 Adding Value through IT	Electronics Corporation of Tamil Nadu Limited
	<p>TENDER TO SELECT SYSTEM INTEGRATOR TO BUILD, OPERATE & MANAGE THIRUKOVIL LIVE STREAMING FROM A CENTRAL VIDEO PRODUCTION CONTROL ROOM (PCR) WITH NETWORK OPERATION CENTER (NOC)</p> <p><u>Tender Reference</u></p> <p>ELCOT/Proc/OT/33468/Thirukovil Live Webstream/2021-22</p> <p>Tender Document</p>
	<p>Electronics Corporation of Tamil Nadu Limited MHU Complex II Floor, 692 Anna Salai, Nandanam Chennai-600035 Phone: +91-44-65512300 Fax: +91-44-2433 0612 ELCOT CIN No.U27209TN1977SGC007291 Email: proctenders@elcot.in Website: www.elcot.in</p>

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Importance Notice

This Tender Process is governed by the Tamil Nadu Transparency in Tenders Act, 1998 and the Tamil Nadu Transparency in Tenders Rules, 2000 as amended from time to time.

In case of any conflict between the terms and conditions in the Tender Document and the Tamil Nadu Transparency in Tenders Act, 1998 and the Tamil Nadu Transparency in Tenders Rules, 2000, the Act and Rules shall prevail.

Acronyms used in the Document

BG	Bank Guarantee
DD	Demand Draft
EMD	Earnest Money Deposit
HD	High Definition
HR&CE	Hindu Religious & Charitable Endowment Department
INR	Indian Rupees
IT	Information Technology
IP	Internet protocol
LD	Liquidated Damage
LOA	Letter Of Acceptance
LOI	Letter of Indent
SD	Security Deposit
SPOC	Single Point of Contact
TDS	Tax Deduction at Source
NOC	Network Operation Center
PCR	Production Control Room

Know Your Rights

1. ALL TENDERS WILL BE OPENED ONLY IN THE PRESENCE OF THE BIDDERS.
2. THE BIDDERS HAVE A RIGHT TO INSIST ON PROCESSING OF TECHNICAL BIDS IN THE BIDDERS PRESENCE ONLY.
3. PRICE BID OPENING AND PRICE COMPARISON WILL BE DONE ONLY IN THE PRESENCE OF THE BIDDERS.
4. BIDDERS ARE ELIGIBLE FOR A BIDDER SIGNED COPY OF THE PRICE BID COMPARISON STATEMENT ON THE SPOT.
5. PLEASE INSIST ON YOUR RIGHTS AND AVAIL THE SAME.

MANAGING DIRECTOR
ELCOT

Letter of Undertaking

To
The Managing Director
Electronics Corporation of Tamil Nadu Limited
692 Anna Salai, Nandanam, Chennai-600035

Sir,

Sub: Undertaking for participating in ELCOT's Tender towards selection of System Integrator to Build, Operate & Manage Thirukoil Live Streaming From a Central Video Production Control Room (PCR) with Network Operation Center (NOC).

Ref: Tender No. ELCOT/Proc/OT/33468/Thirukovil Live Webstream /2021-22

I/We ----- have gone through the Terms and Conditions, Scope of Work and Specification and will abide by them as laid down (Tender Documents, Technical bid and Price Bid)

I/We ----- hereby confirm that our Company was not blacklisted by any State Government/ Central Government/ Public Sector Undertakings during the last three years. We also hereby confirm that our EMD/SD was not forfeited by any State Government / Central Government / Public Sector Undertakings during the last three years due to our non-performance, non-compliance with the tender conditions etc.

I/We ----- hereby declare that all the particulars furnished by us in this Tender are true to the best of my/our knowledge and we understand and accept that if at any stage, the information furnished is found to be incorrect or false, we are liable for disqualification from this tender and also are liable for any penal action that may arise due to the above.

I/We ----- certify that no refurbished components are used in the manufacturing and supply of tendered items. The licences for the operating systems and other software to be installed under this contract are certified as genuine and valid.

I/We _____ certify that we are liable and responsible for any disputes arising out of Intellectual Property Rights.

In case of violation of any of the conditions above, I/We

..... understand that I/ We are liable to be blacklisted by ELCOT for a period of three years.

Yours faithfully
for _____
Name, Signature
Designation
Seal

Note:

- 1) Declaration in the company's letter head should be submitted as per format given above
- 2) If the bidding firm has been blacklisted by any State Government/ Central Government/ Public Sector Undertakings earlier, then the details should be provided.

1. Preamble

Electronics Corporation of Tamil Nadu Limited (ELCOT), a wholly owned Government of Tamil Nadu Undertaking is the Optional Procurement Agency of the Government of Tamil Nadu for procurement of IT related products like Computers, Printers, other peripherals and software as per G.O.Ms.No.58 of Finance (BPE) Department dated 16.2.1999 with latest amendments. ELCOT is procuring various IT related products for all the State Government Departments / Boards / Autonomous Bodies, etc.

As part of the Procurement activity, this tender is floated to select a Bidder for Web Streaming of videos for Thirukkoil Pooja and other devotional events to general public for and on behalf of Hindu Religious and Endowment Department. The selected bidder has to perform a pilot run in the select temple by the Department. After successful completion

of pilot run, the Web Streaming of Videos will be rolled out to the other temples in Tamil Nadu at the discretion of the end user Department (HRCE).

IPR CLAUSE: All Intellectual Property Rights will vest with the HR&CE Department and the bidder shall have no right over the same.

Definitions used in the Tender Document:

1	Agreement	Means the document signed by the Authority (HR&CE) Department and the Bidder that incorporate any final corrections or modifications to the tender and is the legal document binding on both the parties to all terms and conditions of the Contract
2	Bid	Means the complete bidding document submitted by the Bidder to the Authority (ELCOT) and shall include any corrections, addenda and modifications made therein In accordance with the terms and conditions of tender.
3	Bidder	Means the party who makes a formal offer in pursuance of the tender floated.
4	Day	A day means a calendar day
5	Invitation of Bid	Means the advertisement published in accordance with the legal requirements or notifications by other means to prospective Bidders of the forthcoming opportunity to Bid for the Contract.
6	Letter of Acceptance	Means the formal acceptance of the bid of the Successful Bidder by ELCOT
7	Lowest Tender	Means the tender which, on evaluation, is found to be the most beneficial to the procuring entity in financially quantifiable terms.
8	Payment	Means the amount payable by HR&CE Department based on the tendered items as per the agreement.
9	Period	Means entire term of the Contract
10	Purchaser	Purchaser means the end-user for whom the procurement / Services is indented through the tender.
11	Successful Bidder	Successful Bidder means the Bidder who becomes successful through the tender process
12	Goods & Service Tax(GST)	As per the announcement of Government of India, GST will be paid at actuals as applicable

2 e-Tender Schedule

ELECTRONICS CORPORATION OF TAMILNADU LIMITED (ELCOT)

1.	Tender inviting Authority, Designation and Address	The Managing Director ELCOT, II Floor MHU Complex 692 Anna Salai, Nandanam, Chennai-600035. URL: www.elcot.in
2	Tender Accepting Authority	The Board of Directors of ELOT.
3	A) Name of the Work	Tender to Select System Integrator to Build, Operate & Manage Thirukoil Live Webstreaming From a Central Video Production Control Room(PCR) with Network Operation Center(NOC)
	B) Tender reference	ELCOT/Proc/OT/33468/Thirukovil Live Webstream/2021-22
	C) Installation	Initially will be implemented at Arulmigu Dhandayuthapaniswamy Temple, Palani & NOC/PCR at HR&CE Headquarters. After Successful implementation at Arulmigu Dhandayuthapaniswamy Temple, Palani, the same will be rolled out to other 46 Senior Grade Temples across Tamil Nadu.
4	Tender documents available place	Tender documents can be downloaded free of cost from www.elcot.in and http://www.tenders.tn.gov.in
5	Tender Portal Fees	Tender Portal Fee of Rs.10,000/- (Rupees Ten Thousand only) plus 18%GST should be paid electronically through the Bidder's respective internet banking enabled account via NEFT / RTGS to the account of ELCOT: Account Number: 6681528770 Indian Bank, Nandanam Branch, Chennai – 600 035. IFSC Code: IDIB000N078.
6	Earnest Money Deposit (EMD)	The EMD Amount of Rs. 10,00,000/- (Rupees Ten Lakhs Only) should be paid

		electronically through the Bidder's respective internet banking enabled account via NEFT / RTGS to the account of ELCOT: Account Number: 6681528770 Indian Bank, Nandanam Branch, Chennai- 600 035. IFSC Code: IDIB000N078.
7	Tender submission	Two Part Tender comprising of Technical Bid and Price Bid should be submitted electronically through the e-Tender Portal https://tntenders.gov.in
8	Date and Place of Pre-Bid meeting	04.10.2021 @ 11.00 A.M at the address mentioned in Column (1) above.
9	Bid signing	Bidders should possess valid Class 3 - Signing and Encryption Digital Signature Certificates for signing the Bids
10	Help manuals for e-Tender	Bidders may download the help documents and user manuals from https://tntenders.gov.in
11	e-Portal Training & Pre-bid meeting	Bidders should attend the Pre-bid meeting scheduled on 04.10.2021@ 11.00AM .
12	Due Date, Time and Place of submission of Tender	On 27.10.2021 @ 4.00 PM at the address mentioned in Column (1) above.
13	Date, Time and Place of opening of the Technical Bids	On 27.10.2021 @ 4.30 PM at the address mentioned in Column (1) above.
14	Date, Time and Place of opening of Price Bids	Will be intimated only to the Technically Qualified Bidders
15	Bid validity	90 days liable to be extended as per the request of ELCOT

3. General Instructions

3.1 General

- a) The Bidders are requested to examine the instructions, terms and conditions and specifications given in the Tender. Failure to furnish all required information in every respect will be at the Bidder's risk and may result in the rejection of bid. Relaxation in submission of the documentary proof has been given ONLY to the existing suppliers and such relaxation from submission of documents is applicable wherever they are eligible to avail.
- b) It will be imperative for each Bidder(s) to familiarise himself/ themselves with the prevailing legal situations for the execution of contract. ELCOT shall not entertain any request for clarification from the Bidder regarding such legal aspects of submission of the Bids.
- c) It will be the responsibility of the Bidder that all factors have been investigated and considered while submitting the Bids and no claim whatsoever including those of financial adjustments to the contract awarded under this tender will be entertained by ELCOT. Neither any time schedule nor financial adjustments arising thereof shall be permitted on account of failure by the Bidder to appraise himself.
- d) The Bidder shall be deemed to have satisfied himself fully before Bidding as to the correctness and sufficiency of its Bids for the contract and price quoted in the Bid to cover all obligations under this Tender.
- e) It must be clearly understood that the Terms and Conditions and specifications are intended to be strictly enforced. No escalation of cost in the Tender by the Bidder will be permitted throughout the period of Agreement or throughout the period of completion of

contract whichever is later on account of any reasons whatsoever.

- f) The Bidder shall make all arrangements as part of the contract to supply, commission and train the beneficiaries at various locations at their own cost and transport.
- g) The Bidder should be fully and completely responsible to ELCOT and for the concerned Client for all the deliveries and deliverables.

3.2 Clarifications in the Tender

- a) A prospective Bidder requiring any clarification in the Tender may notify ELCOT by letter or by E-mail as per the Format prescribed in Appendix – 3 to proctenders@elcot.in. We encourage paper free e-mail communication.
- b) The responses to the clarifications will be notified in the websites by means of Corrigendum to the Tender Document. It would be advantageous to commence e-mail contact with proctenders@elcot.in to register your e-mail id.

3.3 Amendments to the Tender

- a) Before closing of the Tender, clarifications and amendments if any will be notified in the websites mentioned in the Tender Schedule. The Bidders periodically check for the amendments or corrigendum or information in the websites till the closing date of this Tender. ELCOT will not make any individual communication and will in no way be responsible for any ignorance pleaded by the Bidders.
- b) No clarifications will be offered by ELCOT within 72 hours prior to the due date and time for opening of the Tender.
- c) Before the closing of the Tender, ELCOT may amend the Tender document as per requirements or wherever ELCOT feels that such amendments are absolutely necessary.
- d) Amendments also may be given in response to the queries by the prospective Bidders.
- e) Such amendments will be notified in the websites mentioned in the

tender schedule.

- f) ELCOT at its discretion may or may not extend the due date and time for the submission of bids on account of amendments.
- g) ELCOT is not responsible for any misinterpretation of the provisions of this tender document on account of the Bidders failure to update the Bid documents on changes announced through the website.

3.4 Language of the Bid

The bid prepared by the Bidder as well as all correspondence and documents relating to the bid shall be in English only. The supporting documents and printed literature furnished by the bidder may be in another language provided they are accompanied by an accurate translation in English duly notarised, in which case, for all purposes of the bid, the translation shall govern. Bids received without such translation copy are liable to be rejected.

3.5 Bid Currency

Price should be quoted in Indian Rupees (INR) only and Payment shall be made in Indian Rupees only.

3.6 Contacting Tender Inviting Authority

- a) Bidders shall not make attempts to establish unsolicited and unauthorised contact with the Tender Inviting Authority, Tender Scrutiny Committee, Tender Accepting Authority, after the opening of the Tender and prior to the notification of the Award and any attempt by any Bidder to bring in extraneous pressures on the Tender Accepting Authority shall be sufficient reasons to disqualify the Bidder.
- b) Notwithstanding anything mentioned above, the Tender Inviting Authority or the Tender Accepting Authority may seek bonafide clarifications from the Bidders relating to the tenders submitted by

them during the evaluation of tenders.

3.7 Force Majeure

Neither the Purchaser / ELCOT nor the Successful Bidder shall be liable to the other for any delay or failure in the performance of their respective obligations due to causes or contingencies beyond their reasonable control such as:

- Natural phenomena including but not limited to earthquakes, floods and epidemics.
- Acts of any Government authority domestic or foreign including but not limited to war declared or undeclared, priorities and quarantine restrictions.
- Accidents or disruptions including, but not limited to fire, explosions, breakdown of essential machinery or equipment, power and water shortages.
- In such claim of Force Majeure clause, the bidder should submit the written claim, explaining the cause within 7 days of such occurrence and may be accepted by ELCOT/ Purchaser.

3.8 Dispute and Jurisdiction

“Any dispute or difference, whatsoever, arising between the parties to this contract arising out of or in relation to the terms of this contract shall be resolved by the parties mutually by acting in good faith towards fulfilling the contract and for this purpose the parties mutually agree to furnish or exchange all relevant documents, information and any other material within their special knowledge and thereby conclude their discussions between them / their representatives or officers within a period of time as may be mutually agreed to say the time of commencement of the move to resolve the dispute”.

“In case the parties failed to resolve the disputes amicably within the time frame agreed and in the manner stated supra, the aggrieved party shall approach the Court in Chennai city alone to the exclusion of all other Courts to adjudicate the unresolved dispute”.

4. Eligibility Criteria

The Bidders should have the following Eligibility Criteria for participating in the Tender. The Bidders should enclose documentary evidence for fulfilling the Eligibility Criteria in the Technical Bid.

#	Eligibility Criteria	Supporting documents for fulfilling the Eligibility Criteria
1.	<p>Bidder should be a Company registered in India under the Companies Act 1956 / 2013.</p> <p>Bidder should have been in the Information Technology/IT enabled services/Telecommunication business /Video Recording Services for 5 Years as on 31/03/2021</p>	<p>a) Copy of the Certificate of incorporation should be submitted.</p> <p>b) Copy of the work order dated on or before 31.03.2016 obtained from the customer or agreement signed dated on or before 31.03.2016 with the customer for any IT Services and Completion Certificate should be submitted.</p>
2	<p>a) Bidder should have an average annual turnover of Rs.3 Crores and above, in the last three (2017—18, 2018-19 & 2019-20) audited financial years</p>	<p>1) Copies of the Audited balance sheet for the last 3 financial years should be submitted.</p> <p>2) Certificate from the Chartered Accountant should be enclosed with positive Net worth in the last in the last three (2017—18, 2018-19 & 2019-20) financial years</p>
3	<p>Bidder should have executed, at least one single order, for having experience in rendering similar services where live streaming was involved in India, for any Govt/PSU for a value of Rs.50.00 Lakhs or more, during any one of the previous three financial years (2017-18, 2018-19, 2019-20).</p>	<p>Copy of the work order or Agreements and Completion/Satisfactory Certificates from the customers should be submitted.</p>

4.	The Bidder should have valid ISO 27001:2011 & ISO20001:2011 or higher certificate in his name	Valid copy of ISO 27001:2011 & ISO20001:2011 or higher Certificate should be enclosed.
5.	The Bidder shall have local office in Chennai	Copy of the Rental Agreement or land line telephone bills dated on or before 31.03.2021 should be submitted. If the Bidder is not having an Office in Chennai, a necessary Undertaking letter to open the Office in Chennai within 10 days of signing the agreement should be submitted.
6.	The Bidder should not hold any sanction / black-listing by any Government / Quasi government agency or any Multi-Lateral Donor Body (World Bank, ADB, JICA, etc.) during the past 3 years (even if the sanction / black-list was subsequently withdrawn).	Self declaration Certificate should be submitted
7	The Bidder shall have their own Website.	The URL of the Website Name and Copy of Home Page Print out of the OEMs and Bidder shall be submitted.
8	The Bidder should submit Technical Compliance for the quoted products.	Compliance certificate or an undertaking letter from the authorized signatory of the Bidder to be submitted.
9	The Bidder should submit the brochure for the quoted products. The brochure should be hosted and available in their website till the validity of this tender or until the issuance of last purchase order for the product vide this tender, whichever happens later.	Brochure for the quoted product to be submitted. Relevant proof of hosting the brochure in the website to be submitted. An undertaking letter from the authorized signatory ensuring the availability of the brochures submitted for this tender till the validity of the tender should be submitted. The bidder should also submit technical compliance from the OEM for the products quoted

Important Note:

- 1) Bidders should ensure that they have submitted all the required proof of documents self attested and signed with seal as specified in the Tender document without fail. Bids received without the supporting documents to prove their eligibility are liable for rejection. Bidder must be in a position to produce original for verification as and when demanded by ELCOT, failing which, such of those documents will not be considered.
- 2) ELCOT reserves the right to verify the Authenticity and Veracity of any documents submitted for Eligibility criteria.

5. Bid Preparation and Submission

5.1 Tender Procedure

- a) ELCOT facilitated e-Tender portal <https://tntenders.gov.in>. The prospective Bidders should register themselves in the e-Tender Portal and submit the Bids electronically through the e-Tender portal. The paper based physical Tender submission is not permitted.
- b) The e-Tender training session will be held on the date and time as mentioned in the Tender Schedule. The Bidders are requested to download the e-Tender help manual and user manuals from the Portal for reference.
- c) It is mandatory for the Bidders to possess a valid Class -3 Signing and Encryption Digital Signature Certificate in the name of the tender submitting authority to complete the e-Tender Bid process as per the provisions of Government of India IT Act 2000 with latest amendments.
- d) The Technical Bid form and Price Bid form will be available in spreadsheet format for downloading. The registered Bidders can log into the e-Tender system and download the Bid Forms.

The format of the contents of Technical Bid and Price Bid will be available in the tender site. The registered Bidders can log into the e-Tender system and download the tender documents/corrigendum as applicable and go through them carefully. Then the bidders can get ready the relevant documents as required for the technical bid and upload the documents as indicated before submitting the bid. Similarly the bidder has to download the Bill of Quantity (BOQ), the price bid form in xls format, fill up the relevant portions only in offline mode and then upload the final one against the price bid portion before submitting the bid.

e) The Bid forms should be filled and submitted using the Digital Signature Certificates. The supporting documents should be scanned and uploaded in the e-Tender system.

5.2 Cost of Bidding

The Bidders should bear all costs associated with the preparation and submission of Bids. ELCOT will in no way be responsible or liable for these charges/costs incurred regardless of the conduct or outcome of the bidding process.

5.3 Tender Document Fee

The Tender Documents can be downloaded free of cost from the websites mentioned in the Tender Schedule. The Tender document fee is waived for such downloaded documents.

5.4 Earnest Money Deposit (EMD)

a) An EMD amount as specified in the Tender Schedule should be paid electronically through their respective internet banking enabled account via NEFT / RTGS to the account of ELCOT:

Account Number: 6681528770

Indian Bank, Nandanam Branch, Chennai- 600 035.

IFSC Code: IDIB000N078.

In the case of EMD charges paid in advance by the bidder, but due to some reasons, the bids could not be uploaded/submitted, the EMD charges paid earlier will be refunded by applying through a Letter of request to ELCOT with necessary proofs. The EMD in the form of Bank guarantee is not acceptable.

- b) The EMD of the unsuccessful Bidders will be returned at the expense of the Bidders within a reasonable time consistent with the rules and regulations in this regard. The EMD amount held by ELCOT till it is refunded to the unsuccessful Bidders will not earn any interest thereof.
- c) The EMD amount of the Successful Bidder can be converted as part of the Security Deposit (SD) for successful execution of the work and will be returned only after the successful fulfilment of the Contract.
- d) The EMD amount will be forfeited by ELCOT, if the Bidder withdraws the bid after opening of the bids and during the period of its validity specified in the tender or if the Successful Bidder fails to sign the contract or the Successful bidder fails to remit Security Deposit within the respective due dates.

5.5 Tender Portal Fee

a) For each and every Bid submitted, a non-refundable Tender Portal Fee as mentioned in the Tender Schedule should be paid electronically through their respective internet banking enabled account via NEFT / RTGS to the account of ELCOT:

Account Number: 6681528770

Indian Bank, Nandanam Branch, Chennai- 600 035.

IFSC Code: IDIB000N078.

b) The payment particulars should be entered in the e-Tender Portal. At the time of the Technical Bid opening, the payment committed in the Bid should be factual and should match with the physically submitted payments.

c) Even though the payment particulars are entered in the e-Tender portal, if the Bidder fails to submit the physical instrument, their bid is liable for rejection. If any of the information committed in the e-Tender Bid does not match with physically submitted payment, ELCOT reserves the right to reject the bid summarily.

d) In the case of Tender Fee paid in advance by the bidder, but due to some reasons, the bids could not be uploaded / submitted, the Tender Fee paid earlier will not be refunded.

5.6 Letter of Authorisation

A letter of Authorisation from the Board of Directors / appropriate authority authorising the Tender submitting authority or a Power of Attorney should be submitted in the Technical bid, otherwise the Bids will be summarily rejected.

5.7 Two Part Bidding

Bidders should examine all Instructions, Terms and Conditions and Technical specifications given in the Tender document. Failure to furnish information required by the Bid or submission of a Bid not substantially responsive in every aspect will be at the Bidders risk and may result in rejection of Bids. Bidders should strictly submit the Bid as specified in the Tender, failing which the bids will be considered as non-responsive and will be rejected.

5.7.1 Technical Bid Form

a) The content format of the Technical Bid will be presented in the tender site and the bidder has to upload the relevant documents in the format, as asked in the tender against each item. The Bidder has to verify each uploaded document and then sign the same using the Digital Signature Certificate (DSC) before final submission.

- b) The Technical Bid Format should not be changed or altered or tampered. If the Bid format is found to be tampered, the Bids will be summarily rejected.
- c) The Technical Bid documents uploaded should not contain any Price indications strictly; otherwise the Bids will be summarily rejected.
- d) The Technical Bid format as given in the Tender shall be filled, signed using the DSC and the scanned copy in the prescribed format shall be submitted.
- e) The supporting documents and other documents should be submitted in pdf in the Technical Bid as indicated in Appendix 6 (A6.3).

5.7.2 Price Bid Form

- a) The Price Bid Form called Bill of Quantity (BOQ) will be in spread sheet format (xls). The original BOQ should be downloaded from the tender site, filled in at the appropriate places indicated in offline and then it has to be uploaded with the same name against the price bid option. The BOQ has to be verified and then signed using the DSC before final submission.
- b) The Price Bid Form should not be changed or altered or tampered. If the Bid form is tampered, the Bids will be summarily rejected.
- c) The Price Bid Form should not contain any conditional offers or variation clauses, otherwise the Bids will be summarily rejected.
- d) The Prices quoted shall be only in INDIAN RUPEES (INR) only. The tender is liable for rejection if Price Bid contains conditional offers.
- e) The cost quoted by the Bidder shall include cost and expenses on all counts viz., cost of equipment, materials, tools, techniques, methodologies, manpower, supervision, administration, overheads, travel, lodging, boarding, in-station & outstation expenses, etc., and any

other cost involved in the supply.

f) The cost quoted by the Bidder shall be kept firm for a period specified in the Tender from the date of opening of the tender. The Bidder should keep the Price firm during the period of Contract including during the period of extension of time if any. Escalation of cost will not be permitted during the said periods or during any period while providing services whether extended or not for reasons other than increase of duties / taxes payable to the Governments in India within the stipulated delivery period. The Bidders should particularly take note of this factor before submitting the Bids.

g) The Prices finalised after negotiations should be kept valid during the Contract period and no escalation in the final price will be entertained including reasons due to Foreign Exchange fluctuations.

h) Exchange Rate fluctuations (Foreign Currency Rate Exchange) cannot be cited as reasons for the delay or dishonour of Purchase Order.

5.8 Bid closing date and time

The Bids should be submitted not later than the date and time specified in the Tender Schedule or Corrigendum if published. The e-Tender portal will automatically lock the date and time exactly on the date and time. Even if the Bid submission is in half way through during the closing date and time, submission would not be possible. Hence the Bidders should be cautious to submit the Bids well in advance to avoid disappointments.

5.9 Withdrawal of bids

Bidders can withdraw their bids submitted earlier, in case they do not want to participate in this tender, before the bid closing date and time. Bidders should note that once withdrawn, bid cannot be submitted again for this tender.

5.10 Resubmission of bids

Bidders can resubmit the bids at any point of time either in technical bid or in price bid or both, before the bid submission end date and time and only the last content updated successfully will be available for bid opening, at the scheduled date and time.

5.11 Bid Acknowledgement

The etender system will issue a bid acknowledgement receipt which is the final proof for the successful bid submission from the bidder side.

6. Tender opening and Evaluation

6.1 Technical Bid Opening

The Technical Bid will be opened on the date and time as specified in the Tender schedule in the presence of those Bidders, who choose to be present against production of an authorisation letter from the Bidding authority. A maximum of two representatives for each Bidder would be allowed to attend the Tender opening.

6.2 Tender Validity

The offer submitted by the Bidders should be valid for a minimum period of 90 days from the date of opening of the Tender. The Contract will be valid for 3 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later. The Successful Bidder should keep the Price firm during the period of Contract including during the period of extension of time if any.

6.3 Initial Scrutiny

Initial Bid scrutiny will be conducted and incomplete details as given below will be treated as non-responsive.

If Tenders are;

- not submitted in two parts as specified in the Tender;
- received without the Letter of Authorisation;
- received without EMD amount and e-Portal charges;
- found with suppression of information or incomplete information;
- furnished with subjective and conditional offers;
- submitted without supporting documents in compliance to the Eligibility
- Criteria and Evaluation Criteria;
- non-compliance of any of the clauses stipulated in the Tender;
- lesser validity period

All responsive Bids will be considered for further evaluation.

The decision of ELCOT will be final in this regard.

6.4 Clarifications by ELCOT

When deemed necessary, ELCOT may seek bonafide clarifications on any aspect from the Bidder. However, that would not entitle the Bidder to change or cause any change in the substance of the Bid or price quoted. During the course of Technical Bid evaluation, ELCOT may seek additional information or historical documents for verification to facilitate decision making. In case the Bidder failed to comply with the requirements of ELCOT as stated above, such Bids may at the discretion of ELCOT, shall be rejected as technically non-responsive.

6.5 Tender Evaluation

6.5.1 Suppression of facts and misleading information

- a. During the Bid evaluation, if any suppression or misrepresentation or any of its kind, is brought to the notice of ELCOT, then ELCOT shall have the right to reject the Bid and if after selection, ELCOT would terminate the contract, as the case may be, will be without any compensation to the Bidder and the EMD / SD, as the case may be, shall be forfeited.
- b. Bidders should note that any figures in the proof documents submitted by the Bidders for proving their eligibility is found suppressed or erased, ELCOT shall have the right to seek the correct facts and figures or reject such Bids.
- c. It is up to the Bidders to submit the full copies of the proof documents to meet out the criteria. Otherwise, ELCOT at its discretion may or may not consider such documents.
- d. The Tender calls for full copies of documents to prove the Bidder's experience and capacity to undertake the project.

6.5.2 Technical Bid Evaluation

A Tender Evaluation Committee will examine the Technical Bids against the Eligibility Criteria given in the Tender document. The evaluation will be conducted based on the support documents submitted by the Bidders. The documents which did not meet the eligibility criteria will be rejected and further evaluation will not be carried out for such bidders. The eligible Bidders alone will be called as Eligibility Criteria qualified bidders and will be considered for further evaluation.

6.5.3 Technical Demonstration

The Eligibility Criteria qualified bidders will be asked to present the demo of the proposed solution along with their architecture/network diagram in front of the technical committee. The technical committee will evaluate the proposal/demo and the satisfactory bidders will be called Technically Qualified bidders and will be considered for further process. For demonstration purpose, nearby a temple will be identified by HR&CE department and the HR&CE office will act as NOC. The bidders have to demonstrate some of the stated facilities in front of the technical committee. For this purpose, minimum 2 cameras to be installed for the view and HR&CE department will provide broad band connectivity. The evaluation will be done as per the clause 6.9 Acceptance Criteria.

6.5.4 Price Bid Evaluation

a) The Price Bids of the Technically Qualified Bidders alone will be opened and evaluated. The Price Bid should include all expenses towards this Tender. The Price Bids will be opened in the presence of the Bidders at ELCOT. The Bidders or their authorised representatives will be allowed to take part in the Price Bid Opening.

b) Price Bid evaluation will be done as per the Tamil Nadu Transparency in Tender Rules 2000 with latest amendments.

c) Following method of price evaluation will be adopted.

- The Price Bid Evaluation shall include State Goods and Services Tax, Central Goods and Services Tax, Integrated Goods and Services Tax, and all central duties such as Customs Duty as part of the price. The GST rates quoted should comply with the statutory guidelines and will be paid as applicable at the time of billing.

- In evaluation of the price of an imported item, the price shall be determined inclusive of the Customs duty.

- The prices will be evaluated as follows and the decision of ELCOT will be the final.

- Partial bid is not allowed.

- The prices will be evaluated as follows and the decision of ELCOT will be the final.

- The total cost including applicable GST and including all other duties and charges (Such as Excise Duty, Customs Duty, Installation Charges etc., as per the guidelines stated above) of all individual items under mandatory components will be taken for the price bid evaluation. The bidder who quotes lowest cost/rate will be called as L1 bidder.

d) However the L1 bidder shall be asked to match the price of the applicable individual line items, where they have not become L1.

e) L1 Bidder will be called as Successful Bidder.

- f) If any of the item/s is/are unmatchable by L1 bidder, then the issue will be addressed to the Tender Scrutiny Committee to offer its recommendations, which will be put up to the Tender Accepting Authority (TAA) and the decision of the TAA is the final.
- g) ELCOT reserves the right to cancel the tender and retender to invite the competitive offers / quotes after a thorough analysis of the tender specification terms and conditions.
- h) The Successful Bidder should not sell the Tendered items to any other Purchaser at price which is lower than the final negotiated price offered to ELCOT. If it is found that it has been sold at lower rate, then that lower price will be fixed by ELCOT for that item in future and also for the already supplied quantities under this tender.
- i) The successful bidder should supply, install and commission the ordered items only as per the approved specification. If found otherwise or violating condition, then the tender is liable for cancellation and penal action will be initiated against the erring bidder or OEM including blacklisting of them.

6.6 Negotiations

Negotiations will be conducted with the Successful Bidder for improvement in the further reduction in price and advancement of delivery schedule.

6.7 Award of Contract

- a) Orders will be placed to the L1 Bidder as per the provisions of Tamil Nadu Transparency in Tenders Act, 1998 and the Tamil Nadu Transparency in Tenders Rules, 2000 and Terms and Conditions of the Tender.
- b) No dispute can be raised by any Bidder whose Bid has been rejected and no claims will be entertained or paid on this account.

6.8 ELCOT reserves the right to:

6.8.1 Negotiate with the Bidder whose offer is the lowest evaluated price for further reduction of prices.

6.8.2 Insist on quality / specification of materials to be supplied.

6.8.3 Modify, reduce or increase the quantity requirements to an extent of the tendered quantity as per the provisions of Tamil Nadu Transparency in Tenders Act 1998 and Tamil Nadu Transparency in Tenders Rules, 2000.

6.8.4 Change the list of temples towards supply and installation from time to time based upon the requirement of the purchaser.

6.8.5 ELCOT reserves its right to inspect the bidder's factory before placement of Orders.

6.8.6 ELCOT reserves its right to withhold any amount, for the deficiency in the service aspect of the ordered items supplied to the Purchaser anytime during the contract period.

6.9 Acceptance Criteria for Demonstration

The system integrator has to demonstrate the full functionality of the system and the desired result by live streaming the following types of events in the Arulmigu Dhandayuthapaniswamy temple, Palani on the selected social media through the NoC.

- Live feed from all the cameras
- Live audio from all the cameras
- Live audio and video from the tab
- Live audio and video of a concert and recitation
- Record the event and perform post production including editing, voice, music and caption overlaid

- Uploading and publishing videos on all social media as required by HR&CE

7. Execution of Work

7.1 Acceptance of Tender and Withdrawals

The final acceptance of the tender is entirely vested with ELCOT who reserves the right to accept or reject any or all of the tenders in full or in parts without assigning any reason whatsoever. The Tender Accepting Authority may also reject all the tenders for reasons such as change in Scope, Specification, lack of anticipated financial resources, court orders, calamities or any other unforeseen circumstances. After acceptance of the Tender by ELCOT, the Successful Bidder shall have no right to withdraw their tender or claim higher price.

7.2 Letter of Acceptance (LOA)

After acceptance of the Tender, a Letter of Acceptance (LOA) will be issued to the Successful Bidder by ELCOT.

7.3 Payment of Security Deposit (SD)

The successful Bidder will be required to remit a Security Deposit (SD) not exceeding to Five percent of the value of the order, inclusive of EMD by way of Demand Draft in the name of ELCOT, payable at Chennai or through NEFT/RTGS to the account number mentioned in e-Tender Schedule S.No.6 or in the form of unconditional irrevocable Bank Guarantee, valid for a period, equivalent to the Contract period from the date of acceptance of the tender on receipt of confirmation from ELCOT.

The SD shall be paid to the Client within 7 days from the date of issue Letter of Acceptance (LOA) by ELCOT. The SD furnished by the Successful Bidder in respect of the tender will be returned to them after successful fulfilment of the work. The Security Deposit will be refunded to the Successful Bidder only after successful completion of the work Order. The Security Deposit held by ELCOT till it is refunded to the Successful Bidder will not earn any interest thereof. The Security Deposit will be forfeited if the Successful Bidder withdraws the Bid during the period of Bid validity specified in the Tender or if the Bidder fails to sign the contract.

7.4 Execution of Contract

- a) The Successful Bidder should execute a Contract as per Appendix -1 with the client valid for a period of 36 months in the INR 100 non-judicial Stamp Paper bought in Tamil Nadu only in the name of the Bidder within 7 days from the date of Letter of Acceptance issued by ELCOT with such changes/modifications as may be indicated by the client at the time of execution on receipt of confirmation.
- b) The Successful Bidder shall not assign or make over the contract, the benefit or burden thereof to any other person or persons or body corporate for the execution of the contract or any part thereof without the prior written consent of ELCOT/Client. ELCOT/Client reserves its right to cancel the work order either in part or full, if this condition is violated. If the Successful Bidder fails to execute the agreement, the SD of the Successful Bidder will be forfeited and their tender will be held as non-responsive and will be blacklisted
- c) The expenses incidental to the execution of the agreement should be borne by the Successful Bidder.
- d) The conditions stipulated in the agreement should be strictly adhered to and violation of any of the conditions will entail termination of the

contract without prejudice to the rights of ELCOT/Client and ELCOT/Client also have the right to recover any consequential losses from the Successful Bidder.

7.5 Release of Work Order

After execution of the Contract and receipt of Security Deposit, “Firm Work Order” for the Provisioning of Tendered items will be issued to the Successful Bidder by ELCOT initially to implement the project at Arulmigu Dhandayuthapaniswamy temple, Palani and based on the success the subsequent work orders will be issued for other temples. The supply and payment will be based on the Work Order(s) issued.

7.6 Refund of EMD

The EMD amount paid by the Successful Bidder will be adjusted towards Security Deposit payable by them. If the Successful Bidder submits Security Deposit for the stipulated value in full by way of Bank Guarantee, the EMD will be refunded. The EMD amount of the Unsuccessful Bidder will be refunded after finalisation and issue of Firm Work Order to the Successful Bidder.

7.7 Release of SD

The Security Deposit will be refunded to the Successful Bidder on completion of the contract period upto the satisfaction of Client. Such completion would be arrived based on the satisfactory delivery of services by the Successful Bidder as per the contract agreement and as per the Work Order issued by the Client.

7.8 Forfeiture of EMD and SD

- a) If the Successful Bidder fails to act according to the tender conditions or backs out, after the tender has been accepted, the EMD will be forfeited by ELCOT.
- b) If the Successful Bidder fails to remit the SD, the EMD remitted by

him will be forfeited.

c) If the Successful Bidder fails to act upon to the tender conditions or backs out from the contract, the SD mentioned above will also be forfeited by ELCOT.

7.9 Termination of Contract

7.9.1 Termination for default

a) ELCOT may without prejudice to any other remedy for breach of contract, by written notice of default with a period of 7 days, sent to the Service Provider, terminate the contract in whole or part, (i) if the Successful Bidder fails to deliver any or all of the goods/services within the time period(s) specified in the Contract, or fails to supply the items as per the Delivery Schedule or within any extension thereof granted by ELCOT in consultation with HR&CE Department; or (ii) if the Successful Bidder fails to perform any of the obligation(s) under the contract; or (iii) if the Successful Bidder , in the judgement of ELCOT, has engaged in fraudulent and corrupt practices in competing for or in executing the Contract.

b) In the event of ELCOT terminating the Contract in whole or in part, ELCOT may procure, upon terms and in such manner as it deems appropriate, the goods and services similar to those and delivered and the Successful Bidder shall be liable to ELCOT for any additional costs for such similar goods. However, the Successful Bidder shall continue the performance of the contract to the extent not terminated.

7.9.2 Termination for Insolvency

ELCOT may at any time terminate the Contract by giving written notice with a period of 7 days to the Successful Bidder, if the Successful Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Successful Bidder, provided that such termination will not prejudice or affect any right of

action or remedy that has accrued or will accrue thereafter to HR&CE Department.

7.9.3 Termination for Convenience

ELCOT may by written notice, with a period of 7 days sent to the Successful Bidder, terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for ELCOT's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective. On termination, the Successful Bidder is not entitled to any compensation whatsoever.

7.10 Liquidated Damages (LD)

Liquidated damage will be levied at the rate of 0.25% per day to the maximum of 10% on the un-delivered portion of the material, if the delivery has not been completed in full within the stipulated period. The delivery period will be taken into account from the next date of approval of Purchaser Order. If the Successful Bidder fails to supply even after the lapse of two times of the stipulated delivery period, then the orders are liable for cancellation and the Security Deposit will be forfeited in addition, ELCOT may also to blacklist the successful bidders for a period of three years from participating in ELCOT's tenders. In addition to this, due to purchase of the item from the other dealer the differential cost if any will also be recovered from defaulted Bidder

7.11 Penalty for Non-Fulfilment of Tender

A Penalty will be levied at 5% of the total value of the Purchase Order, for nonfulfillment or non-observance of any of the conditions stipulated in the Agreement, Terms and Conditions and Work Order / contract.

7.12 Other Conditions

- a) The final decision would be based on the technical capacity and pricing of the Bidder. ELCOT does not bind itself in selecting the bidder offering lowest prices.
- b) ELCOT reserves the right to reject any or all the tenders without assigning any reasons, to relax or waive any of the conditions stipulated in the terms and conditions of tender as deemed necessary in the best interests of ELCOT for good and sufficient reasons.

7.13 Other Documents to be submitted:

Copy of EPF Registration or necessary Exemption Letter for ESI Registration should be submitted in the Technical Bid.

8. Scope of Work

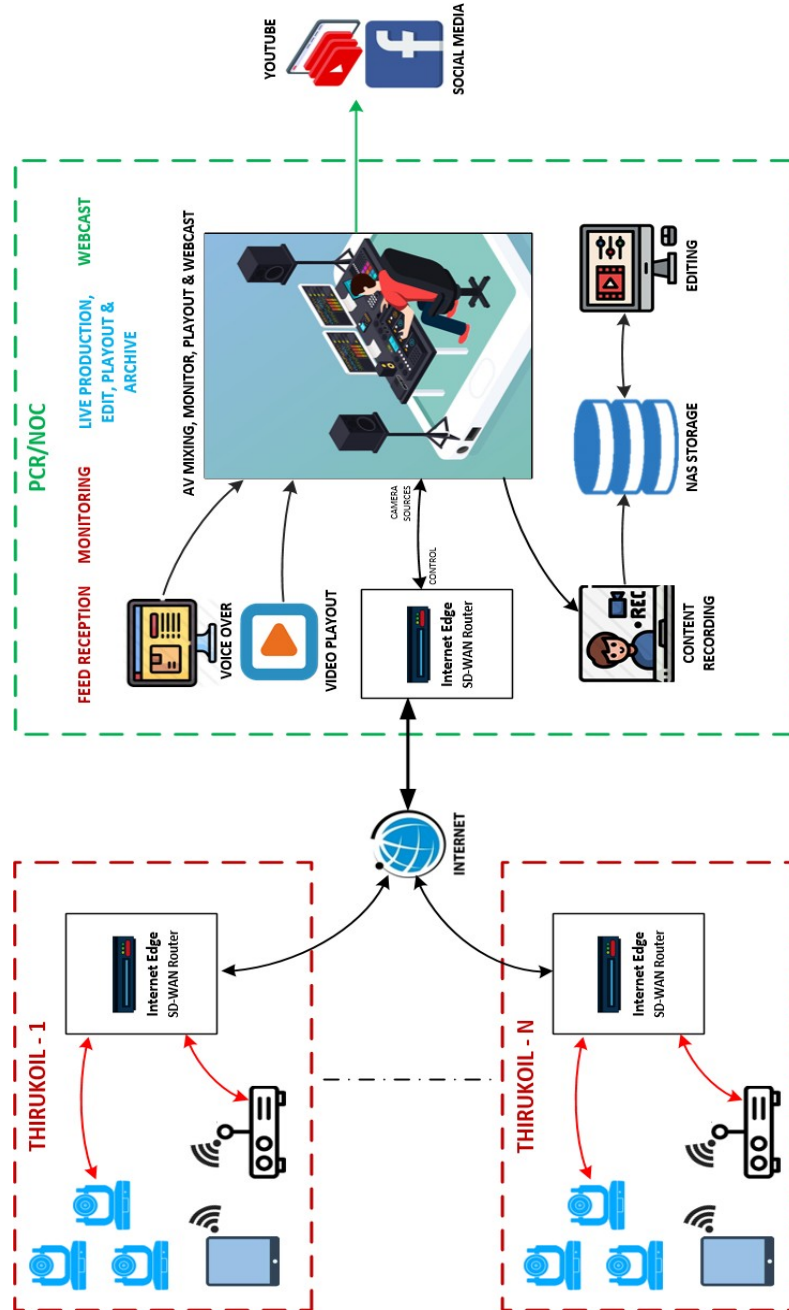
To bring in multiple live video camera feeds from 47 Senior Grade Thirukoils and publish the same in online public video portals and to social media (YouTube, Facebook, Instagram etc.).

“Hindu Religious and Charitable Endowments” Government of Tamilnadu will be selecting the number of temples to be online at a time and will be coordinating with the local Thirukoil authorities and handle the master scheduling of all the events across the state-owned temples which needs to be viewed by the public through online video streaming platforms. Initially the project will be implemented at Arulmigu Dhandayuthapani Swamy Temple. The same will be rolled out to remaining 46 temples in phases after evaluation by a technical committee.

This facility should be state of an art setup, deploying new technologies with a hybrid setup approach involving on-premises equipment, cloud-based software services, and managed services. The conceptual Schematic of the proposed system is shown below diagram. The schematic shows a scalable deployment involving multiple Thirukoils (1 to N) controlled by a single NoC-cum-PCR. It also includes the set of equipment to be placed at each of these places. Keeping in view the multiple set of equipment and software that need to be purchased, installed and integrated, it is strongly recommended to the System Integrator (SI) to build and operate the entire system on a turn-key basis.

There are two classes of items that are part of this proposed system – (1) Items to be procured by the SI; and, (2) Items may be leased as a service by the SI. The items under category (1) includes Audio-Video equipment, workstations, storage boxes, wifi routers, and Network switches (refer the below diagram). The items under category 2 are broadly the Broadband connectivity (refer the below diagram).

CONCEPTUAL DIAGRAM



8.1 Scope of System Integrator (SI):

The following are the responsibilities of the SI

- Providing Broadband Internet services for PCR/NOC & the identified Thirukoils
- Software as a Service (SaaS) for:
- Managed scalable SD-WAN services to meet the Audio-Video throughput as required
- Managed Wi-Fi services at the Thirukoils with coverage to all identified spots.
- On-premises (at the identified Thirukoils and PCR/NOC) equipment for one-time installation & setting up of equipment.
- Managed services including manpower, to handle the day-to-day video production, social media publishing, and systems support of the PCR for seamless technical operations 24x7
- Broadcast quality PTZ (Pan-Tilt-Zoom) Cameras 6 Nos and portable video capture device (Tablet computer) connected on Wi-Fi mesh Access Point to be installed in the identified Thirukoils.
- Need to do a site survey and install a Wi-Fi mesh network around the thirukoils to have a seamless and frame-accurate transition from one WAP to another in and around the Thirukoil Prakaram.
- Necessary Internal wiring at the Thirukoils
- Installation of multiple ISP fiber optic cables, which can be overhead or underground till the rack location in coordination with the Thirukoil authorities.
- All these camera and microphone feeds should be sent live to PCR/NOC, through a secure and reliable method, maintaining the High Quality of the content with low latency.

- The PCR/NOC & Thirukoil locations shall be interconnected in a secure way (SD-WAN) that all the devices in both locations shall be in the same local area network to communicate & exchange data.
- Broadband ISP level redundancy management has to be seamless and also be able to aggregate/utilize both the ISP links for high availability/bandwidth.
- This NoC/PCR facility should handle all the necessary operations for this project initially, and this facility should be scalable and handle additional operations needed while adding additional temples in phases.
- A minimum of 4 ISPs over fiber connectivity is needed, at the NoC/PCR site to meet the growing bandwidth requirement.
- High availability is needed for all the critical infrastructure items such as:
 - SD-WAN solution hardware/application
 - LAN Access
 - Wi-Fi Access
- Audio & Video transportation
- Cameras located at the temples need to capture the video and audio in real-time and encode the audio-video signals to NDI HX standard and stream it to PCR over SD-WAN services which need to take care of Point-to-Point encryption and session-based tunneling over the internet.
- The operator in PCR should have the facility to start the stream from the camera.
- The video production operator's application should handle all the incoming IP streams from various locations, monitor & switch the necessary cameras with overlay graphics (like Astons, temple

name, location, etc.).

- To mix additional audio (Voice Over/background music/prayer songs etc.) and stream the final program to an online video portal and other social media platforms.
- To record the content for social media publishing.
- The Social media publishing operator position will have a dedicated system to handle all live interactions with social media users, editing of recorded content, creating promos, banners, etc.
- Should have NMS system to manage and monitor all the network devices on the setup.
- Should have EMS system to configure and troubleshoot all the devices in Thirukoil locations and NOC over the network.
- All the WAP devices in NOC & all Thirukoil locations shall be controlled and monitored from a single cloud-based web application.
- The items to be installed in NOC should be scalable (Horizontally & Vertically) to cater to the addition of Thirukoil locations.
- Broadband ISP level redundancy management has to be seamless and also be able to aggregate/utilize multiple ISP links for high availability/bandwidth.

8.2 Managed Services:

- The SI should also take care of all the below mentioned Build - System Installation, Testing, and Commissioning activities:
 - Project Management Office
 - Detailed technical design documentation
 - Infrastructure provider coordination
 - Third-Party vendor coordination

- Cabling (AV, Control, Intercom, and Network) & Install Materials
- System components installation
- Systems components testing
- Systems commissioning
- The SI should also take care of all the below-mentioned Operations
 - Manpower recruitment & training
 - Daily manpower allocation
 - Periodical training
 - Live Production AV
 - Social Media Publishing on Approval by HRCE Editorial Team
 - Offline editing, promo cuts, and banner creation
 - IT & Network maintenance

8.3 Skilled Man Power

It will be the system integrators responsibility to provide sufficient professional and skilled man power of not less than 10 personnel in NOC and minimum 2 Personnel in Temple premises. The Personnel will be experienced staff and should be technically qualified and are certified to handle the critical equipment. Kindly refer to Section 8.11 for details regarding manpower requirement.

8.4 HR&CE Responsibility

Provision will be provided for a dedicated, secured, and air-ventilated place to install a half-size rack with a raw power supply with Genset backup as required by system integrators. A representative layout of the PCR/NOC is available in the below diagram.

- **NoC Operations Room** - Provision for a minimum of 25 -seater desk office space with Air condition and expandable, to start with this Pilot project 2000 Sq.Ft minimum to accommodate three-row

of desks and users positions, systems/monitors on desks, monitor wall displays.

- Provision to have a dedicated server room with a minimum of two 42RU racks with the following facilities:
 - 24x7 Air-con
 - 3-Phase Power supply with Genset backup
 - 24x7 physical security and access control system
 - On-premises DC to accommodate IT Racks and Online UPS with battery bank and precision AC. The DC should have false flooring Room – minimum of 800 Sq. Ft.
- In addition, the HR&CE department will take care of the following:
 - All social media legal agreements
 - Daily live event scheduling & Guest/ talent speakers
 - Background Music acquisition and legalization
 - Video acquisition and legalization for program fillers
 - Monetization & scheduled advertisements
- Permission will be provided by the Thirukoil authorities to do the internal wiring.
- Permission will be provided by the Thirukoil to bring in multiple ISP fiber optic cables, which can be overhead or underground till the rack location.

8.5 Representative Layout

A representative layout for the premises (Thirukoil and NoC) is provided in the below diagram. We proceed to present full equipment requirement and technical specifications for the equipment at both the identified Thirukoil and NOC/PCR as illustrated in below diagram.

8.6 Equipments/Systems at The Thirukoil:

- Broadcast Quality PTZ (Pan-Tilt-Zoom) Cameras to be installed in selected Thirukoil. In addition, should have portable cameras (Tablet) connected on the Wi-Fi Access Points installed.

Thirukoil should have:

- 6 cameras & 1 Tablet & Control application executing on the Tablet.
- A minimum of 4 microphones to pick up different audio sources (vocal & ambiance)
- A minimum of 2 PoE Wi-Fi APs placed in the area where devotees congregate and in the “Thirukoil prakaram” to enable coverage of processions, etc.,
- All these camera and microphone feeds should be sent live to the PCR/NOC, through a secure and reliable method, maintaining the High Quality of the content with low latency.
- The NOC and Thirukoils shall be interconnected in a way that all the devices in both locations shall be in the same local area network to communicate and exchange data.
- Broadband ISP level redundancy management has to be seamless and also be able to aggregate/utilize multiple ISP links for high availability/bandwidth.
- Lapel Microphone & Wireless system for Lapel Mic
- Shotgun Microphone with built-in transmitter & receiver & Wireless system
- Microphone stand
- Boundary Mic / Surface Mount wired
- Audio Mixer
- Wireless handheld Mics.

- Network Switch
- Wireless Access Point
- SD-WAN Solution
- Rack Enclosure
- Main Distribution Unit
- UPS

8.7 Equipments/Software at PCR/NoC

- The equipments suggested for PCR/NOC should be capable of performing the following minimum operations
- To handle all the incoming streams from various locations, monitor & switch the necessary cameras with overlay graphics (like Astons, temple name, location, etc.).
- To mix additional audio (Voice Over/background music/prayer songs etc.) and stream the final program to web channels and other platforms.
- To record the content for publishing through online video platforms
- Dedicated system for social media publishing of recorded programs, interacting with social media users, editing of recorded content, creating promos, banners, etc.
- NMS system shall be used to configure and monitor the devices in Thirukoil and NOC over the network.
- All the WAP devices in NOC & all remote locations shall be controlled and monitored from a single web-based UI.
- The items to be installed in NOC should be scalable (Horizontally & Vertically) to cater to the addition of remote locations.
- High availability is needed for all the critical infra. items.

- Broadband ISP level redundancy management has to be seamless and also be able to aggregate/utilize multiple ISP links for high bandwidth.

Category of Equipment and devices required in PCR/NOC

- Video Production application with Multi-viewer & Social Media Publishing feature
- Headphones & speaker for monitoring
- Voice Over Mic & Audio Mixer
- Video, Audio & Photo Editing Softwares with workstations
- Network switch & Management
- Video display for monitoring with system
- NAS Storage
- Wireless Access Point
- SD-WAN solution
- Racks & UPS
- Camera Control Desk + Streaming recorder setup

8.8 General Requirements

- In addition to the requirements given above, overall Technology, Solution, Products should be industry-standard, reliable & capable of handling any future needs.
- Should support Scalability, to receive additional streams if any in the future and to stream to multiple destination platforms in the future.
- Should also include all the necessary installation materials such as cables, connectors, accessories for Video, Audio & Network for complete commissioning of the facility.

8.9 Qualification of Man Power

Manpower details are given below for the Pilot project handling the thirukovil events.

- Manpower at Thirukoil
 - **AV Technician - 2 persons at Thirukovil side**
 - Capable of handling necessary pre-live program preparations with basic AV and IT knowledge
 - Ensuring necessary connections, devices are up and can go for live.
 - Knowledge to handle microphone, audio mixer, wireless mics. frequency tuning with Tx/Rx units, have some basic IT knowledge, maintaining the equipment, UPS & audio battery packs in typical recommended conditions for long life of equipment and uninterrupted live operations while being on-air.
- Manpower at NoC
 - **Technical Manager 1 no at NoC.**
 - **Technical Supervisor 2 no at NoC.**
 - **Technician - Video/Audio production 3 no. round the clock in Shifts**
 - **Technician – Creativity/Social media/Web publishing 3 no. round the clock in Shifts**
 - **Network Engineer – Network installation and troubleshooting 3 no. round the clock in Shifts**
 - **Maintenance/Support Engineers for Tech. Infra. - round the clock in Shifts - 3 no.**

Manpower - Roles minimum expectations:

- **Technical Manager** - To manage overall activities, live event plans, supervisors & whole crew in shift, incharge for the complete facility technical infra. & operations for day to day activities.
- **Technical Supervisor** - To manage the crew in the current shift, ensuring the operations, equipment, connections are up for smoother operations of the facility.
- **Technician** - Video/Audio production
 - a. To manage content on-air with current playlist, based on the live event schedule provided.
 - b. To handle the source feeds being received, switch between the cameras, take necessary video and audio sources on air with necessary audio mixing.
- **Technician** – Creativity/Social media/Web publishing To publish the necessary content to various social media platforms
 1. To manage the content being published in the respective platforms for the live event and managing audience engagement/chats.
 2. Should have worked on Audio & Video applications as well as software like photoshop. Tamil/English typing is mandatory
- **Network Engineer** - Network installation and troubleshooting
 1. To ensure network connections between thirukovil & NoC, availability of connectivity within the NoC infra. Ensuring the availability of the sources/streams from Thirukovil
 2. Taking all necessary preparation steps before and during the live event and bandwidth management for live operations.
 3. Ensuring network infra. & connectivity for live operations

Maintenance/Support Engineers for Tech. Infra. - round the clock in Shifts

1. Regular maintenance of all the equipment in the infra. and the A/V/Network inter-connections between the equipment in the NoC.

The Bidder shall depute the trained Man power (without any political affiliation) with the qualification of Diploma/Degree with adequate experience in the operation of IT equipments, at each identified temple/NOC/PCR.

8.10 Warranty

The Product warranty must be for a minimum of one year or Product Standard warranty whichever is higher would be applicable as follows.

9. Payment Clause

9.1 The following are the conditions precedent for release of any payment by the ELCOT:

- a) Signing of Contract
- b) Signing of Non Disclosure Agreement (Appendix-5) by all the persons involved in the assignment
- c) Submission of an irrevocable Bank Guarantee of the Contract amount in the format **(Appendix-2)** specified to the Client.

9.2 No advance Payment will be made.

9.3 50% of the total cost will be paid after deducting TDS as applicable within one month on the Successful Delivery, Installation after duly certified by the end user. Another 35% will be paid after successful golive and on submission of golive certificate. Bills will be honoured within one month after submission along with all supporting documents in complete shape.

Remaining 15% will be released in 3 equal instalments as given below.

- i. Another 5% will be released after successful completion of 1st year subject to SLA compliance.
- ii. Another 5% will be released after successful completion of 2nd year subject to SLA compliance.
- iii. Another 5% will be released after successful completion of 3rd year subject to SLA compliance.

9.4 Payment will be released based on the quantity used at the site and the same has to be acknowledged by HR&CE department.

9.5 However if the site is not ready within 15 days of delivery, on submission of proof of delivery and SNR certificate from the Purchaser.

9.6 Bills will be honoured within 30 working days after submission of bills along with all supporting documents in complete shape. The Successful Bidder shall file relevant invoices online using the web based procurement software in operation at ELCOT.

9.7 The Successful Bidder hereby agrees to get the refund of incentive, and proportionate GST from authorities concerned and pass it on to Purchaser(s) if the Government or any other appropriate agency reduces the GST or give incentive of any type retrospectively after supplying the Ordered items failing which action will be taken to recover the balance amount from the Successful Bidder under the Revenue Recovery Act or any other relevant act.

9.8 Penalty amount, if any, will be adjusted in the payment due to the successful bidder.

9.9 All taxes and other levies imposed by Governments in India will be paid at actuals as applicable.

9.10 Successful Bidder shall have exclusive liability for remittance of Taxes to State and Central Governments as per the Statutes/Act ruling now or hereinafter enforced.

9.11 For manpower/connectivity, quarterly payments will be released subject to submission of attendance sheet duly signed by concerned Nodal officer and adhere to SLA.

10. Penalty Clause

Inability of the proposed solution and setup to deliver the required functionality with quality of service as expected may result in breach of contract and shall invoke the penalty clause.

The Service Level Agreements are given in the Scope of Work. For each % violation in the Service Level Agreements set forth, two times the equivalent % of deduction in the contract value will be exercised

The contract may be cancelled and penalty towards the damages, if any, may be recovered from the bidder in case of breach at the discretion of the Client. The penalty does not cover disruption due to power/internet connection.

A penalty will be levied as detailed below.

10.1 Penalty for the delay in the transmission of the data feed from the Thirukovil:

The Successful Bidder shall ensure 98% uptime of the data feed from

each identified place in each temple to PCR and acknowledged by NIC/HR&CE department failing which the following charges will be levied which will be deducted from the pending payments due to the bidder.

SLA Conditions

% of yearly uptime	Penalty
98 % or more up time	No penalties
98% to 95%	5 % of the contract value per Thirukovil
95% to 90%	10% of the contract value per Thirukovil
Less than 90%	15% of the contract value per Thirukovil

The justifiable event of default, not necessarily by the System Integrator will be considered by Technical Committee.

Scheduled maintenance and backup activity should be done prior approval of the HR&CE department and the same should not affect the live feed of webstream.

Note:

- i. At the time of raising invoice for yearly payment, the vendor has to submit yearly uptime report for each Thirukoil & NOC certified by HR&CE Department.
- ii. The SLA shall applicable for the period starting from the date of Go-Live.

11. Responsibilities of the stake holders

A) Responsibilities of the Successful Bidder:

1.As per the HR&CE department the Successful bidder has to visit the temple

and do site survey, identify the positioning of cameras then submit the estimate approved by HR&CE officials to ELCOT.

2. Enter into Contract with the ELCOT for the period of approved by department.
3. Deployment of manpower at Temple and NOC/PCR as per requirement
4. Deliver the services & deliverables as per the contract terms & conditions.
5. Give the demonstration of the solution to the nodal officer within 28 days from the date of signing of the contract.
6. Conduct trial runs to see that the web streaming from the identified locations goes through smoothly without any bottlenecks and rectification of the same where necessary.
7. Conduct of live run to see that the web streaming from the identified locations goes through smoothly without any bottlenecks before go live.
8. Prepare the technical documents/user manuals of the proposed solution.
9. Maintain register of the Software license expiry details
10. Maintain register of the Hardware licensing/warranty expire details

B) Responsibilities of the Client (HR&CE)

1. Appoint a nodal officer a dedicated person as a single point of contact to monitor the project.
2. Listing of sites namely where cameras going to be installed
3. Provide room for Video Production Room & NOC
4. Provide social media handle details for Youtube, Facebook, Instagram, Twitter ..etc
5. Conducting the acceptance testing one day in advance for the system prior to Golive day.
6. Ensure the safety and security of the Desktop/Workstation, internet connectivity and other hardware items delivered & installed by the bidders at the respective locations

7. Provision of power, furniture, security and other resources to the bidder, towards the operation of the Laptop / HD cameras to transmit the web streaming data on the scheduled dates.
8. Provision of internet connectivity at the temples & VPR & NOC room
9. Help the bidder during the conduct of the trail and actual runs
10. Facilitate the bidder to ensure that the internet service provider extends the good support in the performance of the connectivity during the temple event.

C) Responsibilities of ELCOT:

- Float the tender for HR&CE Department to select the suitable bidder to assist in the process of temple events towards the web streaming of the video/audio data and the release of LOA to the shortlisted bidder.
- Timely release of payment to vendor on successful completion of milestones on receipt of completion certificate & funds from HR&CE department

12. Exit Clause

Before the end of the contract, the bidder has to hand over the following:

- a) The complete infrastructure established for this project as working condition except the leased/rental items by the system integrator.
- b) User manuals/Documentation and Software licensing details
- c) Change Request Management manual
- b) Register of the Software license expiry details
- c) Register of the Hardware licensing/warranty expire details.

- d) Complete knowledge transfer of the working solution of this project to the HR&CE department and/or its identified technical partners.
- e) Root codes if applicable or any other software infrastructure as prepared for this project.

Appendix-1 Model Form of Contract

(To be executed on a Rs. 100/- Non-Judicial Stamp Paper bought in Tamil Nadu by the Successful Bidder for the Tender for Live Web Streaming of Videos of Thirukovil Events for HR&CE Department, 2021)
(NO FIGURES IN NUMERALS OR WORDS SHALL BE FILLED UP IN THIS SAMPLE FORM AT THE TIME OF SUBMISSION OF TENDER).

This CONTRACT is entered into at Chennai on theday of (Year) between Electronics Corporation of Tamil Nadu Limited, a wholly owned Government of Tamil Nadu Undertaking, a Company registered under the Companies Act, 1956 and having its Registered office at 692, Anna Salai, Nandanam, Chennai- 600035 herein after referred to as “ELCOT” (which term shall mean and include its Successors and permitted assigns) on behalf of HR&CE Department (herein after referred to as “Purchaser”) and a Company registered under the Companies Act, 1956 and having its Registered Office at hereinafter referred to as the “Successful Bidder” (which term shall mean and include its Successors and permitted assigns)

Whereas The Electronics Corporation of Tamil Nadu Ltd invited a tender vide Tender Ref. **ELCOT/Proc/OT/33468/Thirukovil Live Web Stream/2021-221** for **Web Streaming of Thirukovil Events for HR&CE Department** and real time transmission of the same, the Successful Bidder herein has been selected in the Tender for execution of the work as detailed in the Tender Documents.

Whereas the ELCOT and the Successful Bidder, in pursuance thereof have arrived at the following terms and conditions:

1) This Contract shall remain in force during the Contract period of 36 months from the date of signing. The ELCOT/HR&CE department may terminate this contract at the risk and cost of the Successful Bidder, where Successful Bidder is in material breach of the terms and conditions of this contract and fails to remedy that breach on 5 days of written notice from the Department. Termination of this contract by the Department will not relieve the Successful Bidder of his liability as agreed.

2) The Successful Bidder agrees to deliver the services as specified in the Tender within the stipulated period prescribed at the cost given in **Appendix - 10**. This cost is firm and not subject to enhancement.

3) The Contract or any part share of interest in it shall not be transferred or assigned by the Successful Bidder directly or indirectly to any person or persons whomsoever without the prior written consent of ELCOT/HR&CE Department.

4) **Force Majeure:** Neither the Purchaser / ELCOT nor the Successful Bidder shall be liable to the other for any delay or failure in the performance of their respective obligations due to causes or contingencies beyond their reasonable control such as:

- Natural phenomena including but not limited to earthquakes, floods and epidemics.
- Acts of any Government authority domestic or foreign including but not limited to war declared or undeclared, priorities and quarantine restrictions.
- Accidents or disruptions including, but not limited to fire, explosions, breakdown of essential machinery or equipment,

power and water shortages.

- In such claim of Force Majeure clause, the bidder should submit the written claim, explaining the cause within 7 days of such occurrence and may be accepted by ELCOT/ Purchaser.

5) The Tender documents in relation to this Tender issued for Live Telecast of Temple events to the HR&CE Department shall be deemed to form and be read and construed as part of this Agreement. The Tender enclosures, the offer submitted by the Successful Bidder, the negotiated and finalised Terms and Conditions and the Work Order respectively will form part of this contract. Wherever the offer conditions furnished by the Successful Bidder are at variance with conditions of this contract or conditions stipulated in the Tender document, the final negotiated offer conditions shall prevail over the tender conditions furnished by the Successful Bidder.

6) Liquidated Damages (LD):

Liquidated damage will be levied at the rate of 0.25% per day to the maximum of 10% on the un-delivered portion of the material, if the delivery has not been completed in full within the stipulated period. The delivery period will be taken into account from the next date of approval of Purchaser Order. If the Successful Bidder fails to supply even after the lapse of two times of the stipulated delivery period, then the orders are liable for cancellation and the EMD/ Security Deposit will be forfeited in addition, ELCOT may also to blacklist the successful bidders for a period of three years from participating in ELCOT's tenders. In addition to this, due to purchase of the item from the other dealer the differential cost if any will also be recovered from defaulted Bidder

7) Penalty for non fulfilment of Tender conditions:

A penalty for non fulfilment or non- observance of tender conditions indicated in the tender clauses, will be levied at 5% of the total value of the work order.

8) Payment Terms:

8.1 The following are the conditions precedent for release of any payment by the ELCOT:

- a) Signing of Contract
- a) Signing of Non Disclosure Agreement (Appendix-5) by all the persons involved in the assignment
- b) Submission of an irrevocable Bank Guarantee of the Contract amount in the format **(Appendix-2)** specified to the Client.

8.2 No advance Payment will be made.

8.3 50% of the total cost will be paid after deducting TDS as applicable within one month on the Successful Delivery, Installation after duly certified by client. Another 35% will be paid after successful golive and on submission of golive certificate. Bills will be honoured within one month after submission along with all supporting documents in complete shape.

Remaining 15% will be released in 3 equal instalments as given below.

- iv. Another 5% will be released after successful completion of 1st year subject to SLA compliance.
- v. Another 5% will be released after successful completion of 2nd year subject to SLA compliance.
- vi. Another 5% will be released after successful completion of 3rd year subject to SLA compliance.

8.4 Payment will be released based on the quantity used at the site and the same has to be acknowledged by Client.

8.5 However if the site is not ready within 15 days of delivery, on submission of proof of delivery and SNR certificate from the Purchaser.

8.6 Bills will be honoured within 30 working days after submission of bills along with all supporting documents in complete shape. The Successful Bidder shall file relevant invoices online using the web based procurement software in operation at ELCOT.

8.7 The Successful Bidder hereby agrees to get the refund of incentive, and proportionate GST from authorities concerned and pass it on to Purchaser(s) if the Government or any other appropriate agency reduces the GST or give incentive of any type retrospectively after supplying the Ordered items failing which action will be taken to recover the balance amount from the Successful Bidder under the Revenue Recovery Act or any other relevant act.

8.8 Penalty amount, if any, will be adjusted in the payment due to the successful bidder.

8.9 All taxes and other levies imposed by Governments in India will be paid at actuals as applicable.

8.10 Successful Bidder shall have exclusive liability for remittance of Taxes to State and Central Governments as per the Statutes/Act ruling now or hereinafter enforced.

9.11 For manpower/connectivity, quarterly payments will be released subject to submission of attendance sheet duly signed by concerned Nodal officer and SLA.

9. Penalty Clause

Inability of the proposed solution and setup to deliver the required

functionality with quality of service as expected may result in breach of contract and shall invoke the penalty clause.

The Service Level Agreements are given in the Scope of Work. For each % violation in the Service Level Agreements set forth, two times the equivalent % of deduction in the contract value will be exercised

The contract may be cancelled and penalty towards the damages, if any, may be recovered from the bidder in case of breach at the discretion of the Client. The penalty does not cover disruption due to power/internet connection.

A penalty will be levied as detailed below.

9.1 Penalty for the delay in the transmission of the data feed from the Thirukovil:

The Successful Bidder shall ensure 98% uptime of the data feed from each identified place in each temple to PCR and acknowledged by NIC/HR&CE department failing which the following charges will be levied which will be deducted from the pending payments due to the bidder.

SLA Conditions

% of yearly uptime	Penalty
98 % or more up time	No penalties
98% to 95%	5 % of the contract value per Thirukovil
95% to 90%	10% of the contract value per Thirukovil
Less than 90%	15% of the contract value per Thirukovil

The justifiable event of default not necessarily by the System Integrator

will be considered by Technical Committee.

Scheduled maintenance and backup activity should be done prior approval of the HR&CE department and the same should not affect the live feed of webstream.

Note:

- i. At the time of raising invoice for yearly payment, the vendor has to submit monthly/yearly uptime report for each Thirukoil certified by HR&CE Department.
- ii. The SLA shall applicable for the period starting from the date of Go-Live.

10) Any notice from one party to the other given or required to be given here under shall be given by either:

a) Mailing the same by registered mail, postage prepaid, return receipt requested; or

b) Having the same delivered by courier with receipt acknowledged at the address set forth above or with other addresses and to the attentions of such other person or persons as may hereafter be designated by like notice hereunder and any such notice shall be deemed to have been served if sent by post on the date when in the ordinary course of post, it would have been delivered at the addresses to which it was sent or if delivered by courier on the date of acknowledgement of receipt.

11) In case of breach of any of the conditions of the contract by the Successful Bidder during the contract period, ELCOT/HR&CE Department reserves the right to recover costs/liabilities arising

directly due to such breach from the Successful Bidder. The total liability, however arising, of the Successful Bidder under the contract is limited to that amount payable to the Successful Bidder by HR&CE Department under the contract.

12. Termination of Contract

12.1 Termination for default

- a) ELCOT may without prejudice to any other remedy for breach of contract, by written notice of default with a notice period of seven days, sent to the Successful Bidder, terminate the contract in whole or part,
 - (i) if the Successful Bidder fails to deliver any or all of the goods within the time period(s) specified in the Contract, or fails to supply the items as per the Delivery Schedule or within any extension thereof granted by ELCOT (or)
 - (ii) if the Successful Bidder fails to perform any of the obligation(s) under the contract (or)
 - (iii) if the Successful Bidder, in the judgement of ELCOT, has engaged in fraudulent and corrupt practices in competing for or in executing the Contract.
- b) In the event of terminating the Contract in whole or in part, ELCOT may procure, upon terms and in such manner as it deems appropriate, the goods and services similar to those and delivered and the Successful Bidder shall be liable to the ELCOT for any additional costs for such similar goods. However, the Successful Bidder shall continue the performance of the contract to the extent not terminated.

12.2 Termination for Insolvency

ELCOT may at any time terminate the Contract by giving written notice with a period of 7 days to the Successful Bidder, if the Successful Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Successful Bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to ELCOT.

12.3 Termination for Convenience

ELCOT may by written notice, with a period of 7 days sent to the Successful Bidder, 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 HR&CE Department's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective. On termination, the Successful Bidder is not entitled to any compensations whatsoever.

13. Any notice to the Successful Bidder shall be deemed to be sufficiently Served, if given or left in writing at their usual or last known place of abode or business.

14. ELCOT Department reserves the right to cancel the order(s) and to terminate the contract in the event of short performance or non performance of the Successful Bidder.

15. Dispute & Jurisdiction:-

“Any dispute or difference, whatsoever, arising between the parties to this contract arising out of or in relation to the terms of this contract shall be resolved by the parties mutually by acting in good faith towards fulfilling the contract and for this purpose the parties mutually agree to

furnish or exchange all relevant documents, information and any other material within their special knowledge and thereby conclude their discussions between them / their representatives or officers within a period of time as may be mutually agreed to say the time of commencement of the move to resolve the dispute”.

“In case the parties failed to resolve the disputes amicably within the time frame agreed and in the manner stated supra, the aggrieved party shall approach the Court in Chennai city alone to the exclusion of all other Courts to adjudicate the unresolved dispute”.

In Witness whereof the parties hereto have signed on the day, month and year above written in the presence of

	For and on behalf of Successful Bidder	For and on behalf of ELCOT
1) Witness		
2) Witness		

Appendix-2 Bank Guarantee Format

(To be executed in Rs.100/- Stamp Paper)

To
The Managing Director,
ELCOT, MHU Complex,
692, Anna Salai, Nandanam,
Chennai – 600 035.

Bank Guarantee No:
Amount of Guarantee:
Guarantee covers from:
Last date for lodgement of claim:

This Deed of Guarantee executed by (Bankers Name & Address) having our Head Office at(address) (hereinafter referred to as “the Bank”) in favour of The Managing Director, Electronics Corporation of Tamil Nadu Ltd, Nandanam, Chennai – 600 035. (hereinafter referred to as “the Beneficiary”) for an amount not exceeding Rs._____-/- (Rupees _____ Only) as per the request of M/s. _____ having its office address at _____ (hereinafter referred to as “Service Provider”) against Letter of Acceptance reference _____ dated __/__/____ of M/s. Electronics Corporation of Tamil Nadu Limited. This guarantee is issued subject to the condition that the liability of the Bank under this guarantee is limited to a maximum Rs._____-/- (Rupees _____ Only) and the guarantee shall remain in full force up to

___ months from the date of Bank Guarantee and cannot be invoked otherwise by a written demand or claim by the beneficiary under the Guarantee served on the Bank before ___ months from the date of Bank Guarantee.

AND WHEREAS it has been stipulated by you in the said ORDER that the Successful Bidder shall furnish you with a Bank Guarantee by a Scheduled/ Nationalised Bank for the sum specified therein as security for compliance with the Successful Bidder performance obligations for a period in accordance with the contract.

AND WHEREAS we have agreed to give the Successful Bidder a Guarantee.

THEREFORE, we (Bankers address)....., hereby affirm that we are Guarantors and responsible to you on behalf of the Successful Bidder up to a total of Rs.____/- (Rupees _____ Only) and we undertake to pay you, upon your first written demand declaring the Successful Bidder to be in default under the contract and without any demur, cavil or argument, any sum or sums within the limit of Rs.____/- (Rupees _____ Only) as aforesaid, without your needing to prove or show grounds or reasons for your demand or the sum specified therein. We will pay the guaranteed amount notwithstanding any objection or dispute whatsoever raised by the Service Provider.

This Guarantee is valid until ___ months from the date of Bank Guarantee.

Notwithstanding, anything contained herein. Our liability under this guarantee shall not exceed Rs.____/- (Rupees _____ Only). This Bank Guarantee shall be valid up to ___ months from the date of Bank

Guarantee and we are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____.

In witness whereof the Bank, through its authorised Officer, has set its, hand and stamp on this at _____.

Witness:

(Signature)

(Name in Block Letters)

Appendix-3 Format for Clarifications / Amendments

FORMAT FOR
QUERIES ON TENDER CONDITIONS AND TECHNICAL
SPECIFICATIONS

FOR COMMERCIAL CONDITIONS:

Sl. No.	Page No.	Clause No.	Title of the Clause	Description of the Clauses as per Tender Document	Amendment requested	Reasons for requesting the amendment

Sl. No.	Page No.	Clause No.	Title of the Clause	Description of the Clauses as per Tender Document	Amendment requested	Reasons for requesting the amendment

FOR TECHNICAL SPECIFICATIONS:

Sl. No.	Page No.	Product Code	Item Name	Existing Specification as per Tender Document	Technical Parameter as per Tender Document	Amendment requested	Reasons for requesting the amendment

Appendix 4 Bio data of the proposed manpower deployment

The CVs of all the personnel being deployed should be provided as per the format given below.

S No	Description	Details to be provided
1	Name	
2	Date of Birth	
3	Permanent Address	
4	Criminal or Civil Record details if any	
5	Mobile no.	
6	Educational Qualifications	
7	Experience	
8	Email Address	
9	Copies of Identity cards given below	
10	Passport No	
11	Driving License No	
12	PAN Card No.	
13	Aadhaar Card No.	
14	Address during last 10 years	

Appendix 5 Non-Disclosure Agreement

To

The Commissioner,
HR&CE ,
Chennai-600 034

Sir,

Sub: Non –Disclosure agreement.

Format will be provided by HR&CE Department later when required

Due to security reasons, the Consultant is required not to disclose that they are Bidding for this assignment, or in any way disclose that they are performing this assignment to any third party without the consent of the Nodal Officer or the Contracting Authority. Each of the Consultant

Personnel will also be required to sign a Non Disclosure Agreement with the Client and there may be civil and criminal penalties in case of breach of the agreement.

Appendix-6 Technical Bid

A 6.1 Check-list for Enclosures

S.No	Documents to be Submitted	Fill (Yes or No)
1	Filled Tender Technical Bid form and Price Bid Form	
2	Payment of EMD Amount & Tender Fee	
3	Two part Bid submission	
4	Letter of Undertaking Letter of Authorisation /Power of Attorney for signing the Tender document Appendix12 - Undertaking for Certificate of Registration as per GFR Rule Appendix13 – Declaration	
5	Report on the Architecture design of the Network and the plan of execution of the project.	
	Eligibility Criteria	
6	Certificate of Incorporation as per clause 4.1(a)	
7	Copy of Purchase/Work orders received on or after 31.03.2016 and Completion Certificate received from the Customers as per clause 4.1(b)	
8	Copies of Balance sheet and Profit & Loss Account for the Last 3 Audited Financial Years (2017-18, 2018-19 & 2019-20) as a Proof for turnover as per clause 4.2(a)	
9	Copies of Net worth Certificate for the period of last three years as per clause .4.2(b)	
10	Bidder should have executed at least one single order for having experience in rendering similar services where live streaming from multiple locations was involved for any Govt/PSU/Private organisation in India for a value of Rs.50.00 Lakhs or more during any one of the previous three financial years (2017-18, 2018-19 & 2019-20) as	

	per clause no.4.3 (a)	
11	Copy of the valid ISO 27001:2011 & ISO 20001:2011 Certificate or higher, as per clause 4.4	
12	If the Bidder not having an Office in Chennai, copy of the necessary Undertaking letter to open the Office in Chennai within 10 days.	
13	Copy of the bidder's website url	
14	Copy of the Letter of Undertaking as indicated in the tender document vide page no.9	
15	Technical Specifications Compliance Statement as per Appendix-7	
16	Copy of the Brochure for the quoted product. Copy of the Relevant proof of hosting the brochure in the website. Copy of the undertaking letter from the authorized signatory ensuring the availability of the brochures submitted for this tender till the validity of the tender.	

A 6.2 Profile of the Bidder

1.	Name of the Company	
2.	Year of incorporation	
3.	Nature of the Company (Registered Company or Partnership or Proprietary)	
4.	Registered Office Telegraphic Address	
	Office Telephone Number	
	Fax Number	
	Contact Person Name	
	Contact person Telephone Number	
	Email Address	
5.	Name of Local Presence in Tamilnadu	
	Telegraphic Address	
	Office Telephone Number	
	Fax Number	
	Contact Person Name	
	Telephone Number	
	Email Address	

6.	Registration Details	
	Permanent Account Number	
	GST Registration Number	
7.	Banker's Name, Address and Account Number	

Important Note:

Bidders should ensure that they have submitted all the required proof of documents as specified in the Tender document without fail. Bids received without the supporting documents to prove their eligibility are liable for rejection.

A 6.3 Details in support of Eligibility Criteria

Sl.No.	Description	Details to be furnished with Proof/Page no. to be indicted with Flags
1	The Bidder should be a Company Registered in India under the Indian Companies Act 1956 as per Clause 4.1	
2	Bidder should have average annual Turnover for last 3 years as per clause no.4.2(Audited Balance Sheet & Positive Net worth Certificate)	
	2017-18	
	2018-19	
	2019-20	
3	Copy of the Work order/Agreements and Completion certificate as per clause no.4.3	
4	Copy of the valid ISO 27001:2011 & ISO 20001:2011 Certificate as per clause 4.4	
5	Copy of the Rental agreement of Land line telephone bills (or) If the Bidder is not having an Office in Chennai, a necessary Undertaking letter	

	open the Office in Chennai within 10 days as per clause 4.5	
6	Self declaration certificate for black listing as per clause 4.6	
7	Bidder's website	
8	Report on the Architecture design of the Network and the plan of execution of the project	
9	Technical Specifications Compliance Statement as per Appendix-7	

Appendix-7 Technical Specifications

A 7.1 Specifications for Broadcast Quality PTZ Camera

Sl. No	Descriptions	Compliance Yes/No
1	1/2.3",1/2.8", Full HD(1920x1080) MOS/CMOS/EXMOR or better sensor PTZ camera	
2	HD-SDI output	
3	Optical Zoom lens	
4	30x super resolution zoom	
5	16x digital zoom Audio input	
6	IP/RS-422/RS-232C control	
7	Multiple streaming outputs	
8	MicroSD card recording	
9	100 preset memories for pan-tilt-zoom-camera settings/	
10	Desktop and ceiling mountable	
11	PoE compatible / optional NDI/HX compatibility.	
12	Remotely control Pan, Tilt, and Zoom from PCR/NOC, Prefer to control from the vision mixer	

	directly	
13	Should have good video quality even in low light conditions	
14	IP Video (Embedded audio) transmission, remote camera control & Power in a single cable	
15	Wall/ceiling mount support for indoor cameras and pole mount support for outdoor cameras	
16	Weatherproof enclosure(IP68) to mount camera for outdoor applications	
17	For distant cameras (exceeding 75 mtrs), need to extend that camera signals over hybrid fiber cable (with power). Include necessary fiber converters	
18	Support for high quality and low latency for remote live production applications.	

A 7.2 Specifications for PTZ Camera controller & Multi-Viewer

Sl. No	Descriptions	Compliance Yes/No
1	PTZ camera remote controller compatible with above camera.	
2	100 camera control thru IP port	
3	100 preset memories for pan-tilt-zoom-camera settings .	
4	Full camera picture quality control should be possible	
5	PTZ Controller with joystick, panel through NDI, Visca over IP, PoE	
6	Should discover, connect, and control PTZ cameras over Network	
7	Support quick access buttons & control up to multiple PTZ cameras on a single network	
8	For easy one handed control of Pan, Tilt, and Zoom is possible with the 3-Way Joystick.	
9	This camera control system should support monitoring of available sources and control of remote cameras.	

10	Able to create custom macros/presets to call different functions.	
11	Support multiple NDI, SRT, and other IP video standard inputs.	
12	Multi-view system to provide multiple layout options, Multiview Outputs, preset layouts.	
13	To detect sources on network automatically & monitor multiple sources with Audio levels, tally, Source labels	

A 7.3 Specifications for Tablet With Application Software

Sl. No	Description	Compliance Yes/No
1	Latest Android/IOS Operation System	
2	10.4" screen size with 2000 x 1200 (WUXGA+) resolution	
3	Octa-core CPU (2Ghz, 1.8 Ghz)	
4	3GB RAM and 32GB Internal storage	
5	Wireless Connectivity – Wi-Fi Only 2.4G + 5GHz (non-LTE)	
6	Wi-Fi 5 & 6 standards support	
7	8MP rear camera with autofocus	
8	Video Recording Resolution FHD(1920 x 1820) at 30 fps	
9	3.5mm Stereo jack mic input support	
Specification for Control application executing on the above Tablet		
A 7.3.1		
1	Camera Application to make this tablet into an IP-READY live video source	
2	Support for NDI HX Protocol	

3	Different bandwidth modes(High - Medium -Low)	
4	Intuitive and easy to master	
5	Fast navigation with view groups and overview	
6	Quick setup with factory and user-definable presets	
7	Access Limiting allows flexible customization of the user interface and prevents unwanted adjustments from other users.	
8	Quickly access channel processing, signal routing, and a suite of great sounding effects with presets to get started	
9	Export presets, shows and complete system backups via Dropbox, email and more Include Over the Ear Headphone as per the specification mentioned in the Headphone section	

A 7.4 Specifications for Lapel Microphone:

Sl No	Description	Compliance : Yes/No
1	Omni-directional lavalier Condenser microphone with 3.5mm jack output	
2	Draw power from the Transmitter unit	
3	20Hz – 20kHz Frequency Range	
4	110db SPL (Max) or better	
5	3000 Ω Output Impedence or better	
6	Include all necessary accessories such as Pop shield, etc	
7	Include a suitable large-sized headset mount	
8	67dB signal to noise ratio and 27dB equivalent noise	
Specifications for Wireless System for Lapel Mic		
1	Compact clip-on wireless microphone transmission and reception system	
2	Battery operated with rechargeable batteries	
3	Should have LCD/OLED display to show battery levels, signal strength, etc.	

Sl No	Description	Compliance : Yes/No
4	Wireless transmission	
5	Wireless range of 70 mtrs or better.	
6	3.5mm jack for Mic input on Transmitter with phantom power support.	
7	3.5mm jack for Audio output on Receiver	
8	50Hz – 20kHz frequency range	
9	+3dBu Output Level or better	
10	100dB SPL 1000hz at 1m or better	
11	Battery life of 5 hours or more	

A 7.5 Specifications Shotgun Microphone

Sl. No	Descriptions	Compliance Yes/No
1	Super- Cardioid condenser microphone	
2	20hz-20khz frequency range	
3	139 dB spl (max) or better	
4	50 Ω output Impedance or better	
5	18 db equivalent noise	
6	Include all necessary accessories such as windshield, etc	
Specifications Wireless System for Shotgun Microphone		
1	Compact Wireless microphone transmission and reception system	
2	Wireless transmission	
3	Wireless range of 100mtrs or better	
4	50Hz - 20Khz frequency range	
5	112 dB dynamic range or better	
	Compact transmitter suitable for handheld/shotgun microphones	

6	Transmitter with phantom power support	
7	1000 Ω input impedance or better	
8	Battery operated or USB Powered	
9	Should have digital display to show battery levels, signal strength, etc.	
Specifications for Shotgun Receiver		
1	Compact receiver with belt-clip mounting support	
2	3.5mm jack for Mic output on the receiver	
3	300 Ω output impedance or better	
4	battery operated or USB Powered	
5	Should have digital Display to show battery levels, signal strength, etc	

A 7.6 Specifications for Microphone Stand

Sl. No	Descriptions	Compliance Yes/No
1	Full length steel , chromium plated, height adjustable professional floor mount stand	
2	Short stand, Chromium plated, height adjustable for musicians – floor mount	

A 7.7 Specifications for Boundary Mic / Surface Mount wired

Sl. No	Descriptions	Compliance Yes/No
1	Condenser	
2	Omni Directional	
3	Frequency range : 40 Hz to 20 Hz	
4	Impedance : 200 Ohms or better	
5	Sensitivity: 16mV/Pa	

6	Interface: Mini XLR/XLR	
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Note: This microphone is intended for integration in the sanctum or places like sanctum Where there is entry restriction for general public. Required power device and interface converters need to be provided to integrate with PTZ camera installed in the venue.

A 7.8 Specifications for Audio Mixer

Sl. No	Descriptions	Compliance Yes/No
1	16-channel Rack-mountable Digital Audio Mixer with App control	
2	16 recallable mic preamps	
3	8 fully-assignable XLR outputs plus a headphone output	
4	Industry-leading Master Fader control app	
5	16x16 USB recording	
6	16 input channels with 4-band PEQ + HPF, gate, compression and RTA/Spectrograph	
7	16 stereo-linkable input channels	
8	13 output busses with 4-band PEQ + HPF/LPF, 31-band GEQ, comp/limiter, alignment delay and RTA/Spectrograph	
9	6 stereo-linkable aux sends	
10	6 stereo-linkable subgroups	
11	Main L/R bus	
12	6 VCAs and 6 mute groups	
13	4 stereo FX processors featuring great built-in FX like reverbs, delays, choruses, flangers, and many more with dedicated sends and returns	
14	Full I/O routing with A/B sources per channel	
15	Assignable oscillator including pink/white noise and sine waves	
16	Modern and Vintage options for comp/gate and EQ	

A 7.9 Specifications for wireless handheld mics

Sl. No	Descriptions	Compliance Yes/No
1	Wireless handheld Unidirectional Dynamic microphone with transmitter & Mic stand/Holder, windshield	
2	Wireless rack mountable receiver with line outputs	
3	Ideal for live vocal, music applications	

A 7.10 Specifications for Network Switch

Sl. No	Descriptions	Compliance Yes/No
1	Managed Layer 3 switch.	
2	Minimum 12x 1GbE RJ45 Ports	
3	2x 1/10GbE SPF+ Ports	
4	PoE+ and QoS support	
5	64 Gbps of Switching capacity or better	
6	IPv4 and IPv6 unicast & multicast support	
7	Jumbo frames support	
8	Able to be managed over the cloud	

A 7.11 Specifications for Wireless Access Point

Sl. No	Descriptions	Compliance Yes/No
1	802.11 ac 4x4:4 MU (multi-user) MIMO (Multiple input multiple outputs) devices	
2	Wi-Fi 5 & 6 support	
3	Radios for Wi-Fi access for both 2.4 GHz and 5 GHz	

4	Gigabit Ethernet ports	
5	Support Power over Ethernet, 24V passive PoE, and PoE+ (802.3af and 802.3at)	
6	NEMA rated outdoor enclosure.	
7	Up to 300-meter+ coverage range.	
8	Standard security features like WPA2/WPA3 (Wi-Fi Protected Access version 2/3) with AES encryption.	
9	Authenticate all users/devices from the WAP controller in the cloud	
<u>Specifications for WAP Controller</u>		
1	Able to manage all the WAP devices centrally from the cloud.	
2	Web-based management of all the WAP devices in the network	
3	AI-driven system	
4	Real-time monitoring of the network and send alerts when service degrade.	
5	Multiple detailed metrics and Dynamic packet capture for each user device for easy troubleshooting.	
6	Authenticate users/devices (Thirukoil/PCR) centrally from the cloud.	
7	The software shall be a Subscription model.	

A 7.12 Specifications for SD-WAN

Sl. No	Descriptions	Compliance Yes/No
1	Should have a minimum of 6x 1G Copper ETH, 2x 10G SFP+ ports, and 1x LTE module with IMIX performance of minimum 1Gbps.	
2	Should have redundant power supplies	
3	Should have a minimum of 8GB RAM and 128GB of Local Storage	
4	SDWAN Solution is preferred to be service-centric, session-oriented, and Zero Trust Ledfor building context-aware networks	

<p>SDWAN Solution is preferred to use protocols fully compatible and interoperable with existing standard network protocols and architectures.</p> <p>SDWAN Architecture should be open and programmable through northbound RESTful and Netconf APIs.</p> <p>The SDWAN Solution should be session aware, and session-based with directionality information for application routing decisions.</p> <p>The solution should be implemented as true software-defined WAN network architecture.</p> <p>SD-WAN network architecture should have a clear separation of management, control and data plane functions.</p> <p>Management and control plane should be centralized with the capability to be separated for each VRF/Tenant in such a way that management, control, and data traffic are not intermingled.</p> <p>All components of SD-WAN should be on-premises. However, the solution should support deployment on Secure Public Clouds such as AWS, GCP & Microsoft Azure.</p> <p>The management plane shall be responsible for the configuration of SD-WAN policies including routing, security & SLA. Additionally, the management plane shall provide orchestration, administration, zero-touch provisioning, monitoring, and analytics for distributed Branch Routers</p> <p>The control plane shall be responsible to maintain distributed routing table, controls route advertisement as per policy, create end to end segments on the network, and instruct the data plane to change traffic flow as per policy.</p> <p>The Data plane shall provide high-speed packet forwarding, classification, and security functions</p>	
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<p>through session-state management and be responsible to forward traffic with c session-based encryption without a tunnel.</p> <p>The SD-WAN solution should have the ability to classify each TCP or UDP session based on the unique source, destination, and application characteristics of the session and apply Security, quality, routing, and session control policies on a per-session basis to deliver deterministic end-to-end routing.</p> <p>The solution should have the ability to provide an assured Path Symmetry to ensure that bi-directional sessions follow the same path. This symmetric flow should enable packets to be intelligently routed, sessions to be controlled, and traffic to be proactively analyzed.</p> <p>SD-WAN Solution should support multi-Tenancy with service mapping to VRF that allows administrators to create partitions within the network in order to segment access to network services.</p> <p>Should have the ability to treat all devices within a tenant with a common policy, and thereby will have consistent access to the services that have been allowed to the tenant.</p> <p>SD-WAN Solution is preferred to have IP control plane and routing stacks (OSPF, IS-IS, BGP) Services control plane via by exchanging the service and topology changes across the network</p> <p>Should support VRF Learning via BGP and support Tenant to VRF Mapping</p> <p>The proposed solution should be in the form of Virtual Appliance or hardware and should be able to support HA for Branch CPE and Central Location Device</p> <p>Should support the concept of "Named Data Networking" where services are described and communicated across the network in plain language.</p>	
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<p>The software-defined network centralized components need to have the flexibility to be on-prem or on cloud</p> <p>The data plane at the branch locations, data center & DR should be programmable from the central software-defined network controller.</p> <p>The communication between the software-defined network controller and the branch device running on the remote entity should be secure and encrypted.</p> <p>The WAN path Selection at the branch locations should be based on applications/custom applications /URL/IP address and port with the near real-time analytics of the WAN Links Capacity & Quality (Packet loss, Latency & Jitter)</p> <p>The architecture should allow for internet break out at the local at the branch, centralized location, remote entity (remote location) based on the application, and the policy defined in the SD-WAN solution</p> <p>The selection of WAN links to anchor the traffic flows for application traffic should be dynamic and policy-driven.</p> <p>SD-WAN Solution should support an application discovery process to identify the various types of traffic</p> <p>SD-WAN devices should have ability to identify the applications that use HTTP over SSL/TLS or HTTPS without performing decryption by passively observing information exchanged during TLS connections and scrape application information from server-side X.509 certificates</p> <p>SD-WAN Solution should support the ability to add a custom script to add parameters to identify a custom application.</p> <p>SD-WAN devices should have a facility for recording all traffic flows as part of it's audit log functionality and should show all connections that are established and rejected for every source address</p> <p>SD-WAN devices should have the ability to display</p>	
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<p>Dropped Packets on GUI to help identify those sessions that are not established due to the current policy configured on the device.</p> <p>The system architecture should be transport agnostic and should support MPLS, Leased Line, ILL, Broadband and LTE</p> <p>The SD-WAN should have capabilities to terminate multiple physical links and should not have any limitations on the number of physical links</p> <p>The system architecture should allow using the most preferred link based upon Link characteristics (Latency, Jitter, Packet loss) for critical applications as defined in the policy</p> <p>The SD-WAN solution should be able to distribute the sessions across all the links to effective use and load balance of the links.</p> <p>The SDWAN should support min 150 users with min performance of branch 100 Mbps</p> <p>The SD-WAN solution should have the ability to configure dual paths for a session and the ingress router shall duplicate the packets arriving from the session and send it over the dual paths.</p> <p>For Branch locations with a preferred primary path, the solution should have the ability to monitor multiple links and when traffic volume exceeds the bandwidth of the primary connection, the excess is offloaded to the next alternate path.</p> <p>The SD-WAN solution must be able to apply QoS policies to all the traffic seen in the network, including both optimized and non-optimized traffic flows, including TCP, UDP, and other non-TCP traffic types.</p> <p>The SD-WAN solution should include a QoS mechanism that can protect delay-sensitive flows like Voice, Video, and VDI</p>	
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	<p>The SD-WAN must be able to apply rate limiter per service, group of services, per flow</p> <p>The SD-WAN should support IPv4 & IPv6 from day one SD-WAN solution should have the capability to mitigate the effect of packet drop in underlay up to some extent for specific or all applications using Forward Error Correction and Packet Replication to improve end-user experience</p> <p>The SDWAN should have capabilities to provide adaptive encryption for identifying encrypted traffic like Voice, Internet applications and does not re-encrypt over the WAN without any split tunneling mechanism.</p> <p>SD-WAN solution must support Hub-Spoke, Full-Mesh, Spoke-Hub-Hub-Spoke, Partial mesh</p> <p>SD-WAN should support Tier-3. Any to Any Architecture without dependency on tunnels for overlay is preferred</p> <p>SD-WAN solution should have the intelligence to calculate "MOS" (Mean Opinion Score) or equivalent for every peer path, as a composite metric derived from path latency, loss, and jitter</p> <p>The system should be able to retrieve the network information without any peering protocols like BGP, OSPF, or any other routing protocol over WAN.</p> <p>The system should ensure that any change in physical connectivity (Link 1 to Link 2 connectivity in case of multiple links being terminated on the branch device) or any change in physical connectivity type (Link 1 connectivity changed from internet broadband to MPLS or vice versa, in case of multiple WAN links being terminated on the Branch device) does not require any change in virtual private network configuration in the controller or physical/virtual device at location.</p> <p>The system must be able to make virtual private network paths dynamically on power on without using any</p>	
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<p>routing protocols on the WAN side.</p> <p>The SD-WAN Solution should support Per-Session Encryption using AES256 and perpacket authentication using HMAC-SHA256-128</p> <p>The system should support the policy-driven automatic refresh of the encryption keys</p> <p>The system should be able to identify business-critical applications and should prioritize this traffic over others during congestion.</p> <p>The SD-WAN solution should be able to get the server details and be able to path monitoring to ensure that application traffic loads are optimally balanced across preferred links to desired application servers. Real-time criteria include server loads, maximum session rate, packet loss, latency, and jitter.</p> <p>The system should support end-to-end packet classification, marking, and bandwidth allocation with a per-service rate limit and a group of services rate limit</p> <p>The system should be able to automatically steer traffic flows to the optimum path, based on policy definition in the SDWAN Controller</p> <p>The system should ensure that the session is not impacted when switching between paths with fast fail-over and needs to be demonstrated with Low latency Real-time applications like Voice and Video</p> <p>The system should be able to support multiple internet break out points based on the application (e.g. The system should do a direct internet break out at the branch location for O365 traffic while the rest of the internet traffic should be egressed through a centralized security infrastructure in the data center or the cloud).</p> <p>The SLA management should have a fallback mechanism in place i.e., in case if both the links at a branch location fail to meet SLA, the traffic should not drop.</p>	
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	<p>SDWAN Controller must support geographical redundancy. When the primary controller fails, the backup controller must be ready without impacting operations</p> <p>The proposed solution is preferred to support zero trust architecture.</p> <p>The system must maintain strict security control, without configuring access policy explicitly, traffic is not allowed to access all services.</p> <p>SDWAN Solution should have capabilities to define VRF/Tenant and propagate service information network-wide within a tenant for application-driven architecture.</p> <p>The proposed solution should have all required hardware to support up to 2000 Branches on day 1 with the option to horizontally scale to support up to 5000 Branches</p> <p>SD-WAN solution should have the ability to detect whether the traffic is already encrypted using TLS/HTTPS or by IPsec and If the application traffic is already encrypted, router shall not re-encrypt the packet thus eliminating the overhead associated with double encryption</p> <p>SDWAN solution should have native ability to Identify Public cloud Application's like 365 network traffic using Microsoft recommended endpoint API and allow local branch egress of Office 365 network traffic to the internet where possible,</p> <p>SDWAN solution should ensure the traffic destined for Cloud applications like Office 365 can connect to the closest Microsoft's global Front Door Servers thereby Shortening the network path reduces latency and improve Office 365 performance</p> <p>SDWAN solution should have the ability to extend the Ethernet broadcast domain across multiple sites</p>	
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	<p>SDWAN solution should be able to apply Denial of Service (DOS) and Distributed Denial of Service (DDOS) protection to every session passing through any CPE in the network</p> <p>SDWAN Solution also supports source and destination NAT on a per-session basis.</p> <p>The proposed solution is preferred to be FIPS-140-2 and PCI-DSS compliant</p> <p>Should support domain-based web filtering capabilities</p> <p>Should support Packet capture per service to match 5 tuple and rule should be propagated across all nodes in the SDWAN network</p> <p>Should support Inflow performance monitoring based on per priority /Per path/per protocol and intervals across 10ms/100ms</p> <p>SDWAN solution should support Role-Based Access Control (RBAC) mechanism for an Administrator to create Access Management Roles that allow specific access to resources such as routers, tenants, and services, as well as configuration objects.</p> <p>Should support integration with LDAP server to authenticate administrative users to the CLI and GUI interfaces for administration, configuration, and management.</p> <p>The system should allow the SD-WAN Gateway Appliance in the Data Centers at Multiple location's to be deployed in the Active-Active cluster</p> <p>The software-defined controller should be architecturally highly available with Active- Active support</p> <p>The SD-WAN devices at the branch should have an Active-Active cluster for high priority locations</p>	
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	The SDWAN Solution is preferred to be on tunnel-free technology and should not leverage IPSEC/GRE/VXLAN for Packet, if IPSEC tunnel is being used as a solution then the performance of the CPE is considered to be 40% higher performance as mentioned to be provided. The software shall be a Subscription model.	
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A 7.13 Specifications for Rack Enclosure

Sl. No	Descriptions	Compliance Yes/No
1	16RU Rack enclosure with front and rear doors with lock support and cooling fans.	
2	Standard 19" width and 800mm depth.	
3	Should have wheels with wheel lock support.	

A 7.14 Specifications for Main Distributing Unit

Sl. No	Descriptions	Compliance Yes/No
1	1RU Standard 220-240V 50Hz AC input.	
2	16AMP MDU with individually fused 14 IEC13 outputs	
3	Should have a Power On/Off button.	
4	LED indicators for Power input and each output.	
5	Able to manage remotely over IP.	

A 7.15 Specifications for 2KVA Online UPS

Sl. No	Descriptions	Compliance Yes/No
1	Rack-mountable 2KVA online UPS (230V)	
2	Should have a built-in battery	

3	Support for automatic internal bypass in case of fault or power overload.	
4	Able to run automatic/periodic battery self-test and able to provide early-warning fault analysis.	
5	LCD for system parameters and alarms	
6	Network RJ45 port for remote management	

A 7.16 Specifications for Video Production application with Multiviewer & Social Media Publishing

Sl. No	Descriptions	Compliance Yes/No
1.	This video production system should support both Live and recorded programs.	
2.	Should support Live programs and repeat playout of recorded programs	
3.	Should handle the sources in the compatible formats and support monitoring & routing of sources for Streaming to social media.	
4.	Should have support for SD, HD, and 4K.	
5.	Support multiple NDI, SRT, and other IP video standard inputs.	
6.	Support DVE tiles and different transition effects such as cut, wipe, slide, and more.	
7.	Support graphics overlays/Astons; able to create custom overlay templates and import from other applications.	
8.	Support in-built chroma keying would be an added advantage.	
9.	Playlist support for recorded content playback.	
10.	In-built audio mixer with support for EQ and other standard effects.	
11.	Support for an in-built multiviewer to display all the sources as per custom layout and size.	
12.	Able to create custom macros/presets to call different functions.	
13.	Support to record the final program output Able to stream the final program to different platforms	

	(YT/FB etc.).	
14	Support PTZ Camera control.	
15	The software shall be a Subscription model.	
<u>Hardware</u>		
1	Windows 10 Professional	
2	Intel Xeon® W-1350P Processor (12M Cache, base 4.00 GHz, up to 5.10 GHz)	
3	6 core or better	
4	32 GB DDR4 Memory	
5	2x 1TB SSD with RAID	
6	Nvidia GeForce 2060 4GB graphics card or better	
7	Dual 1G port NIC with support for teaming.	
8	Dual 24" Full HD monitors with arm mount, mouse, and keyboard.	
9	Workstation from leading manufacturer	

A 7.17 Specifications for Headphone

Sl. No	Descriptions	Compliance Yes/No
1	Professional over the ear headphones	
2	Frequency response of 21 to 18Khz or better	
3	108 db SPL or better	
4	Support for both 3.5mm & 6.5mm jacks	

A 7.18 Specifications for Audio Speaker

Sl. No	Descriptions	Compliance Yes/No
1	2 way near- field monitor	
2	1" high frequency and 5" low-frequency drivers	

3	52 hz - 35000hz freq response	
4	Amplifier Power - 60W Low freq &40W High Frequency	
5	110 dB Maximum SPL	
6	XLR input	
7	should have a volume control Knob	
8	10000Ω Output Impedance or better	

A 7.19 Specifications for Microphone for Narration or Voice Recording

Sl. No	Descriptions	Compliance Yes/No
1	Condenser Microphone for Voice Over applications	
2	Large-Diaphragm 1" Capsule	
3	Cardioid Polar Pattern	
4	20Hz- 20Khz Frequency Range	
5	100Ω Output Impedance	
6	137dB SPL Maximum SPL	
7	Include all Necessary accessories such as Pop shield, etc along with a compatible desktop and floor microphone stand	

A 7.20 Specifications for Video Editing Software

Sl. No	Descriptions	Compliance Yes/No
1	Industry-standard and widely used professional video editing tool.	
2	The software shall be a Subscription model.	
3	The software should be compatible with workstation as specified in item #A 7.16	
4	Compatible with windows and Mac	
5	Should be able to ingest multiple formats of video up	

	to 4k or above irrespective of resolutions and file formats	
6	Should be able to seamlessly accept images in jpeg, GIF, Tiff and other formats	
7	Should have a minimum of 20 video tracks and 20 audio tracks	
8	Should be able to perform multi-tasking while encoding a video	
9	Full screen playback	
10	Multi - Cam editing option	
11	Ingesting various audio formats for editing	
12	Animated title templates	
13	Title support for Tamil, English and other Indian languages	
14	Should be able to encode videos in multiple formats for Broadcasting, web streaming and all types of social media	
15	Software should allow users to open a variety of projects at the same time. Enabling the user to switch between lifting clips and scenes from one project to the other.	
16	Integrated media encoder	
17	Integrated Audio mixer tool and Graphic equalizers	
18	Colour correction tool with auto brightness and contrast control	

A 7.21 Specifications for Audio Recording & Editing Software(Professional)

Sl. No	Descriptions	Compliance Yes/No
1	Professional Audio Recording and editing software	
2	Subscription: Annual	
3	Record, ingest, convert, export audio live or pre-recorded	
4	Complete audio editing compatibility	
5	Adding customised audio effects with pre-existing	

	templates	
6	Reduce or remove reverb and background noise from recordings with/without noise samples	
7	Playback over 100 audio tracks or record not less than 25 tracks, at low latencies, on generic workstations .	
8	Adjust your audio without moving your eyes or mouse cursor away from your content with on-clip gain adjustments	
9	Simple split and cut tool	
10	easy way to merge sounds, noise filter, Add effects on existing sound	
11	Customisable presets for zoom to specific durations.	
12	Import a variety of audio formats for processing and export to desired format	
13	Scroll through multitrack projects faster and more smoothly. Track heights are maintained when zooming in or out, making it easier to manage large projects	
14	Creating podcasts and albums easily with full support for .jpeg and .png files, such that we can embed thumbnails and images into .mp3 files.	
15	Navigate to any spot in the timeline with this useful keyboard shortcut	
16	Monitoring feature to preview the input of recording device before start of recording with audio level meters	
17	Feature of Audio compressor, expander, limiter and noise gate	

A 7.22 Specifications for 16 Channel Digital Mixer

Sl. No	Descriptions	Compliance Yes/No
1	16 recallable mic preamps	
2	8 fully-assignable XLR outputs plus a headphone output	
3	Industry-leading Master Fader control app	

4	16x16 USB recording	
5	16 input channels with 4-band PEQ + HPF, gate, compression and RTA/Spectrograph	
6	16 stereo-linkable input channels	
7	13 output busses with 4-band PEQ + HPF/LPF, 31-band GEQ, comp/limiter, alignment delay and RTA/Spectrograph	
8	6 stereo-linkable aux sends	
9	6 stereo-linkable subgroups	
10	Main L/R bus	
11	USB based audio mixer to interface	
12	6 VCAs and 6 mute groups	
13	4 stereo FX processors featuring great built-in FX like reverbs, delays, choruses, flangers, and many more with dedicated sends and returns	
14	Full I/O routing with A/B sources per channel	
15	Assignable oscillator including pink/white noise and sine waves	
16	Modern and Vintage options for comp/gate and EQ	

A 7.23 Specifications for AV Equipment Control Software at NOC

Sl. No	Descriptions	Compliance Yes/No
1	Intuitive and easy to master	
2	Fast navigation with view groups and overview	
3	Quick setup with factory and user-definable presets	
4	Access Limiting allows flexible customization of the user interface and prevents unwanted adjustments from other users	
5	Quickly access channel processing, signal routing, and a suite of great sounding effects with presets to get started	
6	Export presets, shows and complete system backups via	

	Dropbox, email and more	
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A 7.24 Specifications for Photo Editing Software

Sl. No	Descriptions	Compliance Yes/No
1	Industry-standard and widely used professional photo editing tool.	
2	The software shall be a Subscription model.	
3	To adjust proper color to the images.	
4	Touch-up photos, like “erasing” a blemish or removing a tear or fold	
5	To retouch your digital and scanned photographs.	
6	To Sharpen and enhance photos to the highest quality.	
7	To remove and change the background of the photos.	
8	To add and remove the watermark in images.	
9	To restore photos from various conditions such as changing the colors of clothes in photos, removing water dots;	
10	Clean and make photos fresh and attractive.	
11	To cut photos of single or multiple people from group photos then you can place them individually or on different photographs.	
12	Create and save images in various formats such as the most popular .png, jpeg, .gif, .targa, etc.	
13	To use attractive and clean Fonts, typography and image editing techniques (mostly simple) along with content.	
14	To reduce sizes, improving pixels in the image, resizing for logos and branding material.	
15	Slice up graphics into a set of pictures	
16	To create Pictures Patterns/texture pattern etc.,	

17	Reducing sizes, rising pixels within the image, resizing for logos	
18	To create oil painting of the original pictures.	
19	To retouch the old photos into new photos	
20	To improve the brightness and color tone of the photo into a new style.	

A 7.25 Specifications for Hardware at Social Media Publishing System

Sl. No	Descriptions	Compliance Yes/No
1	Windows 10 Professional	
2	Intel Core i7-10700 with Intel UHD Graphics 630 (2.9 GHz, up to 4.8 GHz with Intel® Turbo Boost, 8 cores) or better	
3	8 core or better	
4	16 GB (2 x 8 GB) DDR4 Memory	
5	2x 1TB SSD with RAID	
6	NVIDIA Quadro P1000 (4 GB GDDR5 dedicated) graphics card or better	
7	Dual 1G port NIC with support for teaming.	
8	Dual 24" Full HD monitors with arm mount, mouse, and keyboard.	
9	Workstation from leading manufacturer	
10	Office application – Subscription-based	
11	Include Over the Ear Headphone as per the specification mentioned in the Headphone section.	

A 7.26 Specifications for Network Management Software

Sl.	Descriptions	Compliance
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No		Yes/No
1	Cloud-based, industry-standard, and widely used with all the standard features.	
2	Element Management System to manage the remote devices (Start/Stop stream remotely).	
3	The software shall be a Subscription model.	

A 7.27 Specifications for Network Management Client

Sl. No	Descriptions	Compliance Yes/No
1	Windows 10 Professional	
2	Intel Core i7-10700 with Intel UHD Graphics 630 (2.9 GHz, up to 4.8 GHz with Intel® Turbo Boost, 8 cores) or better	
3	8 core or better	
4	16 GB (2 x 8 GB) DDR4 Memory	
5	2x 1TB SSD with RAID	
6	NVIDIA Quadro P1000 (4 GB GDDR5 dedicated) graphics card or better	
7	Dual 1G port NIC with support for teaming.	
8	Dual 24" Full HD monitors with arm mount, mouse, and keyboard.	
9	Workstation from leading manufacturer	
10	Office application – Subscription-based	
11	Include Over the Ear Headphone as per the specification mentioned in the Headphone section.	

A 7.28 Specifications for Display Monitoring System

Sl. No	Descriptions	Compliance Yes/No
1	Windows 10 Professional	
2	Intel Core i7-10700 with Intel UHD Graphics 630 (2.9 GHz, up to 4.8 GHz with Intel® Turbo Boost, 8 cores)	

	or better	
3	8 core or better	
4	16 GB (2 x 8 GB) DDR4 Memory	
5	2x 1TB SSD with RAID	
6	NVIDIA Quadro P1000 (4 GB GDDR5 dedicated) graphics card or better	
7	Dual 1G port NIC with support for teaming.	
8	Dual 24" Full HD monitors with arm mount, mouse, and keyboard.	
9	Workstation from leading manufacturer	
10	Office application – Subscription-based	

A 7.29 Specifications for 65" Display

Sl. No	Descriptions	Compliance Yes/No
1	65 Inch 4K Commercial Series TV/display	
2	Brightness 500 cd/m ²	
3	Viewing Angle (Horizontal/Vertical) 178 / 178°	
4	HDMI In HDMI 1.4 (Type A) × 2 (4K@30Hz)	
5	HDMI 2.0 (Type A) × 1 (4K@60Hz)	
6	HDMI Out HDMI Type A Connector × 1	
7	Wi-Fi and Bluetooth connectivity	
8	Resolution (H × V) 3840 × 2160 pixels	

A 7.30 Specifications for NAS Storage

Sl. No	Descriptions	Compliance Yes/No
1	Populated with 31 x 16TB , SATA ENT 7200 RPM, hot-plug HDDs	

2	Single-Controller Unified Storage (File & block)	
3	Supports both Block (iSCSI, FCP, SRP) & File (SMB, NFS, FTP, AFP) protocols	
4	Host Interface: 2 x 10G SFP+	
5	Supports RAID 0,1,0+1,5,6,50 & 60	
6	Supports up to 36 hot-swap SAS/SATA LFF/SFF HDDs/SSDs in same enclosure and up to 204 HDDs/SSDs using add-on JBODs	
7	Supports SSD Caching (Optional upgrade)	
8	Built-in Snapshot with rollback	
9	WebUI for setup and configuration	
Hardware Details		
1	Dual Intel Xeon processor (10C/20T 2.4G)	
2	128GB DDR4 ECC memory	
3	1+1 Redundant power supplies and 4U form factor	

A 7.31 Specifications for Network Switch(NOC)

Sl. No	Descriptions	Compliance Yes/No
1	Minimum 4x 1/10GbE SFP+ uplink ports with SFP fiber transceivers	
2	Rack-mountable, 48x 10/100/1000BASE-T ports with PoE/PoE+ support	
3	Should support stacking of switches to make it a single logical switch. Include necessary accessories.	
4	Complete L2 and L3 switching capabilities required	

A 7.32 Specifications for Audio Mixer

Sl. No	Descriptions	Compliance Yes/No
1	USB based audio mixer to interface with vision mixer	
2	Should have a minimum of 4 Mic inputs with phantom power support	

3	Should have line inputs (Mono/Stereo selectable)	
4	Should have built-in Mic Preamp , 3-band Equalizer and compressors.	
5	XLR, Phono interface	
6	Include suitable recording and editing software	

A 7.33 Specifications for Head-End Device at Data Center

Sl. No	Descriptions	Compliance Yes/No
1	The device should have min 2x 10 GE Fiber with an IMIX performance of minimum 10Gbps.	
2	It should have Redundant Power Supplies and min 128GB RAM and 512GB of Local Storage	

A 7.34 Specifications for Rack & MDU

Sl. No	Descriptions	Compliance Yes/No
1	42RU rack front and rear doors with lock support to be used in data center environment.	
2	Standard 19" width and 800mm depth.	
3	Include recommended vertical cable managers and all necessary accessories.	
4	Include MDU in High availability mode as per the specification mentioned in above MDU section.	

A 7.35 Specifications for 10KVA Online UPS

Sl. No	Descriptions	Compliance Yes/No
1	10KVA online UPS (230V)	
2	Include necessary batteries for the calculated load for back-up time of 30Min-1hr.	
3	Support to provide early-warning fault analysis for replacement.	

4	Protects connected loads from surges, spikes, lightning, and others.	
5	LCD for system parameters and alarms	
6	Network RJ45 port for remote management	

A 7.36 Specifications for Camera Control Desk with Multiviewer

Sl. No	Descriptions	Compliance Yes/No
1	Hardware: Workstation from leading manufacturers	
2	Windows 10 Professional	
3	Intel Xeon® W-1350P Processor (12M Cache, base 4.00 GHz, up to 5.10 GHz), 6 core or better	
4	32 GB DDR4 Memory	
5	2x 1TB SSD with RAID	
6	Nvidia GeForce 2060 4GB graphics card or better	
7	Dual 1G port NIC with support for teaming.	
8	Dual 24" Full HD Touch monitors with arm mount, mouse, and keyboard.	

A 7.37 Specifications for Streams Recorder

Sl. No	Descriptions	Compliance Yes/No
1	Desktop software application to monitor and record multiple sources, with configurable multiviewer & multiple layouts.	
2	Record full-resolution incoming sources from the network into standard file formats	
3	Sources should be synchronized.	
<u>Hardware</u>		
4	Workstation from leading manufacturers	

5	Windows 10 Professional	
6	Intel Xeon® W-1350P Processor (12M Cache, base 4.00 GHz, up to 5.10 GHz), 6 core or better	
7	32 GB DDR4 Memory	
8	2x 1TB SSD with RAID	
9	Nvidia GeForce 2060 4GB graphics card or better	
10	Dual 1G port NIC with support for teaming.	
11	Dual 24" Full HD Touch monitors with arm mount, mouse, and keyboard.	

Appendix – 8 Form for the Delivery of Equipments

Date of Submission: **dd/mm/yyyy**

Vendor Name :

Vendor Address :

Tender No :

Sample Submitted on :

Tender Product Sl.No :

Sl. No	Item No in the Tender	Item Description	Make	Model	Sl. No of the Item

VENDOR

Certifying Agency

Bidding Company Name
the

Name & Designation of

Person receiving the Sample

Signature of the Representative
Name :
Designation:
Contact No :

Signature
Name :
Designation :
Contact No :

Appendix – 9 List of Infrastructure requirements to be provided by the bidder

A. At Temple:

Sl.No	Description	Qty
1.	Manpower	2 No
2.	PTZ Camera	6 No
3.	PTZ Camera controller & Multi-Viewer – 1 set with software	
4.	Tablet	1
5.	Control application executing on the above Tablet	1
6.	Lapel Microphone with wireless system – 2 Nos	2
7.	Shotgun Microphone with built-in transmitter & receiver & Wireless system	4
8.	Microphone stand - Full length steel , chromium plated, height adjustable professional floor mount Stand	2
9.	Microphone stand Short stand, Chromium plated, height adjustable for musicians – floor mount	4
10.	Boundary Mic / Surface Mount wired	2
11.	Audio Mixer	1
12.	Wireless handheld Mics.	4
13.	Network Switch	1
14.	Wireless Access Point	1
15.	SD-WAN Solution	1
16.	Rack Enclosure	1
17.	Main Distribution Unit	1

18.	UPS	1
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B. At PCR/NOC

Sl.No	Description	Qty
1	Video Production application with Multiviewer & Social Media Publishing & Workstation	1
2	Headphones (One Headphone for each client system and Audio Mixer	4
3	Audio Speakers	2
4	Microphone for Narration or Voice recording	2
5	Audio Mixer	1
6	Video Editing Software	1
7	Audio Recording and Editing software(Professional)	1
8	16-CHANNEL DIGITAL MIXER	1
9	AV Equipment CONTROL Software at NOC	1
10	Photo Editing Software	1
11	Hardware for social media publishing system:	1
12	Network Management Software	1
13	Hardware for Network Management client:	1
14	Display Monitoring system	1
15	65" Display	1
16	NAS - Storage Solution	1
17	Network switch @ NOC	1
18	Wireless Access Point (NOC) and WAP controller	1
19	SD-WAN Solution	1
20	Head-End Device at Datacenter	1
21	Rack & MDU	1
22	UPS (NOC)	1
23	Camera Control Desk with Multiviewer	1
24	Technical Manager	1
25	Technical Supervisor	2
26	Technician – Video/Audio Production(24*7)	3
27	Technician – Creativity/Social media/Web publishing(24*7 support)	3
28	Network Engineer(24*7 support)	3
29	Maintenance/Support Engineers for tech infra(24*7 support) per month	3

*Note: This quantity mentioned above is indicative only. However the quantity needs to be finalised and approved by HR&CE department for each temple.

Appendix – 10 Price Bid

Tender Ref no. : ELCOT/Proc/OT33468/Thirukovil Live Web Stream/2021-22

P1. Tender for Web Streaming of Thirukoil Events
Mandatory Components

Sl. no	Item Description	Unit Rate (Rs.) (A)	Quantity (B)	Value (C) C=A*B	Tax (%) (D)	Total Taxes (Rs.) (E) E= C*D/100	Total (F)=C+E
1	Broadcast Quality PTZ Camera(A7.1)		1				
2	PTZ Camera controller & Multi-Viewer with Software(A7.2)		1				
3	Tablet (A7.3)		1				
4	Control Application Execution on the tablet (S.No.3)(A7.3.1)		1				
5.	Lapel Microphone with wireless system(A7.4)		1				
6	Shotgun Microphone with		1				

	built-in transmitter and wireless system, transmitter & receiver for shotgun microphone(A7.5)						
7	Microphone Full length floor mount stand (A7.6)		1				
8	Microphone Short stand (A7.6)		1				
9	Boundary Mic / Surface Mount wired(A7.7)		1				
10	Audio Mixer at Thirukovil(A7.8)		1				
11	Wireless handheld Mic(A7.9)		1				
12	Network Switch(A7.10)		1				
13	Wireless Access Point(A7.11)		1				
14	SD-SWAN(A7.12)		1				
15	Rack Enclosure(A7.13)		1				
16	Main Distribution Unit(A7.14)		1				
17	2KVA Online UPS(A7.15)		1				
18	Video Production application with Multiviewer & Social Media Publishing & Hardware (A7.16)		1				
19	Headphones (A7.17)		1				

20	Audio Speakers(A7.18)		1				
21	Microphone for Narration or Voice recording (A7.19)		1				
22	Audio Mixer at NOC/PCR(A7.32)		1				
23	Video Editing Software(A7.20)		1				
24	Audio Recording and Editing software (Professional)(A7.21)		1				
25	16-Channel Digital Mixer(A7.22)		1				
26	AV Equipment CONTROL Software at NOC(A7.23)		1				
27	Photo Editing Software(A7.24)		1				
28	Hardware for social media publishing system(A7.25)		1				
29	Network Management Software(A7.26)		1				
30	Hardware for Network Management client(A7.27)		1				
31	Display Monitoring system(A7.28)		1				
32	65" Display(A7.29)		1				
33	NAS - Storage		1				

	Solution(A7.30)						
34	Network switch @ NOC(A7.31)		1				
35	Wireless Access Point (NOC) and WAP controller(A7.11)		1				
36	Head-End Device at Datacenter(A7.33)		1				
37	Rack & MDU		1				
38	10 KVA Online UPS (A7.35)		1				
39	Camera Control Desk with Multiviewer(A7.36)		1				
40	Streams Recorder(A7.37)		1				
41	Manpower – AV Technician @ Thirukovil per month		1				
Manpower at NOC							
42	Technical Manager per month		1				
43	Technical Supervisor per month		1				
44	Technician – Video/Audio production(24*7 support) per month		1				
45	Technician – Creativity/Social media/Web publishing(24*7		1				

	support) per month						
46	Network Engineer(24*7 support) per month		1				
47	Maintenance/Support Engineers for tech infra(24*7 support) per month		1				
Total							

P2. 2nd & 3rd Year AMC for Hardware Items:

Sl.no	Item Description	Total Basic cost of hardware items(Excluding S.NO 4,23,24,26,29,41,42,43,44,45,46,47 in Price Bid P1) (Rs.) (A)	AMC In % on the Total Basic cost of hardware items (Excluding S.NO 4,23,24,26,29,41,42,43,44,45,46,47 in Price Bid P1) (Rs.) (B)	Total Basic (C) C=(A*B)/100	GS T (%) (D)	Total GST (Rs.) (E) E= C*D/100	Total (F)=C+E
1	2 nd year						
2	3 rd year						
Total							

P3. Optional Components

S. No	Description	Unit Price for with	GST per unit (in %)	GST Amount in Rs	Total Unit Price with all	Quantity In Nos	Total In Rs
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		out Taxes (in Rs)			Taxes and duties (Rs.)		
(A)	(B)	(C)	(D)	(E)=(C* D/100)	(F) = (C)+(E)	(G)	(H)=F*G
1	Supply of Cable with PVC conduit and laying and fixing charges per meter					1 metre	
2	Charges for Digging, Trenching and filling up the trench of 1 ft width and 3 ft depth (Soft Land)					1 metre	
3	Charges for Digging, Trenching and filling up the trench of 1 ft width and 3 ft depth (Tar Road)					1 metre	
4	Charges for Digging, Trenching and filling up the trench of 1 ft width and 3 ft depth (Concrete Road)					1 metre	
5	Charges for wiring from UPS -10KVA output to the required equipment with all accessories					1metre	
6	Charges for wiring from UPS -2KVA output to the required equipment with all accessories					1 metre	
7	Survey, estimate preparation, diagram and documentation charges per location.					1 locatio n	
8	Wiring from EB – DB to UPS					1 metre	
	CONNECTIVITY						
9	Broadband Connectivity @ 50Mbps Speed from Service Provider2 (per year **/Per location)					1 No	

10	Broadband Connectivity 100 Mbps Speed from Service Provider 2 (per year **/per location)					1 No	
11	Internet leased line 4 MBPS Per Year					1 No	
12	Internet leased line 8MBPs Per Year					1 No	
13	Internet leased line 10 MBPs Per Year					1 No	
14	Internet leased line 12 MBPs Per Year					1 No	
	Total (H):						

- This is only for a Selected Temple as a pilot project by the HR&CE department. The same will be rolled out to 46 temples in phases after evaluation of Pilot Project. A separate work order will be issued for subsequent phases as per HR&CE requirement.
- Any future temple addition, the same rate will be utilised however separate requirement study has to be conducted by the successful bidder and the same has to be approved by the HR&CE Department.
- At the time of implementing this project at other temples, the performance of the successful bidder will be evaluated.
- Open Source Software should not quoted and wherever software subscription model is mentioned it should be quoted for per annum.

- However, the vendor/bidder must ensure that the functionality of all items stated in the tender is met.
- To this effect, the vendor must fulfil the **Conceptual diagram** which is mentioned in scope of work that shall map the items listed in the tender to the products quoted.
- Considering the installations in the temples; distance of temple from PCR/NoC; and, handling of equipment in PCR/NoC, the technical evaluation will be based both on the functionality and its ruggedness for trouble free performance

Delivery Schedule:

1. After issuing the work order, the delivery, installation and commissioning should be completed within 30 days at Arulmigu Dhandayuthapaniswamy Temple, Palani and NOC & PCR at HR&CE Headquarters.
2. For subsequent 46 temples, a separate work order will be issued on successful completion work as per the first work order and the delivery, installation and commissioning should be completed within 90 days.

Note:

- 1) The Grand total amount of Mandatory Components P1 & **2nd & 3rd** Year AMC for Hardware Items P2 will be evaluated to arrive at the Lowest Price(L1 Price).
- 2) The Bidder shall submit the offer by filling up all the columns against each item. Bids with blank columns are liable for rejection.
- 3) Bidders should quote for all the items. No partial bid is allowed.
- 4) Optional Components will be invoked when there is a need from department.

Appendix 11: Restrictions on Public Procurement

Instructions to bidders to be complied

Bidders are requested to comply with the below instructions without fail. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. The Competent Authority for the purpose of registration under this tender shall be

- a) The Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT). OR
- b) The Registration Committee constituted by Government of Tamil Nadu consisting of the following members:-

- 1.Managing Director & Chief Executive Officer, Guidance (as Chairman)
- 2.Additional Chief Secretary to Government (Finance), or his representative
- 3.Principal Secretary to Government (Information Technology) or his representative
- 4. Principal Secretary to Government (Public Works Department) or his representative
- 5. Industries Commissioner and Director of Industries and Commerce.

Definitions:

- i. “Bidder” for the purpose of the tender(including the term ‘tenderer’, ‘consultant’, ‘vendor’ or ‘service provider’ in certain contexts) means any persons or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- ii. Bidder from a country which shares a land border with India” for the purpose of this tender means

- a. An entity incorporated, established or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d. An entity whose beneficial owner is situated in such a country; or
 - e. An Indian (or other) agent of such an entity; or
 - f. A natural person who is a citizen of such a country; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above. However, there are no restrictions in case of procurement of goods or services from the bidder from those Countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development Projects.
- iii. The “Beneficial owner “for the purpose of (ii) above will be as under:
- (1) In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means.

Explanation –

- a. “Controlling ownership interest” means ownership of, or entitlement to, more than twenty-five percent of shares or capital or profits of the company;
 - b. “Control” shall include the right to appoint majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.
- (2) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more

juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

(3) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

(4) Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

(5) In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

(6) An 'agent' for the purpose of this tender is a person employed to do any act for another, or to represent another in dealings with third person.

(7) The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. The definition of a 'Contractor' from a Country which shares a land border with India' shall be as detailed in paragraph (ii) above.

Each Bidder shall have to submit the Undertaking as per Appendix 12. Where applicable, the bidder shall have to submit the Certificate of Registration from the Competent Authority.

Appendix 12 Undertaking for Certificate of Registration as

per GFR Rule

Ref: Date:

To
The Managing Director,
Electronics Corporation of Tamil Nadu Ltd,
MHU Complex, II Floor,
692, Anna Salai,
Nandanam, Chennai-600 035.

Dear Sir,

Sub: Tender for Thirukoil Live Telecast– Declaration
Letter – Regarding.

Ref: 1. ELCOT/Proc/OT/33468/Thirukoil Live
Webstream/2021-22

I/We, < Bidder > have read the clause regarding restrictions on procurement from a Bidder which shares a land border with India.

I/We hereby certify that I/We, <Bidder >is not from any such country or, if from such a Country, has been registered with Competent Authority.

I/We hereby certify that I/We in the event of becoming a successful bidder shall not subcontract works to any Contractor from a Country which shares a land border with India unless such Contractor is registered with the Competent Authority, as defined vide APPENDIX 11 of the tender document.

I/We hereby certify that I/We fulfil all requirements in this regard and eligible to be considered

For <Bidder>

Authorised signature:

Name of the authorised person:

Designation:

Name of Bidder

Stamp of bidder

NOTE: 1. Letter should be submitted on the Letter head of the BIDDER and should be signed by the Authorised Signatory.

2. Any deviation would lead to summary rejection of bids.

3. Wherever Applicable, valid Registration certificate obtained from the Competent Authority shall be attached.

Appendix 13: Declaration

I/We agree that the offer shall remain open for acceptance for a minimum period as stipulated in the Tender from the date of opening of the tender and thereafter until it is withdrawn by us by notice in writing duly addressed to the authority of opening the tender and sent by registered post with acknowledgement due or otherwise delivered at the office of the authority. The EMD amount shall not bear any interest and shall be liable to be forfeited to ELCOT should I/We fail to abide by the stipulations to keep the offer open for a period mentioned above or fail to sign and complete the contract document as required by ELCOT and furnish the Security Deposit as specified in the terms and conditions of the contract. The EMD amount may be adjusted towards SD or refunded to me/us unless the same or any part thereof has been forfeited as aforesaid.

I/We agree to adhere with the schedule of implementation and deliver the items as specified in the tender.

I/We declare that the Price bid has been submitted without any conditions and strictly as per the Terms and Conditions of the tender document and I/We am/are aware that the Price bid is liable to be rejected if it contains any other conditions.

I/We declare that the information furnished in the tender is true to the best of my/our knowledge. If any false/fictitious information is found I/We agree to the rejection of the bids and consequence action.

**Appendix 14: Senior Grade Temples
Joint Commissioners/Executive Officers**

1	Arulmigu Kapaleeswarar Temple, Mylapore, Chennai - 600004, Chennai
2	Arulmigu Subramanyaswamy Temple, Tiruttani - 631209, Tiruvallur
3	Arulmigu Devi Karumariamman Temple, Thiruverkadu - 600077, Tiruvallur
4	Arulmigu Dhandayuthapaniswamy Temple, Palani - 624601, Dindigul
5	Arulmigu Meenakshi Sundaraswarar Temple, Madurai - 625001, Madurai
6	Arulmigu Ramanathaswamy Temple, Rameswaram - 623526, Ramanathapuram
7	Arulmigu Subramania Swamy Temple, Tiruchendur - 628215, Thoothukudi
8	Kanyakumari District Temples, Suchindrum - 629704, Kanyakumari
9	Arulmigu Aranganatha Swamy Temple, Srirangam - 620006, Thiruchirappalli
10	Arulmigu Mariamman Temple, Samayapuram - 621112, Thiruchirappalli
11	Arulmighu Arunachaleswara Swamy Temple, Tiruvannamalai

Deputy Commissioners/Executive Officers

12	Arulmigu Kamakshi Amman Temple, Mangadu - 600122, Kancheepuram
13	Arulmigu Parthasarathy Swamy Temple, Triplicane, Chennai - 600005, Chennai
14	Arulmigu Vadapalani Andavar Temple, Vadapalani, Chennai

	- 600026, Chennai
15	Arulmigu Bannari Mariamman Temple, Bannari - 638401, Erode
16	Arulmigu Subramaniaswamy Temple, Maruthamalai, Kalveerampalayam - 641046, Coimbatore
17	Arulmigu Swaminatha Swamy Temple, Swamimalai, Kumbakonam - 612302, Thanjavur
18	Arulmigu Subramaniaswamy Temple, Thirupparankundram - 625005, Madurai
19	Arulmigu Kallazhagar Temple, Alagarkoil, Melur Taluk, Madurai Dist.
20	Arulmighu Sankaranarayana Swamy Temple, Sankarankoil. Assistant Commissioners/Executive Officers
21	Arulmigu Sangameswarar Temple, Bhavani, Erode - 638301, Erode
22	Arulmigu Angalamman Temple, Melmalaiyanur - 604204, Viluppuram
23	Arulmigu Thayumanaswamy Temple, Rock Fort, Thiruchirappalli - 620002, Thiruchirappalli
24	Arulmigu Sugavanesuwarar Temple, Mettu Agraharam, Salem - 636001, Salem
25	Arulmigu Vanabadrakaliamman Temple, Thekkampatti - 641305, Coimbatore
26	Arulmigu Abathsagayeswarar Temple, Vallam - 609309, Mayiladuthurai
27	Arulmigu Venkatachalapathi Swamy Temple, Oppiliappan Koil, Thirunageswaram - 612204, Thanjavur
28	Arulmigu Jambukeswarar Akilandeswari Temple, Thiruchirappalli - 620005, Thiruchirappalli
29	Arulmigu Masaniamman Temple, Anaimalai - 642104, Coimbatore
30	Arulmigu Kalyana Venkatramanaswamy Temple, Thanthonrimalai, Karur - 639005, Karur
31	Arulmigu Thirumalaikumaraswamy Temple, Panpozhi-627807,
32	Arulmigu Vekkaiiamman Temple, Thiruchirappalli - 620003, Thiruchirappalli
33	Arulmigu Mariamman Temple, Irukkangudi - 626202,

	Virudhunagar
34	Arulmigu Koodalagar Temple, Madurai - 625001, Madurai
35	Arulmigu Adaikalamkatha Iyanar And Bathirakaliamman Temple, Madapuram - 630611, Sivagangai
36	Arulmigu Naganatha Swamy Temple, Thirunageswaram - 612204, Thanjavur
37	Arulmigu Patteeshwaraswamy Temple, Perur - 641010, Coimbatore
38	Arulmigu Vazhai Thottathu Ayyan Temple, V.Ayyampalayam, Samalapuram - 641663, Tiruppur
39	Arulmigu Lakshmi Narasimmaswamy Temple, Sholinghur - 631102, Ranipet
40	Arulmigu Thiyagaraja Swamy Temple, Thiruvottiyur, Chennai - 600019, Chennai
41	Arulmigu Devarajaswamy Temple, Little Kancheepuram - 631501, Kancheepuram
42	Arulmighu Bragadeswarar Temple, (Big Temple) Tanjavur
43	Arulmighu Thirukuttralanatranathaswamy temple, Courtallam Tenkasi
44	Arulmigu Vinayagar Temple, Eachanari, Kurichi - 641021, Coimbatore
45	Arulmigu Subramaniyswamy Temple, Kangeyam, Sivanmalai - 638701, Tiruppur
46	Arulmigu Arthanareeswarar Temple, Tiruchengode - 637211, Namakkal
47	Arulmigu Narasimaswamy Temple, Namakkal - 637001