (CT)	Amberem	Velguem	Satrem	Caraim
Nagoa	Tivim	Casnem	Xelopo-Curdo	Signem	Chorao
Assagao	Paliem	Poroscodem	Choraundem	Ustem	Corlim (CT)
Assonora	Punola	Chandel	Dongurli	Vainguinim	Cumbarjua (CT)
Moitem	Ucassaim	Corgao	Golauli	Xelopo-Buzruco	Gandaulim
Bastora	Canca	Dargalim	Ivrem-Buzruco	Zarani	Bambolim (CT)
Calangute (CT)	Verla	Ibrampur	Ivrem-Curdo	Codiem	Curca
Camurlim	Adwalpale	Cansarvornem	Naneli	Cumarconda	Goalim Moula
Calangute (CT)	Amone	Querim	Pale	Pissurlem	Talaulim
Candolim (CT)	Cudnem	Tiracol	Rivem	Ponocem	Goltim
Marra	Harvalem	Mandrem (CT)	Surla	Vaguriem	Navelim
Colvale (CT)	Carapur (CT)	Morjim (CT)	Conquirem	Podocem	Morambi-O-Grande (Merces) (OG)
Guirim (CT)	Sarvona	Ozorim	Damocem	Poriem	Morambi-O-Pequeno (Merces) (OG)
Moirá (CT)	Latambarcem	Paliem	Guleli	Anjunem	Murda (CT)
Nachinola	Aturli	Parcem (CT)	Melauli	Gonteli	Renovadi (OG)
Nadora	Maem	Mopa	Buimpal	Gululem	Neura-O-Grande
Nerul (CT)	Vainguinim	Tamboxem	Onda (CT)	Ponsuli	Neura-O-Pequeno
Oxel	Dumacem	Uguem	Saleli	Quelaudem	Siridao
Parra	Mencurem	Torxem	Sonus-Vonvoliem	Querim	Mercurim (CT)
Penha-de-Franca (CT)	Mulgao	Tuem	Compordem	Ravona	Capao
Marra	Naroa	Varconda	Dabem	Siroli	Malar
Pilerne (CT)	Navelim	Virnora	Mauzi	Carambolim-Bozruco	Naroa
Pirna	Curchirem	Advoi	Naguem	Caranzol	Bainguinim
Olaulim	Maulinguem North	Ansolem	Zormen	Codvol	Ella
Pomburpa	Ona	Birondem	Morlem	Cudcem	Panelim (OG)
Salvador do Mundo (CT)	Cotombi	Padeli	Ambedem	Pendral	Goa Velha (CT)
Reis Magos (CT)	Pale (CT)	Sanvorcem	Bombodem	Sanvordem	Calapor (CT)
Revora	Piligao	Vantem	Carambolim- Brama	Sonal	Cujira (OG)
Saligao (CT)	Salem	Ambeli	Codal	Azossim	Jua (CT)
Salvador do Mundo (CT)	Sirigao	Assodem	Davem	Mandur	Durgawadi (OG) (Part)
Sangolda	Surla	Codqui	Derodem	Batim	Taleigao (OG) (Part)



b) South Goa

Agonda	Cortalim (CT)	Priol (CT)	Molcozona	Sirlim	Curdi
Cola	Quelossim	Velinga	Nagvem	Guirdolim	Curpem
Cotigao	Sancoale (CT)	Savoi-Verem	Undorna	Loutulim	Porteem
Gaodongrem	Issorcim	Vagurbem	Zanodem	Macasana	Boma
Anjadip	Pale	Volvoi	Morpila	Calata	Calem
Loliem	Velsao	Ambaulim	Naquerim	Majorda	Costi
Poinguinim	Bandora (CT)	Assolda	Quitol	Utorda	Dongurli
Canacona	Betora	Odor	Sirvoi	Nagoa	Dudal
Caranzol	Codar	Xelvona	Xeldem (CT)	Navelim (CT)	Maulinguem
Colem	Conxem	Xic-Xelvona	Ambelim	Nuvem (CT)	Oxel
Sigao	Nirancal	Avedem	Aquem (CT)	Orlim	Netorli
Sonauli	Betqui	Chaifi	Assolna	Mulem	Nundem
Darbandora	Candola (CT)	Cotombi	Adsulim	Paroda	Verlem
Piliem	Adcolna	Adnem	Benaulim (CT)	Rachol	Vichundrem
Bandoli	Boma	Bali	Cana	Raia (CT)	Colomba
Camarconda	Borim (CT)	Bendordem	Betalbatim	Davorlim (CT)	Rivona
Codli	Candepar	Cordem	Gonsua	Sarzora	Antorlim
Cormonem	Curti (CT)	Tiloi	Camurim	Duncolim	Comproi
Moissal	Durbhat	Barcem	Carmona	Seraulim	Corangim
Molem	Cundaim	Gocoldem	Cavelossim	Sao Jose de Areal (CT)	Rumbrem
Sangod	Marcaim (CT)	Padi	Cavorim	Talaulim	Santona
Agrote	Ponchavadi	Quedem	Chandor	Varca (CT)	Sanvordem (CT)
Sancordem	Quela (CT)	Quisconda	Chinchinim (CT)	Velim	Cotarli
Surla	Querim	Cavorem	Deussua	Verna (CT)	Muguli
Arossim	Siroda	Cazur	Colva	Bati	Patiem
Cansaulim	Telaulim	Corla	Gandaulim	Cumbari	Salauli
Cuelim	Vadi	Maina	Sernabatim	Dongor	Uguem
Chicalim (CT)	Orgao (CT)	Mangal	Vanelim	Naiquinim	Xelpem
Dabolim	Tivrem	Pirla	Curtorim (CT)	Potrem	
Sao Jacinto Island	Gangem	Sulcora	Davorlim (CT)	Sigonem	
Sao Jorge Island	Usgao (CT)	Fatorpa	Dicarpale	Tudou	
Chicolna	Cuncolim	Molcarnem	Dramapur	Viliena	



## 8.5 ANNEXURE F

### Format for submission of pre-NIT queries

Sr.No	Clause Reference	Page Reference	Clause Description	Query / Suggestion / Request with Justification
1.				
2.				

«««« END OF EOI Document»»»»