



उत्तराखण्ड शासन

संस्कृति विभाग, उत्तराखण्ड

ई-निविदा सूचना

संस्कृति विभाग उत्तराखण्ड द्वारा परमार्थ निकेतन, लक्ष्मणझूला, ऋषिकेश में एल0ई0डी0 स्क्रीन, ऑडियो वीडियो सिस्टम स्थापित किये जाने हेतु पंजीकृत इच्छुक निविदादाताओं से ऑनलाईन निविदाएं आमंत्रित की जाती है। सम्बन्धित निविदादाताओं के पास डिजिटल हस्ताक्षर सर्टिफिकेट तथा ई-प्रोक्वोरमेन्ट पोर्टल <https://uktenders.gov.in> में पंजीकृत होना अनिवार्य है।

निविदा संख्या— सं0नि0उ0/दो-3(A.c.acti)/2019-20, दिनांक 6 दिसम्बर, 2019

प्रोजेक्ट की अनुमानित लागत— : Rs. 1,50,00,000/- (रु0 एक करोड़ पचास लाख)

सामग्री का विवरण —

- 1 Video Streaming High Resolution LED Screens (Screen Size 18.90Ft *9.45ft) with Installation
- 2 Content Management Server, Management PC with Software with Installation
- 3 Complete Audio PA System with Installation
- 4 Video System (Camera Setup with Recording and Live Streaming) with Installation

| क्र.सं0 | विवरण | निर्धारित तिथि |
|---------|---|------------------------------------|
| 01 | वेबसाइट www.uktender.gov.in पर निविदा प्रकाशित होने की तिथि | 6 दिसम्बर, 2019 |
| 02 | निविदा प्रपत्र डाउनलोड/उपलब्ध होने की प्रारंभिक तिथि | 07 दिसम्बर , 2019 प्रातः 09.00 बजे |
| 03 | निविदा ऑनलाईन जमा करने की प्रारंभिक तिथि एवं समय | 07 दिसम्बर , 2019 सांय 04.00 बजे |
| 04 | निविदा ऑनलाईन जमा करने की अंतिम तिथि एवं समय | 20 दिसम्बर , 2019 सांय 05.00 बजे |
| 05 | हार्ड कापी में तकनीकी बिड निम्न दस्तावेजों के साथ कार्यालय में उपलब्ध करवाने की अंतिम तिथि— 1-निविदा प्रपत्र शुल्क जी0एस0टी0 सहित — रु0 2,596=00 (निदेशक, संस्कृति निदेशालय उत्तराखण्ड, देहरादून के नाम पर देय होगी) 2-अर्नेस्ट मनी (ई0एम0डी0)— रु0 3,00,000=00 (निदेशक, संस्कृति निदेशालय उत्तराखण्ड, देहरादून के नाम पर देय होगी) | 20 दिसम्बर , 2019 सांय 05.00 बजे |
| 06 | तकनीकी बिड खोले जाने की तिथि व समय | 21 दिसम्बर , 2019 सांय 03.00 बजे |
| 07 | वित्तीय बिड खोले जाने की तिथि व समय | निविदा समिति के निर्णयानुसार |

निविदा प्रपत्र के डाउनलोड एवं अन्य जानकारी हेतु कृपया ई-प्रोक्वोरमेन्ट पोर्टल <https://uktenders.gov.in> देखें तथा अन्य जानकारी हेतु दूरभाष न0 0135-2712595 पर सम्पर्क करें।

निदेशक, संस्कृति निदेशालय उत्तराखण्ड

RISHIKESH

The Gateway to the Garhwal Himalayas, Rishikesh is the Yoga Capital of the world. It is known as the pilgrimage town and regarded as one of the holiest places to Hindus. Hindu sages and saints have visited Rishikesh since ancient times to meditate in search of higher knowledge. The sacred river Ganges flows through Rishikesh. Here the river leaves the Shivalik Hills in the Himalayas and flows into the plains of northern India. Several temples, ancient and new, are along the banks of the Ganges in Rishikesh making it one of the most popular places with not just Indian people but also with people from abroad.

➤ Prominent attraction points in Rishikesh

- Laxman Jhula
- Ram Jhula
- Ganga Ghat
- Triveni Ghat
- Parmarth Niketan
- Shivpuri
- Beatles Ashram

PARMARTH NIKETAN

Parmarth Niketan is the largest ashram in Rishikesh, providing spiritual enlightenment to thousands of pilgrims who come from all corners of the world. Located on the banks of river Ganga, Parmarth Niketan can leave anyone awe struck with the beauty of nature, spiritual simplicity along with a perfect blend of modern amenities. From hosting Bollywood celebrities, politicians and other eminent people to being the home for thousands of people during the International Yoga Festival every year, Parmarth Niketan is one of the major attraction points in Rishikesh.

THE NEED OF LED SCREENS AND SOUND SYSTEM AT PARMARTH NIKETAN

Being the Yoga capital of India, Rishikesh witnesses more than one Lakh people, visiting the place every year. A lot of people along with many

eminent personalities visit the city during the International Yoga Festival conducted at Parmarth Niketan.

On days with a heavy footfall, it gets difficult and unfulfilled sometimes for a lot of devotees to visit and be a part of different religious and spiritual activities on the Ghat.

Considering the challenges faced by the visitors and local masses in Rishikesh to view and participate in the ritual proceedings regularly conducted in the auspicious sacred banks of river Ganges, there is a need to introduce a few IT interventions that can ease the process of being a part of the ritual for a devotee and also help attract more people to the land.

As a value addition for the people and Rishikesh to enhance the participation in the rituals for river Ganges, Puja ceremonies and Yoga festival can be broadcasted on real time basis at different parts of the city to sensitize the local residents and visitors outside the Resort or the Ghats premises about the Puja, ceremonies along with the highlight and focus being on the broadcast of live aarti, music and announcements everyday and during the Yoga Festival from Parmarth Niketan. The LED screen and sound system can also help broadcast shows and messages composed with historic importance of Yoga, Meditation, Rishikesh along with social messages.

RISHIKESH- IT INTERVENTIONS

Being the Yoga Capital of India, Rishikesh sees a footfall of more than a Lakh people in a year. Most of the footfall, prefer to visit the prominent places in the city like Ganga Resort, Parmarth Niketan, Ram Jhulla, Laxman Jhulla and Shimpuri. Evening aarti at Parmarth Niketan in itself sees people ranging from 3000 to 30,000 per day.

On days with a heavy footfall, it gets difficult and unfulfilled sometimes for a lot of devotees to visit and be a part of different religious and spiritual activities on the Ghats.

Considering the challenges faced by the visitors and local masses in Rishikesh to view and participate in the ritual proceedings regularly conducted in the auspicious sacred banks of river Ganges, there is a need

to introduce a few IT interventions that can ease the process of being a part of the ritual for a devotee and also help attract more people to the land.

As a value addition for the people of Rishikesh and the city and to enhance the participation in the rituals for river Ganges, Puja ceremonies can be broadcasted on real time basis at different parts of the city to sensitize the local residents and visitors outside the temple or the Ghats premises about the Puja and ceremonies along with the highlight and focus being on the live broadcast of Aarti from Parmarth Niketan. Along with this, a sound system can help create an attraction point through a Light and sound show reflecting the historic importance of Rishikesh and Yoga along with musical shows.

OBJECTIVE

Every day thousands of devotees visit Rishikesh and have a spiritual dream to witness the magnificent Ganga aarti every day and Yoga sessions during the Yoga festival at the ghat. But due to the platform where the aarti is performed being smaller as compared to the number of people visiting the place it becomes a major problem for devotees to witness the aarti properly.

The idea of having LED Screens and Sound System at different places in and around Parmarth Niketan is to provide a convenient and wonderful experience of the Puja and Aarti rituals along with music sessions happening at the Parmarth Niketan with extended proximity of participation through technology-based real time approach. This will also help in crowd management at the place in peak hours.

ENVISAGED ROADMAP

To implement the envisaged target, Mela Karayalaya has placed an objective to install and commission multiple cameras, LED Variable Message screens catering to the Audio- visual needs of the intended facilitation for citizens.

Variable Message screens shall be installed at identified strategic public places/ locations. The VMS shall broadcast live presentation of the Puja and Aarti at Ghats which is scheduled twice throughout a day.

Also, the VMS screens will demonstrate the public messages in the interest of publicity of a few Govt. schemes such as Swatchahta Abhiyan, traffic mass education, road safety, women safety, various citizen helplines for Govt. services. The VMS system will also be used to communicate information & guidance about traffic based on real time factors, traffic movement intensity and related regulations, diversions etc. to the citizens/ public on the road. They shall also be used for showing emergency/disaster related messages as and when required.

The VMS screens will be complemented with Public address system that shall be used at identified key intersections, public places, market places or those critical locations as identified Competent Authority to make important announcements for the citizens/public. The system shall also deliver pre- recorded messages to the loud speakers attached to them from CD/DVD Players & Pen drives for public announcements.

The system shall contain an IP based amplifier and use PoE power that could drive the speakers. The system shall also contain the control software that could be used to control/monitor all the components of the system that includes Controller, Calling Station & Keypad, Amplifier (Mixing & Booster).

COMMAND & CONTROL CENTRE

The VMS system will be equipped with robust connectivity at all the locations to capture the feeds and broadcast uninterruptedly. Also, the screens will be controlled and monitored by the Integrated Command & Control Centre being developed in Rishikesh. The VMS shall be able to communicate with the Integrated Command and Control Centre System (ICC) using Optical Fibre Leased Line connectivity. Each unit shall be provided with a unique identification number in order to communicate distinctly.

PROPOSED PLACES FOR LED SCREENS AND SOUND SYSTEM

1. Around Parmarth Niketan
2. From Parmarth Niketan to Ram Jhulla

नियम एवं शर्तें व संलग्न करने हेतु अनिवार्य दस्तावेज

- 1- निविदादाता फर्म की पिछले 3 वित्तीय वर्षों की सी0ए0 द्वारा प्रमाणित बैलेंस शीट।
- 2- निविदादाता फर्म का पिछले 3 वित्तीय वर्षों का सी0ए0 द्वारा सत्यापित वांछित कारोबार का प्रमाण पत्र।
- 3- निविदादाता फर्म की पिछले 3 वित्तीय वर्षों की आई0टी0आर0।
- 4- निविदादाता फर्म का पैन कार्ड की छायाप्रति।
- 5- निविदादाता फर्म का जी0एस0टी0 पंजीकरण प्रमाण-पत्र।
- 6- नीचे दिये गये फॉर्मेट में सभी मांगे गये items के मेक एवं मॉडल प्रदर्शित करना अनिवार्य है, items की datasheet/ catalogue/ brochure संलग्न करना भी अनिवार्य है, अन्यथा निविदा निरस्त कर दी जायेगी।
- 7- निविदादाता फर्म/OEM द्वारा पूर्व में (वर्ष 2017-18 तथा 2018-19) क्रियान्वित किये गये प्रोजेक्टों पर सम्बन्धित विभाग/संस्था/कार्यालय द्वारा प्रदत्त संतोषजनक प्रमाण-पत्र की प्रति।
- 8- OEM tender specific authorization letter (MAF)
- 9- निविदा के साथ ₹3,00,000. (₹तीन लाख) मात्र की एफ0डी0आर/ एन0एस0सी0/सी0डी0आर0 धरोहर धनराशि (Earnest Money) जो कि निदेशक, संस्कृति निदेशालय, उत्तराखण्ड, देहरादून के नाम बन्धक हो, संलग्न करना अनिवार्य है।
- 10- निविदा प्रपत्र का मूल्य जी0एस0टी0 सहित ₹2,596/- बैंक ड्राफ्ट के माध्यम से जो देहरादून में देय होगा संलग्न करना अनिवार्य है।।
- 11- Earnest Money तथा निविदा शुल्क पृथक-पृथक सील बंद लिफाफों में निर्धारित तिथि तक पंजीकृत डाक/स्पीड पोस्ट/सीधे जमा करना अनिवार्य है। निर्धारित तिथि के पश्चात् प्राप्ति स्वीकार नहीं की जायेगी।
- 12- निविदा स्वीकृति के उपरान्त फर्म को जमानत राशि (Security Money) के रूप में ₹0 7,50,000/- (₹सात लाख पचास हजार) मात्र की एफ0डी0आर/एन0एस0सी0/सी0डी0आर0 धरोहर धनराशि के रूप में निदेशक, संस्कृति निदेशालय, उत्तराखण्ड, देहरादून के नाम बन्धक हो, जमा करना होगा जिसकी वैधता 05 वर्ष होनी चाहिए।
- 13- निविदा स्वीकृति प्रपत्र हस्ताक्षर मोहर के साथ जमा करना अनिवार्य है, अन्यथा निविदा निरस्त कर दी जायेगी।
- 14- फर्म का उत्तराखण्ड में पंजीकरण प्रमाण-पत्र।
- 15- सामग्री को स्थल तक ले जाने तथा निर्दिष्ट स्थान पर स्थापित करने तथा 05 वर्ष के O&M सहित दरें प्रदान की जायेंगी, नियमानुसार GST की दरें पृथक रूप से अंकित करें।
- 16- Quoted products निर्दिष्ट स्थल पर इंस्टॉलेशन उच्च गुणवत्ता के साथ किया जायेगा।
- 17- सामग्री का निर्दिष्ट स्थल पर इंस्टॉलेशन उच्च गुणवत्ता के साथ किया जायेगा। एल0ई0डी0 स्क्रीन ऑल वेदर तथा निर्धारित मापदण्डों के आधार पर स्थापित की जायेगी।

- 18- साउण्ड सिस्टम हेतु स्पीकर ऑल वेदर उच्च तकनीकी के स्थापित किये जायेंगे।
- 19- सशर्त निविदाएं मान्य नहीं होगी।
- 20- निविदा में अंकित सामग्री आपूर्ति आदेशों के अनुसार निर्धारित समय में आपूर्ति न करने की दशा में बन्धक धनराशि जब्त करने का अधिकार विभाग को होगा। द्वि-निविदा (तकनीकी तथा वित्तीय) आमंत्रित है। (फर्म की तकनीकी निविदा/शर्तें पूर्ण होने पर ही वित्तीय निविदा खोली जायेगी)
- 21- निविदादाता द्वारा तकनीकी बिड निर्धारित प्रपत्र में तथा वित्तीय बिड (Bill of Quantity) में प्रस्तुत करनी होगी। तकनीकी बिड के प्रत्येक पृष्ठ पर निविदादाता द्वारा हस्ताक्षर करना अनिवार्य होगा।
- 22- फर्म का सम्बन्धित कार्य का Black Listed ना होने का नोटरी द्वारा प्रमाणित शपथ पत्र 100/- रु० के स्टाम्प पेपर पर प्रस्तुत करना अनिवार्य है।
- 23- निदेशक, संस्कृति निदेशालय उत्तराखण्ड को समस्त निविदाएं बिना कारण बताए निरस्त करने का पूर्ण अधिकार होगा।
- 24- फाईनेंशियल बिड बी0ओ0क्यू0 में निविदादाता द्वारा ऑन लाईन दी जायेगी।
- 25- निविदादाता करने वाली फर्म का पिछले 3 वित्तीय वर्षों का सालाना टर्न ओवर कम से 2 करोड़ रुपये होना आवश्यक है।
- 26- OEMs/निविदादाता फर्म को कम से कम 3 समान प्रकार के प्रोजेक्ट को सफलतापूर्वक क्रियान्वित करने का अनुभव हो, जिसमें से कम से कम एक प्रोजेक्ट एक वर्ष पुराना हो।
- 27- बिडर का ESIC में पंजीकरण अनिवार्य है एवं इसका रजिस्ट्रेशन सर्टिफिकेट लगाना अनिवार्य है
- 28- OEMs का सालाना टर्न ओवर कम से कम 100 करोड़ रुपये होना आवश्यक है।
- 29- पिछले 03 वर्षों से OEMs का भारत में सर्विस सेंटर होना अनिवार्य है. सर्विस सेंटर्स की डिटेल्स संलग्न की जाये।

नोट— हमने विभाग द्वारा निर्धारित शर्तों का पूर्ण अध्ययन कर लिया है। विभाग द्वारा मांगी गई सूचनायें हमारी फर्म द्वारा सही-सही दी गई हैं। यदि कोई जानकारी असत्य पायी गई तो फर्म इसके लिये स्वयः उत्तरदायी रहेगी।

(बीना भट्ट)

निदेशक

निविदादाता के हस्ताक्षर.....

नाम.....

Other Conditions

1. Purchaser means Directorate of Culture, Uttarakhand
2. The Bidder shall supply equipment/components including associated accessories and software as under this contract and install, commission, integrate, manage and maintain those components during the entire period of contract.
3. The bidder should provide a letter of assurance from his OEM that irrespective of who the bidder is the OEM shall ensure that the equipment/components being supplied by him for the purchaser will not be declared "End Of Sale" or "End of Support" for a minimum of 7 Years, from the date of launch, If the same is de-supported by the OEM for any reason whatsoever, the OEM shall replace it with an equivalent or better substitute that is acceptable to Purchaser without any additional cost to the Purchaser and without impacting the performance of the solution in any manner whatsoever.
4. The Bidder shall employ appropriate advanced technology and engineering practices and safe and effective equipment, machinery, material and methods. The Bidder shall always act, in respect of any matter relating to this Contract, as faithful advisors to the Purchaser and shall, at all times, support and safeguard the Purchaser's legitimate interests in any dealings with Third Parties.
5. That the Bidder shall procure all the necessary permissions and adequate approvals and licenses for use of various software and any copyrighted process/product free from all claims, titles, interests and liens thereon and shall keep the Purchaser indemnified in relation thereto.
6. All Systems Deployed/Installed by the bidder must be capable of GUI/Software based Control/Management and signalling.
7. The Bidder shall Provide all Connectivity/Networking Diagrams between End Devices and would make all necessary arrangements (Fiber

Termination in LIU) at the proposed Site so that existing network can be connected to State Network.

8. Bidders should ensure that Advanced/Latest Cabling standards (Fiber/Cat-6A or better) should be used between end devices in a safe manner in order to minimize Damage to cabling and reduce Interference/Noise/Crosstalks/Latency in the System.

Warranty

1. A comprehensive on-site warranty and Annual Maintenance support on all goods supplied under this Contract shall be provided by the respective Original Equipment Manufacturer (OEM) through Bidder's engineers till the end of the Contract. It include support for all hardware equipments and all updates and patches to the respective Software and for the above stated period.
2. In case of issues with provided equipments, the Bidder shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without prejudice to any other rights which the Purchaser may have against the Bidder under the Contract

Scope of Contract

1. Purchaser has engaged the Bidder for Supply, Installation and Maintenance of Audio/Video Equipments for Govt. of Uttarakhand
2. If any services, functions or responsibilities not specifically described in this Contract are an inherent, necessary or customary part of the Services or are required for proper performance or provision of the Services in accordance with this Contract, they shall be deemed to be included within the scope of the work to be delivered for the Charges, as if such services, functions or responsibilities were specifically described in this Contract.
3. The Purchaser or Purchaser's Technical Representative reserves the right to amend any of the terms and conditions with mutual agreement in relation to the Scope of Work and may issue any such directions which are not necessarily stipulated therein if it deems necessary for the fulfilment of the Scope of Work.

Transit Risks

Any damage during transit due to whatsoever reason, cost shall be borne by the successful bidder.

Evaluation of Bids

1. The Bidder should not be involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this contract. If at any stage of Tendering process or during the currency of the Contract, any suppression / falsification of such information is brought to the knowledge of the Purchaser, the Purchaser shall have the right to reject the bid or terminate the contract, as the case may be, without any compensation to the Bidder.
2. The Purchaser will examine the bids to determine whether they are complete, whether the bid format confirms to the Tender requirements, whether any computational errors have been made, whether required EMD have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
3. A bid determined as not substantially responsive will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the nonconformity.
4. When deemed necessary, during the tendering process, the Purchaser may seek clarifications or ask the Bidders to make Technical presentations on any aspect from any or all the Bidders. However, that would not entitle the Bidder to change or cause any change in the substance of the tender submitted or price quoted.

Local Conditions

1. It will be incumbent upon each Bidder to fully acquaint oneself with the local conditions and other relevant factors at the proposed Setup site/s which would have any effect on the performance of the contract and / or the cost.
2. The Bidder is expected to make a site visit to the proposed sites to obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into contract. Obtaining such information shall be at Bidder's own cost.
 1. Failure to obtain the information necessary for preparing the bid and/or failure to perform activities that may be necessary for the providing services before entering into contract will in no way relieve the successful Bidder from performing any work in accordance with the Tender documents.
 2. The bidder and any of its personnel or agents will be granted permission by Govt of Uttarakhand to enter its facilities at various locations in the state for the implementation of project. The Bidder shall at its own risk, peril, cost and liability undertake site visits to designated facilities in the state.

Reporting Progress

1. During & Post implementation, the Bidder shall submit to the Purchaser, MIS reports as an ongoing basis. Extracts of the progress report to be termed, as “Executive Summary” shall be submitted. Periodic meetings shall be held between the representatives of the Purchaser and the Bidder once in every 15 days during the implementation phase to discuss the progress of implementation.
2. The Bidder shall ensure that the respective solution teams involved in the execution of work are part of such meetings.
3. In case during execution of works, the progress falls behind schedule or does not meet the Tender requirements, Bidder shall deploy extra manpower/resources to make up the progress or to meet the Tender requirements. All time and cost effect in this respect shall be borne, by the Bidder within the contract value.

Onsite Maintenance and Support Services

The scope of work for this activity includes providing comprehensive maintenance with spare parts for all IT Infrastructure supplied for this project for a period of five years from go-live. This includes:

- a. Repairing of defective parts/components,
- b. Replacement of parts/components beyond repair with parts/components of same or better Specifications ensuring compatibility,
- c. Providing suitable standby for parts/components with same or better specifications till the time the Original part/component is repaired or replaced so that daily business is not affected,

संस्कृति विभाग, उत्तराखण्ड

संस्कृति निदेशालय, एम0डी0डी0ए0 कालोनी, चन्दर रोड, डालनवाला, देहरादून।

ई-मेल: directorculture@gmail.com, dir-culture@uk.gov.in दूरभाष नं0-0135-2712595

तकनीकी बिड

- 1- फर्म का नाम—
- 2- पता—
- 3- दूरभाष—
- 4- फर्म के मालिक/साझेदारों का नाम—
- 5- व्यापार कर/सेवाकर/जी0एस0टी0 के अन्तर्गत पंजीकरण का प्रमाण-पत्र (पंजीकरण प्रमाण-पत्र की प्रति संलग्न करें)
- 6- फर्म के आयकर की प्रति (पैन नं0)—
- 7- विगत तीन वर्ष (2016-17, 2017-18 एवं 2018-19) के आयकर रिटर्न की प्रति—
- 8- विगत तीन वर्ष (2016-17, 2017-18 एवं 2018-19) का क्रियान्वित किये गये प्रोजेक्टों पर सम्बन्धित विभाग/संस्था/कार्यालय द्वारा प्रदत्त संतोषजनक प्रमाण-पत्र की प्रति।
- 9- धरोहर राशि का विवरण—
एफ0डी0आर0/डी0डी0नं0

दिनांक—

बैंक का नाम—

- 10- विगत 03 वर्ष (2016-17, 2017-18 तथा 2018-19) का आय-व्यय विवरण (सी0ए0 द्वारा प्रमाणित अंकेक्षित लेखों की प्रति संलग्न करें)।
- 11- फर्म का विगत 03 वर्षों (2016-17, 2017-18 तथा 2018-19) का वार्षिक टर्नओवर न्यूनतम रु0 2.00 करोड़ प्रति वर्ष।
- 12- राजकीय विभाग/संस्थान से विधिक विवाद न होने/किसी सरकारी/अर्द्धसरकारी संस्थान द्वारा काली सूची में न डाले जाने का नोटरी द्वारा प्रमाणित पत्र।
- 13- उत्तराखण्ड के 01 राजपत्रित अधिकारी द्वारा प्रदत्त नवीनतम चरित्र प्रमाण-पत्र।
- 14- अन्य विवरण (यदि कोई हो)।
- 15- संलग्नों का विवरण।
मैं/हम लिखित रूप से अपनी सहमति देता/देते/हूँ/हैं कि निविद प्रपत्र उल्लिखित सभी नियम शर्तें मुझे/हमें मान्य हैं तथा वित्तीय निविदा (बी0ओ0क्यू) में अंकित की गई दरों पर सामग्री आपूर्ति के लिये मैं/हम तैयार हूँ/हैं यदि मुझे आपूर्ति आदेश निर्गत किया जाता है तो मैं/हम रुपये 100.00 के गैर अदालती स्टाम्प पेपर पर औपचारिक अनुबन्ध के लिये तैयार हूँ/हैं।

निविदाता के हस्ताक्षर व मुहर

निविदादाता का नाम व पूरा पता

दूरभाष नं0—

स्थान:

दिनांक:

Documents to be enclosed (To be Indexed by the bidder as per following order).

| Sl. No. | Documents | Yes / No |
|---------|---|----------|
| 1. | Proof of GST Registration | |
| 2. | Proof/certificate of CA Certified turnover of Rs. 02 crores | |
| 3. | Balancesheet of last three financial years of the firm | |
| 4. | ITR of last three financial years of the firm | |
| 5. | Proof of office registration in Uttarakhand of the firm | |
| 6. | EMD & Tender fees | |
| 7. | Signed & Stamped copy of tender document | |
| 8. | Tender acceptance letter in prescribed format with signature & stamp | |
| 9. | Make & Model (Quoted Products) item-wise accompanied with Datasheets/Catalogue/ Brochure | |
| 10. | Required MAF Certificates | |
| 11. | Certificates copy like BIS, UL, FCC etc wherever is required | |
| 12. | Compliance sheet | |
| 13. | Proof of non-blacklist on stamp paper | |
| 14. | Copy of PAN Card | |
| 15. | Copy of GST Registration | |
| 16. | Work orders of similar projects | |
| 17. | Satisfactory completion certificates obtained from the Department/ Office | |
| 18. | ESIC Registration Proof | |
| 19. | OEMs turnover certificate | |
| 20. | Details of service centers | |

Technical Specifications

Item 1: Outdoor LED Display-Pixel Pitch 10mm

| Sl.No. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|--------|---|---|--------------------------------------|------------|
| | Make/Model (For Quoted Product) | | | |
| 1 | Display Size (WXH) | Minimum 18.90ft X 9.45ft or bigger | | |
| 2 | Pixel Pitch | 10 mm or better (Lower pitch is regarded as better) | | |
| 3 | LED Configuration | RGB 3 in 1 SMD | | |
| 4 | Pixel Density | Minimum 10,000 pixels per sqm or better | | |
| 5 | Half Gain Horizontal/Vertical Viewing Angle | H 140 deg/V90 deg or better | | |
| 6 | Refresh Rate | >=3840 Hz or better | | |
| 7 | Temp Range | -20 to +50 Degrees C or better | | |
| 8 | Gray Scale Processing | 16 bit or better | | |
| 9 | Brightness (Calibrated) | 5500cd/m ² or better | | |
| 10 | Maximum Power Consumption | 850w/sqm or lower | | |
| 11 | Power Input | 100~240VAC | | |
| 12 | Individual Title/Cabinet Dimensions | As per the OEM | | |
| 13 | Contrast Ratio | 3500:1 or better | | |
| 14 | Access For Maintenance | Front or Rear | | |
| 15 | IP Level | Front IP65/Rear IP54 OR | | |

| | | | | |
|----|--|--|--|--|
| | | higher | | |
| 16 | Unit Case Material | As per the OEM | | |
| 17 | International Safety Certifications (Mandatory to submit along with the bid) | CE certification , UL, FCC Certification, BIS (Beaureau of Indian Standards), ROHS, Quality Management System 9001:2015 | | |
| 18 | Auto Brightness Sensor | Auto Brightness Sensor to be installed along with the screen to monitor the ambient brightness and ensure automatic optimum brightness levels during the day and night time. | | |
| 19 | Compulsary Requirement | LED Tiles and LED Controller should be from same OEM to ensure compatibility between components and smooth after service support from single OEM | | |
| 20 | Rack Frame Power Distribution Unit | To be supplied with Led screen | | |

Item 2: LED Controller

| Sl. no. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|---------|---------------------------------|--|--------------------------------------|------------|
| | Make/Model (For Quoted Product) | | | |
| 1 | Control Port | RS232 | | |
| 2 | Signal Input | DVI with resolution capability of 1920 X 1200 or better and HDMI,VGA | | |

| | | | | |
|---|-----------------------|----------------------|--|--|
| 3 | Signal Output | RJ45 X2, Ethernet X2 | | |
| 4 | Maximum Load Capacity | 2.3 Million Pixels | | |
| 5 | Input Voltage | 100~240VAC | | |
| 6 | Operating Temperature | 5~40 Deg C | | |

Item 3: Media Player

| S# | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|----|---|--|--------------------------------------|------------|
| | Make/Model (For Quoted Product) | | | |
| 1 | Media Player with built in Playout software | Of reputed manufactures, compatible with LED Supplied (MAF Certificate to be enclosed) | | |
| 2 | Processor | Intel/Other High End | | |
| 3 | OS | Linux / Android/ Windows | | |
| 4 | Internal drive | Solid State Drive 60 GB or More | | |
| 5 | Output | HDMI/Display Port for Graphics | | |
| 6 | Operating System Video | At least should support MPEG-4,WMV,Quicktime or better | | |
| 7 | Audio | MP3, WAV | | |
| 8 | Image | JPEG, PNG,BMP,GIF | | |
| 9 | Text | Multiple fonts, speeds, colors, | | |

| | | | | |
|----|--------------------|--|--|--|
| | | animations | | |
| 10 | Internet | HTML, XML Files, RSS newsfeeds or better | | |
| 11 | Others Video Zones | 1 or more | | |
| 12 | Network | Ethernet 1000/100/10(RJ45) and WiFi | | |

Item 4: Mechanical Structure For Mounting of LED Walls

| Sl. No. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|---------|-----------------------------------|---|--------------------------------------|------------|
| 1 | Make / Model (For Quoted Product) | | | |
| 2 | Mounting Structure | LED wall should be mounted on bipole. Structure should be earthed properly (Earthing resistance: 02 ohm) and provided with lightning arrestor as well which should be properly shielded against any damage. | | |
| 3 | Material | Should be made from mild steel and painted black along with antirust coating. | | |

Item 5: Outdoor Cabinet Commercial Air Conditioner

| Sl. No | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|--------|-----------|----------------|--------------------------------------|------------|
|--------|-----------|----------------|--------------------------------------|------------|

| | | | | |
|---|---------------------------------|--|--|--|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | Outdoor Cabinet Air Conditioner | As per the OEM specifications which should be compatible for given screen. | | |

Item 6: Desktop PC

| Sl. No. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|---------|---------------------------------|-------------------------|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | Operating System | WIN10 Professional | | |
| 3 | HDD | 1 TB or higher | | |
| 4 | RAM | 8GB or higher | | |
| 5 | Processor | i5 8th Gen / i7 8th gen | | |
| 6 | Monitor (With DVI/HDMI I/P) | 22" | | |
| 7 | Display Output | DVI/HDMI/DP | | |
| 8 | Display Memory/Graphic Card | 1GB or higher | | |
| 9 | Ethernet/LAN + Wifi | 10/100/1000 Mbps | | |

Item 7: Communication Interface Device

(This device shall be used to communicate with serial port devices like led controller for brightness control, ON/OFF)

| Sl. no. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|---------|---------------------------------|---|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | Ethernet Interface | | | |
| 2.1 | Number of Ports | One 8 pin RJ45 | | |
| 2.2 | Speed | 10/100/1000 Mbps, auto MDI/MDIX | | |
| 2.3 | Serial Interface | | | |
| 2.4 | Number of Ports | One | | |
| 2.5 | Serial Standards | RS-232 on DB 9 connector | | |
| 3 | Serial Communication Parameters | | | |
| 3.1 | Data Bits | 5,6,7,8 | | |
| 3.2 | Stop Bits | 1,1.5,2 | | |
| 3.3 | Parity | None, Even,Odd,Space,Mark | | |
| 3.4 | Flow Control | RTS/CTS and DTR/DSR (RS-232 only), XON/XOFF | | |
| 3.5 | Baudrate | 110 bps to 230.4 kbps | | |
| 3.6 | Serial Signals | | | |
| 3.7 | RS-232 | TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND | | |
| 4 | Software | | | |
| 4.1 | Network Protocols | ICMP, IPv4,TCP, UDP, DHCP, BOOTP, Telnet, | | |

| | | | | |
|-----|---------------------------|--|--|--|
| | | DNS, SNMP V1, ARP, HTTP, SMTP | | |
| 4.2 | Configuration Options | Web Console, Serial Console, Telnet Console, Windows Utility | | |
| 5 | Physical Characteristics | | | |
| 5.1 | Housing | Metal | | |
| 5.2 | Weight | 340 g or less | | |
| 5.3 | Dimensions | With ears: 75.2 x 80 x 22mm | | |
| 6 | Environmental | | | |
| 6.1 | Operating Temperature | 0° to 55° C | | |
| 6.2 | Ambient Relative Humidity | 5 to 95%(non-condensing) | | |
| 7 | Power Requirements | | | |
| 7.1 | Input Voltage | 12 to 48 VDC | | |
| 7.2 | Input Current | 128.7mA@12VDC | | |
| 8 | Certifications | | | |
| 8.1 | Safety | UL 60950-1 | | |
| 8.2 | EMC | EN 55022/24 | | |

Item 8: Network Switch

| Sl. No . | Specifications | Cross-Reference to Product Catalogue | Compliance |
|----------|--|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | |
| 2 | Minimum 24 ports of 10/100/1000 base-T | | |

| | | | |
|----|--|--|--|
| 3 | And 2 SFP combo uplink ports. | | |
| 4 | Switch Should have minimum 8 PoE Ports. | | |
| 5 | Rack mountable and should support stacking of minimum 4 switches with 40Gbps of dedicated stacking bandwidth | | |
| 6 | 40 Gbps or higher Backplane capacity. | | |
| 7 | Should support Non-blocking hardware architecture | | |
| 8 | All interfaces should provide wire speed forwarding for both Fiber and copper modules | | |
| 9 | Support for at least 1000 VLANs & 16k MAC address | | |
| 10 | It should support IGMP snooping v1 & v2 | | |
| 11 | It should have static IP routing from day 1 | | |
| 12 | Switch should support 8 hardware queues per port | | |
| 13 | Switch should support LLDP and LLDP-MED capabilities | | |
| 14 | Should support Dynamic Host Configuration Protocol (DHCP) snooping, dynamic ARP inspection (DAI) | | |
| 15 | Should support Secure Shell (SSH) Protocol and Simple Network Management Protocol Version 3 (SNMPv3). | | |
| 16 | Switch needs to have console port for administration & management | | |
| 17 | Management using CLI, GUI using Web interface should be supported | | |
| 18 | FTP/TFTP for upgrading the operating System | | |
| 19 | IEEE 802.1x support | | |
| 20 | IEEE 802.1D Spanning-Tree Protocol | | |
| 21 | IEEE 802.1p class-of-service (CoS) prioritization | | |

| | | | |
|----|--|--|--|
| 22 | IEEE 802.1Q VLAN | | |
| 23 | IEEE 802.3 10BASE-T specification | | |
| 24 | IEEE 802.3u 100BASE-TX specification | | |
| 25 | Switch should able to support management via CLI, Web interface | | |
| 26 | SNMP v1,v2,v3 | | |
| 27 | Switch should be manageable through both IPv4 & IPv6. | | |
| 28 | The switch should support zero touch provisioning (ZTP) feature allows a DHCP server to push configuration | | |
| 29 | Proposed Solution should have minimum 7 years EOS/EOL from the date of UAT | | |
| 30 | 5 years OEM comprehensive Onsite Warranty and support for both hardware and software | | |

Item 9: Router

| Sl. No. | Specifications | Cross-Reference to Product Catalogue | Compliance |
|---------|--|--------------------------------------|------------|
| 1 | Make/ model (For Quoted Product) | | |
| 2 | Architecture & Performance | | |
| 3 | The router should be modular | | |
| 4 | Router should have redundant power supplies. | | |
| 5 | The Router should have WAN performance of minimum 01 Gbps with Services and Scalable up to 10 Gbps from Day 1 | | |
| 6 | Should have minimum 4 Gb of DRAM and 4Gb of Flash , should support expandability of DRAM to 8 Gb | | |
| 7 | The router should have following wire speed interfaces | | |
| 8 | 2-1000BASE SFP Ports, | | |
| 9 | Minimum 4-10/100/1000BASE-T RJ-45 Ports, | | |
| 10 | 4-Serial / E1 Ports populated from day 1 with cables. For V.35 connectivity in E1 should provide appropriate convertor, Scalable to 8 Serial/E1. | | |
| 11 | Router Should Support at least 1 10G port | | |
| 12 | High Availability Features | | |

| | | | |
|----|--|--|--|
| 13 | Should have 802.1ag, Y.1731, BFD for IPV4 and IPV6, VRRP | | |
| 14 | Router should support adaptive Routing Adjustment by doing routing path selection based on criteria like packet loss, delay , jitter,RT and Traffic load to intelligently control the traffic to maximize the Quality of user Experience | | |
| 15 | Feature to be supported | | |
| 16 | Dynamic Host Configuration Protocol (DHCP) | | |
| 17 | IP Multicast, PIM SM, PIM SSM, IGMP, MLD, RP, Next generation Multicast using MPLS LSP. | | |
| 18 | Intermediate System to Intermediate System (IS-IS) | | |
| 19 | Label Distribution Protocol (LDP) | | |
| 20 | Multi-protocol Label Switching (MPLS) , MPLS FRR | | |
| 21 | L2 VPN, L3 VPN, VPLS | | |
| 22 | IPv4 Features | | |
| 23 | Support for RIP Version 2, OSPF, ISIS, BGP | | |
| 24 | Support for BGP confederations / Route Reflectors | | |
| 25 | Integrated routing and bridging support | | |
| 26 | Should support Bridge domain and virtual switch or VRF instances or Equivalent | | |
| 27 | Security features | | |
| 28 | Policing/Rate-limiting of traffic to CPU | | |
| 29 | Router should support minimum 1000 IPsec VPN Tunnel | | |
| 30 | The router shall support dynamically established MP2MP IPsec Based VPN Tunnels matching traffic conditions. | | |
| 31 | IPv6 Features | | |
| 32 | Should support IPv6 ping | | |
| 33 | Should support IPv6 trace route | | |
| 34 | Should support Stateless Auto configuration | | |
| 35 | Should support RIPng, OSPFv3, VRRPv6, MLD | | |
| 36 | Should support IPv6 L3 forwarding | | |
| 37 | Should support PIM for Ipv6 multicast | | |
| 38 | Should support IPv6 ACL | | |
| 39 | Should support IPv6 traffic over MPLS LSPs | | |
| 40 | IP/MPLS features | | |
| 41 | Route redistribution and Route filtering | | |
| 42 | MPLS features LDP, L2VPN, | | |
| 43 | Traffic engineering with RSVP-TE, | | |
| 44 | Fast reroute Link Node and path protection | | |
| 45 | Policy Based Routing (PBR) | | |
| 46 | Support MPLS (LDP,L2VPN)and traffic engineering with RSVP-TE | | |

| | | | |
|----|---|--|--|
| 47 | QoS Classifications | | |
| 48 | 802.1Q | | |
| 49 | Egress policy | | |
| 50 | Strict priority queuing (LLQ) – egress | | |
| 51 | WRED (egress) | | |
| 52 | Trust 802.1p/DSCP (ingress) | | |
| 53 | Per port and per queue shaping | | |
| 54 | 8 hardware queues per port | | |
| 55 | Performance Numbers | | |
| 56 | Minimum 20K IPv4 and minimum 20K IPv6 routes with minimum 6 K Multicast routes | | |
| 57 | OAM & Monitoring Features | | |
| 58 | 802.3ah (Ethernet transport OAM □UDLD equivalent), 802.1ag, RMON | | |
| 59 | Network Management | | |
| 60 | SNMP: Support for Minimum SNMP version 2 & upgradable to version 3 shall be provided. | | |
| 61 | Console or Out□of –band Management: The Router shall have console management access | | |
| 62 | The Router shall support Network Time Protocol (NTP) as per RFC 1305 or SNTP (simple NTP) as per as per RFC 2030 | | |
| 63 | Certification | | |
| 64 | The router should be EAL 3/NDPP certified under Common Criteria. | | |
| 65 | The Router should be IPv6 complaint from Day 1 | | |
| 66 | The Router should have ZTP capabilities | | |
| 67 | Router in future should be able to migrate to software defined WAN by adding the Controller in the central location . | | |
| 68 | Proposed Solution should have minimum 7 years EOS/EOL from the date of UAT | | |
| 69 | 5 years OEM comprehensive Onsite Warranty and support for both hardware and software | | |

Item 10: Loudspeaker

| SL.No. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|--------|-------------------------------------|----------------|--------------------------------------|------------|
| | Make/Model (For Quoted Product) | | | |
| 1 | Effective frequency range (+/-3 dB) | 60-15 khz | | |

| | | | | |
|----|----------------------------------|---|--|--|
| 2 | Long term power Handling | 200 watts or better | | |
| 3 | Sensitivity (SPL / 1 W @ 1 m) | 91 dB SPL | | |
| 5 | Nominal Coverage Pattern (H × V) | 100° × 100° or better | | |
| 6 | Maximum peak SPL | 116 db or better | | |
| 7 | Rated impedance | 8 ohms | | |
| 8 | Transducers | Eight (8) 4.5" (114 mm) full-range environmental drivers / 1 X 8" LF driver & 1 X 1" HF or better | | |
| 9 | Enclosure material | Mica-reinforced structural foam, textured / High impact polymer | | |
| 10 | Grille material | Powder-coated steel grille | | |
| 11 | Environmental | IP-55 or better | | |

Item 11: Subwoofer

| SL.No. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|--------|-------------------------------------|---|--------------------------------------|------------|
| | Make/Model (For Quoted Product) | | | |
| 1 | Effective frequency range (+/-3 dB) | 40-280 Hz or better | | |
| 2 | Long term power Handling | 800 watts or better | | |
| 3 | Sensitivity (SPL / 1 W @ 1 m) | 94 dB SPL | | |
| 4 | Nominal dispersion | Omni-directional below 200 Hz or better | | |
| 5 | Maximum peak SPL | 123 dB | | |
| 6 | Rated impedance | 4 or 8 ohms | | |

| | | | | |
|----|--------------------|--|--|--|
| 7 | Transducers | LF: Two (2) 12" (305 mm) woofers with 4" (102 mm) | | |
| 8 | Enclosure material | Birch Plywood or better | | |
| 9 | Grille material | 16-gauge perforated stainless steel grille with powder-coated finish or Powder coated galvanized | | |
| 10 | Environmental | Outdoor per IEC 529 IPX5 or IP 55 | | |

Item 12: Custom Bracket

| Sl.No. | Parameter | Specifications | Compliance |
|--------|----------------|----------------|------------|
| 1 | Make / Model | | |
| 2 | As per the OEM | | |

Item No. 13. Digital Power Amplifier

| Sl. No. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|---------|---------------------------------|-------------------------------------|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | Channel | Four channel | | |
| 3 | Rated Power Output | 2 x 1000W @ 4Ω, 2 x 1000W @ 70/100V | | |
| 4 | Voltage Gain | 36 dB or better | | |
| 5 | Signal to Noise Ratio | >102 dBA | | |
| 6 | Total Harmonic Distortion | <0.4% | | |
| 7 | Damping Factor | As per OEM | | |
| 8 | Frequency Response | 20Hz to 20kHz | | |

| | | | | |
|----|----------------------|---|--|--|
| 9 | Crosstalk | >65dB or better | | |
| 10 | Input Impedance | > 20 Kohm or better | | |
| 11 | Display | As per OEM | | |
| 12 | Built-in DSP feature | As per OEM | | |
| 13 | A-D conversion | 48kHz, 24-bit floating point | | |
| 14 | Cooling | Temprature controlled fans, front to rear | | |
| | | | | |

Item No. 14. Wired handheld Microphone

| Sl. No. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|---------|----------------------------------|------------------------|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | Transducer Type | Dynamic | | |
| 3 | Operating Principle | As per OEM | | |
| 4 | Polar Pattern | Super Cardioid | | |
| 5 | Frequency response: Close miking | 30-17kHz or better | | |
| 6 | Distant miking (measured at 1 m) | 55-18 kHz or better | | |
| 7 | Nominal Impedance | 350 Ω or better | | |
| 8 | Load Impedance | 2 k Ω | | |
| 9 | Connection | XLR, 3-pin, Male | | |

Item No. 15. Instrumental Microphone

| Sl. No . | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|----------|----------------------------------|--------------------|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | Transducer Type | Condenser | | |
| 3 | Operating Principle | As per OEM | | |
| 4 | Polar Pattern | Cardioid | | |
| 5 | Frequency response: Close miking | 20-20kHz | | |
| 6 | Distant miking (measured at 1 m) | 35-20kHz or better | | |
| 7 | Nominal Impedance | 200 Ω | | |
| 8 | Max SPL | 140 db or better | | |
| 9 | Load Impedance | 1 k Ω | | |
| 10. | Connection | XLR, 3-pin, Male | | |

Item No. 16. Mixer

| Sl. No . | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|----------|---------------------------------|-------------------|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | FREQUENCY RESPONSE | 10 Hz ÷ 55000 kHz | | |

| | | | | |
|---|--------------------------|------------------------|--|--|
| 3 | MIC Input | 4 mono & 3 Stereo line | | |
| 4 | Internal Digital Effects | 99 Preset | | |
| 5 | THD + N | 0.03% | | |
| 6 | Power Supply | External | | |
| 7 | Phantom Power | 48 | | |
| 8 | Power Consumption | 24W | | |

Item No. 17. Digital Signal Processor

| Sl. No. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|---------|---------------------------------|--|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | Signal Processor/CPU | 32-bit fixed/floating-point DSP 456 MHz/ARM Cortex-A8 600 MHz | | |
| 3 | Input Channels | 12 balanced, mic/line level | | |
| 4 | Output Channels | 8 balanced, line level | | |
| 5 | Frequency Response | 18 Hz to 20 kHz | | |
| 6 | Audio Latency | 1.05 ms (analog in to analog out) | | |
| 7 | Sample Rate | 48 kHz | | |
| 8 | THD | < 0.002 % | | |
| 9 | Dynamic Range | > 115 dB, A-weighted 20 Hz – 20 kHz, analog input to analog output | | |
| 10. | Dante Network Port | 64 x 64 channel | | |
| 11. | GPIO | 5x5 expandable general-purpose control | | |

| | | | | |
|-----|--------------------------------|--------------------------|--|--|
| 12. | Channel Separation (Crosstalk) | < 108 dB | | |
| 13. | Signal-to-Noise Ratio | 90 dB | | |
| 14. | Dynamic Range | > 115 dB | | |
| 15. | Network Control | Ethernet (RJ-45), 1 Gbps | | |

Item No. 18. PTZ Camera (With Housing)

| Sl. No. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|---------|---------------------------------|--|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | Camera | | | |
| 3 | Image Sensor | 1/2.8 Exmor / CMOS or better | | |
| 4 | Image Sensor | Approx. 2.1 Megapixels or better | | |
| 5 | Signal System | 1080/59.94p, 50p, 29.97p, 25p | | |
| 6 | Minimum Illumination (50IRE) | 1.4 lx (50IRE, F1.6, 1/30s, 43dB, 30fps) | | |
| 7 | S/N Ratio | 50 dB | | |
| 8 | Shutter Speed | 1/1 to 1/10000 sec (59.94 Hz system) | | |
| 9 | Control | Exposure Control, Exposure Compensation, Bright, Slow Shutter White Balance. | | |

| | | | | |
|----|----------------------------|---|--|--|
| 10 | Optical Zoom | 30x or better | | |
| 11 | Digital Zoom | 12x or better | | |
| 12 | Focusing System | Auto/Manual | | |
| 13 | Horizontal Viewing Angle | 60 degree or better (wide) | | |
| 14 | Minimum Object Distance | 10 mm(Wide)~1200 mm(Tele) | | |
| 15 | Pan/Tilt AnglePan | ±170° Tilt: +90°/-30° | | |
| 16 | Pan/Tilt Speed (Max.) | 60 degrees/sec | | |
| 17 | Preset Position | 100 or better | | |
| 18 | Network | Ethernet 10Base-T/100Base-TX or Better | | |
| 19 | IP Video resolution | 1920 x 1080, 1280 x 720, 960 x 540, 720 x 480 | | |
| 20 | Compression Format | H.264 (High Profile) | | |
| 21 | Maximum Frame Rate | H.264:60fps | | |
| 22 | Multi Streaming Capability | 3 sites | | |
| 23 | Maximum Number of Clients | 5 | | |
| 24 | Protocols | IPv4, IPv6, TCP, UDP, ARP, ICMP, IGMP, HTTP, DHCP, DNS, RTP/RTCP, RTSP, VISCA over IP | | |
| 25 | Camera Features | Auto ICR, Wide-D, Image Stabilization, Image Flip, Auto Power Off, Night | | |

| | | | | |
|----|----------------------------------|----------------------|--|--|
| | | Power Off | | |
| 26 | Interface | | | |
| 27 | Visibility should be day & Night | | | |
| 28 | HD Video Output | HD-SDI or HDMI | | |
| 29 | Camera Control Interface | RS-422, RJ-45, RJ-45 | | |
| 30 | Power | PoE Plus or Better | | |

Item 19: Joystick controller

| Sl. No. | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|---------|---------------------------------|--|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | Control Input/Output | RS-232C OUT Connector, RS-422 connector | | |
| 3 | Maximum IP Connections | 100 or better | | |
| 4 | Maximum Serial Connections | 5 or better | | |
| 5 | Control Protocol | RJ- 45 over IP/RS 422/RS-232 C switchable | | |
| 6 | Features | Toggle backlight compensation on/off, R gain and B gain adjustment, Iris value adjustment, Gain value adjustment, Shutter speed adjustment | | |

Item 20: Multi Camera Mixer

| Sl. No | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|--------|---------------------------------|--|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | Video format | 1080/59.94i Hz (60i) | | |
| 3 | Streaming Protocol | AVC/RTMP/RTSP/RTP (Ustream) | | |
| 4 | Recording | AVCHD format by SD Card (128 gb or higher and capable of adding external storage device)or better / External recording device in similar or higher capacity | | |
| 5 | Max rate | 50 Mbps | | |
| 6 | Video Inputs | 4 x SDI, 2 x HDMI, 2 x Video in, 1 x title | | |
| 7 | Video Outputs | 1 x HD-SDI, 2 x HDMI (PGM & multi-view), 1 x video out | | |
| 8 | Key Type | Luminance Key / Chroma key | | |
| 9 | Audio Inputs | 1 x Analog Stereo, 4 x Stereo Embedded Audio inputs | | |
| 10 | Audio Outputs | 1 x PGM (Stereo) | | |
| 11 | Sampling | 48HKHz | | |
| 12 | Analog input | XLR/TRS Combo Type | | |
| 13 | Control Port | 2 x RJ-45, 1 x USB2.0 or better, 1 x D-Sub 9-pin, | | |
| 14 | Display | LCD Touch screen | | |
| 15 | Features | Cut, Mix and Wipe effects, Chroma key, Picture in Picture, Insert and overlay titles, Overlay Logo, Manual transition, Stream content live over the internet, PC, Mac and Tablet integration | | |

Item 21: 32 “ Display

| Sl. No | Parameter | Specifications | Cross-Reference to Product Catalogue | Compliance |
|--------|--|--|--------------------------------------|------------|
| 1 | Make/Model (For Quoted Product) | | | |
| 2 | Viewable Size | 32" Diagonal | | |
| 3 | Aspect Ratio | 16:09 | | |
| 4 | Backlight Scanning | 100Hz | | |
| 5 | Viewing Angle (typ) | 178° | | |
| 6 | Horizontal and Vertical Response Time (typ) | 8 ms (GTG) | | |
| 7 | Input Ports | 1 x Video, 2 x HDMI, 2 x USB input, 1 x VGA in | | |
| 8 | Built -in Speakers Full range | 20W (10W+10W) | | |
| 9 | VESA Mount | 100 X 100 mm | | |
| 10 | Safety Regulations | IS 13252:2010 | | |
| 11 | Rated Power Consumption | 50W | | |
| 12 | Low latency high quality video over IP capable | | | |

Item 22: Scope for installation

1. Complete System must be RoHS certified.
2. All connectivity between devices must be low latency and better performance.
3. All products should be confirming with latest ISO standards.
4. System should be user friendly & should be Interoperable with each other.
5. Complete Supply, Installation, Configuration, Testing and Commissioning of all the delivered equipment with necessary cables and accessories.