

Open Competitive Bid (OCB)

For



Establishment of a Control Operation & Experience Center in O/o Consumer Affairs, Food & Civil Supplies Department, Vijayawada GoAP including Operation and Maintenance for 3 years.

ANDHRAPRADESH COMMISSIONER OF CIVIL SUPPLIES AND CONSUMER AFFAIRS, FOOD & CIVIL SUPPLIES DEPARTMENT

4th & 5th Floors, Sri Sai Towers, Ashok Nagar, Beside SIRIS Company,
Kanuru, Bandar Road, Vijayawada -520007.

Website: <https://civilsupplies.ap.gov.in/>

dated: 21.10.2026

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**ANDHRA PRADESH COMMISSIONER OF CIVIL SUPPLIES, CONSUMER AFFAIRS, FOOD & CIVIL
SUPPLIES DEPARTMENT
e-Procurement Tender
Tender No-APSCSCL/ KMS 2026-27/COEC :,dated:21-10-2026**

S.No.	Item	Description
1.	Name of the Work	Establishment of a Control Operation & Experience center in, O/o Consumer Affairs, Food & Civil Supplies Department, Vijayawada Go AP including Operation and Maintenance for 3 years.
2.	Estimate Contract Value (ECV) of the Work	Rs.1,52,92,704/- (Rupees One Crore Fifty Two Lakhs Ninety Two Thousand Seven Hundred and Four Only)
3.	Work Completion Period	Within 15 days from the date of issue of LoA
4.	Type of Bidder eligible	Firm Registration / Sole Proprietary / Certificate of Incorporation - Copy of registration certificate under the companies Act in India, 1956 and its amendments, should be submitted
5.	Type of Bidding	Open Competitive Bidding (https://apeprocurement.gov.in/)
6.	Submission of Bids	Bids shall be submitted online on https://apeprocurement.gov.in platform 1. The participating bidders in the tender should register themselves free of cost on e-procurement platform through the website https://apeprocurement.gov.in. 2. Bidders can log into e-procurement platform in Secure mode only by signing with the Digital certificates. 3. The bidders who are desirous of participating in e-procurement shall submit their technical bids, price bids as per the standard formats available at the e-market place. 4. The bidders should scan and upload the respective documents in Technical Qualification of bid documentation as detailed at Section 2.15 & 2.16 of the tender including EMD. The bidders shall sign on all the statements, documents, certificates uploaded by them, owning responsibility for their correctness / authenticity. 5. The rates should be quoted in online only.
7.	Eligibility	• Firm Registration/Sole Proprietary/Certificate of Incorporation - Copy of registration certificate under the companies Act in India, 1956 and its amendments,

S.No.	Item	Description
		should be submitted. - The bidder has to produce Manufacturer Authorization Form (MAF) from the respective OEM (Original Equipment Manufacturer) (or) the bidder has to be the Authorized Partner of the respective OEM(Original Equipment Manufacturer) to take up the supply and installation of major components indicated in the Network, AV (Audio- Visual) infrastructure items specified in BOQ and section 1.4 (technical specifications). Respective documentation shall be submitted along with the technical bid documents. - The bidder should have at least 1 (one) registered office by own within 100km radius of COEC(Control Operation and Experience Center) Office location with a team of at least 5 (five) members who are technically sound to support any issue at any time for the work scope specified in this tender. All this information may be furnished in the format of P4 (or) the successful bidder shall establish an office within 100km radius of COEC with a team of at least 5 (five) members who are technically sound to support any issue at any time for the items specified in this tender within 15 days after issuing the Letter of Award. - The bidder should submit declaration in Format P5, stating that they are not debarred / blacklisted by any State Government, Central Government, Central & State Govt. Undertakings / Enterprises / Organizations and by any other Quasi Government bodies / Organizations, World Bank or any major Enterprise / Organization in India for non- satisfactory performance, corrupt & fraudulent or any other unethical business practices. - The bidder should submit Undertaking in Compliance with GFR Rule 144(XI) in the format of Form-P6. - Technical specifications along with data sheets for the bill of quantities with proposed make & model to be submitted in the format of Form-T1 and checklist in the format of Form-T2.

S.No.	Item	Description
		- The bidder should submit a copy of PAN registration of the company / proprietor. - The bidder should submit a copy of GST Registration Certificate. The bidder should submit the latest Income Tax Returns certificates.
8.	Similar Nature of Work	- The bidder should have executed similar nature of works i.e., should be a System Integrator / Prime Contractor in executing any Command Control Center (CCC) / Integrated Command Control Experience Center (ICCEC) / Audio-Visual (AV) projects of worth as mentioned below in any one of the year in the last 3 financial years i.e., 2023-24, 2024-25 & 2025-26 in India. 100% of ECV for single projects/works(or) 55% of ECV for each of the two projects / works(or) 40% of ECV for each of the three projects/works <u>Note:</u> For bidders who have executed at least one project for the Central Government or any State Government or a Public Sector Undertaking, the above percentages stand reduced by 10%. Supporting Documents: Satisfactory completion certificate / payment proceedings / Purchase Order from central / state / local government bodies / private sector companies / non-governmental organizations located in India. All this information may be furnished in the formats of P1, P2.
9.	Turn over Criteria	The bidder should have the minimum average annual turnover of Rs.3,00,00,000/- during the last 3 financial years i.e., 2023-24, 2024-25 & 2025-26. Authenticated certificate from any designated authority like Chartered Accountant / Income Tax Department etc. certifying the above-mentioned criteria should be produced.

S.No.	Item	Description
10.	Net Worth Criteria	The participating bidder must exhibit an increasing and positive net worth during the last three financial years i.e., 2023-24, 2024-25 & 2025-26. Authenticated certificate from any designated authority like Chartered Accountant / Income Tax Department etc. certifying the above-mentioned criteria should be produced.
11.	Non-Refundable BID processing fee	Rs.10, 000/- D.D in favor of "VC&MD, APSCSCL".
12.	EMD (Earnest Money Deposit)	Rs.1,55,000/- (Rupees One Lakh Fifty Three Thousand Only).
13.	EMD Payment Mode	In the form of online payment or BG in favor of VC & MD, APSCSCL".
14.	Period for furnishing EMD	Along with submission of the bid
15.	EMD return period	The Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the contract and furnishing the Performance Security. The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the contract and furnished the required Performance security.
16.	Bid Validity Period	90 days from the date of opening of bids
17.	Variation in quantities, technical specifications	+/-15%(as approved by the authority)
18.	Contract Agreement Period to be entered	Within 5 days from the date of award of work
19.	Maintenance/AMC/O&M Period	3 years from the date of satisfactory and successful demonstration and sign-off
20.	Performance Security	10 % of ECV / TCV whichever is higher in the form of BG valid upto maintenance period.
21.	Performance Security Payment Mode	Through BG in favor of "VC & MD, APSCSCL".
22.	Period for furnishing	At the time of entering contract agreement

S.No.	Item	Description
	Performance Security	
23.	Performance Security validity/return period	Within 60 days after successful and satisfactory completion of Maintenance/AMC/O&M Period
24.	Payment Terms	<u>Supply & Installation Payment:</u> 90% of the total value after satisfactory and successful "Supply, Installation, Testing, Commissioning, Integration, Demonstration & Handover" and sign-off from the respective officer-in-charge & remaining 10% after completion of trial run / acceptance test run period i.e., 3 months. <u>Maintenance / O&M Payment:</u> On post-quarterly basis upon satisfactory service certificate from respective officer-in-charge
25.	LD for late deliveries/service	Liquidated damages as mentioned below shall be levied for the late delivered or deemed late delivered/installed goods/products/services. i. 1% of the total contract value for one week or part thereof, ii. 1.5% of the total contract value for two weeks or part thereof, iii. 2% of the total contract value for three weeks or part thereof, iv. 2.5% of the total contract value for four weeks or part thereof and so on with 0.5% subsequent increment of LD per week for more than four weeks or part thereof with a cap of 10% on the total contract value for late delivery/installation or deemed late delivered / installed goods / services for that location/site The LD amount shall be deducted from the amounts payable to the vendor by the authority. Once this amount is exhausted, LD amount shall be recovered from the PBG/EMD. Once the PBG / EMD is exhausted, the vendor will be required to recoup the Performance Security. If the Vendor fails to recoup the Performance Security, the Vendor will be debarred from participating in tenders till the time he recoups the Performance Security.
26.	Maximum LD for late deliveries/installation	Maximum LD for late deliveries/installations: 10% on the Total Contract value for late delivery/installation or

S.No.	Item	Description
		Deemed late delivered /installed goods/services
27.	Penalty for failure to provide any service during maintenance period for all items	For any delay beyond permissible down time (as per the discretion of the authority), a penalty of Rs. 200/- will be levied for each day or part there of subject to a maximum of 10% of the total contract value. *The penalty amount shall be deducted from the amounts payable to the Vendor by the authority. Once this amount is exhausted, penalty amount shall be recovered from the PBG/EMD. Once the PBG/EMD is exhausted, the Vendor will be required to recoup the Performance Security. If the Vendor fails to recoup the Performance Security, the Vendor will be debarred from participating in tenders till the time he recoups the Performance Security.
28.	Transaction Fee	<u>Transaction fee:</u> All the participating bidders who submit the bids have to pay an amount @ 0.03% of their final bid value or the price mentioned by AP Civil Supplies corporation online with a cap of Rs. 10, 000/- for quoted value of purchase up to Rs.50 crores and Rs. 25, 000/- if the purchase value is above Rs.50 crores. Service tax applicable as levied by Govt. of India on transaction fee through online in favor of MD, APTS. The amount payable to APTS is non-refundable. <u>Corpus Fund:</u> Successful bidder has to pay an amount of 0.04% on ECV (Estimate Contract Value) with a cap of Rs.10, 000/- through online in favor of Managing Director, APTS towards corpus fund at the time of concluding agreement.
29.	Transaction Fee payable to	The Managing Director, APTS
30.	Address	O/o VC & MD, APSCSCL", 4 th & 5 th Floors, Sri Sai Towers, Ashok Nagar, Beside SIRIS company, Kanuru, Bandar Road, Vijayawada-520007.
31.	Contact Details	Mrs. Meena Kumari – Designation– Email id: it-coordinator@ap.gov.in Contact No:+91 9494153872

1 SCOPE OF THE PROJECT

1.1 INTRODUCTION & VISION OF THE PROJECT

The Consumer Affairs, Food and Civil Supplies is the administrative Department at the Government level. Under this Department there are four Heads of Departments: for Commissioner of Civil Supplies Department, Controller, Legal Metrology, A.P. State Civil Supplies Corporation Ltd, A.P. State Consumer Disputes Redressal Commission.

“Control Operational & Experience Center (COEC) was needed by the AP State Civil Supplies Corporation to monitor the ongoing department project activities within the department and across their respective division of the state. The role of COEC was pivotal and the latest technology was the need-of-the-hour. With this Command Control Management Centre, less congestion and better development is expected in the Civil Supplies Department.” said envisioned by Honble Chief Minister, Andhra Pradesh.

The Commissioner Civil Supplies Department, Government of Andhra Pradesh intends to implement establishment of Control Operational & Experience Center in the Office of Consumer Affairs, Food and Civil Supplies, Andhra Pradesh.

The scope of work broadly includes enhancing the functionality with the existing Command Communication Centre which was established in the 2nd floor, Sri Sai Towers, Ashok Nagar, Bandar Road, Vijayawada -520007 and which need to be integrated with latest AI/ML-based analytics services of the organization along with establishment of a new centralized COEC to manage and monitor the work process in the divisions, enabling efficient response and decision-making based on real-time data.

In this context, department wishes to engage the System Integrator to Design, Develop, Implement, Operate & Maintain the Control Operation and Experience Center (COEC) @ 2nd floor, Sri Sai Towers, Ashok Nagar, Bandar Road, Vijayawada -520007. The work scope and tentative quantity of the required items along with technical configuration of each item is mentioned in the subsequent sections 1.2 & 1.4 respectively. Department is looking for vendors who have successful experience in supply and maintenance of above type of infrastructure in India.

The scope broadly includes that the Audio Video for Control Operation Experience center provided under this contract, should be compatible with existing ELV system and coordinated with all other services and necessary interfacing equipment's to complete the system shall also be provided without financial burden to client. The Audio-Visual system should meet the specification given in the tender.

The COEC consists of following components through technically qualified and experienced Vendor: Like Active LED screen, Controller, Control system, HD Based Video & Audio-Conferencing Solution incorporated with the Video wall and control system between their district Offices and Civil supplies department across the state of Andhra Pradesh, the proposed Command & Communication Centre with Video wall, Video Conference Solution should incorporate the need for present and future visual communications needs of Civil supplies Department and

provide the true Virtual and Unified Communication Platform. Since the present Audio and Video IT infrastructure Solutions will be moved towards convergence where the other technologies like high quality Video / Audio, Next generation Communication Networks and data collaboration will integrate together, the proposed Video and Audio Conference Solution should provide state of technology with a scalable and flexible architecture.

COEC (Control Operation Experience Center)- The proposed solution includes the provision, installation, testing, and commissioning of an Active LED Display System having a 288-inch diagonal size. The display shall be capable of flexible operation, allowing it to be utilized either as required independent screens in 16:9 aspect ratio or combined to function as a single continuous large-format display. This flexibility will enable versatile usage for various applications such as conferences, events, and digital content presentations.

Technical Description of the Active LED screen shall be of Flip Chip COB technology, providing enhanced durability and improved visual quality. The display shall operate at a frame rate between 50 Hz and 60Hz, ensuring smooth video playback and stable performance. The color temperature shall be adjustable within the range of 3000 to 10000, enabling accurate color reproduction suitable for different lighting environments.

The LED display shall offer a wide viewing angle of 170 degrees horizontally and 170 degrees vertically, ensuring uniform brightness and color consistency across the entire viewing area. The pixel density of the display shall be 640,000 dots per square meter, delivering high-resolution image clarity suitable for both close and distant viewing. The brightness level shall be equal to or greater than 800 nits, providing clear and vivid visuals even under high ambient light conditions.

Furthermore, the processing bit depth shall range between 14-bit to 16-bit, ensuring smooth color gradients and enhanced grayscale rendering. The display shall have a native contrast ratio of 20000:1, enabling deep blacks and sharp visual details. The system shall be designed for a lifespan of approximately 100,000 hours, ensuring long-term reliability and consistent performance over extended operational periods.

Performance and Quality of the LED screen shall deliver high-definition output with precise color accuracy, superior contrast, and excellent brightness uniformity. The inclusion of Flip Chip COB technology ensures additional protection against dust, moisture, and impact, significantly improving the display's durability and reducing maintenance needs. The wide viewing angle guarantees consistent image quality regardless of audience position, making the screen suitable for large indoor environments.

Control and Integration of the LED system shall include a compatible video processor capable of managing multiple input sources and configurations. It shall support split-screen operation, enabling independent or combined screen displays as required. The processor shall provide 16-bit grayscale processing to enhance visual depth and image fidelity. The display shall support standard AV input formats such as HDMI, DVI, or Display Port, and shall integrate seamlessly with existing control systems or display management software.

Reliability and Maintenance of the proposed LED display system shall be designed for continuous 24/7 operation with stable performance and minimal downtime. It shall feature modular construction, allowing easy maintenance and front or rear access for servicing. The system shall comply with energy efficiency and safety standards, ensuring optimal performance under standard indoor environmental conditions.

The Application of the Active LED Display System should be ideal for conference halls, command centers, offering both multi-screen flexibility and full-screen functionality to suit diverse presentation and display requirements. The video wall shall be made up of size of min 288" LED flat panels with a frameless or minimal border width mounted as per the site conditions for the COEC Room. The video wall system (VWS) shall be rated for 24/7/365 operations with a standard life. The videowall system (VMS) will be operated with control system.

The COEC will be provided to display any input content (PC/Server/Wireless Presentation/User Laptop/Video Conference) on the VMS. The COEC will provide the content on minimum 288 inch configured Display systems, Matrix Mode, Full Screen Mode. The COEC will be able to support BYOD concept to display content from Android/iOS, Mac Book and Windows PC/Laptop.

The COEC will be able to provide content sharing from PC/Server/User Laptop (HDMI) either directly or through wireless presentation system during Video Conference. The COEC will be able to provide 1024-bit encryption for the wireless content shared for high performance security.

The COEC will be able to operate with controller to manage VMS & Other AV Devices for easy operation of user modes and recalling pre-sets. The Control interface/Application should support Android/iOS, OEM Touch Panel and Web Browser to access the GUI from any PC in the network with user login credentials. Controller should support Enterprise Management Solution.

The COEC will be able to allow devices to present using two different networks for user and guests. The COEC will be able to support multimedia streaming, any RTSP Stream through VLC or suitable application from any PC/RTSP Device in the network to stream the content on the Videowall through wireless device or any suitable device in the system.

The COEC will be able to push the signage content from a centralized location within the network to the video wall using the Wireless Presentation device or any suitable device using required application or required management software. The COEC will be able to provide enterprise management platform which enables easy deployment, configuration and management of entire Audio Video installation from anywhere in the network, where ever applicable.

The COEC will be able to Manage all new versions, automatically receive new version notifications and execute updates from a centralized location with one click, where ever applicable.

The COEC will be able to provide user authentication and advanced user management, with different levels of access for different users. The COEC will be able to provide live alert system with proactive notifications such as email and SNMP traps to inform about the issues in your system,

where ever applicable.

The COEC will be able to provide system events and recorded logs, reports should be generated to analytics. The COEC will be able to integrate and can add Extra Components to upscale the systems.

The COEC was provided with Processor based switcher-solution for seamless Integration and better performance, all the video switcher, Controller, Cables and Speakers, Enterprise Management Software.

The overall COEC system will be able to have all the required components specified in the BOQ matching to the specifications. The COEC system with Installation of Hardware Equipment for soft based Video Conference System at all Municipal and Corporation Office Locations in the state of Andhra Pradesh. The COEC system provided with Video conference equipment will be able to integrate with all the platforms provided by State/Central Govt and also Laptops/Desktops based VC.

Through the Provision of the COEC, AP Government link to the divisions by the department, the Head office and all the districts can participate in the Multi Location Video Call which can be either within your organization or to different departments across the state as per your requirement. Through this the department will be able to provide real time services to the public.

The Head of the department can monitor and speed up the pending activities related to the Process, supplies, Storage, grievances pertaining to each division in the state. Facilitates faster decision making by using the data from the respective monitoring tools and applications used in the department and its associated sectors.

This will be able to help in standardization of the process across the department and at all the ground level functionaries. Best in class Audio whereby it reduces the background noise and delivers Advanced Echo Cancellation, keeping Meetings on Track and free from Distractions.

Through the COEC, the department will get the Ultimate In-Room monitoring and meeting Experience and Elevated Video Experience. Auto Focus Camera Ensures all the people are covered properly.

Experiences the Unified Convergence Platform across all the locations. Through the existing or host soft based MCU allows you to make either a Point to Point Video communication or Point to Multi Location Video communications.

The COEC will help in proactively addressing the Procurement Operations-Procurement of Paddy, coarse grains like Maize, Jowar, Bajra and pulses at MSP, MSP Operations, Evolves policy for issue of ration cards, allotment of Deepam connections Distribution Process system-Distribution of Essential Commodities to BPL card holders through ePoS devices, Market Operations, Consumer Protections, Administrative Functions, Enforcement Activities, through CCTV.

The COEC will be required to use the Applications and platform developed by department. There will be a requirement for enhancing the existing platform and using it in the COEC for doing all the necessary actions. All the information received from different sources can be integrated optionally and which will help COEC in better planning and running of operations.

The COEC will be required to integrate the applications provided by the Environmental Sensors & different application to receive real-time information which will help administration monitor its assets and do a better planning.

In the COEC room the device should allow Executives to interact with Corporate CMD/Board members through VC. Hold meetings with outside parties having VC facility. The strategic intent is to reduce travel time across asset and to achieve near real time meeting experience.

Provision of IT & AV Systems, along with required software Integration and development in Centralized Command Center to integrate and monitor multiple data sources. The system is designed to deliver high-performance video processing, real-time content distribution, and seamless collaboration across multiple endpoints, ensuring flexibility, scalability, and superior visual performance for large presentation and monitoring environments.

The existing IT infrastructure shall be upgraded and expanded to support the enhanced operational requirements of the Control Operation Experience Center. The scope shall include provision of additional high-performance, fully featured operator workstations, associated peripherals, network connectivity, software, operating systems and other required IT infrastructure. All new infrastructure shall be properly integrated with the existing environment while ensuring compatibility, reliability, performance and future scalability.

The entire AV setup shall operate on a Complete AV over IP platform, enabling efficient transmission of audio, video, and control signals over a network infrastructure using standard IP protocols. Proposed solution to be considered with **Security & Access Control** with Role-based access control (RBAC) for all modules, Two-factor authentication (2FA) for admins and critical users, Secure APIs with encryption (HTTPS/TLS) and Regular backups, log monitoring, and security audits. All APIs and communication interfaces shall use secure protocols such as HTTPS/TLS wherever applicable.

Centralized COEC should be provided with A large- format Active LED, Operator Workstations, Headsets, High-end central video processing controller with URL & streaming support, Microphones, Cameras, Speakers, Amplifier, Digital Signal Processor, Collaboration AV Encoders and decoders, Wireless Presentation Device, Control Processor, Control Interface, AV Line series and suitable network switchers, with all required devices, cables and connectors as per the BOQ and specifications provided in the tender document, any deviation in the specifications is not allowed by the bidder, solution provider can add additional components to match the functionality requirement of the department as per the scope of work provisioned for respective systems and user functionality.

Department should be able to view any type of source feeds in mixed mode as per the resolution of

the Active LED Wall and content in Mixed View- HDMI Sources, VNCclients, URL Sources, Images, Videos, IP Streaming, Scada Images, Dashboards, H.264 Video Streams, RTSP Streams, RSS Feeds, Tickers, Etc.

Web Based Wall Management software to be provided as optional for managing the sources on the Active LED Wall. Wall Management software to be suitable for 24/7 Application. Perpetual licenses are to be considered for the solution.

Users in the COEC should be able to control the wall with a single click of a button from Web URL. Users in the COEC center should be able to Drag and Drop Video and data window anywhere in the active led wall as per the user requirement. Users in the command center should be able to save and recall presets of the layouts for specific situations. These button provisions to be provided on the software.

Hotkeys to be provided in the Wall Management solution to easily recall the presets by the users in the command center. Users in the command center should be able to preview the source in the wall management software and browser-based wall management software to be provided in the command center for layout management.

Solution should have administrator rights, enabling department to give different access levels to the users for Wall Management Software, enabling restricted access as per the department guidelines. Users in the command center should be able to create online real-time layout creation, Scenarios (Playlists), etc.

Wall Management Controller should have 3rd party application support like PowerPoint, Excel, Pdf, etc. Wall Management Controller/Software should have AI Based feature to enhance the capabilities of a wall controller by leveraging artificial intelligence to automatically analyze and summarize the vast amount of visual information displayed on any of the source, real-time operational dashboards, or data-driven monitoring tools, the AI Summary ensures that decision-makers receive concise, actionable insights without manually scanning every detail. Wall Management Controller/Software should support Live streaming on video wall without any 3rd party hardware device or software, should be inbuilt in wall management software.

The professional-grade Tracking and PTZ Cameras shall be provided as part of the system. The camera shall be configured for automatic presenter tracking, using motion or facial recognition to follow the speaker during sessions. The second camera shall provide a full-room view, capturing User interactions or providing a wide-angle perspective for video conferencing or recording Or Vice versa.

The complete system shall be managed through an intuitive control interface, allowing operators to select video sources, control camera angles, manage layouts, and switch between display modes. The control shall be accessible via a touch panel interface or centralized control software, enabling seamless operation with minimal manual intervention.

The proposed solution shall ensure low-latency transmission, real-time switching, and high-resolution

display performance. All components shall support continuous operation, be compliant with industry standards, and be designed for scalable and modular expansion. The system shall also feature redundant network pathways and fail-safe switching to maintain uninterrupted performance during critical operations. The Proposed solution shall also ensure that the network connectivity of the office shall be free from the cyber-attacks by installing a Firewall protection system.

In addition, professional displays shall be installed—one in each of the cabins. These displays shall be of commercial-grade quality with 24/7 operational capability and shall support network connectivity for remote content distribution and command center integration. Each display shall be wall-mounted and integrated into the central AV control system, allowing synchronized display of content across all rooms as required.

These microphones shall be connected to a Digital Signal Processor (DSP) for audio signal management and mixing. The DSP shall interface with a dedicated controller and amplifier, which in turn shall drive the installed speaker system. The system shall be designed to ensure echo-free, distortion-free, and high-quality audio reproduction suitable for both speech reinforcement and conferencing applications.

The entire system shall be based on AV over IP technology, enabling high-quality transmission of audio, video, and control signals over a standard network infrastructure. This approach will ensure scalability, flexibility, and ease of control.

This setup shall include transmitter and receiver units, wireless presentation systems, and encoders and decoders for network-based content sharing. The wireless presentation unit shall enable participants to share content seamlessly from their personal devices without requiring physical cable connections.

The encoders shall capture video and audio signals from various sources, converting them into IP streams, while the decoders shall receive and display those signals on the designated screens. The entire system shall be centrally managed through a control interface, ensuring smooth switching between sources and destinations.

A network-based camera shall be installed in the COEC room for video conferencing and collaboration purposes. The camera shall be capable of pan, tilt, and zoom (PTZ) functions digitally, offering wide-angle and close-up views to capture participants effectively, ensuring seamless audio and video synchronization.

The AV system shall be operated through an intuitive control interface, such as a touch panel or software-based controller, providing centralized access to all system components. The control interface shall allow the user to select video sources, adjust audio levels, switch displays, initiate conferencing sessions, and manage wireless presentation inputs across the COEC room.

All components shall be configured for low-latency signal transmission, stable operation, and ease of maintenance. The network architecture shall support redundancy and scalability, allowing future expansion or integration with additional devices.

IVRS and AI-Based Call Center Solution, the scope shall include the provision and implementation of a modern Interactive Voice Response System (IVRS) integrated with an AI-based Call Agent for centralized and intelligent call handling. The solution shall support both incoming and outgoing calls and shall provide automated information dissemination, intelligent voice interaction, departmental call routing, call recording, call monitoring, reporting, analytics and integration with the Purchaser's existing telephony and information systems.

Telephony and Enterprise System Integration. The IVRS and AI Call Agent solution shall be capable of integrating with the Purchaser's existing telephony infrastructure, including compatible SIP trunks, DID services, EPABX/IP-PBX systems and other relevant communication platforms. Integration with databases and external applications shall be supported through standard interfaces and secure APIs. The system shall provide the necessary mechanisms for data exchange, call routing, authentication and secure communication with integrated systems.

Deployment, Scalability and Architecture. The IVRS and AI-based Call Center solution shall follow standards-based, modular, secure and scalable and shall be offered as a Cloud-Based IVRS and AI Call Agent solution. The cloud platform shall integrate with the Purchaser-provided BSNL SIP Trunk/DID service, compatible SIP endpoints, approved databases and external applications through standard interfaces or secure APIs. On-Premises or Hybrid deployment is not part of the present tender scope.

The Cloud-Based deployment is mandatory for the present tender. The Purchaser will procure a BSNL SIP Trunk with 20 concurrent channels. The bidder shall supply, install, configure and commission a VPN-capable enterprise Ethernet router/CPE of adequate capacity and shall integrate the BSNL SIP Trunk end-to-end with the Cloud-Based IVRS/IP-PBX and AI Call Agent solution. AI Call Agent performance and accuracy shall be demonstrated against the measurable acceptance criteria specified in this RFQ. A successful Proof of Concept (PoC) is mandatory for technical bid acceptance. Failure to meet the mandatory PoC acceptance criteria shall render the bid technically non-responsive. The commercial bid shall be submitted in a single-line price schedule covering the complete solution and an annual AI Call Agent usage requirement of 1,00,000 minutes.

The Vendor should provide SIP Voice logger for ISDN SIP is a USB based, easy to install, multi-line voice recording solution that can be used to record telephone calls on ISDN SIP Digital Trunk lines, All telephone channels of the SIP to be recorded in stereo or mono audio formats, voice Logger logs complete call details including Caller ID, Called ID, call duration, time of call, time to pick up and the both-sides audio of the telephone conversation, Supports ISDN SIP on E1 trunks, Easy to install on PC/Laptop, State-of-the-art USB powered device, Built-in tap splitter for easy cabling, Capable to combine multiple units, Stereo audio logs of all calls, Browser-based user interface, Powerful search and reporting, Advanced audio player, Backup/archiving capability, Phonebook and call statistics, Multi-user login facility, Audio compression capability, Export of audio files to MP3/PCM/GSM.

The Vendor should take care of the required network like connectivity of the work controller stations from the rack with switch, I/Os, faceplates, patch cards. The vendor needs to ensure that

theraceways/conduitshavesufficientpassage widthand clearway-through right from hub room to end point. Take all precautionary measures to avoid rodent entries (ratentries)intoracewayslikeclosinginward/outwardholes, rattrap padsatjuncturesetc. Conduits should be present only over the walls...For operation and maintenance; the floor cable passage should be ONLY via raceways. Conduits and Raceways to have sufficient gaps for future cable passage as well. Also, to take precautionary measures to safeguardraceways(dustfree, rodent-free, puttingweight, civilclearanceetc.)untiltheyarefilledwith cables.

1.2 WORK SCOPE

SUPPLY, INSTALLATION, TESTING, COMMISSIONING, INTEGRATION, DEMONSTRATION &HANDOVER OF COEC(Control Operational Experience Center):

The successful bidder has to supply, install, test, commission, integrate, demonstrate and handover all the items listed in section 1.4 @ Control Operation Experience Center (COEC), O/o Commissioner of Civil Supplies, Sri Sai Towers, Ashok Nagar, Beside SIRIS Company, Kanuru, Bandar Road, Vijayawada -520007as per the below- mentioned work scope.

- 1) To ensureSupply, Installation, Testing, Commissioning, Integration, Demonstration& Handover of all the items of specified configuration as listed in section 1.4 of this tender document within 15 days from the date of issue of LoA to the 100% satisfaction of Officer-in-Charge, AP Civil Supplies Corporation.
- 2) To furnish a detailed training, operations and maintenance, handover manual for each appropriate unit of the supplied goods and services to the 100% satisfaction of Officer-in-Charge, AP Civil Supplies Department.
- 3) To arrange for a trial run / acceptance test run for a period of 3 months (90 days) in order to ensure that the functionality of the items / services purchased is in accordance with the standard / required norms.
- 4) To provide service / warranty / annual maintenance / operations & maintenance support for the period of 3 years from the date of successful and satisfactory installation and sign-off for the items mentioned in section 1.4 as per the authority's requirement, without any extra cost to the authority.
- 5) Scope also includes, without any extra cost to the authority, resolving all kinds of software and hardware related issues during service / warranty / O&M / support period and including installation or reinstallation of all the items as listed in section1.4 of this tender document to the 100% satisfaction of Officer-in-Charge, AP Civil Supplies Department, if required, due to any reason what-so-ever.
- 6) At least 04no's of technical resources w.r.to Network, AV (Audio-Visual)infrastructure to be deployedat onsite location of department for a minimum period of 30 days to get all the required installation and set-up done for all the components mentioned in the section 1.4 with a satisfactory installation and set-up report signed by the officer- in-

charge.

- 7) To arrange an expert for 7-day training in the onsite location of department on hardware / software / product awareness, usage, administration, troubleshooting, supplied / current and future technologies etc. for the products described in the section 1.4. Also, to handover a full-fledged documentation on the products described in the section 1.4 with architecture / connectivity charts, screenshots and explanation on the implemented features to department.
- 8) To take the responsibility of 24*7 in scope infrastructure availability and uptime (minimum 99.9% availability and uptime) for the entire warranty / service / maintenance / O&M period...To take the responsibility of speedy resolution in every issue that is raised to OEM for better co-ordination and speedy resolution.
- 9) All the items / tools / peripherals etc. supplied should be of NEW / SEALED and BRANDED (from respective / single OEM) type only Used / Worn-out / refurbished / Assembled items shall not be accepted by AP Civil Supplies Department.
- 10) To ensure that the raceways / conduits have sufficient passage width and clear way-through right from hub room to end point...Take all precautionary measures to avoid rodent entries (rat entries) in raceways like closing inward/outward holes, rat trap pads at junctures etc. Conduits should be present only over the walls...For operation and maintenance; the floor cable passage should be ONLY via raceways. Conduits and Raceways to have sufficient gaps for future cable passage as well. Also, to take precautionary measures to safeguard raceways (dust free, rodent-free, putting weight, civil clearance etc.) until they are filled with cables.
- 11) To ensure that all the items listed in section 1.4 are provided with 3-year onsite guarantee / warranty with end-to-end replacement / repair from OEM in case of any software / hardware / operation (or) whatsoever failure within 24 hours of report of the issue, without any extra cost to the authority.
- 12) The scope shall include, but not be limited to, the following activities: Supply/licensing of IVRS/IP-PBX management software and AI Call Agent software. Installation, configuration and commissioning of the complete Cloud-Based solution. Configuration of departments, extensions, queues, ring groups, hunt groups, call routing, office-hour and after-office-hour rules and announcements. End-to-end integration of the Purchaser-provided BSNL SIP Trunk/DID service with 20 concurrent channels, including supply, installation and configuration of a VPN-capable enterprise Ethernet router/CPE, routing, VPN parameters, QoS, firewall/ACL rules, NAT where applicable, and all bidder-side configuration required for reliable inbound, outbound and transferred calls. Configuration of inbound and outbound calling and call transfer between IVR, AI Agent and authorized departments/extensions. Configuration of multilingual AI voice interaction, approved knowledge base, guardrails and keypad fallback. Configuration of call recording, Call Detail Records, dashboards, reports, analytics, user roles and audit logs. Integration with approved external applications, databases, SMS/email services or

APIs wherever included in scope. Functional testing, integration testing, security configuration, User Acceptance Testing and commissioning. Administrator and end-user training, documentation, warranty support and post-Go-Live stabilization support.

- 13) Keeping in view of performance, Physical or Virtual Wi-Fi Controller (with 10G capacity) to be considered. Any other item related to the Supply, Installation, Testing, Commissioning, Integration, Demonstration & Handover of the items listed in section 1.4 as per the discretion of Officer-in-Charge, AP Civil Supplies Department.

OPERATION & MAINTENANCE OF COEC:

The successful bidder has to provide the operation & maintenance services towards all the items supplied, installed, tested, commissioned, integrated, demonstrated and handed over @ Control Operational & Experience Center (COEC), AP Civil Supplies Department, for the period of 3 (Three) years from the date of satisfactory and successful demonstration and sign-off from Officer-in-Charge, AP State Civil Supplies Corporation as per the below-mentioned work scope.

Operation & Maintenance Activities to be carried out by successful bidder towards successful operation of Network, AV (Audio-Visual), IVRS, EPABX, Server, End-User (desktops, telephones, laptops etc.), infrastructure includes but not limited to the following:

- 1) To obtain the service / support pack from the respective OEM's (Original Equipment Manufacturer) for all the items listed in section 1.4 and to take responsibility of replacement of any or all of the items listed in section 1.4 with same make & model (or) equivalent and compatible item in case of any hardware / software / operation (or) whatsoever failure within 24 hours for the period of 3 year or warranty period of such equipment, whichever is higher. Back-to-Back support for all the items listed in section 1.4 is to be provided directly by OEM during the Maintenance Period and successful bidder has to furnish letter from OEM on Service Agreement / Letter towards loading back-to-back order loading with OEM for replacement of the respective items within no time in case of any hardware / software / operation failure or any other failure for that matter.
- 2) The Tenderer has to obtain an undertaking letter from the Principal / Indian Affiliates / Subsidiaries / OEM confirming that the Principal / OEM will continue maintenance and servicing of the equipment for minimum of 03 year from the date of installation and the same shall be submitted after placing the Purchase Order.
- 3) Checking bandwidth throughout and distributing the fine-tuned bandwidth to all end-users i.e., to ensure smooth flow of LAN / Wi-Fi to end user infrastructure.
- 4) Follow-up with ISP (Internet Service Provider(s)) on all internet related tasks.
- 5) Implementation of organization policies over network through firewall as per the instructions of APSCSCL.
- 6) Activation of redundant network infrastructure over primary as per the instructions of

APSCSCL.

- 7) Activation of MAC based LAN/Wi-Fi within the COEC as per the instructions of APSCSCL.
- 8) Performing SAFE Switch-ON, Switch-OFF & Operations on the Network (Active + Passive), AV (Audio-Visual), EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure that is installed on daily basis before and after business hours respectively.
- 9) Attending all kind of Network (Active + Passive), AV (Audio-Visual), EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure operation and maintenance activities in COEC on daily basis as per the instructions of the authority.
- 10) Taking all pro-active and re-active steps to ensure hardware and software protection to the entire Network, AV (Audio-Visual), EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure installed in COEC (Control Operation & Experience Center).
- 11) Inspection and providing alerts to the authority on all the Network, AV (Audio- Visual), EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure related licenses / software / subscriptions / warranty / end-of-life etc. on pro-active basis and renewing them on cost-to-cost basis (if any required).
- 12) Performing all kind of hardware checks on Network, AV (Audio-Visual), EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure and rectification of the same.
- 13) Ensuring uninterrupted and stable flow of power supply to Network, AV (Audio- Visual), EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure and to take precautionary measures to fine-tune the same on cost-to-cost basis (if required) as per the instructions of authority.
- 14) Ensuring 100% end-to-end Network, AV (Audio-Visual), EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure cable / equipment connectivity without any network / connectivity loss(es).
- 15) Ensuring full-fledged, safe & uninterrupted functionality of UPS systems (both primary and backup).
- 16) Ensuring 100% functionality & 24*7 operation of EPABX infrastructure (EPABX Server / System, Telephones, Button Programming, Swapping / Allocation and Activation of numbers etc.).
- 17) Taking all necessary precautionary steps and reactive measures to ensure 100% working of all the interior infrastructure (emblems, plywood, wood, glass, furniture etc.) without any degradation in quality / functionality etc.
- 18) Identification of cable cuts w.r.to Network, AV (Audio-Visual), IVRS, EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure and re-laying / replacing /

splicing / jointing etc. of cables in those areas without any connectivity / network loss(es).

- 19) Identification/numbering/dressing/tagging of each and every port/point/ cable / peripheral(s) w.r.to Network, AV (Audio-Visual), IVRS, EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure in the COEC on both sides of end-user and respective hub room.
- 20) Maintenance of server room / NOC (network operating center) / network hubrooms / electrical room / conference room / core COEC room / VIP room w.r.to the factors of temperature / power / rodent entries / cleanliness / dressing / tagging / numbering etc. and taking all proactive / reactive steps in ensuring 100% compliance to the same as per the existing industry standards and requirements of department.
- 21) Providing full-fledged training and documentation on the Network, AV (Audio- Visual), IVRS, EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure installed in the COEC on comprehensive basis.
- 22) Taking the overall responsibility of 24*7 infrastructure availability w.r.to Network, AV (Audio- Visual), IVRS, EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure (minimum 99.9% availability and uptime) for the entire maintenance period...Also, to take the responsibility of ownership in every issue that is raised to OEM (Original Equipment Manufacturer) for better co-ordination and speedy resolution.
- 23) To carry sufficient number of backup equipment/ cables / peripherals /tools etc.for all the items mentioned in section 1.4 on hand in lump sum manner to replace / rectify any item within no time in case of any software/hardware /operation failure or any failure for that matter to ensure uninterrupted flow of all kinds of services w.r.to Network, AV (Audio-Visual), IVRS, EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure present in the COEC. Any other Network, AV (Audio-Visual), IVRS, EPABX, Server, End-User (desktops, telephones, laptop etc.) infrastructure maintenance related task as entrusted by the authority during maintenance period.
- 24) The Annual tendered requirement shall include 1,00,000 AI Call Agent minutes within the single-line quoted price. The bidder shall include all AI/API, speech-to-text, language-model, text-to-speech and associated cloud usage required to deliver these 1, 00, 000 annual AI minutes, together with the base IVRS/IP-PBX software, cloud hosting and implementation scope. No separate mandatory monthly free-minute or fixed per-minute commercial model is prescribed for bid evaluation. Bidders shall quote one consolidated annual price for the complete scope. Any rate for AI usage beyond 1,00,000 minutes/year may be stated separately in the bidder's commercial notes for future reference but shall not be introduced as an additional line item in the evaluated Price Schedule. The bidder shall clearly describe the IVRS and AI Call Agent licensing model, including whether the licenses are perpetual, annual subscription based,

concurrent-channel based, user based or usage based. The number of included extensions, channels, administrators and AI usage entitlement shall be disclosed. No mandatory license or recurring subscription essential for normal operation shall be introduced after award if it was not disclosed in the bid.

25) Training and Documentation- The successful bidder shall provide adequate administrator and end-user training. Administrator training shall include system administration, user and extension management, IVR configuration, AI Agent and knowledge-base management, reports, recordings, backup and routine troubleshooting. End-user training shall cover login, call handling, reports, recording search and other operational functions relevant to the assigned role. Before final acceptance, the bidder shall provide system architecture, installation documentation, administrator manual, user manual, backup and restoration procedure, configuration documentation, network/port requirements, integration documentation, troubleshooting guide and support/escalation matrix. Documentation shall be updated if major configuration changes are introduced during implementation.

26) The bidder shall provide technical support for the supplied solution during the warranty and AMC periods. Support shall cover the IVRS software, AI Call Agent application, SIP configuration, database/application issues, recording system, reports, user-management issues, software defects and integration-related issues falling within the bidder's scope.

	Severity	Typical Description	Initial Response Target
1.3	Critical	Complete system unavailable / all calling affected	Within 1 hour
	High	Major functionality unavailable or materially affecting operations	Within 2 hours
	Medium	Partial functionality affected	Within 4 business hours
	Low	Minor issue, query or configuration assistance	Within 1 business day

TENTATIVE SPACE REQUIREMENTS & FLOOR PLAN & FOR COEC

Tentative Floor Plan of COEC @ Second Floor, O/o Commissioner AP Civil Supplies Department, Vijayawada: Min Room Dimensions 18Ft W X24 ft L

1.4 BILLOFQUANTITIES(BOQ)&TECHNICALSPECIFICATIONSOITEMS

S.N o	Item Description	UOM	Qty
1	Supply of LED screen with LED controller of Pixel Pitch : 1.25mm or better Minimum Size: 288" Diagonal or Higher, with resolution of 5760 x1080 or better or higher according to pixel pitch. Supply includes: LED Cabinets, LED Controller, Suitable mounting kits, & Software from same OEM. Slim Cabinet 44 mm or less, Viewing Angle 170 / 170 or better , Refresh Rate 3840 Hz or more , Minimum Brightness 600 nits or more, Lifetime 1,00,000 hours or more, Native Contrast ratio 20,000:1 or more. Makes- LG/Samsung/Panasonic/Christie/Barco or equivalent as directed by the department authorities	Nos	1
2	Supply of the 4K 4x1 Seamless HDMI Switcher with Multiview & Audio Output Makes-Creston/Kramer/DVDO or equivalent as directed by the department authorities	Nos	4
3	Supply of 4K60 HDMI 50m Extender Over Ethernet (Tx/Rx) Makes-Creston/Kramer/DVDO or equivalent as directed by the department authorities	Nos	17
4	Supply of The wireless presentation system shall support 4K UHD (3840 × 2160) at 60 Hz, wired HDMI input, dual LAN ports, IR/RS-232 control, digital signage, audio de-embedding and wireless conferencing. It shall support Windows, macOS, Android, iOS and Chrome OS via native app, AirPlay, Miracast and USB-C dongle, with simultaneous display of at least two sources. Features shall include a customizable welcome screen, calendar integration with Microsoft Exchange/Microsoft 365 or Google Calendar, or an external 10-inch scheduling panel. It shall support enterprise-grade network security, dual-band 2.4/5 GHz Wi-Fi, Gigabit Ethernet and a wireless within the range of metres. Makes-Creston/Kramer/BARCO or equivalent as directed by the department authorities	Nos	1
5	Supply of the Wall Mount Power Pack, 24 VDC, 1.25 A, 2.1 mm, Universal. Makes-Creston/Kramer/BARCO or equivalent as directed by the department authorities	Nos	1
6	Supply of 450mm length electret condenser gooseneck microphone with a cardioid polar pattern for focused audio pickup and noise rejection, Slim and elegant black matte finish suitable for professional environments such as conference rooms, auditoriums, and lecterns, Frequency Response: 50 Hz to 20 kHz, Nominal impedance: < 100 Ω, Maximum sound pressure level: 130 dB SPL, Equivalent noise level: 26 dB (A), Phantom powering: P12 - P48 V, Connectivity: XLR 3M, Mounting: Compatible with standard table stands and shock-mount systems and Gooseneck Microphone/40 cm length - Black. Makes-Shure/Sennheiser or equivalent as directed by the department authorities	Nos	2
7	Supply of Digital Wireless Table Stand for Wireless Tabletop gooseneck microphone with transmitter with Mute button, Clear battery life	Nos	2

S.No	Item Description	UOM	Qty
	indication via dedicated battery status LEDs, AF frequency response : 75 to 20,000Hz, Input impedance: 25 kΩ or more, RF output power: up to 200 mW or more, compatible with wireless charging. Rechargeable battery with up to 10 hours or more of operating time, It should be remotely controlled with centralized software. Makes-Shure/Sennheiser or equivalent as directed by the department authorities		
8	Supply of the 2 Channel AP Based Receiver with DANTE, two channel receiver with integrated auto mixer and the analog mix output, Automatic Gain Control, Automatic Frequency management, AES 256 encryption, Frequency range : 1880 - 1900 MHz, 2-port Dante (Primary & Secondary), PoE, Remotely control via centralized software to monitor the system. Supports wall and ceiling mounting options. Makes-Shure/Sennheiser or equivalent as directed by the department authorities	Nos	1
9	Supply of Wireless Charging Base Unit for Gooseneck Mic with wireless charger which should support capable of wirelessly charging up to two gooseneck or boundary microphones, should support 5 hours or less for full charging. Makes-Shure/Sennheiser or equivalent as directed by the department authorities	Nos	1
10	Supply of the Digital Signal Processor shall feature an open-architecture design in a 1U chassis with eight configurable card slots, supporting 12 mic/line inputs, 4 line outputs, USB audio and GPIO. It shall provide 4x4 Dante networking with AES67 compliance, dual RJ45 Gigabit network connections, IEEE 802.3af PoE, 32-bit A/D-D/A converters and a 40-bit floating-point processing architecture. Features shall include USB 2.0 audio with HID control, optional acoustic echo cancellation, API/Lua scripting, advanced audio processing, 48V phantom power and 48 kHz sampling. Performance shall include a frequency response of ± 0.15 dB (20 Hz–20 kHz), THD+N of 0.002%, dynamic range of 110 dB, propagation delay of 4 ms and input-to-input crosstalk below -110 dB. Micro-format DSP core with onboard 4x4 Dante™ audio networking, eight (8) I/O card slots, PoE power, Lua scripting engine, optional software-licensed HearClear AEC. Includes surface-mount bracket. Makes-QSC/Biamp/Xilica/Sennheiser or equivalent as directed by the department authorities	Nos	1
11	Supply of Digital Signal Processor related Series I/O card with dual-channel microphone or line level input, switchable 48V Phantom power, software-controlled functionality. with dual-channel microphone or line level input, switchable 48V Phantom power, software-controlled functionality. Makes-QSC/Biamp/Xilica/Sennheiser or equivalent as directed by the department authorities	Nos	4
12	Supply of the Digital Signal Processor related Series I/O card with dual-channel line level output, software-controlled functionality. Makes-QSC/Biamp/Xilica/Sennheiser or equivalent as directed by the	Nos	2

S.N o	Item Description	UOM	Qty
	department authorities		
13	Supply of the Digital Signal Processor related Series I/O card with 2x2 USB 2.0 input/output, HID command-capable for UC status sync. Makes-QSC/Biamp/Xilica/Sennheiser or equivalent as directed by the department authorities	Nos	1
14	Supply of Digital Signal Processor related Series Software-licensed Acoustic Echo Cancellation (AEC) for Xilica Solaro Series. Eight channel at 250ms, 16 channel at 100ms delay. Makes-QSC/Biamp/Xilica/Sennheiser or equivalent as directed by the department authorities	Nos	1
15	Supply of the Quad-channel power amplifier 4 x 120W 100V. Makes-Audac/Bose/Yamaha or equivalent as directed by the department authorities	Nos	1
16	Supply of the QuickFit™ 2-way 5 1/4" ceiling speaker with TwistFix™ grill White version, 8Ω & 24 Watt @ 100V (RAL9016) Makes-Audac/Bose/Yamaha or equivalent as directed by the department authorities	Nos	8
17	Supply of the Control System for the Control operation center Makes-Creston/Extron/Kramer or equivalent as directed by the department authorities	Nos	1
18	Supply of the iPad Pro - 11 inch, 128gb, wifi only with Control Application License Makes-Apple or equivalent as directed by the department authorities	Nos	1
19	Supply of the AV Patch Cables, Speaker Cable, Audio Cable, Connectors, Audio Video Connectors, Mounts Etc	Nos	1
20	Programming, installation, Configuration for the complete Audio Video System with integration to the existing workstations of the department	Nos	1
21	Supply and Upgradation of the existing Workstations with required 4GB Graphic Cards that supports HDMI/DP/Mini DP ports or HDMI Ports. Makes-Nvidia/AMD/Gigabyte or equivalent as directed by the department authorities	Nos	12
22	Supply and Upgradation of the existing Workstations with required with 19.5' or better IPS LED Monitor with HDMI/DP/Mini DP ports. Makes-Samsung/HP/Benq or equivalent as directed by the department authorities	Nos	4
23	Supply and Upgradation of the existing Workstations with required with Call Center type headsets. Makes-Poly/Jabra/Sennheiser or equivalent as directed by the department authorities	Nos	12
24	Supply and Upgradation of the existing Workstations with Wired Mouse & Keyboard	Nos	12
25	Supply and Upgradation of the existing Workstations with Wireless Wi-Fi Access Cards Makes-Netgear/TP link/MSI or equivalent as directed by the department authorities	Nos	12

S.No	Item Description	UOM	Qty
26	Supply and Upgradation of the Above with required Accessories, Cable ties, Name cards,connectors	Job	1
27	Supply and Installation of the Workstations with TOWER WORKSTATION/INTEL CORE I5/13TH GEN/13500 PROCESSOR ,16/32GB DDR5 RAM/512GB NVME M.2 SSD/WIN 11 PRO,With Dural Monitors 24 and mount with wireless card, Headset. Makes-HP/Dell/or equivalent as directed by the department authorities	Nos	3
28	Supply and Upgradation of Hybrid Model (IVRS + API Call Agent) IVRS/IP-PBX Management Software / AI Call Agent Software - upto 20 concurrent Channels 1.Department Calling Module – up to 20 users 2.Department IVR, Extensions & Call Routing Call Recording, Call Logs, Analytics & Reports 3.Cloud deployment & configuration 4.1year License validity & Application performance guarantee for on-premises / Cloud-Based solution 5.Installation, configuration, testing & Commissioning, Training & documentation Annual tendered requirement shall include 1,00,000 AI Call Agent minutes Makes-Customised or equivalent as directed by the department authorities	Nos	1
29	Supply and Upgradation AI Call Agent Usage Recurring Charges per minute after 1,00,000 AI Call Agent minutes per annum (Monthly Recurring Charges) - excluding 18% GST Makes-Customised or equivalent as directed by the department authorities	Nos	1
30	Supply and Upgradation of Application / IP-PBX Server Intel Core i7/i9 13th Gen or later, or Intel Xeon E-2400 class or higher, 32 GB DDR5 minimum; 64 GB recommended for heavier transcription/analytics, 1 TB NVMe SSD for OS, application, database and IVRS. Makes-Matrix/HP or equivalent as directed by the department authorities	Nos	1
31	Supply and Upgradation of the Above with required Accessories, Cable ties, Name cards,connectors	Nos	1
33	Supply and Upgradation of Speaker Cable, Audio Cable, Control Cable, LAN, CAT XX, All other required cables and Connectors for the AV Solution Makes-Crestron/Extron/Light ware or equivalent as directed by the department authorities	Nos	1
34	Supply and Upgradation of Network Passive Legrand cat 6 cable box 305 mtr. Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities	Nos	4
35	Supply and Upgradation of Network Passive cat 6 IOS- Dual Face Plates-	Nos	30

S.No	Item Description	UOM	Qty
	Back Box. Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities		
36	Supply and Upgradation of Network Passive Patch Panels. Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities	Nos	2
37	Supply and Upgradation of Network Passive cat6 1mtr patch cord. Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities	Nos	36
38	Supply and Upgradation of Network Passive cat6 2 mtr patch cord Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities	Nos	36
39	Supply and Upgradation of Network Passive 35MM PVC Pipes for termination of the CAT6 cable Makes-Sudhakar/Goldmedal/Precision or equivalent as directed by the department authorities	Nos	30
40	Supply and Upgradation of Network Active Wireless Access Point Makes-HP/CISCO or equivalent as directed by the department authorities	Nos	1
41	Supply and Upgradation of 24 Port Network Active High-Performance, Smart-Managed Switches Makes-HP/CISCO/Netgear or equivalent as directed by the department authorities	Nos	1
42	Supply and Upgradation of 24 Port AV lineswitch with in room AV Access point for AV devices Makes-HP/CISCO/Netgear or equivalent as directed by the department authorities	Nos	1
43	Supply and Upgradation of Network Rack with 12U Fully loaded with PDU, Glass, Fans, Wall Mounting/Floor Mounting. Makes-Netrack/Valrack/Vertiv or equivalent as directed by the department authorities	Nos	1
44	Supply and Upgradation of the Above with required Accessories, Cable ties, Name cards, connectors. Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities	Nos	1
45	Man Power Services for period of 36 months	Nos	1

TECHNICAL SPECIFICATION AND GENERAL POINTS

1. Professional Screen:

S.no	Description	Specifications
1	Total Resolution of Screen	5760 x1080 or better

S.no	Description	Specifications
2	Diagonal Size	288" or better
3	Pitch pitch	1.25mm or lesser
4	Pixel Configuration	Flip chip COB
5	Weight per Square Meter (kg/m ²)	25 or less
6	Physical Pixel Density (pixels/m ²)	640000 or better
7	Flatness of Unit Case (mm)	±0.1 or less
8	Cabinet Depth	44mm or less
9	Unit Case material	Aluminium
10	Service access	Front & Rear
11	Brightness (Calibrated) Maximum in Nits	600 or more
12	Brightness (Calibrated) Peak in Nits	1600 or more
13	Color Temperature	3000 - 10000 or better
14	Visual Viewing Angle (Horizontal)	170 degrees or more
15	Visual Viewing Angle (Vertical)	170 degrees or more
16	Brightness Uniformity	98.2% or more
17	Color Uniformity	±0.003Cx,Cy
18	Contrast Ratio	20000 :1 or more
19	Processing Depth (bit)	22 bits or more
20	Power Consumption (W/m ² , Max.)	325 watts or less
21	Maximum Heat Dissipation (BTU/h/m ²)	1109
22	Power Supply (V)	100 to 240
23	IP Rating Front / Rear	IP54 or better
24	Frame Rate (Hz)	50/60 Hz or more
25	Refresh Rate (Hz)	3840 or more
26	Indian Certificate Only	BIS
27	Lifetime	100000 hr or more
28	Operating Temperature	-10° to +40° or better
29	Operating Humidity	10~90%RH
30	Inputs	16x HDMI/ DVI/ SDI/ VGA/ DP
31	Loading capacity	13 million pixels or better
33	Input resolution	1920 × 1200 @60Hz
33	Output connectors	20 × Gigabit Ethernet port
34	Windows / Multi Layout supported	12 or more
35	Number of presets of Layout	4 or more
36	Audio Ports	In & out both
37	Control Ports	USB, RS232 and LAN

S.no	Description	Specifications
38	Controller and screen should be provided by same OEM	Yes
39	Warranty	3 years warranty from the date of supply
40	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
41	Authorization	OEM Authorization specific to the bid need to be submitted OEM should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

2. Switcher-

S.No.	Description	Specification
1	Device Type	4×1 seamless HDMI switcher with multiview functionality and audio de-embedding.
2	HDMI Compliance	Shall support HDMI 2.0b and HDCP 2.2/1.x.
3	Video Bandwidth	18 Gbps.
4	Video Resolution	Shall support resolutions up to 4K × 2K at 60 Hz with 4:4:4 chroma sampling.
5	HDMI Inputs	Minimum 4 HDMI Type-A inputs.
6	Video Output	Minimum 1 HDMI Type-A output.
7	Display Modes	Shall support 8 display modes, including single-screen, Picture-in-Picture (PIP), Picture-by-Picture (PBP), triple-view and quad-view modes.
8	Switching Performance	Shall support seamless switching in single-display mode and fast switching in multiview mode.
9	Colour Space	Shall support RGB, YCbCr 4:4:4, YCbCr 4:2:2 and YCbCr 4:2:0.
10	Colour Depth	Shall support 8-bit, 10-bit and 12-bit colour depth.
11	Audio Support	Shall support HDMI audio formats including LPCM 2.0/5.1/7.1, Dolby Digital, Dolby Digital Plus, DTS and DTS High Resolution Audio.
12	Audio De-embedding	Shall provide independent analog stereo audio and optical S/PDIF audio outputs. Analog output shall support PCM 2.0; optical output shall support PCM 2.0, Dolby Digital and DTS 5.1, subject to format limitations.
13	Audio Control	Shall support volume control and independent audio source selection.
14	Control Interfaces	Shall support front-panel buttons, IR remote control, on-screen display (OSD), control software and RS-232 control.
15	Control Ports	Minimum 1 RS-232 interface and 1 IR extension interface.
16	EDID Management	Shall provide EDID management functionality.
17	IR Specifications	IR level: 5 Vp-p; IR frequency: 38 kHz.
18	ESD Protection	Shall provide protection of ±8 kV for air-gap discharge

S.No.	Description	Specification
		and ± 4 kV for contact discharge.
19	Enclosure	Metal enclosure suitable for professional AV installations.
20	Dimensions	Approximately 220 mm (W) $\times$ 100 mm (D) $\times$ 30 mm (H).
21	Weight	Approximately 620 g.
22	Power Supply	100–240 V AC, 50/60 Hz input and 12 V DC, 2.5 A output.
23	Power Consumption	Maximum 10 W.
24	Operating Temperature	0°C to 40°C.
25	Storage Temperature	–20°C to 60°C.
26	Relative Humidity	20% to 90% RH, non-condensing.
27	Warranty	3years warranty from the date of supply
28	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
29	Authorization	OEM Authorization specific to the bid need to be submitted. OEM or authorized Distributor should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

3. Table Stand Base

S.No.	Description	Specification
1	Device Type	HDMI Extender kit consisting of a Transmitter (Tx) and Receiver (Rx) for long-distance transmission of HDMI signals over a single CAT5e/CAT6 cable.
2	HDMI Compliance	Shall support HDMI 2.0, HDCP 2.2/1.4 and DVI 1.0 compatibility.
3	Video Resolution	Shall support resolutions up to 4K $\times$ 2K at 60 Hz with 4:4:4 chroma sampling.
4	Video Bandwidth	Minimum 18 Gbps.
5	Transmission Distance	Shall support HDMI signal transmission up to 50 metres over a single CAT5e/CAT6 cable.
6	Colour Space	Shall support RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0 and YUV 4:4:4.
7	Colour Depth	Shall support 8-bit, 10-bit and 12-bit colour depth for supported resolutions and formats, including 8-bit at 4K 60 Hz 4:4:4.
8	HDR Support	Shall support High Dynamic Range (HDR).
9	EDID Management	Shall support automatic EDID copying, with selection of local or remote EDID.
10	Transmitter HDMI Output	The transmitter shall provide one HDMI loop-through output for connection to a local display or another compatible HDMI device.
11	Audio Support	Shall support LPCM 2.0, 2.1, 5.1, 6.1 and 7.1 channels, Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS-ES, DTS-HD Master Audio, DTS-HD High Resolution Audio and DTS:X.

S.No .	Description	Specification
12	IR Control	Shall support one-way IR pass-through for remote-control signal transmission.
13	Power over Cable	Shall support two-way Power over Cable (PoC), allowing power to be supplied from either the transmitter or receiver, as supported by the system design.
14	Transmitter Interfaces	Minimum one HDMI Type-A input, one HDMI Type-A loop-through output, one RJ45 CAT output, one IR output and one service/update interface.
15	Receiver Interfaces	Minimum one RJ45 CAT input, one HDMI Type-A output and one IR input.
16	ESD Protection	Shall provide electrostatic discharge protection of ± 8 kV air-gap discharge and ± 4 kV contact discharge.
17	Construction	Compact metal enclosure suitable for professional AV installation.
18	Mounting	Mounting ears or equivalent mounting accessories shall be included.
19	Power Supply	Compatible power adapter with 100–240 V AC, 50/60 Hz input and 12 V DC, 1 A output.
20	Power Consumption	Approximately 3.84 W, as specified in the product documentation.
21	Operating Temperature	0°C to 40°C.
22	Storage Temperature	–20°C to 60°C.
23	Operating Humidity	20% to 90% relative humidity, non-condensing.
24	Warranty	3years warranty from the date of supply
25	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
26	Authorization	OEM Authorization specific to the bid need to be submitted. OEM or authorisedDistributor should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

4. Wireless Collaboration System

S.No .	Description	Specification
1	Type Device	4K Wireless Presentation and Wireless Collaboration Device.
2	Wireless Sharing Compatibility	User should be able to share content wirelessly using application, Google Chrome browser, and Miracast® screen mirroring for latest Windows, Mac, Android, and iOS devices.
3	Wireless BYOM (Bring Your Own Meeting)	User should be able to access soundbars, cameras, and speakerphones connected to PC/Laptop conferencing apps wirelessly through the wireless presenter App or supplied Dongle/Adapter.

S.No .	Description	Specification
4	Welcome Screen Customization	Should support uploading a minimum of 5 image files for customizable welcome screen display when no content is being shared.
5	Calendar & Scheduling Integration	Should support configuration with Microsoft Exchange Server (Outlook®/Microsoft 365®), Google Calendar™, and room scheduling software to show booking and meeting details onscreen.
6	Occupancy Sensor Integration	Should have I/O or RJ45 port for integration with room occupancy sensor to automate display control based on room occupancy/vacancy.
7	Network Security	Should support Active Directory® authentication, 802.1X network access control, TLS, SSH, AES content encryption, and HTTPS for IT compliance. Configuration to be demonstrated during installation.
8	Input / Output Ports	Should have 1x HDMI Input, 1x HDMI Output, 1x Stereo Line-level Audio Output, 2x LAN Ports (for Corporate & Guest Network), and 2x USB Ports for peripherals.
9	Network Connectivity	Should support Ethernet with TCP/IP, UDP/IP, DHCP, SSL, and SFTP (SSH File Transfer Protocol).
10	Third-party Device Control	Should have 1x Bi-directional RS-232 and 1x IR port to control third-party devices without needing additional control cabling from AV control systems.
11	Wi-Fi Capability	Should be able to create its own secure Wi-Fi network for guest users to share content.
12	Dongle Support	Should be support dongle from the same OEM
13	Content Protection	HDCP 2.2 compliant.
14	Certifications	UL, CE, FCC, RoHS/WEEE compliant. (Additional BIS certification to be shared if applicable).
15	Additional Hardware	Additional hardware can be used to meet the functional and compliance requirements.
16	Warranty	3years warranty from the date of supply
17	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
18	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

5. Power Adapter

S.No .	Description	Specification
1	Device Type	Universal regulated wall-mount power supply adapter.
2	Output Voltage	24 V DC, regulated.
3	Output Current	1.25 A.

S.No	Description	Specification
4	Input Voltage	100–240 V AC, 50/60 Hz.
5	Maximum Input Current	0.8 A.
6	DC Output Connector	2.1 × 5.5 mm DC barrel connector.
7	Cable Length	1.83 metres (6 feet) attached DC output cable.
8	Mounting	Direct wall-outlet mounting with universal plug adapter blades.
9	Enclosure	Black plastic enclosure.
10	Operating Temperature	5°C to 40°C.
11	Operating Humidity	10% to 90% RH, non-condensing.
12	Application	Suitable for powering compatible professional AV and control system devices.
13	Warranty	3years warranty from the date of supply
14	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
15	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

6. Gooseneck Microphone Pack

S.No	Description	Specification
1	Type	Gooseneck Microphone black in color
2	Microphone Type	Pre-polarised condenser microphone
3	Gooseneck Length	450 mm
4	Pick-up Pattern	Cardioid
5	Frequency Response	75 Hz to 20,000 Hz
6	Maximum Sound Pressure Level (SPL)	130 dB SPL or more
7	Connector Type	Compatible with wireless tabletop transmitter base
8	Features	High speech clarity and noise rejection suitable for conference and presentation use
9	Application	Designed for installation in conference rooms, meeting rooms, and boardrooms
10	Warranty	3years warranty from the date of supply
11	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
12	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

7. Bodypack Transmitter

S.No.	Description	Specification
1	Item	Wireless Tabletop Gooseneck Microphone Transmitter
2	Type	Table Stand Wireless Transmitter with detachable gooseneck microphone
3	Microphone Type	Condenser type gooseneck microphone suitable for speech and conference applications
4	Frequency Response (AF)	75 Hz to 20,000 Hz or better
5	Input Impedance	25 kΩ or more
6	RF Output Power	Up to 200 mW or more for stable wireless transmission
7	Operation Mode	Digital wireless transmission with automatic frequency management and secure encrypted communication
8	Controls	Capacitive or tactile Mute Button on the unit with LED status indication
9	LED Indication	Clear Battery Status LED Indicators to show remaining charge and mute/unmute status
10	Battery Type	Rechargeable Lithium-ion battery pack
11	Battery Operating Time	Minimum 10 hours or more of continuous operation per charge
12	Charging Method	Compatible with Wireless Charging Dock/Pad for convenient and cable-free charging
13	Power Supply (Charging Dock)	Should support charging via dedicated docking station or USB-C port
14	Remote Management	The device shall be remotely controllable and monitored via centralized control software for configuration, mute, and battery status monitoring
15	Audio Performance	Low noise and distortion suitable for professional conference and discussion systems
16	Construction	Compact and robust table stand design with anti-slip base and tamper-resistant housing
17	Connectivity	Compatible with digital wireless receiver systems of same manufacturer's ecosystem
18	Operating Frequency Range	License-free or as per local regulatory compliance standards (e.g., 1.9 GHz or 2.4 GHz band)
19	Encryption	AES 256-bit or equivalent secure encryption to ensure signal privacy
20	Mounting / Placement	Designed for desktop/tabletop use in conference and meeting environments
21	Environment	Operating temperature: 0°C to +45°C; Humidity: up to 90% non-condensing
22	Warranty	3years warranty from the date of supply
23	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
24	Authorization	OEM Authorization specific to the bid need to be

S.No.	Description	Specification
		submitted. OEM should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

8. Wireless Receiver

S.No.	Description	Specification
1	Type	Two-channel wireless receiver with integrated auto mixer and analog mix output
2	Gain Control	Automatic Gain Control (AGC) for consistent output levels
3	Frequency Management	Automatic frequency management for interference-free operation
4	Encryption	AES 256-bit encryption for secure audio transmission
5	Frequency Range	1,880 – 1,900 MHz
6	Network Connectivity	Dual-port Dante interface (Primary and Secondary)
7	Power Supply	Supports Power over Ethernet (PoE)
8	Control and Monitoring	Remote monitoring and control through centralized software
9	Mixing Function	Integrated auto mixer for seamless multi-microphone operation
10	Output Options	Analog mix output for direct connection to audio systems
11	Mounting Options	Supports both wall and ceiling mounting configurations
12	Application	Suitable for conference rooms, auditoriums, and multi-channel AV systems, Command Control Rooms.
13	Warranty	3years warranty from the date of supply
14	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
15	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

9. Wireless Charger

S.No	Description	Specification
1	Type	Wireless Charger
2	Charging Capacity	Capable of wirelessly charging up to two gooseneck or boundary microphones simultaneously
3	Charging Time	Supports full charging within 5 hours or less
4	Compatibility	Compatible with wireless tabletop and boundary microphones
5	Features	Efficient charging design with automatic power regulation for multiple devices
6	Application	Suitable for use in conference rooms, meeting spaces, and audio system setups

S.No	Description	Specification
7	Warranty	3years warranty from the date of supply
8	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
9	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

10. Digital Signal Processor

S.No	Description	Specification
1	Type of Device	The Digital Signal Processor shall feature an open-architecture configuration housed in a 4.25-inch-wide, 1U chassis.
2	Expansion Slots and Audio I/O	Shall provide eight user-configurable card slots supporting analog audio via six-position, 3.5 mm screw terminals, USB and GPIO. The system shall include 12 mic/line inputs, 4 line outputs and USB connectivity.
3	Analog Audio Specifications	Analog ports shall support a maximum level of +20 dBu, microphone gain up to +42 dB in 6 dB steps, line gain of 0 dB and frequency response of ± 0.15 dB from 20 Hz to 20 kHz.
4	USB Audio Interface	Shall support USB 2.0 Class 1 Audio, two inputs and two outputs, 16-bit depth and 48 kHz sampling. USB HID/OS integration shall support mute and volume synchronization with Windows and macOS, including Microsoft Teams mute-status synchronization. Supported audio profiles shall include 1x1 speakerphone mode with HFP host and AEC disabled, 1x1 speakerphone mode with HFP host and AEC enabled, and 2x2 general line-in/line-out sound-card mode (A2DP).
5	Dante and AES67	Shall provide native Dante audio networking with 4x4 channels and comply with AES67.
6	Network and Power	Shall provide two RJ45 network connections supporting CAT5e or higher, including a dedicated 1000 Mbps Dante connection and a separate control network port. Power shall be supported through IEEE 802.3af Class 0 PoE, with maximum power consumption of 13 W.
7	Processing Architecture	Shall feature a dual-core Linux processor with 40-bit floating-point architecture and 32-bit A/D and D/A converters.
8	Acoustic Echo Cancellation	Optional software licensing shall support acoustic echo

S.No	Description	Specification
		cancellation with latency of 250 ms for eight channels and 100 ms for 16 channels.
9	Control and Programming	Shall include an internal control engine supporting third-party command execution through an API and Lua scripting.
10	Digital Signal Processing	Shall support advanced audio processing functions, including mixers, equalizers, filters, crossovers, dynamics and gain controls, routers, room combiners and delays.
11	Program Memory and Security	Program memory shall be non-volatile and retain the programmed configuration in the event of power failure.
12	Electrical Performance	THD+N shall be 0.002% (1 kHz at +4 dBu, measured over 22 Hz–22 kHz); EIN shall be below –125 dBu, unweighted (20 Hz–20 kHz); dynamic range shall be 110 dB, unweighted; propagation delay shall be 4 ms; and input-to-input crosstalk shall be below –110 dB at 1 kHz. The DSP shall provide +48 V DC phantom power up to 75 mA maximum and support a 48 kHz sampling rate.
13	Warranty	3years warranty from the date of supply
14	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
15	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

11. Digital Amplifier

S.No	Description	Specification
1	Type	Quad Channel digital power amplifier
2	Output Power	4 X 240 W @ 100V
3	Frequency Response	50 Hz - 22 kHz
4	Signal to Noise Ratio	> 100 dB
5	THD+N (@ 1 kHz)	< 0.3% (@ 1/2 rated power)
6	Crosstalk (@ 1 kHz)	> 80 dB
7	Input Sensitivity	-0.5 to 10.5 dB
8	Technology	Class-D
9	Protection	DC short circuit; Over load; over heating; signal limiting; temperature controlled fan
10	Power Supply	Switching mode power supply
11	Certification	CE Certification or more
12	Warranty	3years warranty from the date of supply
13	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
14	Authorization	OEM Authorization specific to the bid need to be

S.No	Description	Specification
		submitted. OEM should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

12. Speaker

S.No	Description	Specification
1	Speaker Type	2-way coaxial ceiling-mounted loudspeaker.
2	Driver Configuration	5.25-inch low-frequency woofer and 1-inch high-frequency tweeter.
3	Power Handling	30 W continuous (AES), 60 W program and 120 W peak.
4	Impedance	8 Ω.
5	Transformer Tappings	100 V line: 24 W, 12 W and 6 W.
6	Frequency Response	60 Hz to 20 kHz (±3 dB).
7	Frequency Range	45 Hz to 20 kHz (–10 dB).
8	Sensitivity	87 dB (1 W/1 m).
9	Maximum Sound Pressure Level	102 dB at 1 m under the specified 100 V operating condition.
10	Dispersion	145° conical coverage.
11	Connection	Multi-tap speaker connector suitable for the supported transformer and low-impedance connections.
12	Mounting	Quick-fit ceiling mounting system with a twist-lock grille.
13	Cut-out Diameter	170 mm.
14	Dimensions	Approximately 193 mm diameter × 83 mm depth.
15	Construction	ABS enclosure with a perforated steel front grille.
16	Colour	White finish.
17	Operating Temperature	–20°C to +60°C.
18	Application	Suitable for ceiling installation in conference rooms, Command Control Center, offices, retail spaces and commercial audio systems.
19	Warranty	3years warranty from the date of supply
20	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
21	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

13. Control Processor

S.No	Description	Specification
1	Scope	AV Control System with multiple control ports.

S.No	Description	Specification
2	Processor	Should have Quad Core / Multicore / Ultra-Fast Processor for advanced automated system requirements and faster processing.
3	Control Capability	Should be capable of controlling two rooms simultaneously for future-proofing and redundancy.
4	Network Security	Should support Active Directory® authentication, 802.1X network access control, TLS, SSH, and HTTPS to ensure IT policy compliance. Configuration to be demonstrated during installation.
5	Certifications (Security)	Should be JITC / FIPS / NIAP certified.
6	Protocol Support	Should support BACnet communication protocol for integration with third-party building management systems (HVAC, Security, Lighting, etc.) over Ethernet.
7	Memory Requirements	Should have minimum 2 GB SDRAM and minimum 8 GB Flash Memory.
8	Control Ports	Minimum ports required: • 8x IR / Serial ports • 1x Bidirectional RS-422/485 port • 2x Bidirectional RS-232 ports • 8x I/O ports • 8x Low Voltage Relay outputs, 1x Lan Port
9	Compliance Standards	Should be TAA compliant / IC3S (Indian Common Criteria Certification) compliant / Common Criteria.
10	Network Compatibility	Should have Ethernet port supporting TCP/IP, UDP/IP, DHCP, SSL, SFTP (SSH File Transfer Protocol), IPv4, and IPv6.
11	Product Compliance	UL, CE, FCC, RoHS/WEEE certified. (Additional BIS certification to be shared if applicable).
12	OEM Compatibility	Control processor and Touch Control interface should be from the same OEM.
13	Internet Independence	Configuration, programming, and operation must not require any internet connectivity to Manage the AV Devices.
15	Expandability	Additional hardware can be used to meet the system requirements if necessary.
16	Warranty	3years warranty from the date of supply
17	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
18	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence of company engineer in India to extend support in configuration level and to provide support in warranty time.

14. Control Pad

S. No.	Description	Specification
1	Type	Tablet device suitable for AV system control and centralized monitoring applications
2	Display	Minimum 11-inch Retina or equivalent high-resolution touch display with multi-touch capability
3	Resolution	2160 × 1620 pixels or higher
4	Processor	High-performance multi-core processor suitable for real-time control operations
5	Storage Capacity	Minimum 128 GB or above internal storage
6	Connectivity	Wi-Fi (IEEE 802.11 a/b/g/n/ac or higher); Bluetooth support
7	Operating System	Latest version of compatible tablet operating system with support for control and monitoring applications
8	Battery Life	Minimum 10 or above hours of operation on a single charge
9	Charging	USB-C or equivalent fast-charging compatible
10	Audio	Built-in speakers and microphone for system alerts and voice functionality
11	Build Quality	Lightweight aluminum or reinforced chassis suitable for professional use
12	Accessories	Includes compatible power adapter and charging cable
13	Application License	Pre-installed with authorized control application license for AV system management
14	Functionality	Capable of controlling, monitoring, and configuring AV devices through centralized software
15	Mounting Option	Should support tabletop, wall-mount, or docking stand installation as required

15. HDMI Cable

S.no	Description	Specification
1	Cable	Should be minimum of 06 feet length or more, Should be Passive, bidirectional HDMI to HDMI cable, Should have Male to Male HDMI connector, Should support Resolutions of Without DCS: up to 8K @ 30Hz 4:4:4 or 4K @ 120Hz 4:4:4, With DCS: up to 8K @ 120Hz 4:4:4, Should support 8K60 4:4:4 video, 48 Gbps bandwidth, Should support HDCP 2.3 or better, Should be 24k gold-plated 19-pin Type A connectors or better, Should be Thin and highly flexible CL2-rated cable, Should be RoHS compliant
2	Warranty	3 year warranty from the date of supply
3	Compliance	Should be complied with scope of work and list of makes in Bill of Material.

S.no	Description	Specification
4	Authorization	OEM Authorization specific to the bid need to be submitted.OEM should have direct presence in India and company engineer in India to extend support in configuration level and to provide support in warranty time.

16. 10Gigabit DAC cable

S. No.	Description	Specification
1	Cable Type	10 Gigabit SFP+ Direct Attach Cable (DAC) suitable for high-speed network connectivity.
2	Interface / Connector	SFP+ connector at both ends.
3	Transmission Speed	10 Gbps or higher.
4	Cable Technology	Passive Direct Attach Copper (DAC) cable.
5	Cable Construction	Copper twin-axial cable construction or equivalent high-performance passive DAC technology.
6	Cable Length	3 meters (approximately 9.8 ft).
7	Application	Suitable for short-distance 10 Gigabit Ethernet uplinks between compatible SFP+ network devices.
8	Supported Devices	Shall be suitable for interconnection between compatible network switches, servers, storage systems and other SFP+ enabled network equipment.
9	Interface Compatibility	Shall be compatible with standard SFP+ ports provided on the proposed network equipment.
10	Data Transmission	Shall support reliable 10GbE data transmission with low latency for high-bandwidth network applications.
11	Latency	Suitable for low-latency network connectivity in data, IT and AV-over-IP infrastructure.
12	Operating Environment	Suitable for continuous operation in professional IT/networking and AV-over-IP infrastructure applications.
13	Network Application	Suitable for switch-to-switch, switch-to-server, switch-to-storage and similar short-distance 10G network connections.
14	Warranty	3 year warranty from the date of supply
15	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
16	Authorization	OEM Authorization specific to the bid need to be submitted.OEM should have direct presence in India and company engineer in India to extend support in configuration level and to provide support in warranty time.

17. AV Line 24 Port Switch

S.no	Description	Specifications
1	Physical Interfaces	S24 # 1G Base-T Copper PoE+ Ports
		04 # 1/10G Base-X Fiber SFP+.
		Ethernet: Out-of-band 1G port

S.no	Description	Specifications
		Console: USB-C
		Storage: 2 x USB-A
		Half-width 1 or 2-unit 1U rack mount
2	CPU/ Memory	CPU: Quad-Core Cortex-A57 ARMv8 1.8Ghz 64-bit
		RAM: 2 GB DDR4
		Packet buffer memory: 16 MB
		Flash: 512MB NAND 8-bit ECC
3	PSU Options	648W (base) POE budget with internal PSU up to 720W PoE Budget with 2 PSUs(1 internal + 1 modular PSU) in EPS mode External PSU APS350W
4	Performance	Stack height: 8 switches
		Switching fabric: 128 Gbps Line-Rate (non-blocking fabric)
		Throughput: 95.2 Mpps
		Forwarding mode: Store-and-forward
		Address database size: 16,000 MAC addresses (48-bit MAC address)
		Number of VLANs: 4,093 (IEEE 802.1Q) simultaneously
		Number of multicast groups= 2K IPv4
		Number of multicast groups= 2K IPv6
		ARP/NDP= 2K
		Number of LAGs (802.3ad): 128 LAGs with up to 8 ports per group
		Number of hardware queues for QoS: 8 (Standalone)
		Number of routes: 512 IPv4 Unicast routes
		Number of routes: 256 IPv6 Unicast routes
		Jumbo frame support: up to 12K packet size
		Mean time between failures (MTBF):782,376 hours (~89.3 years)
5	L2 Services	Protocol based VLAN
		IP Subnet
		IPX
		ARP
		Subnet based VLAN
		MAC based VLAN
		Voice VLAN
		Private Edge VLAN
		Private VLAN
		Guest VLAN
		Double VLAN Tagging (QoQ)
		GARP with GVRP/GMRP
		MVR (Multicast VLAN Registration)
		Multiple Registration Protocol (MRP)
		Multicast VLAN Registration Protocol (MVRP)
		LAG Hashing
		LAG Member Port Flaps Tracking
		UDLD support
		Distributed Link Aggregation
		Storm Control
		Link Dependency
		Spanning Tree Protocol

S.no	Description	Specifications
		Per VLAN STP (PVSTP) with FastUplink and FastBackbone
		Per VLAN Rapid STP (PVRSTP)
		STP Loop Guard
		STP Root Guard
		BPDU Guard
		STP BPDU Filtering
		STP BPDU Flooding
		IGMP v2/v3 Snooping support
		MLD v1/v2 Snooping support
		Expedited Leave Function
		Static L2 Multicast Filtering
		MLDv1/2 Snooping Support
		IGMPv2/3 Snooping Support
6	L3 Services	IGMP Proxy
		MLD Proxy
		Any Source Multicast (ASM)
		Source Specific Multicast (SSM)
		Multicast streams routing between subnets, VLANs
		Multicast Static Routes (IPv4, IPv6)
		DVMRP
		Neighbor discovery (IPv4, IPv6)
		PIM-DM (IPv4, IPv6)
		PIM-SM (IPv4, IPv6)
		PIM multi-hop RP support
		IPMC replication (hardware support)
		DHCP Client (IPv4, IPv6)
		DHCP Server (IPv4, IPv6)
		DHCP Snooping (IPv4, IPv6)
		DHCP/ BootP Relay (IPv4, IPv6)
		DHCP options 66, 67, 150, and 55, 125
		Static Routing (IPv4, IPv6)
		Port based Routing
		ECMP Static Routing
		Port Based Routing
		VLAN Routing
		RIP v1 and v2
		OSPF v2 and v3
		OSPF Flood Blocking
		Route Redistribution
		VRRP
		VRRP Route/Interface Tracking
		Loopback Interfaces
		Tunnel interfaces
		Router Discovery
		IP Helper
		IP Source Guard

S.no	Description	Specifications
		IP Event Dampening
		ECMP
		Proxy ARP
		Multinetting
		ICMP v4 and v6
		IPv4/IPv6
		DNS v4 and v6
		IPv6 Routing
		Configured v6-over-v4 tunnels
		Automatic (6to4) tunnels
7	QoS	IEEE 802.1p CoS
		DiffServ QoS
		WRED (Weighted Deficit Round Robin)
		Single Rate Policing
		Strict Priority queue technology
		Auto-VoIP
		iSCSI Flow Acceleration
		IP DSCP
		IP Precedence
		IP TOS
		L3 IPv6 Flow Label
		Interface Traffic Shaping
		PHB Support
		Minimum Bandwidth per-interface
8	Security	Broadcast, Multicast and Unicast Network Storm Protection
		CPU Protection
		DoS attack protection
		ICMP throttling
		Management ACL
		Radius accounting
		TACACS+
		L2/L3/L4 Access Control List (ACL)
		MAC, IPv4, IPv6, TCP, UDP ACL
		Protocol based ACL
		ACL over VLAN
		Dynamic ACL
		IEEE 802.1x Radius Port Access Authentication
		802.1x MAC Address Authentication Bypass (MAB)
		Port Security
		Dynamic ARP Inspection
		MAC Filtering
		Port MAC Locking
9	IEEE Network Protocols	IEEE 802.3 10Base-T
		IEEE 802.3 Ethernet
		IEEE 802.3i 10BASE-T
		IEEE 802.3u 100BASE-T

S.no	Description	Specifications
		IEEE 802.3ab 1000BASE-T
		IEEE 802.3z Gigabit Ethernet 1000BASE-SX/LX
		IEEE 802.3ae 10-Gigabit Ethernet
		IEEE 802.3ad Trunking (LACP)
		IEEE 802.1AB LLDP with ANSI/TIA-1057 (LLDP-MED)
		IEEE 802.1D Spanning Tree (STP)
		IEEE 802.1s Multiple Spanning Tree (MSTP)
		IEEE 802.1w Rapid Spanning Tree (RSTP)
		IEEE 802.1p Quality of Service
		IEEE 802.1Q VLAN tagging
		IEEE 802.1v protocol-based VLAN
		IEEE 802.1X Radius Network Access Control
		IEEE 802.3x flow control
		GMRP — Dynamic L2 multicast registration
		GVRP — Dynamic VLAN registration
		GARP -Generic Attribute Registration Protocol
10	Management	ISDP (Industry Standard Discovery Protocol)
		Out of band Management
		802.1ab LLDP and LLDP-MED
		SNMP v1, v2 and v3
		RMON 1, 2, 3, 9
		sFlow
		Command Line Interface (CLI)
		Web-based graphical user interface (GUI)
		Admin access control via Radius and TACACS+
		Telnet
		IPv6 Management
		Dual Software (Firmware) images
		Dual Configuration file (Text-based)
		Radius accounting
		Malicious Code Detection
		SNTP
		XMODEM
		Port Mirroring
		Cable Test Utility
		SSH v1/v2
		SSL/HTTPS and TLS v1.0 for web-based access
		File Transfer (uploads, downloads) through TFTP/HTTP
		SCP/ SFTP/ HTTPS
		Syslog
		Non-disruptive Config Management
		Remote Port Mirroring (RSPAN)
		Persistent log supported
11	Network Traffic	Access Control Lists (ACLs) L2 / L3 / L4
		Time-based ACLs
		ACL over VLANs

S.no	Description	Specifications
		IPv6 RA Guard Stateless Mode
		Network Authentication Successive Tiering
		802.1x MAC Address Authentication Bypass (MAB)
12	LEDs	Per port: Speed, link, activity
		Power, Fan, Stack Master, Stack ID
13	Environmental	Operating Temperature: 32° to 122°F (0° to 50°C)
		Operating Humidity: 90% maximum relative humidity, non-condensing
		Storage Temperature: - 4° to 158°F (-20° to 70°C)
		Storage Humidity: 95% maximum relative humidity, non-condensing
14	Certifications	CE mark, commercial FCC Part 15 Class A, VCCI Class A Class A EN 55022 (CISPR 22) Class A Class A C-Tick EN 50082-1 EN 55024 CSA certified (CSA 22.2 #950) UL listed (UL 1950)/cUL IEC 950/EN 60950
15	Warranty	3years warranty from the date of supply
16	Authorization	OEM Authorization specific to the bid need to be submitted OEM should have direct presence in India and company engineer in India to extend support in configuration level and to provide support in warranty time.

18. Cat6 Cable Cat 6 cable with required Accessories

S.No	Description	Specification
1	4 pair UTP Cat 6 Cable	Category 6 4 pair UTP Cable - The cable should consist of Eight 23 AWG copper conductors and should be round in shape. - - Copper Clad Aluminum or any other combinations are not allowed 1.01 Category 6 4 pair UTP Cable - Electrical performance should meet/exceed the requirements of ISO 11801 Class E and ANSI/TIA 568-C.2 Category 6 standards - Shall be a Certified Component from the OEM to support 1G Ethernet (1G BASE-T) up to 100 Meter deployments in a channel with up to four connectors with "Minimum 20-Year Extended Product Warranty and Applications Assurance" . - Should be a ETL Verified Category 6 cable with Low Smoke Zero Halogen Jacket (LSZH) Material. - It should support Operating temperature of - 20 to 60 °C - Should meet / Exceed PoE+ (IEEE
2	Information Outlets (IO)	Category 6 Information Outlet (IO) -Should be a Category 6 Information Outlet with 8-pin modular (RJ-45) jack comply with IEC 60603 7-4 - Shall support both T568A, T568B Wiring standards. - Shall be backward compatible with Category 6 and 5E cords and cables. - Shall be a Certified Component from the OEM to support 1G Ethernet (1G BASE-T) up to 100 Meter deployments in a channel with up to four connectors with

S.No	Description	Specification
		"Minimum 20-Year Extended Product Warranty and Applications Assurance". - Support 90 degree cable termination - Should have Insertion life of 750 cycles minimum - It should support Operating temperature of -20 to 60 °C - Should meet / Exceed PoE+ (IEEE802.3at) Power Requirements - No Special Grounding requirements. - UL® listed
3	RJ-45 to RJ-45 1.04 Modular Patch Cords - 3 FT / 7FT Length	RJ-45 to RJ-45 Modular Patch Cords (3FT / 7FT Length) - Should be a High performance, factory connectorized tested and certified Category 6 RJ-45 to RJ-45 modular patch cord with an anti-snag latch - The cable should consist of Eight copper conductors and should be round in shape. - - Copper Clad Aluminum or any other combinations are not allowed. Electrical performance should meet/exceed the requirements of ISO 11801 Class E and ANSI/TIA 568-C.2 Category 6 standards - Shall be a Certified Component from the OEM to support 1G Ethernet (1G BASE-T) up to 100 Meter deployments in a channel with up to four connectors with "Minimum 20-Year Extended Product Warranty and Applications Assurance". - Should be with Low Smoke Zero Halogen Jacket (LSZH) Material. - It should support Operating temperature of -20 to 60 °C - Should meet / Exceed PoE+ (IEEE 802.3at) Power Requirements - No Special Grounding requirements. - Should be a T568B Wiring standard. - Must comply with IEC 60332, UL VW Fire resistance standards
4	Surface Mount Box (SMB) / Faceplate	Surface Mount Box (SMB) / Face Plate- No of Ports shall be as per the design- Faceplate Shuttered Square type Note: Bidder shall supply the unit that is suitable/ Compatible for the Modular Furniture used.
5	Grounding	Shall Propose and include Grounding Kits - All Metallic Metal distribution boxes (LIU/Patch Pannels) must be bonded to ground properly. - Must ensure both the sides of the Armed Cable is bonded to ground properly at the time of laying. - Shall Meet / Exceed the IEEE National Electrical Safety Code (NESC), TIA-607-B, the NEC, ISO/IEC 60364, EN 50174-2 and EN 50310. - Bidder shall Clearly furnish the information regarding the Grounding of Each Panel and Armed / Shielded Cable. - Bidder shall follow an acceptable practice to terminate and ground the armor of the OFC Cable at the entry point into the cabinet (LIU / Patch Panel) or rack and then route the fiber cable to its final termination. - The ground wire should be ran to the Main grounding bus bar.
6	Common Terms & Conditions	Common Terms & Conditions for the UTP Structured Cabling Solution (SCS) - Should Meet or exceed ANSI/TIA Category 6 - Should support 1G Ethernet up to 100 Meter deployments for 2,3,4 & 6 connector channels without any minimum
7		length requirement's. - The SCS Solution should be capable of

S.No	Description	Specification
		meeting "Category 6" and "Class E" performance requirements for links and channels less than 15 meters in length. - End-to-End performance should exceed Category 6/Class E Specifications with any combination of these in a channel with up to four connectors - Shall support T568A / T568B Wiring standards. - All Passive Components should be RoHS (Restriction of Certain Hazardous Substances) complied - The Category 6 Cable and Category 6 channel components shall be manufactured by a single manufacturer - Bidder shall clearly furnish the Name of the OEM and shall furnish OEM Authorization Letter refereeing this Tender. - All Items Proposed items should be Qualified for "Minimum 20-Year Extended Product Warranty and Applications Assurance" for "Channel Performance of 1Gbps" by the Same SCS OEM. - The SCS must be tested by an ISP 17025 accredited 3rd Party test facility to EIA/TIA 568C, ISO/IEC 11801 and for the channel
8	Certification	IEC 60603-7-4, T568A, T568B Wiring standards,
9	Warranty	3 year limited warranty from the date of supply
10	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
11	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence in India and company engineer in India to extend support in configuration level and to provide support in warranty time.

19. Network Access Point

S.no	Description	Specification
1	Access Point Warranty	Should be Dual-radio 802.11ax 4x4 5GHz MU-MIMO 2x2 2.4GHz. Should be MU-MIMO Maximum data rate: 4.8Gbps (5GHz) 574 Mbps (2.4GHz). Should have Interfaces: 1x 2.5GbE Base-T uplink port. Should have Antennas: Should be Dual omni-directional 4x4 MU-MIMO.
2	Warranty	3 year limited warranty from the date of supply
3	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
4	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence in India and company engineer in India to extend support in configuration level and to provide support in warranty time.

20. Network Switch

S.no	Description	Specification
1	Access Point Warranty	Should have 24 RJ-45 autosensing 10/100/1000 ports. Should have 4 SFP+ 1/10GbE ports. Should have Throughput (Mpps): 95.23 Mpps. Should have Switching Capacity: 128 Gbps. Should have MAC address table size: 16,000 entries. Should have Processor and memory: ARM Cortex-A9 @ 800 MHz, 512 MB SDRAM, 256 MB flash; packet buAer: 1.5 MB.
2	Warranty	3 year limited warranty from the date of supply
3	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
4	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence in India and company engineer in India to extend support in configuration level and to provide support in warranty time.

21. Network Rack

S.no	Description	Specification
1	Rack	12U 550x600 for wall mount/12U 600x600 floor mount for Network
		Racks manufactured out of steel sheet punched,formed, welded and Powder coated
		Rack should be from ISO 14001 ,27000 Certified Company & UL Listed
		Standard for Racks configuration will be welded frame and side panels and vented top cover
		Floor mount Rack should have Front glass door and rear metal door
		Floor Mount Rack should have 2 no's of removable side panel with slam latch.
		Rack should have provision to mount racks on Floor / wall
		Rack should be 12U in Height.
		It should be 600MM Wide for Floor mount and 550mm for wall mount,600MM Deep
		Rack should include cable manager kit 1 no (channel)
		Rack should Conforms to DIN 41494 or Equivalent EIA /ISO / EN Standard
		Rack should have Adjustable mounting depth,
		Rack should have Numbered U positions,
		Rack should have 100% assured compatibility with all equipments conforming to DIN 41494 (General industrial standard for equipments)
		Powder coated finish with seven Tanks pretreatment process meeting IS
		Rack should have Proper Grounding & Bonding
		Rack should have Fan module Mount Provision on top Cover

S.no	Description	Specification
		Rack should have Fan tray with min 1 no's 90 CFM Fan
		Rack should have 1 No Fixed shelf with 460mm depth for mounting NON Rack mountable Equipments
		Rack should have 1 Horizontal Cable manager
		Rack should have PDU
		Rack should have provision for cable entry Exit from Both top & Bottom.
		Rack should have 1 Packet of mounting hardware, Pack of 20.
2	Certification	ISO 14001 ,27000 Certified Company & UL Listed, DIN 41494 or Equivalent EIA /ISO / EN standard((Additional BIS to be shared if applicable).
3	Warranty	1 year limited warranty from OEM from date of supply
4	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
5	Authorization	OEM Authorization specific to the bid need to be submitted OEM should have direct presence in India and company engineer in India to extend support in configuration level and to provide support in warranty time.

22. Work station

S.no	Description	Specification
1	Processor	Intel core i5 - 13th Gen - 13500 Processor or better
2	Chipset	Intel Chipset Q670 or better
3	Memory	32GB DDR5 RAM expandable to 64GB or higher with 2 DIMM slots or more
4	SSD	512GB NVME M.2 SSD and 1TB or above
5	Operating System/Other	Genuine Microsoft Windows 11 Professional 64bit OS including MS Office Home (Word, Excel &Powerpoint).
6	Audio	Integrated audio controller with internal speaker of at least 2W
7	Graphics	Colorful GeForce GT 1030 4GB DDR4 RAM GDDR4 Pci_e Graphics Card 4GB Graphics integrated
8	WIFI	Wifi + Bluetooth
9	Ports	min. 4Nos USB 3.0 ports/USB 3.2 ports , 2Nos USB 2.0 ports , VGA/DP and HDMI and RJ45 network port or more
10	Slot	Minimum 2 x PCI Express / PCI Slots , 2 xM.2 slots for Wi-Fi and SSD or more
11	Power	260W with 92% efficiency or better
12	Keyboard ,Head set and Mouse	USB wired /wireless call center Head set , Keyboard and Optical Mouse (Same make as PC)
13	Security	TPM 2.0

S.no	Description	Specification
14	Monitor	23.8" LED Monitor or bigger (same make as PC) and monitor integration with Dual Arm base stand
15	Certificates	Microsoft Windows, ROHS, CE, FCC Certifications, UL, Energy star , EPEAT Registered ,ISO : 9001, 14001, 20000,27001 for OEM(Additional BIS to be shared if applicable).
16	Warranty	3 Years Comprehensive Onsite Warranty
17	Compliance	Should be complied with scope of work and list of makes in Bill of Material.
18	Authorization	OEM Authorization specific to the bid need to be submitted.OEM should have direct presence in India and company engineer in India to extend support in configuration level and to provide support in warranty time.

23. Workstation monitors

S.no	Description	Specifications
1	Monitor	23.8" Full HD LCD Monitor - 16:9-24" Class - in-Plane Switching (IPS) Technology - Edge LED Backlight - 1920 x 1080-250 Nit - 5 ms - 75 Hz Refresh Rate - HDMI - DisplayPort - U,Black
2	Aspect Ratio	16:9
3	Screen Finish Type	Glossy
4	Contrast Ratio	8,000,000:1
5	Refresh Rate	75 Hz
6	Display Type	LCD
7	Display Technology	LCD
8	Viewing Angle	178 Degrees
9	Image Brightness	856.5
10	Pixel Pitch	10.6
11	Color Gamut	99
12	Has Color Screen	Yes
13	Resolution	Full HD
14	Maximum Display Resolution	1920 x 1080 Pixels
15	Native Resolution	1920 x 1080
16	HDMI Port	1
17	USB Ports	5
18	Video Out Ports	1
19	Certificates	Energy star , EPEAT® registered; TCO Certified ,ISO : 9001, 14001, 20000,27001 for OEM(Additional BIS to be shared if applicable).
20	Warranty	3 Years Warranty
21	Compliance	Workstation and monitor Should be complied with same make and scope of work and list of makes in Bill of Material.
22	Authorization	OEM Authorization specific to the bid need to be

S.no	Description	Specifications
		submitted. OEM should have direct presence in India and company engineer in India to extend support in configuration level and to provide support in warranty time.

24. Work station headsets:

S.No	Description	Specification
1	Headphone type	On-ear (stereo)
2	Wearing style	Two sided
3	Reversible Microphone Design	Headset must have a reversible microphone design, allowing use on either side of the head.
4	Boom mic rotation	280° and above
5	Acoustic protection	Yes
6	Button user controls	Call answer/end; Mute; Volume +/-
7	Cable length (USB to headset)	210 cm and above
8	Connectivity	Headset must support both USB-C & A & 3.5 mm plug connectivity, with all connectors provided by the same manufacturer.
9	Compatible Operating Systems	Windows 11; Windows 10; macOS; Android™; iOS, Chromebook certified
10	Ear cushions	Leather
11	Auto Mute Alert	Yes
12	Impedance	32 ohm
13	Microphone bandwidth	100 Hz to 10 kHz
14	Speaker bandwidth	20 Hz to 20 kHz
15	Microphone type	Noise cancelling
16	Sensitivity (microphone)	10 dB SLR
17	Sensitivity (speaker)	6 dB RLR
18	Signal-to-noise ratio	>24 dB
19	Speaker size	28 mm
20	UC compatibility	Standard
21	Firmware Update	Headset should support firmware update option.
22	Management Software	Headset must support remote management of these headsets and allow IT teams to push firmware updates centrally.
23	Call Analytics and Usage Reporting	It should support to access Headset call analytics and usage reports for every team member when connected to PC/Laptop calls.
24	Travel Case	Yes
25	Weight	172 grams
26	Ecolabels	TCO Certified
27	Manufacturer Warranty	Two-year OEM warranty
28	Warranty	3 Years Warranty
29	Compliance	Workstation and monitor Should be complied with

S.No	Description	Specification
		same make and scope of work and list of makes in Bill of Material.
30	Authorization	OEM Authorization specific to the bid need to be submitted. OEM should have direct presence in India and company engineer in India to extend support in configuration level and to provide support in warranty time.

25. IVRS with AI calling Agent

S.No	Description	Specification
1	IVRS / IP-PBX	Mandatory should provide SIP-based IVRS / IP-PBX
2	Calls facility	Mandatory should have the Incoming and outgoing calls facility
3	and DTMF navigation	Mandatory should have Multi-level IVR and DTMF navigation
4	Routing	Mandatory should have Department/extension routing
5	Groups	Should provide the Queues / ring groups / hunt groups
6	Recording	Mandatory should have the Call recording
7	logs	Should provide Call logs / CDR
8	Reports	Mandatory Should provide Dashboard and reports
9	Voice conversation	Mandatory Should provide AI voice conversation
10	Language	Should provide the Multilingual AI Telugu, English & Hindi
11	Language detection	Mandatory should have Automatic language detection
12	AI transfer	Mandatory Should have the facility of AI-to-department transfer
13	DTMF/keypad fallback	Should have DTMF/keypad fallback
14	Knowledge-base administration	Mandatory Should have Knowledge-base administration
15	Role-Based Access Control	Mandatory Should have Role-Based Access Control
16	Audit logs	Mandatory Should have Audit logs
17	SIP Trunk integration	Mandatory Should have SIP Trunk integration
18	API integration capability	Mandatory Should have API integration capability
19	Backup and restoration	Mandatory Should have Backup and restoration
20	Recording export	Mandatory Should have Recording export
21	Data export / portability	Mandatory Should have Data export / portability

S.No .	Description	Specification
22	Cloud deployment option	Mandatory Should have Cloud deployment option
23	Administrator/end-user training	Mandatory Should have Administrator/end-user training
24	Technical documentation	Mandatory Should have Technical documentation
25	Security patching / VA support	Mandatory Should have Security patching / VA support
26	POC wrt IVRS (If necessary)	Should have Technical Qualification Gate and PoC before Technical Bid acceptance, including AI performance/accuracy validation
27	BSNL SIP Trunk integration – 20 concurrent channels	Mandatory Should have BSNL SIP Trunk integration – 20 concurrent channels
28	Supply & commissioning of VPN-capable Ethernet router/CPE for BSNL SIP Trunk	Mandatory Should have Supply & commissioning of VPN-capable Ethernet router/CPE for BSNL SIP Trunk
29	AI intent/routing accuracy $\geq 95\%$ in approved PoC test set	Mandatory Should have
30	AI knowledge-base response correctness/relevance $\geq 90\%$ in approved PoC test set	Mandatory Should have AI knowledge-base response correctness/relevance $\geq 90\%$ in approved PoC test set
31	Annual AI Call Agent usage – 1,00,000 minutes included	Mandatory Should have Annual AI Call Agent usage – 1,00,000 minutes included

Note:

1. Videowall: Bidders to provide additional Hardware required (if any), to facilitate multi view features for monitoring.
2. Bidders to submit Compliance of the technical specifications on OEM's letterhead, for Major items like Video Wall Display, Ceiling Microphone, Ceiling Speaker, DSP & Amplifier.
3. For all other items compliance of technical specifications to be submitted on bidder's letterhead.
4. Bidders to submit Datasheet/Brochure for all the items in addition to compliance letter.

Operations & Maintenance			
S.No.	Name	Item Description/Specifications	QTY
1	Operation & Maintenance	01 no's of Support Engineer with minimum of any diploma/degree qualification and with minimum of 3 years industry experience and sound technical knowledge in operation & maintenance of audio-visual and other allied systems / equipment in COEC	Months

1.5 MANPOWER & MATERIAL REQUIREMENTS

The successful bidder has to provide the following manpower and material to the authority on exclusive and comprehensive basis on 18*6 manner to ensure uninterrupted and smooth flow of operations and maintenance to the COEC (Control Operation & Command Center) as per the work scope defined in section 1.2 during the entire maintenance / operations and maintenance period i.e., for the period of 3 (Three) year from the date of satisfactory and successful demonstration and sign-off:

Manpower:

- 01 no's of Support Engineer with minimum of any diploma / degree qualification and with minimum of 3 years industry experience and sound technical in operation & maintenance of audio-visual and other allied systems / equipment in COEC

Note:

- Manpower to be provided by the successful bidder on exclusive basis and bidder has to take the responsibility of replacing the manpower within no time if the existing resource has vacated the office for whatsoever reason.
- The Authority reserves its right to conduct interview(s) for the man power provided by the bidder and to accept / reject the man power provided towards AV (Audio- Visual) and other allied systems / equipment infrastructure maintenance.
- The successful bidder has to engage any further manpower / material / service etc. on ad-hoc basis within 24 hours at any given point of time at his / her own cost (without any extra cost to the authority) to resolve any software / hardware / operation / maintenance / co-ordination (or) whatsoever task / issue to ensure uninterrupted and smooth flow of services w.r.to Network, AV (Audio-Visual), EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure @ COEC.

Material:

- The successful bidder has to obtain the service / support pack from the respective OEM's (Original Equipment Manufacturer) for all the items listed in section 1.4 and to take responsibility of replacement of any or all of the items listed in section 1.4 with same make & model (or) equivalent and compatible item in case of any hardware / software / operation (or) whatsoever failure within 24 hours for the period of 3 years or warranty period of such equipment, whichever is higher. Back- to-Back support for all the items listed in section 1.4 is to be provided directly by OEM during the Maintenance Period and successful bidder has to furnish letter from OEM on Service Agreement / Letter towards loading back-to-back order loading with OEM for replacement of the respective items within no time in case of any hardware / software / operation failure or any other failure for that matter.
- The successful bidder has to carry sufficient number of backup equipment / cables / peripherals / tools etc. for all the items mentioned in section 1.4 on hand in lump sum manner to replace / rectify any item within no time (within 24 hours) in case of any software / hardware / operation failure or any failure for that matter to ensure

uninterrupted flow of all kinds of services w.r.to Network, AV (Audio-Visual), EPABX, Electrical, Surveillance, Server, End-User (desktops, telephones, laptops etc.) infrastructure present in the COEC in the due course of maintenance.

Note:

- The Authority reserves its right to conduct quality test(s) for the material provided by the bidder and to accept / reject the material provided towards the Network, AV (Audio-Visual), EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure.

1.6 SLA(ServiceLevelAgreement) & PENALTIES:

- The original call log for all the logged calls of complaints & calls closed status should be sent by email to department on fortnightly basis for monitoring.
- The successful bidders should be able to resolve all the calls related to items mentioned in section 1.4 through below mentioned SLA:

Priority/SLA	Acceptance SLA	Response SLA	Resolution SLA
Priority1	2hrs	4hrs	24hrs
Priority2	8hrs	12hrs	48hrs
Priority3	24hrs	24hrs	72hrs

Note: Priority and type of call logging for any kind of call will be solely decided by AP State Civil Supplies Corporation based on the urgency and impact.

- Also, a date wise abstract of calls logged and repair status within SLA and outside SLA for the logged calls should be provided to AP State Civil Supplies Corporation in the following format with supporting call reports duly signed by the user:

Date	No. of calls logged	Calls closed							
		Within 12hrs	Within 24hrs	Within 48hrs	Within 72hrs	Within 5 days	Within 10 days	Within 15 days	

The above tables in point number 2, 3 under this section 1.5, may be used for calculation of penalties for not meeting the SLA requirements during maintenance/warranty period. In case the service/information is not provided as mentioned above, a penalty of 1% per week up to a maximum of 10% of PV will be levied until the service / information is provided.

Persistent complaints from the user department during the warranty / service / maintenance period relating to the improper service will be sufficient ground for the AP State Civil Supplies Corporation to debar/blacklist the successful bidder from participating in the future tenders.

2 BIDPROCESS

2.1 INSTRUCTIONSTOBIDDERS:

- Tender call or invitation for bids means the detailed notification seeking a set of solution(s), service(s), materials or any combination of them.
- Specificationmeansthefunctionalandtechnicalspecificationsorstatementofwork, as the case may be.
- Firm means a company, authority, co-operative or any other organization incorporated under appropriate statute as is applicable in the country of incorporation.
- Bidder means any firm offering the solution(s), service(s) and/or materials required in the tender call. The word vendor when used in the pre award period shall be synonymous with bidder and when used after award of the contract shall mean the successful bidder with whom AP State Civil Supplies Corporation signs the contract for rendering of goods and services.
- Each Tenderer shall submit only one Tender for the work.A Tenderer who submits morethanoneTenderwillcausedis-qualificationofalltheTenderssubmittedbythe Tenderer.
- Technical bid means that part of the offer that provides information to facilitate assessment by AP Civil Supplies department, professional, technical and financial standing of the bidder, conformity to specifications etc.
- Financial Bid means that part of the offer, that provides price schedule, total project costs etc.
- Two-partBidmeansthetechanicalandfinancialbidssubmittedthroughonline<https://apeprocurement.gov.in>
- Two-part Bid means the technical bid and financial bids submitted through online e-procurement portal and their evaluation is sequential.
- Composite bid means a bid in which the technical and financial parts are combined into one but their evaluation is sequential.
- Goodsand services mean the solution(s), service(s), materials or acombinationof them in the context of the tender call and specifications.
- The word goods when used singly shall mean the hardware, firmware component of the goods and services.
- Maintenance / Service period means period mentioned in bid document for

maintaining the systems beyond (or) on par / in parallel with warranty / contract period.

- Representations received from the bidders within 3 days from the date of opening of technical bids on the issues related to Pre-qualification/Technical bid evaluation and within a day from the date of opening of commercial bids on the issues related to the commercial bid evaluation will only be accepted. Representations received beyond this period will not be considered and strictly rejected.

2.2 The bidder should upload all the required documents with clear visibility, avoid missing documents and avoid bidding mistakes. In such cases, AP State Civil Supplies Corporation reserves its right in seeking clarification from the bidder or may disqualify the bidder for the bidding mistakes, missing documents and for the documents that are not clear.

2.3 GENERAL ELIGIBILITY:

- This invitation for bids is open to all firms from within India, who are eligible to do business in India under relevant Indian laws as is in force at the time of bidding subject to meeting the eligibility criterion.
- Bidders marked / considered by AP State Civil Supplies Corporation to be ineligible to participate for non-satisfactory past performance, corrupt, fraudulent or any other unethical business practices shall not be eligible.
- Bidder debarred / blacklisted by any Central or State Govt. / Quasi-Govt. Departments or organizations as on bid calling date for non-satisfactory past performance, corrupt, fraudulent or any other unethical business practices shall not be eligible.
- Breach of general or specific instructions for bidding, general and special conditions of contract with AP State Civil Supplies Corporation or any of its user organizations may make a firm ineligible to participate in bidding process.

2.4 JOINT VENTURE CONDITIONS:

The prospective bidders can enter into joint venture agreement with any company / agency for satisfying the pre-qualification / technical qualification criteria and submit their bids and all such JV / consortium bids that satisfies the pre-qualification criteria / technical qualification shall be accepted.

- In case of JV, at least one member of the JV group should have a valid registration with Central / any State Government and the other member should have applied for registration with the Central / any State Government as on the date of submission of bids. Evidence of their making applications with Central / any State Government will be sufficient to make them eligible for participation.

- In case the JV happens to be successful Contractor, the other JV partners who have applied for registration should produce valid registration with Central / any State Government before concluding Contract agreement.
- Failure to comply with this condition, contract shall be cancelled, duly forfeiting the Performance Security, security deposits besides blacklisting the other JV partners having valid registration with Central / any State Government.
- ThetotalmembersintheJointVentureshallnotbemorethan2(TWO).
- In case of Joint Venture, the JV members should have entered into a legally valid Agreement or MoU (Memorandum of Understanding) for joint and several responsibilities and submit along with bid. The Lead Member shall be defined. The LeadMember'sshareshallbenotlessthan51%inthejointventure.Theshareof eachmemberincludingleadMembershallbeexhibitedintheJVAgreement.
- The JV Agreement / MoU should clearly exhibit the roles & responsibilities of the JV members. The non-lead members of the JV shall execute a Power of Attorney in favor of the Lead Member authorizing the Lead Member to conduct all business for and on behalf of the JV during (a) Tendering process and (b) execution and for successful performance of the package including the Defect Liability and Operation and Maintenance periods in case of award of work. The Lead Member shall execute a Power of Attorney in favor of one of its officers to be the Authorized Signatory for signing the Bid Documents and also to undertake all other acts and deeds on the behalf of the JV in connection with the Bid and the Contract.
- The JV firm should submit a copy of valid GST registration certificate issued by the GST registration authority.
- TheJVfirmshouldsubmitcopyofPANcardandcopyoflatestIncomeTax return.
- TheJVfirmshouldsubmitaPowerofAttorneyforSigningof Bid.
- The JV Agreement should clearly exhibit the validity of the Agreement until the completion of the work including the Defect Liability and Operation and Maintenance periods.
- The JV firm should furnish an undertaking / MoU from all the members that in case of award of work, the J.V Agreement deed is irrevocable by any one or all the members together until 3 months after the completion of the contract period including the defect liability and operation and maintenance periods. In case of Extension of time granted by the employer, the Agreement of joint undertaking is also deemed to be extended for the period of such delay and that it is irrevocable until 3 months after the completion of the extended periods also.
- The JV Agreement should also include JV members to agree that the above

undertaking to be without any prejudice to the various liabilities of the members of the JV (Contractor) including the performance security deposit as well as all the other obligations of the contract.

- Regarding the requirement of eligibility criteria, i.e., available Bid capacity and Liquid Assets, similar value of work, minimum quantities in case of Joint Venture, the eligibility criteria in respect of all the technical requirement and financial requirement will be considered as combined resources added together. The Bids are limited to those individuals, firms, companies, joint ventures, who meet the qualification and eligibility requirements and herein after referred to as "Contractor".

2.5 BID FORMS:

- Wherever a specific form is prescribed in the bid document, the bidder shall use the form to provide relevant information. If the form does not provide space for any required information, space at the end of the form or additional sheets shall be used to convey the said information.
- For all other cases the bidder shall design a form to hold the required information.

2.6 COST OF BIDDING:

- The bidder shall bear all costs associated with the preparation and submission of its bid, and AP State Civil Supplies Corporation will in no case be responsible for those costs, regardless of the conduct or outcome of the bidding process.
- Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or to submit a bid not substantially responsive to the bidding documents in every respect will be at the bidder's risk and may result in the rejection of its bid.

2.7 CLARIFICATION OF BIDDING DOCUMENTS:

- A prospective vendor requiring any clarification of the bidding documents may notify AP State Civil Supplies Corporation contact person.

2.8 AMENDMENT OF BIDDING DOCUMENTS:

- At any time prior to the deadline for submission of bids, AP Civil Supplies department, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, may modify the bidding documents by amendment.
- The bidder is requested to download the tender document and read all the terms and conditions mentioned in the tender document and seek clarification if any from the Tender inviting authority. Any offline bid submission clause in the tender document could be neglected. The bidder has to keep track of any changes by

viewing the Addendum / Corrigenda issued by the Tender inviting authority on time-to-time basis in the AP e-Procurement platform. The department calling for tenders shall not be responsible for any claims / problems arising out of this.

- In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the AP Civil Supplies department, at its discretion, may extend the deadline for the submission of bids.

2.9 PERIOD OF VALIDITY OF BIDS:

- Bids shall remain invalid for the days or durations specified in the bid document, after the date of bid opening prescribed by AP Civil Supplies department. A bid valid for a shorter period shall be rejected as non-responsive.
- In exceptional circumstances, the AP State Civil Supplies Corporation may solicit the bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The bid security shall also be suitably extended. A bidder granting the request will not be permitted to modify its bid.

2.10 SUBMISSION OF BIDS:

- The bidders shall submit all the bids i.e., Technical and Financial Bids on AP e-Procurement website only.

2.11 DEADLINE FOR SUBMISSION OF BIDS:

- Bids must be submitted on AP e-procurement website not later than the bid submission date and time specified in the tender call notice.
- The AP State Civil Supplies Corporation may, at its discretion, extend this deadline for the submission of bids by amending the tender call, in which case all rights and obligations of the AP State Civil Supplies Corporation and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

2.12 LATE BIDS:

Any bid not received in AP e-procurement portal by the deadline for submission of bids will be rejected and returned unopened to the bidder.

2.13 MODIFICATION AND WITHDRAWAL OF BIDS:

- No bid can be modified subsequent to the deadline for submission of bids.
- No bid can be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity. Withdrawal of a bid during this interval will result in the forfeiture of its bid security (EMD).

2.14 GENERAL BUSINESS INFORMATION:

The bidders shall furnish general business information to facilitate assessment of its professional, technical and commercial capacity and reputation.

2.15 BID SECURITY i.e. EARNEST MONEY DEPOSIT (EMD):

- The bidder shall furnish, as part of its bid, a bid security for the amount specified in the tender call notice.
- The bid security is required by AP State Civil Supplies Corporation to:
 - o Assure bidder's continued interest till award of contract and
 - o Conduct in accordance with bid conditions during the bid evaluation process.
- The bid security shall be in Indian rupees through ONLINE form via APe-procurement portal to the AP Civil Supplies department.
- Unsuccessful bidder's bid security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of bid validity prescribed by AP Civil Supplies department.
- The earnest money or performance security deposited by the successful tenderer will not carry any interest and it will be dealt with as provided in the conditions stipulated in the tender. In case any valid extension of contract period is granted, the validity of EMD/Performance Security shall also be extended for the corresponding period. Any additional security amount submitted by the successful (L1) tenderer shall be valid till the work is completed in all respects.
- The successful bidder's bid security will be discharged upon the bidder signing the contract, and furnishing the performance security,
- The bid security may be forfeited:
 - o if a bidder withdraws its bid during the period of bid validity or
 - o in the case of a successful bidder, if the bidder fails:
 - i. to sign the contract in time; or
 - ii. to furnish performance security.

2.16 STATEMENT OF IMPORTANT LIMITS/VALUES RELATED TO BID:

S.N o.	Item	Description
1	Name of the Work	Establishment of a Control Operation & Experience center (COEC) in 2 nd Floor, O/o Commissioner Civil Supplies Department Civil supplies building, including Operation and Maintenance for 3 years.
2	Estimate Contract Value of the work	Rs.1,52,92,704/- (Rupees One Crore Fifty Two Lakhs Ninety Two Thousand Seven Hundred and Four Only)
3	Work Completion Period	Within 15 days from the date of issue LoA.
4	Type of Bidder eligible	Firm Registration/Sole Proprietary/Certificate of Incorporation-Copy of registration certificate under the companies Act in India, 1956 and its amendments, should be submitted.
5	Type of Bidding	Online through APe-Procurement website (https://apeprocurement.gov.in/)
6	Submission of Bids	Bids shall be submitted online on https://apeprocurement.gov.in platform 1. The participating bidders in the tenders should register themselves free of cost on e-procurement platform through the website https://apeprocurement.gov.in . 2. Bidders can log-in to e-procurement platform in Secure mode only by signing with the Digital certificates. 3. The bidders who are desirous of participating in e-procurement shall submit their technical bids, price bids as per the standard formats available at the e-market place. 4. The bidders should scan and upload the respective documents in Technical Qualification of bid documentation as detailed at Section 2.15 & 2.16 of the tender including EMD. The bidders shall sign on all the statements, documents, certificates uploaded by them, owning responsibility for their correctness / authenticity. 5. The rates should be quoted in online only.
7	Non-Refundable BID processing fee	Rs.10, 000/- D.D in favor of "VC&MD, APSCSCL".
8	EMD (Earnest Money Deposit)	Rs.1,55,000/- (Rupees One Lakh Fifty Three Thousand Only).
9	EMD Payment Mode	In the form of online payment or BG in favor of "VC&MD, APSCSCL".

S.N o.	Item	Description
10	Periodfor furnishing EMD	Alongwithsubmissionofthebid
11	EMDvalidity/return period	TheBidSecurityofunsuccessfulBiddersshallbereturned as promptly as possible upon the successful Bidder's signing the contract and furnishing the Performance Security. TheBidSecurityofthesuccessfulBiddershallbereturned as promptly as possible once the successful Bidder has signed the contract and furnished the required performancesecurity.
12	BidValidityPeriod	90daysfromthedata ofopeningofbids
13	Variationin	+/-15%(asapprovedbythe authority)
	quantities, technical specifications	
14	Contract Agreement Periodtobe entered	Within 5 days the date of award of work
15	Maintenance/AMC/O&MPeriod	3 years from the date of satisfactory and successful Demonstration and sign-off
18	PerformanceSecurity	10%ofECV / TCV whichever is higher in the form of BG valid upto maintenance period.
19	Performance Security PaymentMode	Through DD/BG in favor of"VC&MD, APSCSCL"
20	Period for furnishing PerformanceSecurity	Atthetimeofenteringcontractagreement
21	PerformanceSecurity validity/returnperiod	Within 60 days after successful and satisfactorycompletion of Maintenance / AMC / O&M Period
22	PaymentTerms	<u>Supply & Installation Payment:</u> 90% of the total valueafter satisfactory and successful "Supply, Installation, Testing, Commissioning, Integration, Demonstration & Handover" and sign-off from the respective officer-in-charge & remaining 10% after completion of trial run / acceptance test run period i.e., 3 months. <u>Maintenance / O&M Payment:</u> On post-quarterly basis upon satisfactory service certificate from respectiveofficer-in-charge
23	LD for late deliveries/service	Liquidateddamagesasmentionedbelowshallbeleviedfor the late delivered or deemed late delivered/installed goods/products/services. v. 1% of the total contract value for one week or part

S.N o.	Item	Description
		thereof, vi. 1.5% of the total contract value for two weeks or part thereof, vii. 2% of the total contract value for three weeks or part thereof, 2.5% of the total contract value for four weeks or part thereof and so on with 0.5% subsequent increment of LD per week for more than four weeks or part thereof with a cap of 10% on the total contract value for late delivery/installation or deemed late delivered / installed goods / services for that location/site The LD amount shall be deducted from the amounts payable to the vendor by the authority. Once this amount is exhausted, LD amount shall be recovered from the PBG/EMD. Once the PBG/EMD is exhausted, the vendor will be required to recoup the Performance Security. If the Vendor fails to recoup the Performance Security, the Vendor will be debarred from participating in tenders till the time he recoups the Performance Security.
24	Maximum LD for late deliveries/installation	Maximum LD for late deliveries / installations: 10% on the Total Contract value for late delivery/installation or deemed late delivered / installed goods / services
25	Penalty for failure to provide service during maintenance period for all items	For any delay beyond permissible down time (as per the discretion of the authority), a penalty of Rs. 200/- will be levied for each day or part thereof subject to a maximum of 10% of the total contract value. The penalty amount shall be deducted from the amounts payable to the Vendor by the authority. Once this amount is exhausted, penalty amount shall be recovered from the PBG/EMD. Once the PBG/EMD is exhausted, the Vendor will be required to recoup the Performance Security. If the Vendor fails to recoup the Performance Security, the Vendor will be debarred from participating in tenders till the time he recoups the Performance Security.
26	Bid document Download Start Date	21.10.2026@3.00PM

S.N o.	Item	Description
27	Bid Submission Closing Date & Time	28.10.2026 @ 05.00PM
28	Pre-Bid Meeting Date	23.10.2026@3.30PM (Virtual)
29	Pre-Bid Clarification Date	24.10.2026
30	Opening of Technical bid	29.10.2026 @ 11.30AM
31	Opening of Commercial Bid	30.10.2026@3.00PM
32	Transaction Fee	<u>Transaction fee:</u> All the participating bidders who submit the bids have to pay an amount @ 0.03% of their final bid value or the price mentioned by AP State Civil Supplies Corporation online with a cap of Rs. 10, 000/- for quoted value of purchase up to Rs.50 crores and Rs. 25, 000/- if the purchase value is above Rs.50 crores. Service tax applicable as levied by Govt. of India on transaction fee through online in favor of MD, APTS. The amount payable to APTS is non-refundable. <u>Corpus Fund:</u> Successful bidder has to pay an amount of 0.04% on ECV (Estimate Contract Value) with a cap of Rs.10, 000/- through online in favor of Managing Director, APTS towards corpus fund at the time of concluding agreement.
33	Transaction Fee payable to	The Managing Director, APTS

Note:

- For tenders up to 25% less than the estimated contract value of work, no additional security deposit is required. But for tenders less than 25% of the estimated Contract Value of work, the difference between the tendered amount and 75% of the estimated contract value, shall be paid by the successful tenderer at the time of concluding agreement as an additional security to fulfil the contract through a Bank Guarantee a Nationalized Bank / Scheduled bank in the prescribed format valid till completion of the work in all respects.
- Tenders with an excess of above 5% of the estimated contract value shall summarily be rejected.

2.17 TECHNICAL QUALIFICATION CRITERIA

- Firm Registration / Sole Proprietary / Certificate of Incorporation - Copy of

registration certificate should be submitted.

- The bidder should have executed similar nature of works i.e., should be a System Integrator / Prime Contractor in executing any Command Control Center (CCC) / Integrated Command Control Center (ICCC) / Audio-Visual (AV) projects of worth as mentioned below in any one of the year in the last 3 financial years i.e., 2023-24, 2024-25 & 2025-26 in India.
 - 100% of ECV for single projects/works (or)
 - 55% of ECV for each of the two projects/works (or)
 - 40% of ECV for each of the three projects/works

Note: For bidders who have executed at least one project for the Central Government or any State Government or a Public Sector Undertaking, the above percentages stand reduced by 10%.

Supporting Documents: Satisfactory completion certificate / payment proceedings / Purchase Order from central / state / local government bodies / private sector companies / non-governmental organizations located in India.

All this information may be furnished in the formats of P1, P2.

- The bidder has to produce Manufacturer Authorization Form (MAF) from the respective OEM (Original Equipment Manufacturer) (or) the bidder has to be the Authorized Partner of the respective OEM (Original Equipment Manufacturer) to take up the supply and installation of major components indicated in the Network, AV (Audio-Visual), EPABX, Server, End-User (desktops, telephones, laptops etc.) infrastructure items specified in BOQ and section 1.4 (technical specifications). Respective documentation shall be submitted along with the technical bid documents.
- The bidder should have the minimum average annual turnover of Rs.3,00,00,000/- during the last 3 financial years i.e., 2023-24, 2024-25 & 2025-26. Authenticated certificate from any designated authority like Chartered Accountant / Income Tax Department etc. certifying the above-mentioned criteria should be produced.
- The participating bidder must exhibit an increasing and positive net worth during the last three financial years i.e., 2023-24, 2024-25 & 2025-26. Authenticated certificate from any designated authority like Chartered Accountant / Income Tax Department etc. certifying the above-mentioned criteria should be produced.

The prospective bidders can enter into joint venture agreement with any company / agency for satisfying the pre-qualification / technical qualification criteria and submit their bids and all such JV / consortium bids that satisfies the pre-qualification / technical criteria shall be accepted. Please refer to respective "Joint Venture Conditions" section 2.3 in this tender document for more details.

- The bidder should have at least 1(one) registered office by own within 100km radius of Control Operational & Experience Center (COEC) Office location with a team of at

least 5 (five) members who are technically sound to support any issue at any time for the work scope specified in this tender. All this information may be furnished in the format of P4 (or) the successful bidder shall establish an office within 100km radius of COEC with a team of at least 5(five) members who are technically sound to support any issue at any time for the items specified in this tender within 15 days after issuing the Letter of Award.

- The bidder should submit declaration in Format P5, stating that they are not debarred / blacklisted by any State Government, Central Government, Central & State Govt. Undertakings / Enterprises / Organizations and by any other Quasi Government bodies / Organizations, World Bank or any major Enterprise / Organization in India for non-satisfactory performance, corrupt & fraudulent or any other unethical business practices.
- The bidder should submit Undertaking in Compliance with GFR Rule 144(XI) in the format of Form-P6.
- Technical specifications along with data sheets for the bill of quantities with proposed make & model to be submitted in the format of Form-T1 and checklist in the format of Form-T2.
- The bidder should submit a copy of PAN registration of the company/proprietor.
- The bidder should submit a copy of GST Registration Certificate.
- The bidder should submit the latest Income Tax Returns certificates.

If the bidder is debarred/blacklisted as mentioned above, such bidder becomes ineligible to participate in the bidding process. In case of any concealing of information relating to blacklisting or pending of cases as mentioned above or submission of fake information/fake documents, AP State Civil Supplies Corporation reserves the right to cancel the work order / contract allotted, apart from forfeiting EMD / PBG. AP State Civil Supplies Corporation reserves the right further to take penal action on the bidder.

AP State Civil Supplies Corporation reserves its right in not considering the bid of a bidder, if such bidder / consortium member was a previous supplier and had a past bad track record or their earlier performance was unsatisfactory on any count.

The bidder should upload all the required documents with clear visibility, avoid missing documents and avoid bidding mistakes. In such cases, AP State Civil Supplies Corporation reserves its right in seeking clarification from the bidder for missing documents/unclear documents and after confirming genuinity of the documents may qualify the bidder for further rounds or may disqualify the bidder for the bidding mistakes, missing documents and for the documents that are not clear.

Even though the tenderers meet the above qualifying criteria, they are liable to be disqualified / debarred / suspended / blacklisted if they have

- o Furnished false / fabricated particulars in the forms, statements and / annexures submitted in proof of the qualification requirements and/or
- o Not turned up for entering into agreement, when called upon.
- o Record of poor progress such as abandoning the work, not properly completing the contract, inordinate delays in completion, litigation history or financial failures etc. and/or
- o Participated in the previous bidding for the same work and had quoted unreasonably high tender percentage and
- o Even while execution of the work, if found that the work was awarded to the Contractor based on false / fake certificates of experience, the Contractor will be blacklisted and work will be taken over invoking clause 61 of PS to APSS.

2.18 BIDDING PROCEDURE

- EMD detail should be given in the "Technical Bid".
- Tenders will be accepted from those who submit their bids through online portal <https://apeprocurement.gov.in>.
- All correspondences should be with AP State Civil Supplies Corporation contact person.

Technical Bid:

It shall include the following information about the firm and/or its proposal.

1. General information on the bidder's company in Form P-1
2. List of major customers in relevant fields in Form P-2 for the respective Schedules
3. Manufacturing Authorization Form (MAF)
4. Bidder turnover details with net worth in Form P-3
5. Details of service centers in AP in Form P-4
6. The bidder should submit/give declaration in Form P-5
7. Undertaking in compliance with GFR Rule 144(xi) in Form P-6
8. Authenticated certificate from any designated authority like Chartered Accountant / Income Tax Department etc. certifying the annual turnover.
9. Deviation(s) to technical specifications, if any in Form T-1
10. Checklist in Form T-2

11. ProcessingFeePaymentAcknowledgement

12. Detailed technical documentation, reference to various industry standards to which the products/services included in vendor's offer conform, and literature concerning the proposed solution

13. Detailed documentation in reference to the experience which is specific to the work/needs of this project may be produced.

14. Otherinformation, ifanyrequiredinthebiddocument

FinancialBid:

- The tenderer should quote his lump sum tender in Price Bid Form based on this schedule of quantities. The bidder should quote his offer as an overall tender percentage. The overall tender percentage should be written both in words and figures by the tenderer and it should be free from errors.
- Also, the L1 tenderer shall produce Bill of Quantities with price listing of each and every item as annexure in accordance to the price bid submitted before concluding the agreement with AP Civil Supplies department.
- The bid offer shall be for the whole work and not for individual items / part of the work.
- The tendered contract amount as computed based on overall tender percentage is subject to variation during the performance of the Contract in accordance with variation in quantities etc.
- The tenderers will have to state clearly their willingness to execute the work at certain specific percentage of excess or less or at par of the ECV indicated in Part-I at the space provided therein in Price Bid form.
- TheSchedule“A”shallcontaintheitemsofworkindicatedaspart-IandLSprovisions as part-II. The percentage quoted by the contractor shall be applicable only to part-I. However, the provisions contained in the part-II will be operable basing on the conditions provided in the Tender Document.
- Bill of Quantities called Schedule “A” and the bid offer accompanies the tender document as Volume-II. It shall be explicitly understood that the Tender Inviting Officer does not accept any responsibility for thecorrectness or completeness of this schedule ‘A’ and this schedule ‘A’ is liable to alterations by omissions, deductions or additions at the discretion of the Project Manager (IS) or as set forth in theconditions of the contract.

Pre-bidMeeting:

Pre-bid meeting for the subject tender shall be conductedvirtually on**23.10.2026 @ 3.30 AM IST.**

2.19 BIDEVALUATIONMETHOD:

BidEvaluationProcedure:

Bids would be evaluated for entire Schedule. Bidders should offer prices for all the items of Schedule and for the full quantity of an item of Schedule failing which such bid will not be considered. Technical bid documentation should be in the prescribed format. In case the schedule or procedure of tender processing is revised, the same shall be communicated through online portal <https://apeprocurement.gov.in>

EMDValidity:

The EMD will be scrutinized first for the amount paid by the bidder and realization of such amount from online. The bids submitted with required EMD amount and validity only be considered for the evaluation. The bids submitted with insufficient EMD amount/validity will be treated as disqualified bids and those bids will not be considered for further evaluation.

Technical bid documentation:

Technical bid documentation shall be evaluated in two sub-steps. Firstly, the documentation furnished by the vendor shall be examined prima facie to see if the product /services offered, technical skill base and financial capacity and other vendor attributes claimed therein are consistent with the need of this project. In the second step, AP State Civil Supplies Corporation may ask vendor(s) for additional information, visit to vendors site and/or arrange discussions with their professional, technical faculties to verify claims made in technical bid documentation.

Award Criterion:

Final choice of firm to execute the project shall be made on the basis of conformity to technical specifications, appropriateness of the product offered, capability of bidder to execute and service the project and appropriateness of financial offer from the point of view of cost-effectiveness over the entire maintenance period for the product/services.

2.20 EVALUATION OF BIDS:

This is a two-step selection process in which the Bidder has to submit their technical and financial bids online. The process is as given below.

- a) First of all, it will be determined whether each tender is accompanied with the valid Bid Security i.e. the required amount and in an acceptable form. Tenders not accompanied with the valid tender security shall be rejected and may not be evaluated further.
- b) AP State Civil Supplies Corporation will determine whether each tender is substantially responsive to the requirements of the Tender Documents i.e. it conforms to all terms, conditions and specifications of the tender document. In case

of any inconformity, the tender shall be disqualified and rejected. The decision of AP State Civil Supplies Corporation as to which tenders are not substantially responsive shall be final. Technical evaluation will be done as per section no. 2.15 of the tender document.

- c) The Authority, would select the successful bidders who have qualified in the Technical Evaluation.
- d) The evaluation by the Authority will be undertaken by Chief Engineer / representatives formed by the Authority and its decision shall be final.
- e) In the second step based on the outcome of technical evaluation, financial bids shall be opened for the technically qualified proposals only by the system.

Clarification of bids:

To assist in the examination, evaluation and comparison of bids, the Authority may, at its sole discretion, ask any bidder for clarification of its bid, including breakdowns of its prices. Such clarification may be requested at any stage up to the contract award decision. Requests for clarification and the responses shall be in writing or by fax and no change in the price or substance of the bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Authority.

If the Bidder does not provide clarifications sought for under, within the specified time, its Bid shall be liable to be rejected. Any such verification or lack of such verification, by the Authority shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Authority there under.

Evaluation of Technical bids:

Technical bid documentation shall be evaluated in two sub-steps.

- a. Firstly, the documentation furnished by the vendor will be examined prima facie to see if the offer made, technical skill base and financial capacity and other vendor attributes claimed therein are consistent with the needs of this project.
- b. In the second step, APSCSCL may ask vendor(s) for additional information, visit to vendors site and/or arrange discussions with their professional, technical faculties to verify claims made in technical bid documentation.

Manufacturer Authorization Form (MAF)

The authorization should be in the nature of a letter, memorandum or certificate regularly granted by the manufacturer to its channel partners, authorized solution providers, system integrators, distributors, etc. or a specific letter issued for purposes of this bid. Such communication should include statements/ undertakings from the said manufacturer to the following effect:

1. Guarantee and warranty coverage in respect of the goods and services manufactured by the said manufacturer shall be honored by that manufacturer, their channel partners, distributors, authorized service centers as the case may be.
2. The manufacturer updates the bidder and their technical personnel with relevant technical literature, training and skill transfer workshops etc. on a regular basis.
3. The manufacturer provides back-to-back technical support to the said bidder on a continuing basis.
4. The said bidder is authorized to provide service and solutions using hardware, firmware and / or software as the case may be.

Note: The letter of authority should be signed by a person competent and having the power of attorney to bind the manufacturer.

In lab proof of concept:

The in-lab proof of concept on demand may be organized in APSCSCL.

Field demonstration:

AP State Civil Supplies Corporation may identify a part or segment of the proposed project site. The concerned bidder, on demand, should be able to demonstrate functional requirements as described in the specifications.

Products specifications and support from OEM:

The bidder has to submit the product data sheets of all the major products quoted as part of the tender. Also, the bidder has to submit the escalation matrix from the OEM for all the major products quoted as part of the tender.

Evaluation of financial bids:

Financial bids of those vendors who satisfy all phases of the pre-qualification and technical bid and corresponding to chosen technical bid choices will only be opened. All other financial bids will be ignored. AP State Civil Supplies Corporation will assess the nature of financial offers and may pursue any or all of the options mentioned under financial bid. APSCSCL may at its discretion discuss with vendor(s) available at this stage to clarify contents of financial offer.

Evaluation and comparison of financial bids:

- Evaluation of financial bids will exclude and not take into account any offer not asked for or not relevant to the present requirements of user.
- Evaluation of financial bid will take into account, in addition to the basic bid price, one or more of the following factors
 - a) The projected costs for the entire contract period/schedule.

- b) Taxes may vary from time to time based on the government decisions and such changes made by government in tax slabs may be accepted as a variation and will be borne by the authority. Of Course, the authority reserves its right to pay the taxes only after submission of tax payment receipts submitted by the successful bidder (as per government norms) to the concerned department.
- c) The bidder who passes PQ, Technical criteria and quotes the least value in the financial bid will be qualified as L1 bidder. The authority reserves its right to select the L1 bidder based on "Without Taxes" in any situation/time, keeping in view of change in taxation slabs from government side and variation of tax slabs and prices submitted by bidders.
- d) Financial Bids would be evaluated for entire Schedule. Bidders should offer prices for all the items of Schedule and for the full quantity of an item of Schedule failing which such bid will not be considered.
- e) Any other specific criteria indicated in the tender call and/or in the specifications.

Performance and productivity of the equipment:

Bidders shall state guaranteed performance or efficiency in response to the specifications.

Contacting APSCSCL:

- 1. Bidders shall not approach APSCSCL officers outside of office hours and/or outside AP State Civil Supplies Corporation office premises, from the time of the tender call notice to the time the contract is awarded.
- 2. Any effort by a bidder to influence APSCSCL officers in the decisions on bid evaluation, bid comparison or contract award may result in rejection of the bidder's offer and bidder may also be marked as ineligible for future bids. If the bidder wishes to bring additional information to the notice of the APSCSCL it should do so in writing.

APSCSCL right to vary quantities at time of award:

APSCSCL reserves the right at the time of award to increase or decrease the quantity, as indicated in tender call, from the quantity of goods and services originally specified in the specification without any change in unit price or other terms and conditions.

APSCSCL right to accept any bid and to reject any or all bids:

APSCSCL reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder(s) or any obligation to inform the affected bidder(s) of the grounds for such decision.

Notification of award:

- Prior to expiration of the period of bid validity, APSCSCL will notify the successful bidder in writing, that its bid has been accepted.
- Upon the successful bidder's furnishing of performance security, APSCSCL will promptly notify each unsuccessful bidder and will discharge its bid security.

Signing of contract:

- At the same time as the APSCSCL notifies the successful bidder that its bid has been accepted, the APSCSCL will send the bidder the Contract Form provided in the bidding documents, incorporating all agreements between the parties.
- On receipt of the Contract Form, the successful bidder shall sign and date the contract and return it to the APSCSCL.

Performance security:

- On receipt of notification of award from the APSCSCL, the successful bidder shall furnish the performance security in accordance with the conditions of contract, in the performance security form provided in the bidding documents or in another form acceptable to the AP Civil Supplies department.
- Failure of the successful bidder to sign the contract, proposed in this document and as may be modified, elaborated or amended through the award letter, shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the AP State Civil Supplies Corporation may make the award to another bidder or call for new bids.

Corrupt, fraudulent and unethical practices:

- "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the process of contract execution and
- "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to detriment of the purchaser, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition:
- "Unethical practice" means any activity on the part of bidder, which try to circumvent tender process in any way. Unsolicited offering of discounts, reduction in financial bid amount, upward revision of quality of goods etc. after opening of first bid will be treated as unethical practice.

- AP State Civil Supplies Corporation will reject a proposal for award and also may debar the bidder for future tenders in AP State Civil Supplies Corporation if it determines that the bidder has engaged in corrupt, fraudulent or unethical practices in competing for, or in executing a contract.

2.21 COMPLIANCE OF RESTRICTIONS UNDER RULE 144(XI) OF GFR 2017:

Restrictions on procurement from a bidder of a country which shares a land border with India.

- I. 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.
- II. "Bidder" (Seller / Service Provider) means any person 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.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order 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.
- IV. The beneficial owner for the purpose of (iii) above will be as
- V. 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, 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 per cent 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.
- VI. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
 - VII. 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.

Any false declaration and non-compliance of the above would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

FORMP-1**BidderInformation**

1	Name oftheorganization	
2	Yearofestablishment	
3	RegisteredOfficeAddress	
4	PhoneNo.	
5	FaxNo.	
6	Email	
7	Contactpersondetailswithphoneno.	
8	TotalNo.ofbranchofficesinAP	
9	TotalSupportEngineers/Employees	
	AtHeadoffice(No.)	

	• Atbranchoffices(No.)	
12	WhetherManufacturer?	IfYes, Providerelevant documents
13	Whetherauthorizeddealer/serviceprovider?	IfYes, Providerelevant documents
14	DetailsofEMDfurnished	
15	Detailsofcertificatesenclosed	
16	PANNo. ofCompany	
17	TANNo.ofCompany	
18	GSTNo.ofCompany	

Note:Relevantdocumentsinsupportofaboveshouldbefurnished.

FORMP-2

List of Major Customers

Services offered to the Major customers during the last 3 FY: 2023-24, 2024-25 & 2025-26				
S.No	Customer Full Address	Year of Service	Products/Services supplied to the customer	Total Amount (In Rs.)
A	B	C	D	E

Note: Relevant documents in support of above should be furnished.

FORMP-3**BidderTurnoverDetails**

Sales turnover details as per technical-qualification criteria section of this document (taking in to consideration all the amendments issued to this document if any) are to be provided in the following format along with supporting documents in last 3 financial years 2023-24, 2024-25& 2025-26:

S.No	Financial Year	Turnover of the bidder in Rs.
1	2023-24	
2	2024-25	
3	2025-26	

Note: Relevant documents in support of above should be furnished.

FORMP-4

Detailsofregisteredoffice(s)within100kmradiusof Control Operational & Experience Center
(COEC) Office location

S.No	FullAddressof office	ContactpersonwithphoneNo.	No.ofsupportengineers/ employees
A	B	C	D

Note:Relevantdocumentsinsupportofaboveshouldbefurnished.

FORM P5-DECLARATION REGARDING CLEAN TRACK RECORD

To,
The Commissioner,
Andhra Pradesh Civil Supplies Department,
Vijayawada, Andhra Pradesh-520007, Andhra Pradesh – 520007.

Sir,

I have carefully gone through the Terms & Conditions contained in the RFP Document [No. ____]. I hereby declare that my company / Consortium Partners / Joint Venture has not been debarred/ black listed as on Bid calling date by any State Government, Central Government, Central & State Govt. Undertakings/enterprises/Organizations and by any other Quasi Government bodies / Organizations, World Bank and any other major Enterprise/Organizations in India for non-satisfactory past performance, corrupt, fraudulent or any other unethical business practices. I further certify that I am competent officer in my company to make this declaration.

Yours faithfully,

(Signature of the Bidder)

Printed Name

Designation

Seal

Date:

Business Address:

FORM P6-UNDERTAKING IN COMPLIANCE WITH GFR RULE 144(XI)

To,
 The Commissioner,
 Andhra Pradesh Civil Supplies Department,
 Vijayawada, Andhra Pradesh-520007, Andhra Pradesh – 520007.

.

Dear Sir,

Sub: Tender invited for _____ –Regarding.

Ref: Tender Reference _____, Dt. _____

I have read the GO order issued by Ministry of Finance vide F.No.6/18/2019-PPD, dated 23-07-2020 and subsequent clarifications/ amendments & G.O. Ms.No. 9, Dt. 25-02-2021 issued by Industries & Commerce Department of Government of Andhra Pradesh regarding restrictions on procurement from a Bidder of a Country which shares a land border with India.

I certify that this bidder is not from any such country or, if from such a Country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and eligible to be considered. [wherever applicable, evidence of valid registration by the competent authority shall be attached].

For <Bidder> (* the definition of bidder as per above mentioned in Clause No.2.19)

Authorized signatory:

Name of the authorized person:

Designation:

Name of Bidder:

Stamp of Bidder:

NOTE: The letters should be submitted on the Letterhead of the Bidder and should be signed by the Authorized signatory.

FORMT-1

Technical compliance statement as per technical specifications mentioned in the following table (taking in to consideration all the amendments issued to this document, if any) is to be submitted in the following format:

S. No	Parameter / Feature	Specification/ Qualification/ Required	Specification/ Qualification/ Proposed	Compliance (Complied/ Higher/Lower)	Reference for proof of compliance (Required docsto be uploaded along with technical bid)

Note: Relevant documents in support of above should be furnished.

FORMT-2**Check List****Compliance/Agreed/Enclosed/DeviationStatement**

The following are the particulars of compliance / deviations from the requirements of the tender specifications.

S No	Biddocumentreference	Remarks
1	FormP-1	
2	FormP-2	
3	FormP-3	
4	FormP-4	
5	FormP-5	
6	FormP-6	
7	FormT-1	
8	FormT-2	
9	EMDPaymentAcknowledgement	
10	Non-RefundableProcessingFeePaymentAcknowledgement	
11	PriceBidForm(unpriced)	
12	TechnicalQualificationcriterion	
13	Technicalspecifications	
14	Financialbidformat	
15	Productdatasheetformajorproducts quoted	
16	Generalinstructiontobidders	
17	Generalconditionofproposedcontract(GCC)	
18	SpecialConditionofproposedContract(SCC)	
19	EscalationMatrixfromOEMformajorproductsquoted	
20	PowerOfAttorneyForLeadMemberofJointVenture	
21	JointVentureAgreement	

The specifications and conditions furnished in the bidding document shall prevail over those of any other document forming a part of our bid, except only to the extent of deviations furnished in this statement.

Place:

Bidder'ssignatureandseal

Date:

NOTE: For every item appropriate remark should be indicated like 'no deviation', 'agreed', 'enclosed' etc. as the case may be.

BILLOF QUANTITIES**Schedule: A****Part: I**

Name of Work: "Control Operation & Experience center in O/o Consumer Affairs, Food & Civil Supplies Department, Vijayawada including Operation and Maintenance for 3 years".

S.No	Item Description	UOM	Qty
1	Supply of LED screen with LED controller of Pixel Pitch : 1.25mm or better Minimum Size: 288" Diagonal or Higher, with resolution of 5760 x 1080 or better or higher according to pixel pitch. Supply includes: LED Cabinets, LED Controller, Suitable mounting kits, & Software from same OEM. Slim Cabinet 44 mm or less, Viewing Angle 170 / 170 or better, Refresh Rate 3840 Hz or more, Minimum Brightness 600 nits or more, Lifetime 1,00,000 hours or more, Native Contrast ratio 20,000:1 or more. Makes- LG/Samsung/Panasonic/Christie/Barco or equivalent as directed by the department authorities	Nos	1
2	Supply of the 4K 4x1 Seamless HDMI Switcher with Multiview & Audio Output Makes-Creston/Kramer/DVDO or equivalent as directed by the department authorities	Nos	4
3	Supply of 4K60 HDMI 50m Extender Over Ethernet (Tx/Rx) Makes-Creston/Kramer/DVDO or equivalent as directed by the department authorities	Nos	17
4	Supply of The wireless presentation system shall support 4K UHD (3840 × 2160) at 60 Hz, wired HDMI input, dual LAN ports, IR/RS-232 control, digital signage, audio de-embedding and wireless conferencing. It shall support Windows, macOS, Android, iOS and Chrome OS via native app, AirPlay, Miracast and USB-C dongle, with simultaneous display of at least two sources. Features shall include a customizable welcome screen, calendar integration with Microsoft Exchange/Microsoft 365 or Google Calendar, or an external 10-inch scheduling panel. It shall support enterprise-grade network security, dual-band 2.4/5 GHz Wi-Fi, Gigabit Ethernet and a wireless within the range of metres. Makes-Creston/Kramer/BARCO or equivalent as directed by the department authorities	Nos	1
5	Supply of the Wall Mount Power Pack, 24 VDC, 1.25 A, 2.1 mm, Universal. Makes-Creston/Kramer/BARCO or equivalent as directed by the department authorities	Nos	1
6	Supply of 450mm length electret condenser gooseneck microphone with a cardioid polar pattern for focused audio pickup and noise rejection, Slim and elegant black matte finish suitable for professional environments such as conference rooms, auditoriums, and lecterns, Frequency Response: 50 Hz to 20 kHz, Nominal impedance: < 100 Ω, Maximum sound pressure level: 130 dB SPL, Equivalent noise level: 26 dB (A), Phantom powering: P12 - P48 V, Connectivity: XLR 3M, Mounting: Compatible with standard table stands and shock-mount systems and	Nos	2

S.No	Item Description	UOM	Qty
	Gooseneck Microphone/40 cm length - Black. Makes-Shure/Sennheiser or equivalent as directed by the department authorities		
7	Supply of Digital Wireless Table Stand for Wireless Tabletop gooseneck microphone with transmitter with Mute button, Clear battery life indication via dedicated battery status LEDs, AF frequency response : 75 to 20,000Hz, Input impedance: 25 kΩ or more, RF output power: up to 200 mW or more, compatible with wireless charging. Rechargeable battery with up to 10 hours or more of operating time, It should be remotely controlled with centralized software. Makes-Shure/Sennheiser or equivalent as directed by the department authorities	Nos	2
8	Supply of the 2 Channel AP Based Receiver with DANTE, two channel receiver with integrated auto mixer and the analog mix output, Automatic Gain Control, Automatic Frequency management, AES 256 encryption, Frequency range : 1880 - 1900 MHz, 2-port Dante (Primary & Secondary), PoE, Remotely control via centralized software to monitor the system. Supports wall and ceiling mounting options. Makes-Shure/Sennheiser or equivalent as directed by the department authorities	Nos	1
9	Supply of Wireless Charging Base Unit for Gooseneck Mic with wireless charger which should support capable of wirelessly charging up to two gooseneck or boundary microphones, should support 5 hours or less for full charging. Makes-Shure/Sennheiser or equivalent as directed by the department authorities	Nos	1
10	Supply of the Digital Signal Processor shall feature an open-architecture design in a 1U chassis with eight configurable card slots, supporting 12 mic/line inputs, 4 line outputs, USB audio and GPIO. It shall provide 4x4 Dante networking with AES67 compliance, dual RJ45 Gigabit network connections, IEEE 802.3af PoE, 32-bit A/D-D/A converters and a 40-bit floating-point processing architecture. Features shall include USB 2.0 audio with HID control, optional acoustic echo cancellation, API/Lua scripting, advanced audio processing, 48V phantom power and 48 kHz sampling. Performance shall include a frequency response of ±0.15 dB (20 Hz–20 kHz), THD+N of 0.002%, dynamic range of 110 dB, propagation delay of 4 ms and input-to-input crosstalk below –110 dB. Micro-format DSP core with onboard 4x4 Dante™ audio networking, eight (8) I/O card slots, PoE power, Lua scripting engine, optional software-licensed HearClear AEC. Includes surface-mount bracket. Makes-QSC/Biamp/Xilica/Sennheiser or equivalent as directed by the department authorities	Nos	1
11	Supply of Digital Signal Processor related Series I/O card with dual-channel microphone or line level input, switchable 48V Phantom power, software-controlled functionality. with dual-channel microphone or line level input, switchable 48V Phantom power, software-controlled functionality.	Nos	4

S.No	Item Description	UOM	Qty
	Makes-QSC/Biamp/Xilica/Sennheiser or equivalent as directed by the department authorities		
12	Supply of the Digital Signal Processor related Series I/O card with dual-channel line level output, software-controlled functionality. Makes-QSC/Biamp/Xilica/Sennheiser or equivalent as directed by the department authorities	Nos	2
13	Supply of the Digital Signal Processor related Series I/O card with 2x2 USB 2.0 input/output, HID command-capable for UC status sync. Makes-QSC/Biamp/Xilica/Sennheiser or equivalent as directed by the department authorities	Nos	1
14	Supply of Digital Signal Processor related Series Software-licensed Acoustic Echo Cancellation (AEC) for Xilica Solaro Series. Eight channel at 250ms, 16 channel at 100ms delay. Makes-QSC/Biamp/Xilica/Sennheiser or equivalent as directed by the department authorities	Nos	1
15	Supply of the Quad-channel power amplifier 4 x 120W 100V. Makes-Audac/Bose/Yamaha or equivalent as directed by the department authorities	Nos	1
16	Supply of the QuickFit™ 2-way 5 1/4" ceiling speaker with TwistFix™ grill White version, 8Ω & 24 Watt @ 100V (RAL9016) Makes-Audac/Bose/Yamaha or equivalent as directed by the department authorities	Nos	8
17	Supply of the Control System for the Control operation center Makes-Creston/Extron/Kramer or equivalent as directed by the department authorities	Nos	1
18	Supply of the iPad Pro - 11 inch, 128gb, wifi only with Control Application License Makes-Apple or equivalent as directed by the department authorities	Nos	1
19	Supply of the AV Patch Cables, Speaker Cable, Audio Cable, Connectors, Audio Video Connectors, Mounts Etc	Nos	1
20	Programming, installation, Configuration for the complete Audio Video System with integration to the existing workstations of the department	Nos	1
21	Supply and Upgradation of the existing Workstations with required 4GB Graphic Cards that supports HDMI/DP/Mini DP ports or HDMI Ports. Makes-Nvidia/AMD/Gigabyte or equivalent as directed by the department authorities	Nos	12
22	Supply and Upgradation of the existing Workstations with required 19.5" or better IPS LED Monitor with HDMI/DP/Mini DP ports. Makes-Samsung/HP/Benq or equivalent as directed by the department authorities	Nos	4
23	Supply and Upgradation of the existing Workstations with required Call Center type headsets. Makes-Polycom/Jabra/Sennheiser or equivalent as directed by the department authorities	Nos	12
24	Supply and Upgradation of the existing Workstations with Wired Mouse	Nos	12

S.No	Item Description	UOM	Qty
	& Keyboard		
25	Supply and Upgradation of the existing Workstations with Wireless Wi-Fi Access Cards Makes-Netgear/TP link/MSI or equivalent as directed by the department authorities	Nos	12
26	Supply and Upgradation of the Above with required Accessories, Cable ties, Name cards, connectors	Job	1
27	Supply and Installation of the Workstations with TOWER WORKSTATION/INTEL CORE I5/13TH GEN/13500 PROCESSOR ,16/32GB DDR5 RAM/512GB NVME M.2 SSD/WIN 11 PRO, With Dural Monitors 24 and mount with wireless card, Headset. Makes-HP/Dell/or equivalent as directed by the department authorities	Nos	3
28	Supply and Upgradation of Hybrid Model (IVRS + API Call Agent) IVRS/IP-PBX Management Software / AI Call Agent Software - upto 20 concurrent Channels 1.Department Calling Module – up to 20 users 2.Department IVR, Extensions & Call Routing Call Recording, Call Logs, Analytics & Reports 3.Cloud deployment & configuration 4.1year License validity & Application performance guarantee for on-premises / Cloud-Based solution 5.Installation, configuration, testing & Commissioning, Training & documentation Annual tendered requirement shall include 1,00,000 AI Call Agent minutes Makes-Customised or equivalent as directed by the department authorities	Nos	1
29	Supply and Upgradation AI Call Agent Usage Recurring Charges per minute after 1,00,000 AI Call Agent minutes per annum (Monthly Recurring Charges) - excluding 18% GST Makes-Customised or equivalent as directed by the department authorities	Nos	1
30	Supply and Upgradation of Application / IP-PBX Server Intel Core i7/i9 13th Gen or later, or Intel Xeon E-2400 class or higher, 32 GB DDR5 minimum; 64 GB recommended for heavier transcription/analytics, 1 TB NVMe SSD for OS, application, database and IVRS. Makes-MATrix/HP or equivalent as directed by the department authorities	Nos	1
31	Supply and Upgradation of the Above with required Accessories, Cable ties, Name cards, connectors	Nos	1
33	Supply and Upgradation of Speaker Cable, Audio Cable, Control Cable, LAN, CAT XX, All other required cables and Connectors for the AV Solution Makes-Crestron/Extron/Lightware or equivalent as directed by the department authorities	Nos	1

S.No	Item Description	UOM	Qty
34	Supply and Upgradation of Network Passive Legrand cat 6 cable box 305 mtr. Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities	Nos	4
35	Supply and Upgradation of Network Passive cat 6 IOS- Dual Face Plates-Back Box. Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities	Nos	30
36	Supply and Upgradation of Network Passive Patch Panels. Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities	Nos	2
37	Supply and Upgradation of Network Passive cat 6 1mtr patch cord. Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities	Nos	36
38	Supply and Upgradation of Network Passive cat 6 2 mtr patch cord Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities	Nos	36
39	Supply and Upgradation of Network Passive 35MM PVC Pipes for termination of the CAT6 cable Makes-Sudhakar/Goldmedal/Precision or equivalent as directed by the department authorities	Nos	30
40	Supply and Upgradation of Network Active Wireless Access Point Makes-HP/CISCO or equivalent as directed by the department authorities	Nos	1
41	Supply and Upgradation of 24 Port Network Active High-Performance, Smart-Managed Switches Makes-HP/CISCO/Netgear or equivalent as directed by the department authorities	Nos	1
42	Supply and Upgradation of 24 Port AV lineswitch with in room AV Access point for AV devices Makes-HP/CISCO/Netgear or equivalent as directed by the department authorities	Nos	1
43	Supply and Upgradation of Network Rack with 12U Fully loaded with PDU, Glass, Fans, Wall Mounting/Floor Mounting. Makes-Netrack/Valrack/Vertiv or equivalent as directed by the department authorities	Nos	1
44	Supply and Upgradation of the Above with required Accessories, Cable ties, Name cards, connectors. Makes-Commscope/Legrand/Systimax or equivalent as directed by the department authorities	Nos	1

Operations&Maintenance			
S.No.	ItemShortName	Item Description/Specifications	QTY
1	Operations& Maintenance	01 no's of Support Engineer with minimum of any diploma / degree qualification and with minimum of 3 years industry experience and sound technical knowledge in operation & maintenance of audio-visual equipment	36Months

Part: II

1	Provision towards GST	Rs.18,045,390/-
2	Provision for Unforeseen Items	Rs.4, 26, 183/-

PRICE BID

Name of work: Establishment of Control Operation & Experience center in, O/o Consumer Affairs, Food & Civil Supplies Department, Vijayawada including Operation and Maintenance for 3 years.

Estimate Contract Value (in figures & words): Rs.1,52,92,704/- (excl. of all taxes and other charges)

(Rupees One Crore Fifty Two Lakhs Ninety Two Thousand Seven Hundred and Four Only) {excl. of all taxes}

An overall tender amount which is exclusive of GST on the specified items has to be submitted in application.

I/We do hereby express my willingness to execute the aforesaid work as per the conditions, standards, specifications, rules, regulations, etc., stipulated in the tender documents.

a) at an overall tender amount of Rs. (in figures) (in words) which is excl. of all taxes and other charges on the specified items.

Note:

1. L1 bidder shall submit the Bill of Quantities with price listing of each and every item in accordance to the price bid submitted before concluding the agreement with AP **Civil Supplies Department**.
2. The bidder must quote the best and single price bid as per our specification. The offer submitted as option-a / option-b etc. (or) duplicate bids will not be considered and in such case, all the bids submitted by the bidder will be summarily rejected.

3 CONTRACT

3.1 GENERALCONDITIONSOFCONTRACT:

The Parties agree and confirm that the terms, conditions, rights and obligations hereto shall be applicable and binding on the Parties during the operation of this Agreement, unless expressly agreed to other wise in writing by the Parties in terms of the applicable provisions contained elsewhere in this Agreement, in particular:

The successful bidder shall carry out the system integrator services to the COEC in accordance with the provisions of the Agreement; and

AP State Civil Supplies Corporation shall make payments to the successful bidder in accordance with the provisionsof the Agreement.

Definitions:

Inthiscontract, thefollowingtermsshallbeinterpretedas indicated.

- “Contract” means the agreement entered into between the AP State Civil Supplies Corporationand the successful bidder, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein;
- “Contract Price” means the price payable to the successful bidder under the contract for the full and proper performance of its contractual obligations;
- “Incidental Services” means those services ancillary to the supply of the goods and services, suchastransportation andinsurance, andanyotherincidentalservices, such as installation, commissioning, provision of technical assistance, training and other such obligations of the successful bidder covered under the contract;
- “GCC”meansthegeneralconditionsofcontract;
- “SCC”meansthespecialconditionsofcontract(ifany);
- “AP Civil Supplies Department
- “COEC”meansControl Operational & Experience Center;
- “Purchaser/User/Client/Department/Authority” means ultimate recipient of goods and services;
- “Vendor/Bidder/Successful Bidder/Agency/Service Provider” means the individual or firm supplying the goods and services under this contract;

- “Project Site” / ”Site”, wherever applicable, means the place(s) where goods/services are to be made available to user;
- “Day” means calendar day;
- “UpTime” means the time period when specified services with specified technical and service standards are available to user(s);
- “Down Time” means the time period when specified services with specified technical and service standards are not available to user(s);
- “ECV” means Estimated Contract Value;
- “AMC” means Annual Maintenance Contract;
- “JV” means Joint Venture;
- “O&M” means Operations and Maintenance;
- “PV” means Project Value;
- “SLA” means Service Level Agreement;
- “FTE” means Full-Time Equivalent;
- “LD” means Liquidated Damages;
- “PBG” means Performance Bank Guarantee;
- “PS” means Performance Security;
- “EMD” means Earnest Money Deposit;
- “Officer-in-Charge” means the concerned officer who is authorized / nominated on behalf of AP State Civil Supplies Corporation to execute / maintain this project in due course of this contract;
- “Agreement/Project Agreement” means this Agreement, together with its Appendices;
- “Applicable Law” means any Indian statute, law, ordinance, regulation, rule, order, by law, notification, directive including directive by the Government of India which is in force in India as applicable to any Party, as is in force from time to time;
- “Parties” means the AP State Civil Supplies Corporation on one part and the successful bidder on the other part for the purposes of this Agreement;
- “Service Level Agreement (SLA)” means the Operation and Maintenance SLA,

executed by and between Parties;

- “AV” means Audio-Visual;
- “IBMS” means Integrated Building Management System;
- “Gol” means Government of India;
- “GoAP” means Government of Andhra Pradesh;
- “OEM” means Original Equipment Manufacturer;
- “MAF” means Manufacturer Authorization Certificate;
- “SI” means System Integrator i.e., an entity that builds computing systems for clients by combining hardware, software, networking and storage products;
- “MSI” means Master System Integrator i.e., an entity that provides System Integrator services + enables all those technical systems, with all of their disparate parts and pieces to work cohesively in the first place and to continue working as designed throughout the lifespan of the project;
- “SP” means Service Provider;

All Appendices and other attachments to this Agreement are hereby incorporated as a part of this Agreement by this reference.

References to any statute or statutory provision include a reference to that statute or statutory provision as from time to time amended, extended, re-enacted or consolidated and to all statutory instruments made pursuant to it.

Words denoting the singular shall include the plural and vice versa and words denoting persons shall include firms and corporations and vice versa.

Unless otherwise expressly stated, the words "herein", "hereof", "hereunder" and similar words refer to this Agreement as a whole and not to any particular Article, Appendix or other subdivision. The terms Article and Appendix refer to Articles and Appendices of this Project Agreement. The words "include" and "including" shall not be construed as terms of limitation. The words "writing" and "written" mean "in documented form", whether electronic or hard copy, unless otherwise stated.

The headings and use of bold type in this Agreement are for convenience only and shall not affect the interpretation of any provision of this Agreement.

In interpreting the Conditions of Contract, singular also means plural, male also means female, and vice-versa. Headings have no significance. Works/Goods/Services have their normal meaning under the language of the contract unless specifically defined. The Officer-in-Charge will provide instructions clarifying queries about the conditions of Contract.

Application:

These general conditions shall apply to the extent that they are not superseded by provisions of other parts of the contract.

Intellectual Property Rights (IPR):

The software/deliverables and documentation which are developed pursuant to this Agreement by the successful bidder shall remain the property of **AP Civil Supplies Department**.

The successful bidder shall be entitled to use in the normal course of its business and in providing same or similar services or development of similar deliverables for its other clients, the general knowledge and experience gained in the performance of this Agreement.

The ownership of tools, processes, utilities, and methodology deployed by the successful bidder to perform services under this agreement, including any successful bidder's proprietary products or components thereof (The successful bidder's Pre-Existing Intellectual Property) with all modifications, enhancements or customization if any made thereto while providing services hereunder shall remain the absolute property of the successful bidder or its Licensors.

The Intellectual Property Rights (IPR) in the third-party software used in providing services including those forming part of or incorporated into the deliverables referred to above shall remain with the respective third-party owners/licensor and AP State Civil Supplies Corporation shall have user rights in accordance with end user license agreement (EULA) as applicable to use of such software.

Limitation of Liability:

The successful bidder shall be excused and not be liable or responsible for any delay or failure to perform the services or provide a deliverable under this Agreement to the extent that such delay or failure has arisen as a result of any delay or failure by AP State Civil Supplies Corporation or its employees or agents or third-party service providers to perform any of its duties and obligations as set out in this Agreement. In the event that The successful bidder is delayed or prevented from performing its obligations due to such failure or delay on the part of or on behalf of **AP Civil Supplies Department**, then The successful bidder shall be allowed an additional period of time to perform its obligations and unless otherwise agreed, the additional period shall be equal to the amount of time for which the vendor is delayed or prevented from performing its obligations due to such failure or delay on the part of or on behalf of **AP Civil Supplies Department**. Such failures or delays shall be brought to the notice of AP State Civil Supplies Corporation and subject to mutual agreement with **AP Civil Supplies Department**, the successful bidder shall take such actions as may be necessary to correct or remedy the failures or delays. The successful bidder shall be entitled to invoice the AP State Civil Supplies Corporation for additional costs incurred in connection with correction or remedy as above.

Neither party shall be liable to the other for any special, indirect, incidental, consequential (including loss of profit, data or revenue), exemplary or punitive damages whether in contract, tort or other theories of law, even if such party has been advised of the possibility of such damages.

Any continuous degradation observed on the performance of the successful bidder w.r.to application/infrastructure/attendance etc. may attract penal charges as per the discretion of AP State Civil Supplies Corporation and any such penal charges shall not exceed 30% of the total respective quarter invoice value.

Indemnification:

Each of the party will indemnify the other Party for its part of failure in its responsibilities specified in this agreement from the claims and litigation raised by the third-party beneficiaries in the implementation of this scheme.

A party (which is accused of commission of a fault) shall have no liability under this clause if the claim is based on:

- Use of altered release of some or all of the deliverables or any modification thereof by other party including, but not limited to, other party's failure to use corrections, fixes, or enhancements made available by the accused-party;
- The combination, operation, or use of some or all of the deliverables or any modification thereof furnished under this Agreement with information, software, specifications, instructions, data, or materials not furnished by the accused-party;
- Some or all of the deliverables or the modification thereof, which is based on other party's Materials or instructions;
- Any change, not made by the accused -party to some or all of the deliverables or any modification thereof; or
- Other party's misuse of some or all of the deliverables or any modification thereof.

A party shall not be entitled to seek any indemnification from the other party unless such party provides the other party with

- Prompt written notice of any claim, demand or action for which such party is seeking or may seek indemnification hereunder and gives the indemnifying party the right to have sole control over the defense and settlement negotiations;
- Does not make any statement or admission in relation to such claim which may prejudicially affect the chances of settlement or defense of such claim;
- Reasonably cooperate with the indemnifying party in assisting the defense of the

claim and in the negotiations or settlements of any such claim, demand or action by providing all assistance and information to perform the above obligations; and

- Allow the other party, at its own expense, exclusively defend such litigation, negotiations and settlements with counsel of its own choosing. The indemnifying party shall not have the right to settle any claim if such settlement contains a stipulation to, or an admission or acknowledgement of, any wrongdoing (whether in tort or otherwise) on the part of the indemnified party.

Standards:

The goods supplied under this contract shall conform to the standards mentioned in the specifications, and, when no applicable standard is mentioned, the authoritative standards appropriate to the goods' country of origin shall apply. Such standard shall be the latest issued by the concerned institution.

Confidentiality:

Neither party shall improperly use or disclose any Confidential Information of the other party or of a customer. "Confidential Information" means any information, technical data or know-how, including, without limitation, that which relates to computer software programs or documentation, specifications, source code, object code, research, inventions, processes, designs, drawings, engineering, products, services, customers, markets or finances of the disclosing party.

The receiving party shall:

- Treat all Confidential Information disclosed to it as strictly private and confidential and take all necessary measures to keep and procure that its officers, agents and employees keep the Confidential Information confidential and to copy Confidential Information only to the extent necessary for the proper fulfillment of this Agreement; and
- Use the same standard of care and discretion to avoid disclosure, publication or dissemination of any and all Confidential Information as it employs with respect to such information of its own where unauthorized disclosure, publication or dissemination might cause it substantial harm; and
- Use the Confidential Information only for the purpose of this Agreement; and
- Disclose Confidential Information only to those of its officers, agents or employees to whom it is strictly necessary for the achievement of this Agreement and only to the extent necessary for the proper fulfillment of this Agreement, ensuring that such persons are made and kept fully aware of its confidential nature and strictly observe the terms of this Agreement; and not disclose Confidential Information to third parties without the prior written consent of the disclosing party and subject to any terms and conditions the disclosing party may impose on such disclosure, and
- immediately notify the disclosing party of any unauthorized use, copying or disclosure of the disclosing party's Confidential Information of which the receiving party

becomes aware and provide all reasonable assistance to the disclosing party to terminate such unauthorized use and/or disclosure.

The confidentiality provisions of this Section shall not apply to any information which

- the recipient can demonstrate was in its possession before receipt,
- is or subsequently becomes publicly available without the recipient's breach of any obligation owed the disclosing party,
- is disclosed to the recipient without restriction on disclosure by a third party who had the right to disclose such information or the recipient can demonstrate was independently developed without reliance on any Confidential Information.
- Within ten days of the request of the disclosing party, and in its sole discretion, the recipient shall either return to the disclosing party originals and copies of any Confidential Information of the disclosing party, and all information, records and materials developed from them by the recipient, or destroy the same.
- Money damages will not be an adequate remedy if this section is breached and therefore, either party may, in addition to any other legal or equitable remedies, seek an injunction or similar equitable relief against such breach.
- The confidentiality obligations of each party shall survive for the term of this Agreement and for a period of five years thereafter.

Use of documents and information:

- The vendor shall not, without prior written consent from AP **Civil Supplies Department**, disclose/share/use the bid document, contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the AP State Civil Supplies Corporation in connection therewith, to any person other than a person employed by the vendor in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- The Vendor shall not, without prior written consent of AP **Civil Supplies Department**, make use of any document or information made available for the project, except for purposes of performing the Contract.
- All project related document (including this bid document) issued by AP **Civil Supplies Department**, other than the contract itself, shall remain the property of the AP State Civil Supplies Corporation and shall be returned (in all copies) to the AP State Civil Supplies Corporation on completion of the Vendor's performance under the contract if so required by the AP **Civil Supplies Department**.

Userlicenseandpatentrights:

- The Vendor shall provide licenses for all software products, whether developed by it or acquired from others. In the event of any claim asserted by a third party for software piracy, the vendor shall act expeditiously to extinguish such claim. If the vendor fails to comply and the AP State Civil Supplies Corporation is required to pay compensation to a third party resulting from such software piracy, the vendor shall be responsible for compensation including all expenses, court costs and lawyer fees. The AP State Civil Supplies Corporation will give notice to the vendor of such claim, if it is made, without delay.
- The Vendor shall indemnify the purchases against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the goods, software package or any part thereof.

Performance Security:

- On receipt of notification of award, the Vendor shall furnish performance security to AP State Civil Supplies Corporation in accordance with bid document requirement.
- The proceeds of the performance security shall be payable to the AP State Civil Supplies Corporation as compensation for any loss resulting from the supplier's failure to complete its obligations under the contract.
- The performance security shall be denominated in Indian rupees or in a freely convertible currency acceptable to AP State Civil Supplies Corporation and shall be in one of the following forms:
 - a. A bank guarantee, issued by a reputed bank located in India with at least one branch office in AP State Civil Supplies Corporation region, in the form provided in the bidding document or another form acceptable to the AP **Civil Supplies Department**; or
 - b. A cashier's cheque or banker's certified cheque or banker's certified form or pay order drawn in favor of the AP **Civil Supplies Department**.
- The performance security will be discharged by the AP State Civil Supplies Corporation and returned to the Vendor not later than sixty (60) days following the date of completion of all formalities under the contract and if activities, post warranty/contract, by the Vendor is envisaged, following receipt of a performance guarantee for annual maintenance as per bid document.
- In the event of any contract amendment, the vendor shall, within 15 days of receipt of such amendment, furnish the amendment to the performance security, rendering the same valid for the duration of the Contract.

Officer-in-charge's Decisions:

Except where otherwise specifically stated, the Officer-in-charge will decide the contractual matters between the Department and the Vendor in the role representing the Department.

Delegation:

The Officer-in-charge may delegate any of his duties and responsibilities to other officers and may cancel any delegation by an official order issued.

Manuals and drawings:

1. Before the goods and services are taken over by the user, the Vendor shall supply operation and maintenance manuals, (together with drawings of the goods and services where applicable).
2. The Vendor shall provide complete technical documentation of hardware, firmware, all subsystems, operating systems, compiler, system software and the other software.
3. The manuals and drawings wherever applicable shall be in English or Telugu.
4. At least one set of the manuals should be supplied for each installation site.
5. Unless and otherwise agreed, the goods and services shall not be considered to be completed for the purpose of taking over until such manuals and drawings have been supplied to the user.

Inspection and acceptance tests:

1. Inspection and tests prior to shipment of Goods and at final acceptance areas follows:
 - a. Inspection of the goods shall be carried out to check whether the goods are in conformity with the specifications mentioned in the bid document. Following broad test procedure will generally be followed for inspection and testing of hardware and firmwares. The vendor will dispatch the goods to the ultimate consignee after internal inspection testing along with the supplier's inspection report, manufacturer's warranty certificate. The AP State Civil Supplies Corporation will test the equipment after completion of the installation and commissioning at the site of the installation. (If site preparation is not included in the tender call or specification, the vendor should furnish all details of the site requirement to the AP State Civil Supplies Corporation sufficiently in advance so as to get the work completed before receipt of the equipment.)
 - b. The Inspections and tests, at the discretion of AP **Civil Supplies Department**, may be conducted on the premises of the Vendor or its subcontractor(s), at point of delivery, and / or at the good's final destination. If conducted on the premises of the Vendor or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data,

shall be furnished to the

inspectors at no charge to the AP **Civil Supplies Department**.

- c. Should any inspected or tested goods fail to conform to the specifications the AP State Civil Supplies Corporation may reject the goods, and the vendor shall either replace the rejected goods or make alterations necessary to meet specification requirements free of cost to the AP State Civil Supplies Corporation/user.
- d. AP State Civil Supplies Corporation right to inspect, test and, where necessary reject the goods after the goods' arrival at user's site shall in no way be limited or waived by reason of the goods having previously been inspected, tested and passed by the AP State Civil Supplies Corporation or its representative prior to the goods shipment from the country of origin.
- e. Nothing in this clause shall in any way release the vendor from any warranty or other obligations under this contract.
- f. The acceptance test will be conducted by the AP **Civil Supplies Department**, their consultant or any other person nominated by the AP **Civil Supplies Department**, at its option. There shall not be any additional charges for carrying out acceptance tests. Any reduction in functional requirements and performance specifications shall be ground for failure. Any malfunction, partial or complete failure of any part of hardware, firmware or excessive heating of hardware enclosures, motors attached to printers, drivers etc. or bugs in the software shall be grounds for failure of acceptance test. All the software should be complete and no missing modules/ sections will be allowed. The vendor shall maintain necessary log in respect of the results of the tests to establish to the entire satisfaction of the AP **Civil Supplies Department**, the successful completion of the tests specified. An average uptake efficiency of 97% for the duration of test period (30 days) shall be considered as satisfactory.
- g. In the event of the hardware and software failing to pass the acceptance test, a period not exceeding two weeks will be given to rectify the defects and clear the acceptance test, failing which the AP State Civil Supplies Corporation reserves the right to get the Equipment replaced by the vendor at no extra cost to the AP **Civil Supplies Department**.

Acceptance certificates:

On successful completion of acceptability test, receipt of deliverables etc, and after AP State Civil Supplies Corporation is satisfied with the working of the system, the acceptance certificate signed by the vendor and the representative of the AP State Civil Supplies Corporation will be issued. The date on which such certificate is signed shall be deemed to be the date of successful commissioning of the systems.

Packing:

- The vendor shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperature, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the AP **Civil Supplies Department**.

Delivery and documents:

Delivery of the goods/services shall be made by the vendor in accordance with the terms specified in the Schedule of requirements. The details of shipping and / or other documents to be furnished and submitted by the vendor are specified below.

For Goods supplied from abroad:

1. Within 24 hours of shipment, the Vendor shall notify the AP State Civil Supplies Corporation and the Insurance Company by cable or telex or fax full details of the shipment including contract number, description of goods, quantity, the vessel, the bill of lading number and date, port of loading, date of shipment, port of discharge, etc. The Vendor shall mail the following documents to the AP **Civil Supplies Department**, with a copy to the Insurance Company.
2. Four copies of supplier's invoice showing goods description, quantity, unit price and total amount;
3. 4 copies of packing list identifying contents of each package;
4. Insurance certificate; Manufacturer's/Supplier's warranty certificate;
5. Inspection certificate, issued by the nominated inspection agency and the
6. Supplier's factory inspection report; and Certificate of origin.

The above documents shall be received by the AP State Civil Supplies Corporation at least one week before arrival of Goods at the port or place of arrival and, if not received, the Vendor will be responsible for any consequent expenses.

For Goods from within India:

Upon delivery of the goods jto the user, the vendor shall notify the AP State Civil Supplies Corporationandmail the following documents to the AP **Civil Supplies Department**:

1. Four copies of the Vendor invoices showing goods description, quantity, unit price total amount;
2. Delivery note, or acknowledgement of receipt of goods from the user;
3. Manufacturer's or Supplier's warranty certificate;
4. Inspection Certificate issued by the nominated inspection agency, and the Supplier's factory inspection report.
5. Certificate of Origin;
6. Insurance policy;
7. Excise gate pass Octroi receipts wherever applicable duly sealed indicating payments made; and
8. Any of the documents evidencing payment of statutory taxes.

The above documents shall be received by the AP State Civil Supplies Corporation before arrival of the Goods (except delivery note and where it is handed over to the user with all documents) and if not received, the vendor will be responsible for any consequent expenses.

Insurance:

1. It is suggested that the goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery up to user site.
2. The insurance should be for replacement value from "Warehouse to warehouse (final destination)" on "All Risks" valid up to 3 months after completion of delivery, installation and commissioning.

Transportation & Logistics:

Transportation of the goods / manpower / material etc. to the project site(s) shall be arranged by the vendor at his own cost. Further, accommodation/logistics/food etc. for the manpower supplied shall be arranged by the vendor at his own cost.

Hardware Installation:

The vendor is responsible for all unpacking, assemblies, wiring, installations, cabling between computer units and connecting to power supplies. The vendor will test all hardware operations and accomplish all adjustments necessary for successful and continuous operation of the computer hardware at all installation sites.

Incidental services:

- The Vendor may be required to provide any or all the following services, including additional services:
 - a. Performance or supervision or maintenance and/or repair of the supplied goods and services, for a period of time agreed by the parties, provided that this service shall not relieve the Vendor of any warranty obligations under this Contract, and
 - b. Training of AP State Civil Supplies Corporation and/or its user organization personnel, at the Vendor's site and / or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied goods and services.
 - c. Prices charged by the Vendor for the preceding incidental services, if any, should be indicated separately (if required), and same will be mutually negotiated separately.

Spare parts:

- The Vendor may be required to provide any or all of the following materials, notifications and information pertaining to spare parts manufactured or distributed by the Vendor.
- Such spare parts as the AP State Civil Supplies Corporation may select to purchase from the Vendor, provided that this election shall not relieve the Vendor of any warranty obligations under the contract and
- In the event of termination of production of the spare parts, an advance notification to the AP State Civil Supplies Corporation of the pending termination, in sufficient time to permit the AP State Civil Supplies Corporation to procure needed requirements and
- The Vendor shall ensure availability of spares in stock at his nearest service center for immediate delivery such spare parts as: (a) are necessary for a minimum of 5 years of operation after installation at the Purchaser's sites (b) are necessary to comply with specifications.

Warranty:

- The Vendor warrants that the goods and services supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The Vendor further warrants that all goods and services supplied under this contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Vendor, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.
- The warranty period shall be as stated in bid document. The Vendor shall, in addition,

comply with the performance guarantees specified under the contract. If, for reasons attributable to the Vendor, these guarantees are not attained in whole or in part, the Vendor shall, make such changes, modifications, and/or additions to the goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the contract at its own cost and expenses and to carry out further performance tests.

- The equipments supplied should achieve required uptime.
- AP State Civil Supplies Corporation/User shall promptly notify the Vendor in writing of any claims arising under this warranty.
- Upon receipt of such notice, the Vendor shall, within the period specified in GCC and with all reasonable speed, repair or replace the defective goods and services or parts thereof, without costs to the user.
- If the Vendor, having been notified, fails to remedy the defect(s) within a reasonable period, the AP State Civil Supplies Corporation/user may proceed to take such remedial action as may be necessary, at the vendor's risk and expense and without prejudice to any other rights which the AP State Civil Supplies Corporation/user may have against the Vendor under the contract.

Vendor's Risks:

All risks of loss of or damage to physical property and of personnel injury and death, which arise during and in consequence of the performance of the Contract, are the responsibility of the Vendor. Further, the Vendor shall be responsible for the safety of all activities on the Site.

Maintenance service:

1. Free maintenance services including spares shall be provided by the vendor during the period of warranty/contract. User, at its discretion may ask the vendor to provide maintenance services after warranty/contract period, i.e. Annual maintenance and repairs of the system at the rates indicated by bidder in its proposal and on being asked so, the vendor shall provide the same.
2. The maximum response time for maintenance complaint from any of the destination (i.e. time required for supplier's maintenance engineers to report to the installations after a request call/telegram is made or letter is written) shall not exceed 48 hours.
3. The vendor will accomplish preventive and breakdown maintenance activities to ensure that all hardware, and firmware execute without defect or interruption for at least required up time.
4. In case up time is less than the stipulated up-time, penalty as indicated in the bid document shall be imposed on the vendor.

5. The amount of penalty if any, will be recovered at source from the performance guarantee during the warranty/contract or from annual maintenance charges payable as the case may be.

Prices:

Prices charged by the Vendor for goods delivered and services performed under the contract shall not vary from the prices quoted by the Vendor in its bid, with the exception if any price adjustments authorized in special conditions of contract or in the request for bid validity extension, as the case may be.

Change orders:

AP State Civil Supplies Corporation may, at any time, by written order given to the Vendor, make changes within the general scope of the Contract in any one or more of the following:

- i. Drawing, designs, or specifications, where Goods to be supplied under the Contract are to be specifically manufactured for the AP **Civil Supplies Department**;
- ii. The method of shipment or packing;
- iii. The place of delivery and/or the services to be provided by the Vendor. If any such change causes an increase or decrease in the cost of, or the time required for, the vendor's performance of any provisions under the contract, an equitable adjustment shall be made in the contract price or delivery schedule, or both, and the contract shall accordingly be amended. Any claims by the Vendor for adjustment under this clause must be asserted within thirty (30) days from the date of the Vendor's receipt of the change order.

Contract Amendment:

No variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

Subcontracts:

The Vendor shall notify the AP State Civil Supplies Corporation in writing of all subcontracts awarded under this contract if not already specified in the bidder's proposal. Such notification, in the original bid or later, shall not relieve the Vendor from any liability or obligation under the contract. Subcontract shall be only for bought-out items and sub-assemblies.

Delays in the supplier's performance:

Delivery of the Goods and performance of the services shall be made by the Vendor in accordance with the time schedule specified by the AP State Civil Supplies Corporation in the specifications.

1. If at any time during performance of the Contract, the Vendor or its subcontractor(s)

should encounter conditions impeding timely delivery of the goods and performance of services, the Vendor shall promptly notify the AP State Civil Supplies Corporation in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the vendor's notice, AP State Civil Supplies Corporation shall evaluate the situation and may at its discretion extend the Vendor's time for performance, with or without liquidated damages.

2. A delay by the Vendor in the performance of its delivery obligations shall render the vendor liable to the imposition of appropriate liquidated damages, unless an extension of time is agreed upon by AP State Civil Supplies Corporation without liquidated damages.

Liquidated damages:

If the Vendor fails to deliver any or all of the goods or perform the services within the time period(s) specified in the Contract, the AP State Civil Supplies Corporation shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to, as per the terms indicated in the bid document, until actual delivery or performance, subject to maximum limit. Once the maximum is reached, the AP State Civil Supplies Corporation may consider termination of the contract.

Force Majeure:

Except for the obligation to make payments properly due for the services provided under the Agreement, neither party will be liable for delay or failure to perform obligations if that delay or failure is caused by circumstances beyond the reasonable control of the affected party provided that the affected party promptly gives the other notice of such delay or failure and circumstances and that the affected party uses all reasonable endeavors to mitigate the delay or failure.

1. The Vendor shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
2. For purposes of this clause, "Force Majeure" means an event beyond the control of the Vendor and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the AP State Civil Supplies Corporation in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
3. If a Force Majeure situation arises, the Vendor shall promptly notify the AP State Civil Supplies Corporation in writing of such condition and the cause thereof. Unless otherwise directed by the AP State Civil Supplies Corporation in writing, the Vendor shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not

prevented by the Force Majeure event.

Termination and Exit Management Plan:

Termination of this agreement is applicable at any point of time with 90 days of prior written notice from head of either party and gracious handover of all the data / knowledge / owned resources to AP **Civil Supplies Department**.

Effect or Termination:

- At the time of Termination or Expiry of this Agreement, the successful bidder will hand over the software including source code and the documents related to the Project to **AP Civil Supplies Department**.
- At any time, if AP State Civil Supplies Corporation terminates this contract for convenience and requests transfer of the whole maintenance and operational support of COEC to a 3rd party or to AP State Civil Supplies Corporation, the successful bidder shall help in smooth transition. AP State Civil Supplies Corporation shall pay the cost of such transition to the successful bidder as agreed by both parties on mutual consent.
- AP State Civil Supplies Corporation shall be liable to make payments of the entire amount due under this Agreement up to the effective date of termination for services which have been rendered by the successful bidder till such date of Termination/Expiry of this agreement period.
- The successful bidder shall provide all such information as may reasonably be necessary to affect seamless handover to AP State Civil Supplies Corporation on its nominated officer or replacement partner.
- All data center equipment, hardware, software, devices and any other intellectual property of the successful bidder deployed in this project shall remain the property of the successful bidder, post termination.

Termination for default:

- The **AP Civil Supplies Department**, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Vendor, may terminate the Contract in whole or in part:
 - o if the Vendor fails to deliver any or all of the Goods/services within the time period(s) specified in the contract, or within any extension thereof granted by the AP State Civil Supplies Corporation pursuant to Clauses of GCC or
 - o if the Vendor fails to perform any other obligation(s) under the Contract or
 - o if the Vendor, in the judgment of the AP State Civil Supplies Corporation, has engaged in corrupt or fraudulent practices in competing for or in executing

the Contract.

- In the event the AP State Civil Supplies Corporation terminated the contract in whole or in part, AP State Civil Supplies Corporation may procure, upon such terms and in such manner as it deems appropriate, goods or services similar to those undelivered, and the Vendor shall be liable to the AP State Civil Supplies Corporation for any excess costs for such similar goods or services. However, the Vendor shall continue performance of the contract to the extent not terminated.

Termination for insolvency:

AP State Civil Supplies Corporation may at any time terminate the contract by giving 30 days written notice to the Vendor if the Vendor becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Vendor, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the AP Civil Supplies Department.

Termination for Convenience:

- **AP Civil Supplies Department,** may at any time by giving 30 days written notice to the Vendor, terminate the Contract, in whole or in part, for its convenience. The notice of termination shall specify that termination is for the AP State Civil Supplies Corporation/Purchaser's convenience, the extent to which performance of the Vendor under the Contract is terminated, and the date upon which such termination becomes effective.
- The goods that are complete and ready for shipment within thirty (30) days after the vendor's receipt of notice of termination shall be accepted by the AP State Civil Supplies Corporation at the contract terms and prices. For the remaining goods, the AP State Civil Supplies Corporation may elect to have any portion completed and delivered at the contract terms and prices at its discretion.

Termination for inefficiency:

The authority may at any time terminate the contract by giving 30 days written notice to the Vendor if the Vendor becomes inefficient to deliver the services as per the expectations of authority. In this event, termination will be without compensation to the Vendor, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the authority.

Resolution of disputes:

- The AP State Civil Supplies Corporation and the Vendor shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the contract.

- If, after thirty (30) days from the commencement of such informal negotiations, the AP State Civil Supplies Corporation and the Vendor have been unable to resolve amicably a contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified here in. These mechanisms may include, but are not restricted to, conciliation mediated by a third party.
- The dispute resolution mechanisms shall be as follows:
- In case of a dispute or difference arising between the AP State Civil Supplies Corporation and the Vendor relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, of India, 1996. The venue of such arbitration shall be Vijayawada and the language of arbitration proceedings shall be English.

Governing language:

The contract shall be written in English or Telugu. All correspondence and other documents pertaining to the contract which are exchanged by the parties shall be written in same languages.

Applicable law:

The contract shall be interpreted in accordance with appropriate Indian laws.

Notices:

- Any notice given by one party to the other pursuant to this contract shall be sent to the other party in writing or by telex, email, cable or facsimile and confirmed in writing to the other party's address.
- A notice shall be effective when delivered or tendered to other party whichever is earlier.

Taxes and duties:

The vendor shall be entirely responsible for all taxes, duties, license fee Octroi, road permits etc. incurred until delivery of the contracted Goods/services at the site of the user or as per the terms of tender document if specifically mentioned.

Licensing considerations:

The software mentioned in the Schedules (if any) of Requirement will be used throughout Andhra Pradesh or user's sites even outside Andhra Pradesh.

Protection against damages- site conditions:

- The system shall not be prone to damage during power failures and trip outs. The normal voltage and frequency conditions available at site are as under:

a. Voltage 230 Volts

b. Frequency 50 Hz

- However, locations may suffer from low voltage conditions with voltage dropping to as low as 160 volts and high voltage conditions with voltage going as high as 220 + 20% volts. Frequency could drop to 50 Hz + 2%. The ambient temperature may vary from 10 degrees centigrade to 48 degrees centigrade. The relative humidity may range in between 5% to 95%.
- The goods supplied under the contract should provide protection against damage under above conditions.

Fail-safe procedure:

The vendor should indicate in detail fail-safe procedure(s) for Power failure, Voltage variation, Frequency variation, Temperature and humidity variations categories.

Training:

For each hardware and software component installed, the Vendor may be required to train the designated AP State Civil Supplies Corporation and user personnel to enable them to effectively operate the total system. The training, if required, shall be given, as specified in section 1.3 at the AP State Civil Supplies Corporation Office locations specified. The training schedule will be agreed to by both parties during the performance of the Contract.

Site Preparation and Installation:

The Purchaser is solely responsible for the construction of the installation sites except where it is specifically required under bid document. The bidder will designate to perform a site inspection to verify the appropriateness of the sites before the installation of every hardware related item.

Possession of the Site:

The Department/Registry shall give possession of the site to the Vendor. If possession of a part site is given, the Department will ensure that the part site so handed over is amenable to carry out the work at site by the Vendor.

Access to the Site:

The Vendor shall provide the Officer-in-charge and any person authorized by the Officer-in-charge, access to the site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.

Instructions:

The Vendor shall carry out all instructions of the Officer-in-charge and comply with all the applicable local laws where the Site is located.

Speed of Work:

The Vendor shall at all times maintain the progress of work to conform to the latest operative progress schedule approved by the Officer-in-charge. The vendor should furnish progress report indicating the programme and progress once in a month. The Officer-in-charge may at any time in writing direct the vendor to slow down any part or whole of the work for any reason (which shall not be questioned) whatsoever, and the vendor shall comply with such orders of the Officer-in-charge. The compliance of such orders shall not entitle the vendor to any claim of compensation. Such orders of the Officer-in-charge for slowing down the work will however be duly taken into account while granting extension of time if asked by the vendor for which no extra payment will be entertained.

Delays in Commencement or progress or neglect of work and forfeiture of earnest money, Security deposit and withheld amounts. If, at any time, the Officer-in-charge shall be of the opinion that the Vendor is delaying Commencement of the work or violating any of the provisions of the Vendor is neglecting or delaying the progress of the work as defined by the tabular statement. "Rate of progress" in the Articles of Agreement", he shall so advise the Vendors in writing and at the same time demand compliance in accordance with conditions of Tender notice. If the Vendor neglects to comply with such demand within seven days after receipt of such notice, it shall then or at any time thereafter, be lawful for the Officer-in-charge to take suitable action in accordance with rules in vogue.

Management Meetings:

The Officer-in-charge may require the Vendor to attend a management meeting. The business of a management meeting shall be to review the programme for remaining work and to deal with matters raised in accordance with the early warning procedure.

Independent Entities:

Nothing contained in this Agreement shall be construed as creating a joint venture, partnership or employment relationship between the parties hereto, nor shall either party have the right, power or authority to create any obligation or duty, express or implied, on behalf of the other.

Assignment:

Neither party may assign, delegate or transfer this Agreement or any obligations hereunder, without the prior written consent of the other party, which consent shall not be unreasonably withheld or delayed. Notwithstanding the foregoing, either party may assign, delegate or transfer this Agreement to any affiliate of such party for so long as such assignee, delegate, or transferee remains an affiliate of such party. The successful bidder may engage any subcontractor for the purposes of executing this Agreement. Any assignment, delegation, or

transfer in violation of this provision shall be void and without legal effect.

No Third-Party Beneficiaries:

Except as expressly stated herein, nothing in this Agreement shall confer any rights upon any person other than the parties hereto and their respective successors and permitted assigns.

Governing Law:

This Agreement shall be governed by and interpreted in accordance with the laws of India and courts at Hyderabad shall have jurisdiction over the subject matter of dispute under this Agreement.

Entire Agreement:

This Agreement sets forth the entire understanding of the parties with respect to the subject matter hereof and thereof. This Agreement supersedes all prior or simultaneous representations, discussions, negotiations, letters, proposals, agreements and understandings between the parties hereto with respect to the subject matter hereof, whether written or oral. Each party acknowledges that it has not relied on or been induced to enter into this Agreement by a representation or warranty other than those expressly set out in this Agreement. To the extent permitted by Applicable Law, a party is not liable to another party in contract or tort or in any other way for a representation or warranty that is not set out in this Agreement.

Amendment:

This Agreement may be amended, modified or supplemented only by a written instrument duly executed by a duly authorized representative of each of the parties on mutual consent.

Severability:

Any provision of this Agreement that is determined to be invalid or unenforceable in any jurisdiction shall be ineffective to the extent of such invalidity or unenforceability, without rendering invalid or unenforceable the remaining provisions of this Agreement.

Waivers:

No term or provision of this Agreement will be considered waived by either party, and no breach consented to by either party, unless such waiver or consent is in writing signed on behalf of the party against whom it is asserted. No consent to or waiver of a breach of this Agreement by either party, whether express or implied, will constitute a consent to, waiver of, or excuse for any other, different, or subsequent breach of this Agreement by such party.

Agreement Controlling:

If there is any inconsistency or conflict in the understanding between the parties, the provisions of this

Agreement shall be controlling and shall govern.

Acts or Omissions of Other Party:

Neither Party shall be liable for any delay or failure in the performance of its obligations under this Agreement, if and to the extent such delay or failure is caused by the actions or omissions of the other Party or other Party's agents or due to a breach of this Agreement by the other Party. The liability of a party shall stand proportionately reduced to the extent the event giving rise to the said liability was a result of or contributed to by any act, omission or contribution of the other party/parties or its employees or agents.

Non- Exclusivity:

The successful bidder shall be free at all times to provide the services same or similar to the one envisaged hereunder to any of its other clients, either existing or future, and nothing herein shall preclude the successful bidder from providing such Services to its other clients but without in any way affecting the services agreed to be offered by the successful bidder under this Agreement.

Publicity:

The successful bidder shall be entitled to use the name (and the logo, if any, associated with the name) of AP **Civil Supplies Department**, in its customer lists, any sales, marketing or promotional material or presentation, to identify the AP State Civil Supplies Corporation as one of the successful bidder's customers for the products and services hereunder, and provide for a marketing reference.

Arbitration:

In case of any disputes arising out of or in connection with this Agreement the same shall be referred to the authorized representatives of the parties. If they could not agree for an amicable solution, it shall be referred to arbitration by any person or entity nominated and appointed as mutually agreed by the three parties, failing which to a panel of Three Arbitrators (Each Party to nominate one and the umpire to be appointed by such nominated arbitrators), in accordance with the Arbitration and Conciliation Act, 1996.

The venue of arbitration shall be Vijayawada. The language of the arbitration proceedings shall be English. The award of the arbitration shall be final, conclusive and binding upon the Parties. Pending the submission of a difference to the arbitration and thereafter until the final decision of the arbitration, the parties shall continue to perform all of their obligations under this agreement.

Execution and Delivery:

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. It shall

not be a condition to the effectiveness of this Agreement that each party shall have executed a counterpart.

Non-Solicitation:

Both Parties agree that AP State Civil Supplies Corporation and/or its agencies/vendors/contractors shall not directly or indirectly employ, sub-contract, solicit for employment, or recommend for employment any employee/staff/contractor/agent of the successful bidder, during this agreement period and for a period of five (5) years thereafter, without the written/email consent of the successful bidder. Both Parties agree that this non-solicitation obligation shall be extended to the incoming vendor (Replacement Agency) if any and AP State Civil Supplies Corporation shall enforce the same where required.

Authority:

Each signatory of this Agreement represents and warrants that he/she is duly authorized by the Party and for on whose behalf he/she is signing this Agreement to execute the same in a manner binding upon said Party and that all necessary approvals and procedures necessary for vesting such authority in him/her have been duly complied with.

Benefit of doubt:

The decision of AP State Civil Supplies Corporation shall be final in the event of any ambiguity/conflict arising out of any clause/condition/document w.r.to this contract and even if such case is referred to the legal platform such as arbitration/court etc., the benefit of doubt shall be prevailing with AP State Civil Supplies Corporation only.

Fairness & Good Faith:

The Parties undertake to act in good faith with respect to each other's rights under this Agreement and to adopt all reasonable measures to ensure the realization of the objectives of this Agreement.

Term & Duration:

Supply, Installation, Testing, Commissioning, Integration, Demonstration & Handover of all the items of specified configuration as listed in section 1.4 of this tender document within 15 days from the date of issue of LOA to the 100% satisfaction of Officer-in-Charge, Commissioner Civil Supplies Department.

Comprehensive Warranty along with Operation & Maintenance services towards all the items supplied, installed, tested, commissioned, integrated, demonstrated and handed over @ **Establishment of Control Operation & Experience center in, O/o Consumer Affairs, Food & Civil Supplies Department, Vijayawada** for the period of 3 (Three) years from the date of satisfactory and successful demonstration and sign-off from Officer-in-Charge, AP Civil Supplies Department.

This contract shall remain effective for the above period unless terminated earlier in accordance with Termination clause. This contract represents the entire agreement between Parties. While the Parties may discuss or exchange letters, emails regarding any amendments to this Agreement, any such modification of this Agreement shall be valid only if agreed mutually and duly signed by authorized signatories of both Parties.

Not with-standing point (i) of this section, in the event of expiry of this Agreement, (a) without being terminated and (b) without a written extension being executed by both Parties, AP State Civil Supplies Corporation and the successful bidder duly acknowledge and agree that:

- Provision of technical services by the successful bidder for AP State Civil Supplies Corporation in the state of Andhra Pradesh (i.e. scope of services under this Agreement) and acceptance of such services by AP State Civil Supplies Corporation beyond the expiry of this agreement in itself means the then valid terms and conditions of this Agreement shall be applicable and govern such services till such time the services are provided by the successful bidder and accepted by AP State Civil Supplies Corporation beyond the expiry of this Agreement, subject to approval of Managing Director, AP **Civil Supplies Department**.
- It shall be deemed that this Agreement (along with any amendments agreed in writing by all parties) has been extended in writing by all Parties till such time the services are provided by the successful bidder and accepted by AP State Civil Supplies Corporation beyond the expiry of this Agreement subject to approval of Managing Director, AP **Civil Supplies Department**.

Communication:

Any communication to be exchanged under this Agreement will have to be addressed to the Signatories of the Agreement or to such authorities who are designated to receive such communications. Authorities designated for this purpose are:

Successful Bidder:

AP Civil Supplies Department:

The Commissioner Civil Supplies Department, Vijayawada-520007.

3.2 SPECIAL CONDITIONS OF CONTRACT (SCC):

--NA--

3.3 BIDLETTER FORM:

BidLetterForm

From:

(Registerednameandaddressofthe bidder.)

To:

TheCommissioner,

AndhraPradeshCivil Supplies Department,

Vijayawada, Andhra Pradesh-520007, Andhra Pradesh – 520007.

Sir,

Having examined the bidding documents and amendments there on, we the undersigned, offer to provide services/execute the works including supply, delivery installation of hardware, firm wares and soft wares as the case may be, in conformity with the terms and conditions of the bidding document and amendments there on, for the following project in response to your tender call dated

Project Title:AP State Civil Supplies Corporation– Establishment of Control Operation & Experience center in, O/oConsumer Affairs, Food & Civil Supplies Department, Vijayawada.

We undertake to provide services/execute the above project or its part assigned to us in conformity with the said bidding documents in accordance with the schedule of prices attached herewith and coverage options made by AP State Civil Supplies Corporationor its user organization.

If our bid is accepted, we undertake to;

1. provide services/execute the work according to the time schedule specified in the bid document,
2. obtain the performance guarantee of a bank in accordance with bid requirements for the due performance of the contract, and
3. agree to abide by the bid conditions, including pre-bid meeting minutes if any, which remain binding upon us during the entire bid validity period and bid may be accepted any time before the expiration of that period.

We understand that you are not bound to accept the lowest or any bid you may receive, nor to give any reason for the rejection of any bid and that you will not defray any expenses incurred by us in bidding.

Place & Date:

Bidder's signature and seal

**FORM OF BID SECURITY
(Demand Guarantee)**

Beneficiary : _____
 _____ **Invitation for Bids No.**
 : _____
 _____ **Date**
 : _____
 _____ **BID GUARANTEE No.**
 : _____
Guarantor : _____

We have been informed that _____ (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its bid (hereinafter called "the Bid") for the execution of _____ under Invitation for Bids No. _____ ("the NIT no.").

Furthermore, we understand that, according to the Beneficiary's conditions, bids must be supported by a bid guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:

- (a) Has withdrawn its Bid during the period of bid validity set forth in the Applicant's Letter of Bid ("the Bid Validity Period"), or any extension thereto provided by the Applicant; or
- (b) Having been notified of the acceptance of its Bid by the Beneficiary during the Bid Validity Period or any extension thereto provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful bidder, upon our receipt of copies of the Contract Agreement signed by the Applicant and the BID SECURITY issued to the Beneficiary in relation to such Contract Agreement; or (b) if the Applicant is not the successful bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the bidding process; or (ii) thirty days after the end of the Bid Validity Period.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

[signature(s)]

POWER OF ATTORNEY FOR LEAD MEMBER OF JOINT VENTURE
(To be executed on appropriate stamp paper)

Whereas the.....(the "Employer") has invited Bids from interested parties for the
Project (the "Project").

Whereas, M/s....., M/s.....and M/s.
 (collectively the "Joint Venture Partners") being Members of the Joint
 Venture are interested in bidding for the Project in accordance with the terms and
 conditions of the Bid Documents in respect of the Project, and

Whereas, it is necessary for the Members of the Joint Venture to designate one of them as
 the Lead Member with all necessary power and authority to do for and on behalf of the Joint Venture
 all acts, deeds and things as may be necessary in connection with the Joint Venture's Bid for
 the Project and its execution.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

We, M/s.....having our registered office at....., and M/s.
 having our registered office at, (hereinafter collectively
 referred to as the "Principals") do hereby irrevocably designate, nominate, constitute,
 appoint and authorize M/s.....having its registered office at.....,
 being one of the Members of the Joint Venture, as the Lead Member and true and lawful
 attorney of the Joint Venture (hereinafter referred to as the "Attorney"). We hereby
 irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for
 and on behalf of the Joint Venture and any one of us during the bidding process and, in the
 event the Joint Venture is awarded the Contract, during the execution of the Project and in
 this regard, to do on our behalf and on behalf of the Joint Venture, all or any of such acts,
 deeds or things as are necessary or required or incidental to the qualification of the Joint
 Venture and submission of its Bid for the Project, including but not limited to signing and
 submission of all applications, bids and other documents and writings, participating in Pre-
 Bid and other conferences, respond to queries, submit information/ documents, sign and
 execute Contracts and undertakings consequent to acceptance of the Bid of the Joint
 Venture and generally to represent the Joint Venture in all its dealings with the Employer,
 and/ or any other Government Agency or any person, in all matters in connection with or
 relating to or arising out of the Joint Venture's Bid for the Project and/ or upon award
 thereof during the period of execution of the Contract.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds
 and things done or caused to be done by our said Attorney pursuant to and in exercise of the
 powers conferred by this Power of Attorney and that all acts, deeds and things done by our
 said Attorney in exercise of the powers hereby conferred shall and shall always be deemed
 to have been done by us / the Joint Venture.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER
OF ATTORNEY ON THIS.....DAY OF.....20.....

For

(Signature, name, designation and address of the first Non-Lead Member)

Witnesses:

1.

(Notarized)

2.

Accepted

.....

(Signature)(Name, title and address of the Attorney/Lead Member) Notes:

- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
- The Contractor should submit along with the Power of Attorney, the extract of the charter documents and documents such as the board or shareholders' resolution / authorization in favour of the persons executing this Power of Attorney on behalf of the Non-Lead Members / Lead Member and the Memorandum and Articles of Association of the Non-Lead Members / Lead Member.
- For a Power of Attorney executed and issued overseas, the document should also be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued and should be duly stamped on receipt in India. However, the Power of Attorney provided by the Contractor from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate.

JOINT VENTURE AGREEMENT
(To be executed on Stamp paper of appropriate value)

THIS JOINT VENTURE AGREEMENT is entered into on this the day of 20...

AMONGST

1. M/s..... Limited, a company incorporated under the Companies Act, 1956 and having its registered office at (hereinafter referred to as the "First Party" which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

2. M/s..... Limited, a company incorporated under the Companies Act, 1956 and having its registered office at (hereinafter referred to as the "Second Party" which expression shall, unless repugnant to the context include its successors and permitted assigns)

The above mentioned First Party & Second Party are collectively referred to as the "Parties" and each is individually referred to as a "Party"

WHEREAS,

- A. represented by its (hereinafter referred to as the "Employer" which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has invited Bids (the "Bids") by its Bid Documents for qualification and selection of Contractors for Project (the "Project").
- B. The Parties are interested in jointly bidding for the Project as members of a Joint Venture (JV) and in accordance with the terms and conditions of the Bid Document in respect of the Project, and
- C. It is a necessary condition under the Bid Document that the members of the Joint Venture shall enter into a Joint Venture Agreement and furnish a copy thereof with the Bid.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

In this Agreement, the capitalized terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the Bid Documents

2. Joint Venture

- 2.1 The Parties do hereby irrevocably constitute a Joint Venture (the "Joint Venture") for the purposes of jointly participating in the Bidding Process for the Project.
- 2.2 The Parties hereby undertake to participate in the Bidding Process only through this Joint Venture and not individually and/ or through any other joint venture / Joint Venture constituted for this Project, either directly or indirectly or through any of their Associates.

3. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

- (a) The First Party shall be the Lead Member of the JV and shall have the Power of Attorney from all members for conducting all business for and on behalf of the JV during the Bidding Process and during the execution of the Contract.
- (b) The Second Party shall be the member of the JV; and

4. Joint and Several Liability

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the Bid Documents and the Contract, under and in accordance with the Contract to be entered into with the Employer.

5. Shares in the JV

- 5.1 The Parties agree that the proportion of shares among the Parties in the JV shall be as follows:

First Party: (Lead Member: At least 51%) Second

Party:

6. Representation of the Parties

Each Party represents to the other Parties as of the date of this Agreement that:

- (a) Such Party is duly organized, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this Agreement;
- (b) The execution, delivery and performance by such Party of this Agreement has been authorized by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/ power of

attorneyinfavourofthepersonexecutingthisAgreementforthedelegationof

power and authority to execute this Agreement on behalf of the Joint Venture Member is annexed to this Agreement, and will not, to the best of its knowledge:

- (i) require any consent or approval not already obtained;
 - (ii) violate any Applicable Law presently in effect and having applicability to it;
 - (iii) violate the Memorandum and Articles of Association, by-laws or other applicable organizational documents thereof;
 - (iv) violate any clearance, permit, concession, grant, license or other governmental authorization, approval, judgment, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or
 - (v) create or impose any liens, mortgages, pledges, claims, security interests, charges or encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;
- (c) this Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and
- (d) there is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its Affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfillment of its obligations under this Agreement.

7. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect during the Contract Period and in accordance with the Contract to be entered into with the Employer, in case the Project is awarded to the Joint Venture. However, in case the Joint Venture is either not qualified for the Project or does not get selected for award of the Project, the Agreement will stand terminated.

8. Miscellaneous

8.1 This Joint Venture Agreement shall be governed by law of India.

- 8.2 The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of the Employer.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED

For and on behalf of the First Party By

.....

Signature Name

Designation

Address

SIGNED, SEALED AND DELIVERED

For and on behalf of the Second Party By

.....

Signature Name

Designation

Address

In the presence of:

Witnesses:

1.

2.

Notes:

- The mode of execution of the Joint Venture Agreements should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

- The Contractor should submit along with the Joint Venture Agreement, the extract of the charter documents and documents such as the board or shareholders' resolution / authorization in favour of the persons executing this Agreement on behalf of the Parties and the Memorandum and Articles of Association of the Parties.
- For an Agreement executed and issued overseas, the document should also be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued and should be duly stamped on receipt in India.

3.4 PAYMENT TERMS:

- The vendor's request(s) for payment shall be made to the AP State Civil Supplies Corporation in writing, accompanied by an invoice describing, as appropriate, the goods/service delivered/ performed.
- Payments shall be made promptly by the AP Civil Supplies department, but in no case later than sixty(60) days after submission of a valid invoice or claim by the vendor as detailed below:
 - o Supply & Installation Payment: 90% of the total value after satisfactory and successful "Supply, Installation, Testing, Commissioning, Integration, Demonstration & Handover" and sign-off from the respective officer-in-charge & remaining 10% after completion of trial run / acceptance test run period i.e., 3 months.
 - o Operations & Maintenance Payment: On post-quarterly basis upon satisfactory service certificate from respective officer-in-charge.
- The currency of payment will be Indian rupees.
- Payment will be made through Cheque/NEFT/RTGS.
- All the payments are subject to standard deduction as mandated by government rules.
- AP State Civil Supplies Corporation will provide a TDS certificate to the successful bidder reflecting such taxes deducted and remitted to corresponding authority.
- All the payments shall be done through Cheque/RTGS/NEFT and currency shall be in Indian Rupees.

3.5 CONTRACT CLOSURE:

The contract with the successful bidder will be closed after completion of all the terms and

formalities like 100% supply and installation, warranty / maintenance / contract / O&M period, payment, PBG return etc.