ELCOT Adding Value through IT	**Electronics Corporation of Tamil Nadu Limited**
Corrigendum	**Corrigendum No.1 to the Tender Document for the** 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) **Tender Ref.** **ELCOT/Proc/OT/33468/Thirukovil Live Webstream/2021-22**
	Electronics Corporation of Tamil Nadu Limited **MHU Complex II Floor,** **692 Anna Salai, Nandanam** **Chennai-600035** **Phone: +91-44-66401400 Fax: +91-44-2433 0612** **Email: proctenders@elcot.in Website: www.elcot.in**

CORRIGENDUM TO THE TENDER DOCUMENT

Please note that the clarifications to the Queries 1 to 58 are part of the Tender and the bidders are requested to include the signed clarifications and Amendments with the Tender document. The bids received without clarifications and amendments will be summarily rejected

S.N	Title of the clause	Query	Clarifications
1.	Page No.49 – Clause No 8.7 - Equipments/Software at PCR/NoC To handle all the incoming streams from various locations, monitor & switch the necessary cameras with overlay graphics (like Astons, temple name, location, etc.).	How many location streams are expected ? Is it multiple streams from the same temple ?	Yes. It is multiple streams. It will be not less than four streams per temple
2	Page No.49 – Clause No 8.7 - Equipments/Software at PCR/NoC To mix additional audio (Voice Over/background music/prayer songs etc.) and stream the final program to web channels and other platforms.	Will there be a quality check before broadcast ?	Yes. at Production Control Station in Chennai
3	Page No.54 – Clause No 9.3 – Payment Clause 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	This should be relaxed to MSME companies.	Remains unchanged.

	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.		
4	Page No.55-56- Clause No.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.	This may also depend on the facility provided by the temple.	The bidder is responsible for failures. However , penalty will be decided by HR &CE on case to case basis
5	Page No.19- Clause No.4 – Eligibility Criteria 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).	1. There are not many tenders of such kind in Govt/ PSU so request to consider private sector company also. 2. Most of Government Streaming Project has happened only in the elections only, almost many of the elections happened only last 6 months or 5 years before, so we request extend the time line.	1. Remains unchanged 2. Remains unchanged

6	Page No.20- Clause No.4 – Eligibility Criteria The Bidder should have valid ISO 27001:2011 & ISO20001:2011 or higher certificate in his name	ISO9001:2015 should be good enough.	Remains unchanged
7	Page No.12- S.No.6 – eTender Schedule-EMD	Can we know, this EMD of Rs. 10,00,000/- can be waived off if we produce MSME certificate.	The bidder seeking EMD exemption for MSME/NSIC/SSI, must submit the valid supporting document for the relevant category. Units having either permanent SSI Registration Certificate prior to implementation of MSMED Act, 2006 or valid Entrepreneurs Memorandum Part-II issued by the Directorate of Industries & Commerce or UdyogAadhar Memorandumare exempted from payment of EMD. The tenders without Earnest Money Deposit or Valid MSME/NSIC/SSI certificate / UdyogAadhar for exemption of EMD will be summarily rejected
8	Page No.19- Clause No – 4- Eligibility Criteria - Turnover –	There is no clarity of which particular year	Certificate from the Chartered Accountant should be

			enclosed with positive Net worth for the last three (2017—18, 2018-19 & 2019-20) financial years
	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		
9		No clarity on consortium	Consortium is not allowed.
10	Page No.79 - A7.2 - Specifications for PTZ Camera controller & Multi-Viewer	• Need more information on purpose • NDI is mainly Video over IP Protocol, kindly make NDI as optional. • Multi-view system to provide multiple layout options, Multiview Outputs, pre-set layouts - Is it ok if we achieve the same through separate software • To detect sources on network automatically automatically & monitor multiple sources with Audio. Is it ok if we achieve the same through separate software?	• Central Location – PCR • if able to meet the required functionality, NDI may be considered as optional • Yes as long as it provides the desired result and is user friendly. • Yes as long as it provides the desired result and is user friendly

| 11 | Page No.80 - A7.3.1 - Specification for Control application executing on the above Tablet A 7.3.1 | Define the purpose of this equipment. At Thirukovil side why this is required. If same is used for live streaming of build-in camera in tablet then other specified specifications are not required in application

Need more information on purpose | This tablet will be used for streaming via the inbuilt camera and the wifi network made available at Thirukovil |
| --- | --- | --- | --- |
| 12 | Page No.83 - A7.4,A 7.5, A 7.6, A7.7 - | Need purpose of each microphone | To stream singing of hymns, music concerts etc |
| 13 | Page No.95 - A7.14 - Specifications for Main Distributing Unit | Need purpose of this unit. Is it IP based PDU to control power to server | It is a IP based PDU to control power to Servers |
| 14 | Page No.96 - A7.16 - Specifications for Video Production application with Multiviewer & Social Media Publishing | Need quantity required. Is it one per Thirukovil to stream from Central Station? | For pilot project it is one switcher with preferably scalable option |
| 15 | Page No.100 - A7.22 - Specifications for 16 Channel Digital Mixer | Need purpose of this. Is it for audio mixing? | It is an audio mixer required at Thirukovil for concert and similar application |
| 16 | Page No.101 - A7.23 - Specification for AV equipment Control Software at NOC | Need purpose of this. Is it for audio mixing? | It is a software based video production mixer |
| 17 | Page No.104 - A7.26 - Specification for Network Management Software | Why this is required as cloud based. | The SD-WAN architecture requires cloud based control and measurement plane. By opting for SD-WAN we automatically include the cloud based control and measurement plane. |
| 18 | Page No.105 - A7.30 - Specification for NAS Storage | 16TB HDD is not available | Available |
| 19 | Page No.105 - A7.30 - Specification for NAS Storage | What is total usable capacity required? | 14TB minimum |
| 20 | Page No.85 - A7.11 - Specification for | 802.11 AX is the WIFI 6 standard, it | For the current scenario, it |

		can give better video streaming and data transfer	would be advisable and because of budgetary constraints to deploy 802.11 ac alone. Wifi 6 standard will be adopted later on when appropriate.
21	Page No.85 - A7.11 - Specification for Wireless Access Point	WIFI 6 certification for hardware is more important to ensure required feature and hardware are supported in the device	For the current scenario, it would be advisable and because of budgetary constraints to deploy 802.11 ac alone. Wifi 6 standard will be adopted later on when appropriate.
22	Page No.86 - A7.11 - Specification for Wireless Access Point	WIFI 6 APs with 4x4 mimo will have 2.6Gbps throughput recommend for 2.5Gbps multigigabit Ethernet ports day one	Under pilot project scenario, it is suggested that 1G ports will be sufficient for the rollout.
23	Page No.79 - A7.1 - Specification for Broadcast Quality PTZ Camera For distant cameras (exceeding 75 mtsrs), need to extend that camera signals over hybrid fiber cable (with power). Include necessary fiber converters Support for high quality and low latency for remote live production applications.	Separate Converters are required to achieve this. Please add converters as a separate line item	Meet functionality using the devices
24		Camera specification should be properly defined. Let us know if CCTV IP Camera with 2/ 4MP with 25X zoom can be used. We have used these Camera in multiple Thirukovil projects and are easy to manage and maintain.	CCTV optics are different. If a surveillance camera meets our specs, you can quote

25		There is no equipment specified for local level streaming when handheld video camera is used for programs which are captured locally in Thirukovil. We suggest to add encoder device with HDMI input to RTSP/ RTMP protocol.	Manpower and maintenance are not feasible. The control centre prefers to have total control of what is streamed
26		CCTV camera for small Thirukovil where big size IP PTZ camera not possible to install one more IP CCTV Camera with fixed lens should considered with wide angle.	The Control Centre prefers all Thirukovil to stream the same hi-quality video with no differences in quality
27		Whether all Thirukovil will be part single publishing channel or it will be separate channels on social media. If is it separate channel then we need separate computer for mixing and re-streaming at central monitoring station.	Publishing channels are different. You can quote for the pilot project with scalable option
28		who will own content rights, whether it will be sold to different service provider? If yes why not to include same in current tender. In other Thirukovil content are provided to other services providers like Jio TV, tata Sky etc..	All rights will be held by HR & CE, Govt., of Tamil Nadu
29		Whether multiple Thirukovil live feed will be mixed to create single stream in time division of in PIP ?	NO such idea at present
30		Why cloud hosted solution is not considered, and on-premises solution is used on central command and	security and ownership of content

		control	
31		Whether we have to publish such stream on Thirukovil or other government website. If yes there no HLS streaming platform planned. Separate platform should be planned as social media platform video link is possible to be embedded in to any website and there is not security on same.	Since it is a reliable and verified content, streaming on Social media is not an issue
32		How many resolutions video we will stream? Single 1080p or multiple size ? If same is to be published on Government website.	Social media like Youtube transcodes to different resolutions, for Government websites, it will be planned after reviewing pilot project
33		If multiple cameras are used at Thirukovil why local level content management software is not provided so local person can manage programs which are local to Thirukovil.	It is not feasible to have a man power in each temple and have a supervisor to check the work done and have a another officer to over see all these.
34		How feed coming from other movable camera will be feed in to this system need HDMI to IP encoder units	There are no camcorders
35		Who takes care of social media account creation and copy rights related issues on social media ?	Exclusive section of HR & CE , Govt., of Tamil Nadu
36		Why social media platforms is used when there are TV and other broadcasting platforms are in use like	The intention is to reach the maximum including international public. However,

		JioTV etc..These social media platforms can be embedded in any website which will cause misuse of content.	after review of Pilot Project, the decision of other platforms will be addressed
37	Technical Specifications	The existing technical specifications seem to be favoring one specific OEM	The tender clearly says that it is funtionality , integration, robustness/ruggedness and finally the desired result that matters The specific feature are only representative as mention in the tender document. Every bidder is free to choose any equipment that could demonstrate the technical capabilities to fulfil the deliverables as stated in the tender and desired by HR & CE
38	Page No:73, Appendix4 The CVs of all the personnel being deployed should be provided as per the format given below	Name of person with personal details should avoided during tender as person may change during execution time	we can allow 50% of staff details and 50% on assured qualified technicians
39	Page No:88, A 7.12 Specifications for SD-WAN. The software-defined network centralized components need to have the flexibility to be on-prem or on cloud.	Since Cloud is not recommended for Govt. classified data, Kindly remove.	The data generated is for public dissemination and hence cloud services can be availed with necessary data protection and regulations as deemed fit.

	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	Kindly amend as " SDWAN solution should have native ability to Identify Public cloud Application's like 365 and allow local branch egress of Office 365 network traffic to the internet where possible"	The integrator is free to use any compatible solution that meets the required functionality.
40	General	Why cloud hosted solution is not considered, and on-premises solution is used on central command and control. AWS is one of the leading cloud service provider approved by MeitY and we have worked very closely with multiple live and web streaming projects in India successfully. We are very keen to participate for Tender Ref.: ELCOT/Proc/OT/33468/Thirukovil Live Stream/2021-22. We kindly requesting you to consider Cloud as option to store (A 7.30 Specifications for NAS Storage) and for Servers. Being web streaming and internet facing applications we strongly suggest to consider cloud as infrastructure for this project and the SI / Application provider can design the solution with cloud infra as option.	We have considered both Cloud and on-premises solutions. Any cloud storage/service with the systems residing in India can be used matching the specifications of the corresponding equipments mentioned in the tender. The cloud subscription cost should be quoted for five years and that cost will be used for comparison purposes.

S.N	Title of the clause	Existing	Amendment/To be read as
41	Page No. 78 - A7.1 Specifications for Broadcast Quality PTZ Camera	• 30x super resolution zoom • 16x digital zoom Audio input • Multiple streaming outputs • Desktop and ceiling mountable	• 20x or more super resolution zoom • 16x digital zoom input • no change - dual channel streaming required to stream directly on two platforms if the need may arise • no change as installation points varies in each temple
42	Page No.86 – A 7.11 Specifications for Wireless Access Point	• Support Power over Ethernet, 24V passive PoE, and PoE+ (802.3af and 802.3at) • Authenticate all users/devices from the WAP controller in the cloud • NEMA rated outdoor enclosure	• Support Power over Ethernet, and PoE+ and PoE++ (IEEE 802.3af, 802.3at and 802.3bt) • Authenticate all users/devices from the WAP controller On Premises/on cloud in DC • NEMA or IP66/67 standards to withstand extreme environmental factors
43	Page No.86- A 7.11 Specifications for WAP Controller	Able to manage all the WAP devices centrally from the cloud.	Able to manage all the WAP devices centrally from On Premises/On Cloud DC

44	Page No.86-A 7.12 Specifications for SD-WAN	Should have a minimum of 6x 1G Copper ETH, 2x 10G SFP+ ports, and 1x LTE module with IMIX performance of minimum 1Gbps.	Should have a minimum of 6x 1G Copper ETH, 6 X 1G SFP, 2x 10G SFP+ ports with SDWAN IPSec throughput of minimum 10Gbps and NGFW throughput of 3 Gbps
	Page No.87-A 7.12 Specifications for SD-WAN	SD-WAN network architecture should have a clear separation of management, control and data plane functions.	SD-WAN network architecture should have a clear separation of management and data plane functions.
		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.	Management 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.
	Page No.91-A 7.12 Specifications for SD-WAN	SD-WAN should support Tier-3. Any to Any Architecture without dependency on tunnels for overlay is preferred	SD-WAN should support Tier-3. Any to Any Architecture.
		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 is 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.	The system should ensure flexible WAN link types (Broadband, ILL, MPLS) to be used seamless across all the interfaces

45	Page No.92-A 7.12 Specifications for SD-WAN	The SD-WAN Solution should support Per-Session Encryption using AES256 and perpacket authentication using HMAC-SHA256-128	The SD-WAN Solution should support AES256 and HMAC-SHA256-128
46	Page No.93-A 7.12 Specifications for SD-WAN	SDWAN Controller must support geographical redundancy. When the primary controller fails, the backup controller must be ready without impacting operations	SDWAN Controller must support geographical redundancy. When the primary controller fails, the SDWAN solution must work without impacting operations.
		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	The proposed solution should have all required hardware to support up to 500 Branches on day 1 with the option to horizontally scale to support up to 1000 Branches
		New spec for branch devices	Appliance in Branch, Should have a minimum of 3x 1G Copper ETH ports and with IMIX performance of minimum 100Mbps. Shall have Built in power supply and required memory for seamless performance
		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	SD-WAN solution should have the ability to detect encrypted application traffic and recognize it to have better security policy and QOS

47	Page No.94-A 7.12 Specifications for SD-WAN	Should support integration with LDAP server to authenticate administrative users to the CLI and GUI interfaces for administration, configuration, and management.	Should support integration with LDAP or Radius or Tacacs+ server to authenticate administrative users to the CLI and GUI interfaces for administration, configuration, and management.
		The software-defined controller should be architecturally highly available with Active- Active support	The software-defined controller should be architecturally highly available and the solution should work when the controller is down.
		Should support domain-based web filtering capabilities	Both NOC device and Edge device should have Next Generation Firewall capabilities like IPS, Gateway Anti-Virus, Application Control, Web & Video Filtering, Anti-Bot, Anti-Spam from day one to protect the network from attacks
		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.	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. It also should support work flow management with various levels of approval for any changes
48	Page No.105-A 7.30 Specifications for NAS - Storage	Populated with 31 x 16TB , SATA ENT 7200 RPM, hot-plug HDDs	Populated with 31* 16 TB (or) 28 x 18TB , SATA ENT 7200 RPM, hot-plug HDDs

49	Page No.106- A7.30 Specifications for NAS - Storage	Supports both Block (iSCSI, FCP, SRP) & File (SMB, NFS, FTP, AFP) protocols	Supports both Block (iSCSI) & File (SMB, NFS, FTP) protocols
		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	Supports up to 28 hot-swap SAS/SATA LFF/SFF HDDs/SSDs in same enclosure and up to 52 HDDs/SSDs using add-on JBODs
50	Page No.86- A7.12 Specifications for SD-WAN	SDWAN Solution is preferred to be service-centric, session-oriented, and Zero Trust Led for building context-aware networks	SDWAN Solution is preferred to be service-centric and Zero Trust Led for building context-aware networks
	Page No.87- A7.12 Specifications for SD-WAN	SDWAN Architecture should be open and programmable through northbound RESTful and Netconf APIs.	SDWAN Architecture should be open and programmable through northbound RESTful/Netconf APIs.
		The SDWAN Solution should be session aware, and session-based with directionality information for application routing decisions	Removed.
		The Data plane shall provide high-speed packet forwarding, classification, and security functions through session-state management and be responsible to forward traffic with session-based encryption without a tunnel	The Data plane shall provide high-speed packet forwarding, classification, and security functions through session-state management
	Page No.86- A7.12 Specifications for SD-WAN	Should have a minimum of 8GB RAM and 128GB of Local Storage	Removed

51	Page No.88-A 7.12 Specifications for SD-WAN	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.	Removed.
	Page No.88 - A 7.12 Specifications for SD-WAN	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	The proposed solution should be in the form of Hardware Appliance and should be able to support HA for Branch CPE and Central Location Device
	Page No.88 - A 7.12 Specifications for SD-WAN	Should support the concept of "Named Data Networking" where services are described and communicated across the network in plain language.	Removed.
	Page No.89 - A 7.12 Specifications for SD-WAN	SD-WAN devices should have a facility for recording all traffic flows as part of its audit log functionality and should show all connections that are established and rejected for every source address	SD-WAN devices should have a facility for recording all traffic flows as part of its audit log functionality and should show all connections that are established and rejected for every source address. The solutions should have centralised log and reporting functionality with necessary storage for 3 months log retention as per the Govt. Guidelines

52	Page No.90-A 7.12 Specifications for SD-WAN	The SDWAN should support min 150 users with min performance of branch 100 Mbps	The SDWAN device at branch should support SDWAN IPSec throughput of 2Gbps or above, should have 500Mbps of NGFW throughput, and should have minim 5X 1G ports with a support for LTE traffic.
53	Page No.91-A 7.12 Specifications for SD-WAN	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 tunnelling mechanism	The SDWAN should have capabilities to have identified the encrypted traffic like Voice. Internet applications and does not re-encrypt over the WAN without any split tunnelling mechanism
54	Page No.91-A 7.12 Specifications for SD-WAN	The system should be able to retrieve the network information without any peering protocols like BGP, OSPF, or any other routing protocol over WAN. The system must be able to make virtual private network paths dynamically on power on without using any routing protocols on the WAN side.	The system should be able to retrieve the network information from the entire network The system must be able to make virtual private network paths dynamically on power on.
55	Page No.92 - A 7.12 Specifications for SD-WAN	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.	The SD-WAN solution should be able get to path monitoring to ensure that application traffic loads are optimally balanced across preferred links to desired applications. Real-time criteria include applications, maximum session rate, packet loss, latency, and jitter.
56	Page No.95 - A 7.12 Specifications for SD-WAN	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.	Removed.

57	Page No.53 – 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	The Product warranty must be for a minimum of one year or Product Standard warranty whichever is longer would be applicable.
58	Page No:75, A.6.1, Checklist for enclosures		Sl.No:17 – Bidder to specify whether they are providing Hardware for NOC as On Prem or On Cloud Solution. **note: Bidder should provide POC to the committee as per their chosen solution

<div style="background-color:cyan; text-align:center">**Addendum - Instructions to BIDDERS on e-TENDERING through the website https://tntenders.gov.in**</div>

1. ELCOT is using the e-tendering system of Government of Tamil Nadu namely tntenders.gov.in which is developed and hosted by NIC.

2. Bidders can go to the ELCOT tenders page directly by selecting the e-Tender option from the home page of ELCOT site elcot.in. The bidders should enroll themselves on the website https://tntenders.gov.in using the option "Online Bidder Enrolment". This enrolment is free at this pint of time.

3. Possession of a Valid Class III Digital Signature Certificate (DSC) in the form of smart card/e-token with signing and encryption keys, in the Company's name is a prerequisite for registration and participating in the bid submission activities through this web site.

4. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://tntenders.gov.in under the link "Information about DSC".

5. The web site also has user manuals with detailed guidelines on enrolment and participation in the online bidding process. The user manuals can be downloaded for ready reference.

6. Vendors can also attend the training/familiarization programme on the e-tendering system conducted periodically by NIC.

7. The bidders will be able to see the status of the tenders for which they have submitted bids in different stages and would also be informed of the status by E-Mail. For the bidders who have specified the Product Category through "Product Category" option, information of all the tenders published, under the selected product category, will be

sent by E-Mail.

8. Bidders should submit the bid well in advance before bid submission end date and time, instead of doing at the last minute, which may fail. In this case, the Tender Inviting Authority is not responsible for the non-submission of bids at the bidders end.

9. Bidder should contact the help desk for any clarifications on the bid submission at any point of time one day before the bid submission, so that bid submission goes through' smoothly. Bidders should not assume and do the steps and then get into issues which cannot be solved.

10. Bidders should go through the tender documents and get ready the all relevant documents in pdf/xls/rar formats as indicated and then have to be uploaded against each category. In the technical bid, bidders may attach an index page wherever necessary, in the beginning, which indicates the details of the files/documents that follow the index page against each technical bid content indicated. This will also help

for easy reference later.

11. While scanning the bid documents to convert to pdf, bidders are asked to scan the page in 65 to 100 dpi mode, to get a readable page after scanning and also the size of the document will also be lesser. For pages in text, it is advised to use 65dpi mode and for pages with images, 100 dpi mode.

12. Bidders can get ready the technical bid and price bid in filled form in advance instead of doing at the last moment and once ready in all aspects, they may chose the freeze option to submit the bid finally and thereafter they will get a bid acknowledgement receipt which is the final end, indicating the successful submission of the bid

submission process.

13. Bidders can do the resubmission of the bid any number of times, either technical bid or price bid or both till the end date and time of bid submission. The content of the last submitted bid alone will be opened at the time of tender opening.

14. Bidders can withdraw the submitted bid, before the end of bid submission date and time with proper reasons and once it is withdrawn, bids cannot submitted again for that tender.

15. For all tender processing activities, the server time indicated at the top, while doing bid submission/tender opening activities is the final. The Local system time will not be taken into account in this case.

16. Bidders may contact the help desk by mail etendersupport@elcot.in or by mobile 9566003517 to get any clarifications on ebid submission process well in advance.

Mandatory Components:

P1 - Hardware Items @ Thirukovil

Sl.no.	Item Description	Warranty(in years) (A)	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)			6				
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)			2				
6	Shotgun Microphone with built-in transmitter and wireless system, transmitter & receiver for shotgun microphone(A7.5)			4				
7	Microphone Full length floor mount stand (A7.6)			2				
8	Microphone Short stand (A7.6)			4				
9	Boundary Mic / Surface Mount wired(A7.7)			2				
10	Audio Mixer at Thirukovil(A7.8)			1				
11	Wireless handheld Mic(A7.9)			4				
12	Network Switch(A7.10)			1				
13	Wireless Access Point(A7.11)			1				
14	Rack Enclosure(A7.13)			1				
15	Main Distribution Unit(A7.14)			1				
16	2KVA Online UPS(A7.15)			1				

	Total									

P2 - Manpower @ Thirukovil

Sl.no.	Item Description	Unit Rate (Rs.)			Quantity (D)	Value			Tax (%) (H)	Total (I)=(((E+F+G)+((E*H)/100)+((F*H)/100)+((G*H)/100))
		1st year (A)	2nd year (B)	3rd year (C)		1st year E=(A*D)	2nd year F=(B*D)	3rd year G=(C*D)		
1	Manpower – AV Technician @ Thirukovil				2					
Total										

Note:

.Work order will be issued on yearly basis and will be renewed based on the department requirement and the system integrator's performance.

P3 – a) Hardware items @ NOC/PCR

Sl.no.	Item Description	Warranty(In years)	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	Video Production application with Multiviewer & Social			1				

Sl.no	Item Description			Quan				
	Media Publishing & Hardware (A7.16)							
2	Headphones (A7.17)			4				
3	Audio Speakers(A7.18)			2				
4	Microphone for Narration or Voice recording (A7.19)			2				
5	Audio Mixer at NOC/PCR(A7.32)			1				
6	16-Channel Digital Mixer(A7.22)			1				
7	Display Monitoring system(A7.28)			1				
8	65" Display(A7.29)			1				
9	Wireless Access Point (NOC) and WAP controller(A7.11)(to connect with item no9)			1				
10	10 KVA Online UPS (A7.35)			1				
11	Camera Control Desk with Multiviewer(A7.36)			1				
12	Streams Recorder(A7.37)			1				
	Total							

P3 – b) Hardware items @ NOC/PCR

Sl.no	Item Description	Warra	Unit	Quan	Value	Ta	Total Taxes	Total

.		nty(in years)	Rate (Rs.) (A)	tity (B)	(C) C=A*B	x (%) (D)	(Rs.) (E) E= C*D/100	(F)=C+E
1	Hardware for social media publishing system(A7.25)			1				
2	Hardware for Network Management client(A7.27)			1				
3	NAS - Storage Solution(A7.30)			1				
4	Network switch @ NOC(A7.31)			1				
5	Head-End Device at Datacenter(A7.33)			1				
6	Rack & MDU			1				
7	SD-SWAN(A7.12)			1				
	Total							

***Note:
1. P3-b) Hardware items @ NOC/PCR - This solution can be On Premises or On Cloud Solution. The bidder has to quote either On Premises or on Cloud Solution. **If the bidder offers, the On cloud solution, then the bidder has to quote annual subscription cost * 5 years.**
2. If the bidder has quoted for On cloud solution. The Subscription cost will be paid annual basis based on the performance and at the discretion of the HR&CE department.
3. The Eligibility Criteria Qualified bidder will be called for technical demo based on their solution offered (On Premises/ On Cloud).
4. If bidder has quoted for on prem solution, then enter applicable warranty period in years. Not applicable for on cloud solution.

P4 - Software items @ NOC/PCR

Sl.no.	Item Description	Quantity (A)	Subscription cost			Tax (%) (E)	Total Cost including tax for 3 years $(F)=(((B+C+D)+((B.E)/100)+((C.E)/100)+((D.E)/100)))$
			1st year (B)	2nd year (C)	3rd year (D)		
1	Video Editing Software(A7.20) – Subscription cost per annum	1					
2	Audio Recording and Editing software (Professional)(A7.21) - Subscription cost per annum	1					
3	AV Equipment CONTROL Software at NOC(A7.23) - Subscription cost per annum	1					
4	Photo Editing Software(A7.24) - Subscription cost per annum	1					
5	Network Management Software(A7.26) - Subscription cost per annum	1					
Total							

Note:

1.Work order will be issued on yearly basis and will be renewed based on the department requirement and the system integrator's performance.

P5 - Manpower @ NOC/PCR

Sl.no.	Item Description	Unit Rate (Rs.)			Quantity (D)	Value			Tax (%) (H)	Total $(I)=(((E+F+G)+((E*H)/100)+((F*H)/100)+$
		1st year	2nd year	3rd year		1st year	2nd year F=(B*D)	3rd year G=(C*D)		

		(A)	(B)	(C)		E=(A*D)				((G*H)/100))
1	Technical Manager				1					
2	Technical Supervisor				2					
3	Technician – Video/Audio production(24*7 support)				3					
4	Technician – Creativity/Social media/Web publishing(24*7 support)				3					
5	Network Engineer(24*7 support)				3					
6	Maintenance/Support Engineers for tech infra(24*7 support)				3					
Total										

Note:

1.Work order will be issued on yearly basis and will be renewed based on the department requirement and the system integrator's performance.

P6. CAMC for Thirukovil Hardware Items:

Sl. no.	Item Description	Warranty (N) in years	Unit cost (A)	Qty (B)	CAMC % for N+1 year (in %) (C)	CAMC % for N+2 year (in %)(D)	CAMC % for N+3 year (in %) (E)	CAMC % for N+4 year (in %)(F)	GST(%)(G)	N+1 Cost(H) = (((A*C)/100)*B)	N+2 Cost(I) =(((A*D)/100)*B)	N+3 Cost(J) (((A*E)/100)*B)	N+4 Cost(K) (((A*F)/100)*B)
1	Broadcast Quality PTZ Camera(A7.1)			6									
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)			2									
6	Shotgun Microphone with built-in transmitter and wireless system, transmitter & receiver for shotgun microphone(A7.5)			4									
7	Microphone Full length floor mount stand (A7.6)			2									
8	Microphone Short stand (A7.6)			4									

9	Boundary Mic / Surface Mount wired(A7.7)			2											
10	Audio Mixer at Thirukovil(A7.8)			1											
11	Wireless handheld Mic(A7.9)			4											
12	Network Switch(A7.10)			1											
13	Wireless Access Point(A7.11)			1											
14	Rack Enclosure(A7.13)			1											
15	Main Distribution Unit(A7.14)			1											
16	2KVA Online UPS(A7.15)			1											

				Total									
	Grand Total = Total of H+I+J+K												

Note:
1. Where N is the warranty period. Quote for 5 years AMC cost only. Fill accordingly wherever applicable.

P7. CAMC for NOC/PCR Hardware Items:

Sl.no.	Item Description	Warranty(N years)	Unit cost (A)	Qty (B)	CAMC N+1(in %) (C)	CAMC N+2(in %) (D)	CAMC N+3(in %) (E)	CAMC N+4(in %)(F)	GST (%)(G)	N+1 Cost(H) = (((A*C)/100)*B)	N+2 Cost(I)=((A*D)/100)*B)	N+3 Cost(J) (((A*E)/100)*B)	N+4 Cost(K) (((A*F)/100)*B)
1	Video Production application with Multiviewer & Social Media Publishing &			1									

	Hardware (A7.16)												
2	Headphones (A7.17)			4									
3	Audio Speakers(A7.18)			2									
4	Microphone for Narration or Voice recording (A7.19)			2									
5	Audio Mixer at NOC/PCR(A7.32)			1									
6	16-Channel Digital Mixer(A7.22)			1									
7	Display Monitoring system(A7.28)			1									
8	65" Display(A7.29)			1									
9	Wireless Access Point (NOC) and WAP controller(A7.11)(to connect			1									

	with item no9)													
10	10 KVA Online UPS (A7.35)			1										
11	Camera Control Desk with Multiviewer(A 7.36)			1										
12	Streams Recorder(A7.3 7)			1										
13	Hardware for social media publishing system(A7.25)			1										
14	Hardware for Network Management client(A7.27)			1										
15	NAS - Storage Solution(A7.3 0)			1										
16	Network switch @ NOC(A7.31)			1										
17	Head-End Device at			1										

	Datacenter(A7.33)								
18	Rack & MDU		1						
19	SD-SWAN(A7.12)		1						
	Total								
	Grand Total = Total of H+I+J+K								

Note:

1. Where N is the warranty period. Quote for 5 years AMC cost only. Fill accordingly wherever applicable.
2. If bidder has quoted for on Cloud solution, then AMC is not applicable.

P8.Optional Components

S. No	Description	Unit Price for with out Taxes (in Rs)	GST per unit (in %)	GST Amount in Rs	Total Unit Price with all Taxes and duties (Rs.)	Quantity In Nos	Total In 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					1 metre	

	fixing charges per meter						
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 location	
8	Wiring from EB – DB to UPS					1 metre	
	CONNECTIVITY						
9	Broadband Connectivity @ 50Mbps Speed from Service Provider2					1 No	

	(per year **/Per location)						
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):		

Consolidated Price Bid Summary;

S.No	Item Name	Total Cost
1	Hardware Items @ Thirukovil	
2	Manpower @ Thirukovil	
3	Hardware items @ NOC/PCR	
4	Software items @ NOC/PCR	
5	Manpower @ NOC/PCR	

6	CAMC for Thirukovil Hardware Items:	
7	CAMC for NOC/PCR Hardware Items:	

Note:
1) The Grand total amount of Mandatory Components P1, P2, P3, P4, P5, P6 & P7 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.