

**TENDER FOR SUPPLY, INSTALLATION AND COMMISSIONING OF OPTICAL AMPLIFIER SOLUTION ON LONG HAUL LINK**

**Ref. no. ITI/ASCONPh-4/OFC/OLA-ILA/2026 dated 30.04.2026**

**Query by Bidder 1**

SI No	Clause no	Query Description	Query and Request	ITI Response
1	5.1 ELIGIBILITY CRITERIA	Bidder should have relevant experience of three similar works in the field of successful supply, installation and commissioning of optical amplifier solution. Bidder should have minimum Five years' to ten years' experience	<b>May be changed to</b> " <b>Bidder / OEM</b> should have relevant experience of three similar works in the field of successful supply, installation and commissioning of optical amplifier solution. <b>Bidder / OEM</b> should have minimum Five years' to ten years' experience"	As per Corrigendum -1
2	5.2 FINANCIAL STRENGTH	The average annual financial turnover on Supply for the last 3 years (up to 31st March 2025) shall not be less than 30% of the estimated cost. The requisite Turnover shall be duly certified by a Chartered Accountant with his seal/Signatures and registration number. The Bidder shall submit Audited financial statements/Balancesheets for Three years (2022- 23,2023-24 & 2024-25) by CA.	The average annual financial turnover on Supply <b>of bidder / OEM</b> for the last 3 years (up to 31st March 2025) shall not be less than 30% of the estimated cost. The requisite Turnover shall be duly certified by a Chartered Accountant with his seal/Signatures and registration number. The Bidder shall submit Audited financial statements/Balancesheets for Three years (2022- 23,2023-24 & 2024-25) by CA.	As per Corrigendum -1
3	9. PAYMENT TERMS AND CONDITIONS	a) The payment will be made in Three milestone on submission of tax invoice with supporting documents	a) The payment will be made in Three milestone on submission of tax invoice with supporting documents <b>through Bank Letter of Credit (LC)</b>	As per Corrigendum -1

**Query by Bidder 2**

S. No.	Clause no	Content of the clause requires clarification	Points of Clarification Required	ITI Response
1	3	Scope of Work	We kindly request confirmation on whether the existing links are operating in a single-channel or multi-channel configuration. In the event of multi-channel operation, please provide details of the MUX/DEMUX type deployed, along with the number of channels currently in use.  This information is required to accurately assess the network architecture and to determine whether a single-channel optical amplifier or a full C-Band-supported amplifier is required, thereby ensuring correct solution sizing and alignment with link-engineering requirements.	Full C Band supported amplifier is required. Other details will be given after signing of NDA by selected L1 bidder.
2	3	Scope of Work	We kindly request the complete technical specifications of the optical modules deployed at the terminal equipment, including key performance parameters. Additionally, please provide details of the Forward Error Correction (FEC) scheme currently used in the network.  This information is essential to carry out detailed link-engineering simulations and to ensure accurate system design, performance validation, and the development of a robust and error-free network solution in compliance with the project requirements.	Other network related details will be given after signing of NDA by selected L1 bidder.
3	3.2	Technical Specification of Optical Amplifier Solution Gain: Min: 15dB Max: 35dB	1. We respectfully request amendment of the maximum optical amplifier gain requirement from 35 dB to 33 dB, as a maximum gain of 33 dB aligns with established DWDM deployment practices and standard link-engineering guidelines. Higher gain values may adversely impact OSNR due to increased ASE noise and can introduce channel power imbalance and fiber non-linear effects in dense wavelength environments. A 33 dB upper limit is sufficient to meet the required link budgets through appropriate amplifier spacing or multi-stage amplification, while ensuring stable, reliable, and error-free network operation. This amendment is consistent with industry best practices and does not compromise network performance or coverage.  2. Alternatively, we propose that the maximum amplifier gain requirement be defined as a solution-based parameter, allowing bidders the flexibility to optimize amplifier design in accordance with their proposed architecture and link-engineering approach, while fully meeting the project's performance and reliability objectives. This approach would also enable broader participation from qualified vendors, fostering a more competitive bidding environment without impacting the technical or operational requirements of the network.	As per Tender
4	3.2	Technical Specification of Optical Amplifier Solution Noise Figure Typ: 4.8 Max: 7.5	We respectfully request that the Noise Figure requirement be broadened to a range of 5 dB to 11 dB, as this range remains compliant with overall system performance objectives and does not impact network requirements or link-engineering outcomes. The proposed Noise Figure range falls within acceptable operational limits for the specified amplifier gain range and ensures stable amplification while maintaining adequate OSNR and error-free transmission performance. Additionally, allowing this wider Noise Figure range will enable broader participation from qualified vendors, thereby promoting a more competitive bidding environment without compromising the reliability, scalability, or performance of the proposed network. Accordingly, we request that the clause be amended to reflect this revision.	As per tender
5	3	Scope of Work	Kindly confirm whether the existing network architecture is DCM-based. In case of a DCM-based network, please share details of the currently deployed DCMs. Alternatively, please confirm whether the DCM supply and implementation are expected to be included within the bidder's or solution provider's scope.	As per Tender

6	3	Scope of Work	We respectfully assume that the end-to-end optical loss across an OADM-ILA-OADM span will not exceed 35 dB. We kindly request your confirmation on whether this assumption is acceptable for the proposed network design and link-engineering calculations.	Preliminary link engineering suggest the range of 35 db span loss. However bidder shall be responsible for ensuring satisfactory performance of over all system solution.
7		Equipment should have the capability of Monitoring locally.	We kindly request confirmation on whether remote monitoring of OLA/ILA is mandatory. If remote monitoring is required, please provide details of the DCN (Data Communication Network) architecture, we assume DCN router/Switch will be available at ILA locations.	As per Tender
8	3.2	Bill of Quantity	we request you to please provide the OLA/ILA count calculation to confirm alignment with the specified technical requirements and link-engineering assumptions.	OLA-ILA quantity may vary as per the link engineering done by successful bidder. For BOQ refer clause 3.2
9	5.1	5.1 ELIGIBILITY CRITERIA FOR THE BIDDERS	Bidder/OEM should have relevant experience of three similar works in the field of successful supply, installation and commissioning of optical amplifier solution. Bidder should have minimum Five years' to ten years' experience up to 31st March 2025 as indicated below: a. Three similar works of OLA-ILA/DWDM solution each costing not less than 40% of the estimated cost put to tender. OR b. Two similar works of OLA-ILA/DWDM solution each costing not less than 50% of the estimated cost put to tender. OR c. One similar works of OLA-ILA/DWDM solution costing not less than 80% of the estimated cost put to tender.  The experience in similar nature of work should be supported by certificates issued by the client's organization or unertaking by OEM. The bidder/OEM has to submit Letter of work order for ongoing work/Completion certificate. Bidder/OEM shall submit the work experience certificate from client as per format given tender document or in the format showing the relevant experience issued by the client.	As per Corrigendum -I
10	9	Payment terms	9. PAYMENT TERMS AND CONDITIONS a) The payment will be made in Three milestone on submission of tax invoice with supporting documents b) All payment will be done Link wise. (i) First Milestone - 100% payment after supply of equipment for that particular link, POD duly endorsed by ITI team/field engineer through transferrable LC. (ii) Second Milestone - 100% payment on Installation, Commissioning and Operationalization of end-to-end OFC with a credit period of 45 days from the date of submission of the I&C Completion Certificate certified by M/s ITI Limited with the submission of Work Completion report signed by Zonal Head of ITI.  LC charges to be borne by ITI limited	As per Corrigendum -I
11		Delivery Schedule	I.Delivery of the equipment shall be phase wise within 4 months from the date of work order as per consignee detail which will be shared in the PO for full quantity.  II.ITI will provide the schedule of staggered delivery. However PO to be placed for full quantity.  III.Delivery of the items will be at Nodes of link as mentioned in clause 3 para-A.  IV.The bidder shall have the ability to supply the whole Lot in single supply Order .	As per Tender

### Query by Bidder 3

S. No.	Clause No.	RFP Clause / Description	Query / Clarification Requested	ITI Response
1	Annexure-C	Price quoted: Price Bid-A + Price Bid-B and L1 calculation mentioned as Min(X+Y)	Kindly clarify whether Price Bid-B is mandatory for L1 evaluation or optional in nature. Also confirm whether Price Bid-B value shall be considered in Reverse Auction and final commercial evaluation.	As per Corrigendum -1
2	Annexure-C	Vendor will be decided through value/rate based reverse auction	Request clarification whether Reverse Auction will be conducted on Total Project Value including GST or excluding GST basis.	GST amount is part of Price Bid format
3	Annexure-C	Reverse auction process shall be intimated later	Kindly confirm minimum decrement value, start price logic and number of extension rounds applicable during Reverse Auction process.	As per Corrigendum -1
4	3.2.1	Quantities of OLA/ILA mentioned with note "quantities may vary +25%"	Request customer to clarify whether variation shall be applicable item-wise or overall project quantity basis and Billing to be done based on the Supply Qty.	Billing to be done on supply qty basis
5	3.2.1	Spare quantities included separately in BOQ	Kindly clarify whether spare quantity is part of executable quantity or to be supplied separately without installation & commissioning scope.	Spare quantity to be supplied separately
6	3.2.1	OLA and ILA quantities provided zone-wise	Request confirmation whether exact site-wise deployment details along with link distance and power budget shall be shared after award of contract.	Details will be shared after award of contract
7	3.2.1	No detailed optical link engineering provided in BOQ	Kindly provide optical link loss budget, span details and existing network compatibility details required for accurate amplifier sizing and engineering.	Details will be shared after award of contract
8	Annexure-C / BOQ	Commercial format does not clearly mention inclusion/exclusion of installation charges	Kindly clarify whether Installation, Testing, Commissioning, Integration and Transportation charges are to be quoted separately or deemed included within unit prices.	As per tender
9	Commercial BOQ	GST applicability not explicitly mentioned in BOQ summary	Request confirmation whether quoted prices shall be considered inclusive or exclusive of GST during financial evaluation and Reverse Auction.	As per Tender
10	BOQ Note	"Quantities may vary +25%"	Kindly confirm whether unit rates finalized through tender shall remain valid for quantity variation during entire contract period.	Unit rate price will remain valid for quantity variation during entire contract period.
11	Annexure-C	L1 determination methodology not elaborated	Kindly clarify whether overall L1 bidder shall be decided on combined total value basis only or item-wise evaluation methodology will be adopted.	As per tender
12	3.2.1	No make/model mapping requested in commercial BOQ	Kindly confirm whether OEM part number and detailed technical compliance matrix is required to be submitted along with commercial bid.	OEM part number & Technical Compliance matrix to be submitted with technical documents.

13	OLA / ILA Deployment	Optical Amplifier equipment to be installed at multiple locations	Kindly confirm whether required rack space/U-space for installation of OLA/ILA equipment shall be provided by customer at all locations.	Site readiness will be the responsibility of ITI
14	Power Requirement	-48V DC power requirement mentioned for equipment	Request customer to confirm availability of regulated and redundant -48V DC power supply at all installation sites.	Site readiness will be the responsibility of ITI
15	Earthing Requirement	Earthing requirement not clearly defined	Kindly confirm whether proper telecom-grade earthing and grounding infrastructure shall be provided by customer at all sites.	Site readiness will be the responsibility of ITI
16	Power Cable Scope	Power connectivity details not mentioned	Kindly clarify whether bidder scope includes internal power cabling only or complete power extension from SMPS/Power Plant up to equipment location.	Complete power extension from SMPS/Power plant to equipment location is required.
17	Rack Integration	Existing rack availability not defined	Kindly confirm whether existing telecom racks shall be provided by customer or bidder has to supply separate racks/shelves for OLA/ILA installation.	As per tender
18	Existing EMS/NMS Integration	EMS/FCAPS integration mentioned	Request customer to share details of existing EMS/NMS platform and northbound/southbound interface requirements for integration compatibility assessment.	Details will be given after signing of NDA by selected L1 bidder.
19	EMS Compatibility	Existing network/OEM details not available	Kindly provide existing DWDM/Transmission OEM details and interoperability requirements for proposed optical amplifier solution.	Details will be given after signing of NDA by selected L1 bidder.
20	Site Readiness	Site infrastructure responsibility not specified	Kindly clarify whether site readiness including power, rack space, air-conditioning and civil readiness shall be customer responsibility prior to deployment.	Site readiness will be the responsibility of ITI
21	Manpower Support	Local coordination requirements not specified	Request confirmation whether customer/ITI representative shall be available during installation, ATP and commissioning activities at each site.	Yes
22	Access Permission	Remote/Defense locations involved	Kindly clarify whether entry passes, security clearance and site access permissions for defense/strategic locations shall be facilitated by customer.	Necessary coordination and support will be provided by ITI, wherever applicable. However, the bidder shall be required to submit requisite documents/details in a timely manner as per site-specific security protocols and guidelines.
23	Resident Engineer Requirement	O&M manpower requirement not explicitly defined	Kindly confirm whether any resident engineer/on-site support manpower is required during warranty/O&M period.	As per Tender
24	Attendance Requirement	Preventive maintenance schedule not specified	Kindly clarify whether periodic site attendance/health check visits are mandatory during warranty period and expected frequency of visits.	As per Tender
25	Fault Response SLA	SLA details not clearly mentioned	Request customer to clarify expected fault response time and restoration timelines during warranty/O&M support period.	Specified in the tender
26	Spare Management	Spare deployment responsibility not defined	Kindly confirm whether spare equipment shall be centrally stored or required to be deployed zone-wise/site-wise by bidder.	Spare equipment are to be deployed at Zone along with executable quantity
27	Fiber Patch Cord / OFC Termination	Interconnection details not mentioned	Kindly clarify whether required OFC patching/fiber termination at existing ODF/DDF shall be in bidder scope.	All accessories like Cable, Connectors and I&C Kit is in the scope of Bidder.
28	Remote Monitoring	EMS monitoring responsibility not clearly defined	Kindly clarify whether bidder is required to provide centralized remote monitoring support during warranty period.	Requirement will be finalized after operationalization of link
29	Training Requirement	Training scope not clearly mentioned	Kindly confirm whether OEM/bidder is required to provide operation & maintenance training to customer personnel and expected duration/location of training.	As per Tender
30	EMD/BG/Any Other Document Physical Submission	EMD/BG/Any Other Document Physical Submission	Kindly confirm whether EMD/BG/ Any other document from the RFP physical need to submit before or after bid submission due date.	Bidder need to submit their Bid online through e-Wizard portal

**Query by Bidder 4**

S. No.	Clause No.	RFP Clause / Description	Query / Clarification Requested	ITI Response
1	5.1	5.1 ELIGIBILITY CRITERIA FOR THE BIDDERS	Bidder/OEM should have relevant experience of three similar works in the field of successful supply, installation and commissioning of optical amplifier solution. Bidder should have minimum Five years' to ten years' experience up to 31st March 2025 as indicated below: a. Three similar works of OLA-ILA/DWDM solution each costing not less than 40% of the estimated value by Bidder/OEM for OLA-ILA/DWDM. OR b. Two similar works of OLA-ILA/DWDM solution each costing not less than 50% of the estimated value by Bidder/OEM for OLA-ILA/DWDM. OR c. One similar works of OLA-ILA/DWDM solution costing not less than 80% of the estimated value by Bidder/OEM for OLA-ILA/DWDM.	As per Corrigendum -I

2	5.2 FINANCIAL STRENGTH	The average annual financial turnover on Supply for the last 3 years (up to 31st March 2025) shall not be less than 30% of the estimated cost. The requisite Turnover shall be duly certified by a Chartered Accountant with his seal/Signatures and registration number. The Bidder shall submit Audited financial statements/Balancesheets for Three years (2022- 23,2023-24 & 2024-25) by CA.	The average annual financial turnover on Supply of bidder / OEM for the last 3 years (up to 31st March 2025) shall not be less than 30% of the estimated cost. The requisite Turnover shall be duly certified by a Chartered Accountant with his seal/Signatures and registration number. The Bidder shall submit Audited financial statements/Balancesheets for Three years (2022- 23,2023-24 & 2024-25) by CA.	As per Corrigendum -I
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