

REQUEST FOR PROPOSAL (RFP)

**REVAMP OF A/V LOGGING AND MONITORING SETUP INSTALLED AT
ELECTRONIC MEDIA MONITORING CENTRE (EMMC), SOOCHNA BHAWAN,
NEW DELHI.**

Ref. No. BECIL/EMMC/Logging & Monitoring/2025-26/01

Dated: 07.06.2025



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(A Government of India Enterprise)

(A Mini Ratna Company)

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Invitation to Bid (ITB) /Request for Proposal

Revamp of AV Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC), Soochna Bhawan, New Delhi.

- 1) BECIL has been engaged as Turnkey partner for Revamp of AV Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC) Soochna Bhawan, New Delhi.
- 2) Bidding will be conducted through Competitive Bidding procedures specified in the GFR Procurement Manual, and are open to all eligible Bidders as defined in this ITB.
- 3) Interested eligible bidders may obtain further information for Project at [**pravinkumar@becil.com**](mailto:pravinkumar@becil.com).
- 4) Qualification requirements are specified in the ITB.
- 5) Bids must be delivered as specified in the Instructions to Bidders of this ITB (please read this part carefully). Late bids will be rejected.

RFP for Revamp of A/V Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC), Soochna Bhawan, New Delhi.

Summary

Section I. General Information & Instructions to Bidders

This Section provides information to help Bidders prepare their bids. Information is also provided on the submission, opening, and evaluation of bids and on the award of Contracts. Section I contains provisions that are to be used without modification.

Section II. Technical System Requirement

This Section includes Generic and Technical requirements of the project, List of Software and Technical Specifications of the Software to be procured.

Section III. Enclosure

This Section includes format for Bidder/Agency Information and their customer's references and checklist for the Bidder/Agency, Compliance etc.

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SECTION I

GENERAL INFORMATION & INSTRUCTIONS TO BIDDERS

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A. RFP SCHEDULE AND CRITICAL DATES

The RFP tentative schedule and critical dates are shown below:

	EVENT	DATE
1.	RFP reference number and Date	BECIL/EMMC/Logging & Monitoring/2025-26/01 Dated 07.06.2025
2.	Issue of RFP documents to Prospective Bidders	07.06.2025
3.	Representation	The queries will be attended through online corrigendum. Last date & time of receiving representation within 7 days from the date of floating of RFP
4.	Pre Bid Meeting	18.05.2025 at 14:00 hours
5.	Venue for Pre Bid Meeting	BECIL Bhawan, C-56, A/17, C Block, Phase 2, Industrial Area, Sector 62, Noida, Uttar Pradesh 201301
6.	Last date for submission of Proposals/bids	As per GeM-CPPP Portal
7.	Opening of Technical Bids	As per GeM-CPPP Portal
8.	Technical evaluation of bids	To be intimated
9.	Opening of Financial Bid	To be intimated
10.	Commercial Bid evaluation	To be intimated
11.	Award of Purchase Order	To be intimated

BECIL reserves the right to amend the RFP tentative schedule and critical dates.

No tender document will be issued after the last date as mentioned above.

Disclaimer

The information contained in this Tender Document, hereinafter called Request for Proposal (RFP) is being provided to interested Bidders for their participation as per the terms and conditions set out in this.

This RFP includes statements, which reflect various assumptions and assessments arrived at by BECIL in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require.

BECIL may, at its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP. The issue of this RFP does not imply that BECIL is bound to select or appoint a Bidder for the Project and BECIL reserves the right to reject all or any of the Bidder or Bids without assigning any reason whatsoever.

The Bidders shall bear all costs associated with or relating to the preparation and submission of its bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the BECIL, or any other costs incurred in connection with or relating to its bid. All such costs and expenses will remain with the Bidder and BECIL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation for submission of the bid, regardless of the conduct or outcome of the bidding process.

General Information

1. Complete bid document can be downloaded from GeM-CPPP Portal and BECIL website <https://www.becil.com>.
2. **Technical & Financial Bid** have to be submitted online on GeM-CPPP Portal.
3. **Tender fee and EMD document should be placed** in a single envelope super scribed as

“Tender Fee and EMD Documents” for RFP Ref. No. BECIL/EMMC/ Logging & Monitoring/2025-26/01 Dated: 07.06.2025 for Request for Proposals (RFP) for the revamp of A/V Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC), Soochna Bhawan, New Delhi”.

4. **Hard copy of “Technical Bid and EMD Documents”** should be submitted before the last date of BID submission at **Tender Box, BECIL Bhawan, A-56/C-17, Block ‘C’, Sector-62, Noida-201307 (U.P)**. Bids will be **rejected** if hard copy of **Technical bid and EMD Document** are not received before the last date of bid submission.
5. **Financial bid is to be submitted online ONLY**, any hard copy of Financial Bid received at BECIL office will be ignored.

No tender document will be issued after the last date as mentioned above.

NOTE: Exempted firms must submit Bid Securing Declaration (as per format given in Annexure-6) in lieu of Bid Security (i.e. EMD) along with valid exemption certificate, else bids will be rejected.

B. INTENT OF THE REQUEST FOR PROPOSAL

Broadcast Engineering Consultants India Limited has been engaged as a turnkey partner for the revamp of A/V Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC), Sochna Bhawan, New Delhi.

The proposed RFP is to select/hire an agency, which would in turn, provide the following equipment / services as per the procedure defined in this tender document:

1. Procurement of equipment for Datacenter along with work stations setup:

Selected agency will need to procure the equipment such as Server, Storage, Switch, desktop and other miscellaneous hardware (**such as Air /Gas filtration Solution & Access Control System**) for the completeness / functionality of the system as per the specifications laid down in this tender documents. All the procured equipment will be under **Comprehensive Warranty** for the period of 5 years from the date of completion of Functional Handing / Taking Over (FHTO) for complete Setup.

2. Comprehensive Annual Maintenance Contract (CAMC) of pre-owned equipment at EMMC:

Selected agency will need to undertake the CAMC of the pre-owned equipment such as **3 Nos. of PACs installed at Data Centre & the entire existing cabling network** situated at EMMC. Selected agency will be responsible for the repair / replacement of the spares for the proper functioning of the complete system, at no additional cost. **Comprehensive Annual Maintenance Contract (CAMC)** of the pre-owned equipment will be for the period of 5 years from the date of completion of Functional Handing / Taking Over (FHTO) for complete Setup.

3. Upgradation of Monitoring Software:

Selected agency will need to complete the **upgradation of existing Monitoring Software** and customization of monitoring software as per the functionality defined in the tender document and thereafter, conduct the **training** of designated manpower. Upgraded monitoring software will be under **Comprehensive Maintenance (OEM remote support) which includes free upgrades and updates** for the period of 5 years from the date of completion of Functional Handing / Taking Over (FHTO) for complete Setup.

NOTE:

i) Selected bidder needs to provide the “Perpetual license” for Monitoring Software, where validity of the license shall never go end-of –life. Bidders will be responsible for providing unlimited free upgrades / updates for Monitoring Software, since the license is a perpetual license. All the customization arising due to upgrades / updates of monitoring software,

bidder need to complete the same at no additional cost.

ii) In case of requirement of additional TV channels to be monitored, bidder must ensure the Monitoring Software must be capable of scaling as and when required by EMMC, at no additional cost.

- 4. Buy Back of old equipment:** Selected agency will be responsible to take out old equipment from the premises of EMMC under the provision of buy back. To assess the conditions of equipment under buy back, all bidders should complete the site survey and obtain the site survey certificate duly signed by EMMC official. All the equipment under buy back must be taken out within **1 week** from the EMMC premises after the signing of Functional Handing / Taking Over (FHTO) for complete A/V Logging & Monitoring Setup.

The selected Bidder will be responsible for function, operation and maintenance as per the terms & conditions listed in this RFP.

The selected Bidder must have all the facility and solution, so that the project must be made operational within the stipulated time frame and is to keep it functional thereafter.

The proposed equipment, software and services must be in accordance with all provisions of IT Act, 2000. Furthermore, no private data in any form should be accessed/stored/archived under this setup.

C. PROCEDURE AND TERMS & CONDITIONS

1. The proposal is to be submitted in **TWO BID SYSTEM** with **separate Technical and Financial bid**.

2. TWO BID SYSTEM

All bidders are required to submit their offer in two covers as under:-

2.1 Technical Bid should contain the following:-

- (i) Tender documents duly completed and signed without any financial quote.
- (ii) The technical details of the models offered along with the supporting original technical literature, Leaflets, Brochure etc. in duplicate.
- (iii) Bidder should not submit financial rates as a part of technical bid. Rates quoted in technical bid would be rejected.

2.2 Financial bid should contain the following:-

- (i) Details of rate, taxes, duties, discount, if any, quoted by the bidder. These details should be submitted online on GeM-CPPP Portal.
- (ii) Rates quoted without taxes will be assumed that the rates quoted are inclusive of taxes.

The composite bid i.e. rate indicated in the Technical bid of tender is liable to be rejected. Only the first cover i.e. Technical bid shall be opened on the date of tender opening.

3. The bidder, at its own risk & cost shall visit and examine the site to obtain all the requisite information that may be necessary for preparing the bid (Financial and Technical). Site visit to EMMC is compulsory for all Bidders and Site survey Certificate is to be obtained from EMMC. **Bidders will be rejected, in case of non-submission of Site Survey certificate duly signed by the client along with their bids.** The cost of visiting the site shall be at the Bidder's own expense. **Further, it is suggested that interested bidders may complete the site visit before the scheduled pre-bid meeting.**
4. Complete bid should be submitted as per GeM-CPPP Portal. Bids received beyond the specified date & time will be rejected. It is the responsibility of the Bidder to ensure that the bids have been received on time & to the proper place within the specified dates.
5. All bids shall remain valid for a period of **Six months** from the last date of submission of Bid.
6. In case any of the information furnished by bidder is found to be wrong or false or in case any material information is not disclosed by bidder while

submitting bids, then BECIL shall have the liberty to reject / cancel the bid of the corresponding bid of bidder, at any stage of the procurement process / Contract.

7. **Clarification regarding contents of the RFP:** At any time prior to the deadline for submission of bids, the BECIL may for any reason, whether on its own initiative or in response to the clarification requested by the prospective bidders, may modify the bid document. Such modification/ amendment in the bid document/ RFP at any time prior to the deadline for submission of bid will be uploaded as “corrigendum”. Such amendment/modifications shall be binding on all the prospective bidders. BECIL at its discretion may extend the deadline for the submission of bids if the bid document undergoes major changes during the bidding period in order to give prospective bidder time to take into the consideration the amendments while preparing their bids. A prospective bidder who requires clarification regarding the contents of the bidding documents shall notify to the BECIL in writing about the clarifications sought not later than 10(ten) days prior to the date of opening of the Bids. (BECIL implies name of the office).
8. In case work order is awarded to any company / firm and later it is found by BECIL, that the agency has furnished wrong information / declaration or not disclosed any material information to BECIL while submitting bid, BECIL reserves the right to cancel the work order awarded to company / firm. Further BECIL reserves the right to forfeit the Bank Guarantee of the Bidder. The pending work will be done on the risk & cost of the Bidder.
9. BECIL reserves the right to solicit additional information from Bidders to evaluate which bid best meets the need of the Project. Additional information may include, but is not limited to, past performance records, on-site visit and evaluations by BECIL personnel, or any other pertinent information. It will be vendor’s responsibility to check for updated information on BECIL’s website www.becil.com.
10. Additional questions should be submitted in writing to the addressed to:
Broadcast Engineering Consultants India Ltd,
C-56 A/17, Sector -62, Noida 201 307
Tel: 0120-4177850 Fax: 0120-4177879

E-mail: pravinkumar@becil.com
11. **Modification and Withdrawal of Bids** A bidder may modify or withdraw his bid after submission provided that the written notice of modification or withdrawal is received by BECIL prior to deadline prescribed for submission of bids. A withdrawal notice may be sent by fax/e-mail but it should be followed by a signed confirmation copy to be sent by post and such signed confirmation should reach BECIL not later than the deadline for submission

of bids. No bid shall be modified after the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and expiration of the period of bid validity specified. Withdrawal of a bid during this period will result in Bidder's forfeiture of bid security.

12. **Clarification regarding contents of the Bids:** During evaluation and comparison of bids, the BECIL/Customer may, at its discretion, ask the bidder for clarification of his bid. The request for clarification will be given in writing and no change in prices or substance of the bid will be sought, offered or permitted. BECIL also reserves the right to call for additional information from the bidders. No post-bid clarification on the initiative of the bidder will be entertained.
13. **Rejection of Bids:** Canvassing by the Bidder in any form, unsolicited letter and post-tender correction may invoke summary rejection with forfeiture of EMD. Conditional bids will be rejected.
14. BECIL will make its decision based on the ability of the Bidder(s) to meet our specific needs, technical expertise of the Bidder(s), delivery capabilities, customer references, past satisfactory performance experience, system completeness etc. besides cost.
15. BECIL reserves the right to waive off any deviations, accept the whole or part thereof or reject any or all bids and to select the Bidder(s) which, in the sole opinion of BECIL/EMMC, best meets the project's interest. BECIL also reserves the right to negotiate with potential bidders so that its best interest to fulfill the need of project is served.
16. All information contained in this RFP, or provided in subsequent discussions or disclosures, is proprietary and confidential. No information may be shared with any other organization, including potential sub-contractors, without prior written consent from BECIL.
17. BECIL reserves the right to either increase or decrease the quantity of any or all the items included in suggestive bill of material which are estimated requirements and therefore open to variation.
18. BECIL reserves the right to reject any and all proposals, to negotiate all terms of any agreement resulting from this Request for Proposal, and to request additional information from vendors.
19. BECIL reserves the right to alter/modify the scope of work mentioned in this RFP document at any stage of the bidding process and contract.
20. The commercial bid shall clearly indicate the price to be charged without any qualification whatsoever and should include all packing and forwarding, transportation, transit insurance, taxes, duties, fees, levies and other charges as may be applicable in relation to the activities proposed to be

carried out. All such charges shall be included in the rates quoted in the prescribed format.

21. The successful bidder shall keep BECIL informed of the progress on each activity on fortnightly basis. In case of any delay in any particular activity, the recovery plan shall be evolved and given to BECIL for ensuring completion of all the activities within the overall time schedule specified by BECIL. BECIL reserves the right to terminate the contract at any stage of the work by giving 15 days' notice if it is noticed that the delay occurred in any of the activities covered under the contract cannot be made good and will affect the overall work schedule. In this case, BECIL shall revoke the Performance Bank Guarantee of the bidder. The decision of BECIL shall be final and binding.
22. BECIL reserves the right to monitor work execution progress and review it on as required basis. The works contractor will be fully transparent, responsive and demonstrate at all times that he is in position to complete the work as per the specified time schedule.
23. This RFP is issued for the **“Revamp of A/V Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC), Sochna Bhawan, New Delhi”**. The bidder is responsible for completeness of the project.
24. The bidder shall be responsible for any damage to the equipment / site occurred due to negligence of bidder and cost of repair / replacement for the same will be recovered from the bidder.
25. In case Company goes into liquidation or change in business/management, it will be intimated to BECIL. In case, of liquidation, the work order/contract executed with the bidder shall be terminated forthwith by giving a notice of termination of thirty days.

D. GENERAL TERMS AND CONDITIONS

1. RELATIONSHIP BETWEEN THE PARTIES

Nothing contained herein, shall be construed as establishing a relation of master and servant or of Agent and Principal as between the Bidder/Agency and BECIL.

2. INTELLECTUAL PROPERTY RIGHTS:

- 2.1. Deliverable, outputs, plans, drawings, specifications, designs, reports and other documents and software submitted by the Bidders under this RFP and subsequent to this RFP in relation with this tender shall become and remain the property of BECIL/procuring entity and subject to laws of copyright, must not be shared with third parties or reproduced, whether in whole or part, without BECIL's/ the procuring entity's prior written consent.
- 2.2. The Bidder shall, not later than upon termination or expiration of this Contract and/or subsequent Agreement/Contract signed with the Bidder, deliver all such documents and software to BECIL/the procuring entity, together with a detailed inventory thereof.
- 2.3. The Bidder shall not incorporate any materials, technology or any item or thing that involves the use of intellectual property rights or proprietary rights that the Bidder does not have the right to use or that may result in claims or suits against BECIL arising out of claims of infringement of any intellectual property rights or other proprietary rights.
- 2.4. The Bidder shall perform all acts necessary to obtain and continue to have all necessary licenses, approvals, consents of third parties free from any encumbrances and all necessary technology, hardware and software to enable it to perform its obligations under this Contract . If license agreements are necessary or appropriate between the Bidder and third parties for purposes of enabling, enforcing or implementing the provisions hereinabove, the Bidder shall be under an obligation to enter into such agreements at its own sole cost, expense and risk.

3. LAND AND BORDER PROVISION (Format given at Annexure-21)

- 3.1. The Undertaking at Annexure-21 shall be submitted by the Bidder in

line with the guidelines issued vide the Office Memorandum, No. F. No. 6/18/2019 dated 23.07.2020, by the Department of Expenditure, Ministry of Finance, Govt. of India.

4. INDEMNITY

4.1. The Bidder shall indemnify, save, hold harmless and defend BECIL and its officers, servants, employees and agents promptly upon demand and at its expense, from and against any and all suits, proceedings, actions, demands, losses, claims, damages, liabilities, costs (including reasonable attorney's fees and disbursements) and expenses (collectively, "Losses") to which BECIL may become subject, insofar as such losses arise out of, in any way relate to, arise or result from:

- a) Any Compensation/ claim or proceeding by any third party against BECIL arising out of any act, deed or omission by the Bidder;
- b) Any breach by the Bidder of any of its obligations under this Contract or from any negligence under the Contract, including any errors or deficiencies in the performance its scope of work.

4.2. That BECIL shall have no liability whatsoever for any injury/death to the Bidder or its staff caused or suffered during the performance of its obligations hereunder

5. SIGNING OF NON-DISCLOSURE AGREEMENT (Format given at Annexure-22)

Except with the written consent of the Buyer, the bidder shall not disclose the contract or any provision, specification, plan, design, pattern, sample or information thereof to any third party.

Bidders interested to participate in this RFP, shall have to sign a NON-DISCLOSURE AGREEMENT with BECIL on a non-judicial stamp-paper of Rs. 100. Participation without undertaking for compliance to above shall be invalid and such bids shall not be considered by BECIL.

6. CODE OF INTEGRITY (Format given at Annexure-17)

No official of BECIL or the Bidder shall act in contravention of the codes which includes Prohibition of:

- a) Offering of any bribe or undue gratification in any form to BECIL or its officials, or indulging in any corrupt practices.

- b) Any omission, or misrepresentation that may mislead or attempt to mislead so that a financial or other benefit may be obtained, or any necessary obligation or pre-requisite may be avoided.
- c) Improper use of information provided by BECIL to the Bidder with an intent to gain an unfair advantage in the procurement process or for personal gain.
- d) Any financial or business transactions between the Bidder and any official of BECIL related to tender or execution process of contract, which can affect the decision of BECIL directly or indirectly.
- e) Any coercion or any threat to impair or harm, directly or indirectly, any party or its property to influence the procurement process.
- f) Obstruction of any investigation or auditing of a procurement process.
- g) Making false declaration or providing false information for participation in a tender Process or to secure a contract.

7. CONFLICT OF INTEREST (Format given at Annexure-5)

Any Bidder having a conflict of interest, which substantially affects fair competition, shall not be eligible to bid in this tender. Bids found to have a conflict of interest shall be rejected as non-responsive. Bidder shall be required to declare the absence of such conflict of interest in Form Declarations. A bidder in this Tender Process shall be considered to have a conflict of interest if the bidder:

- a) Directly or indirectly controls, is controlled by or is under common control with another Bidder; or
- b) Receives or have received any direct or indirect subsidy/ financial stake from another Bidder; or
- c) Has the same legal representative/ agent as another Bidder for purposes of this bid. A Principal can authorize only one agent, and an agent also should not represent or quote on behalf of more than one Principal. However, this shall not debar more than one Authorized distributor from quoting equipment manufactured by an Original Equipment Manufacturer (OEM), in procurements under Proprietary Article Certificate; or
- d) Has a relationship with another bidder, directly or through common third parties, that puts it in a position to have access to information about or influence the bid of another Bidder or influence the decisions of the Procuring Entity regarding this Tender process; or

- e) Participates in more than one bid in this tender process. Participation in any capacity by a Bidder (including the participation of a Bidder as sub-contractor in another bid or vice- versa) in more than one bid shall result in the disqualification of all bids in which he is a party. However, this does not limit the participation of a non-bidder firm as a sub- contractor in more than one bid; or
- f) Would be providing goods, works, or non-consulting services resulting from or directly related to consulting services that it provided (or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm), for the procurement planning (inter-alia preparation of feasibility/ cost estimates/ Details Project Report (DPR), design/ technical specifications, terms of reference (ToR)/ Activity Schedule/ schedule of requirements or the Tender Document etc.)of this Tender process; or has a close business or family relationship with a staff of the Procuring Organization who:
 - (i) are directly or indirectly involved in the preparation of the Tender document or specifications of the Tender Process, and/or the evaluation of bids; or
 - (ii) would be involved in the implementation or supervision of resulting Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Procuring Entity throughout the Tender process and execution of the Contract.

8. UNDUE INFLUENCE

- 8.1. The Agency/Bidder undertakes that it has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the BECIL or otherwise in procuring the Contracts or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the present Contract or any other Contract with the Government of India for showing or forbearing to show favor or disfavor to any person in relation to the present Contract or any other Contract with the Government of India.
- 8.2. Any breach of the aforesaid undertaking by the Agency/Bidder or any one employed by it or acting on its behalf (whether with or without the knowledge of the Agency) or the commission of any offers by the Agency or anyone employed by him or acting on his behalf, as defined in the Bharatiya Nyaya Sanhita, erstwhile known as the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1986 or any other Act enacted

for the prevention of corruption shall entitle BECIL to cancel the contract and all or any other contracts with the Agency and recover from the Agency the amount of any loss arising from such cancellation, from the present or from any other contract with BECIL.

9. UNLAWFUL/UNETHICAL PRACTICES

9.1 If the Contractor/ Bidder has engaged in corrupt, fraudulent, collusive and coercive practices or defaulted commitments under integrity.

9.2 Any intentional omission or misrepresentation in the documents submitted by the Bidder for the purpose of due diligence or for the execution of any act essential for the execution of the Project.

9.3 If the Bidder uses intimidation / threats or bring undue outside pressure on BECIL or any of its official for acceptance / performances of the deliverable/qualified work under the contract:

10. PENALTY FOR BREACH OF INTEGRITY, CONFLICT OF INTEREST AND UNDUE INFLUENCE

10.1 Forfeiture of Bank guarantee or any other bond or bid security submitted by the Bidder.

10.2 Cancellation/ termination of the Contract with the liberty to recover the accrued losses/damages by the Bidder including imposition of penal damages.

10.3 Initiation of Arbitration /legal proceedings to recover losses or damages incurred by BECIL due to the violation of ethical practice or use of undue influence by the Agency.

11. BLACKLISTING/ DEBARMENT

11.1 The Bidder/Contractor shall be debarred/blacklisted from bidding for the contract/tender floated by BECIL for a period of two years, for violation of the code of integrity, for undue influence as well as for the breach of any other terms and conditions of the tender as per the General Financial Rules 2017 and the Guidelines for debarment of firms from bidding issued by the Department of Expenditure, Ministry of Finance no. F1/20/2018 –PPD dated 02.11.2021.

12. RISK AND COST CLAUSE

12.1. In case of persistent breach/default of the terms and conditions of the Contract and due to abnormal delay (beyond the maximum late delivery in the Liquidated damages clause) in supplies, defective supplies or non-

fulfilment of any of the terms and conditions of the RFP and the Work Order, BECIL may cancel the contract/Work Order in full or part thereof, and will procure supplies/equipment's or ensure the execution of work or any pending service in case of service contract from other willing vendor at the risk and cost of the Bidder.

- 12.2. Risk & Cost Clause, in line with Conditions of Contract may be invoked in any of the following cases:
- 12.3. Bidder's poor progress of the work vis-à-vis execution timeline as stipulated in the Contract, backlog attributable to Bidder including unexecuted portion of work/ supply does not appear to be executable within balance available period.
- 12.4. Withdrawal from or abandonment of the work by Bidder before completion of the work as per contract.
- 12.5. Non completion of work/ Non-supply by the Bidder within scheduled completion/delivery period as per RFP or as extended from time to time, for the reason attributable to the Agency/ Bidder.
- 12.6. Termination of Contract on account of any other reason (s) attributable to Agency/ Bidder
- 12.7. Assignment, transfer, subletting of Contract by the Agency/Bidder without BECIL's written permission resulting in termination of Contract or part thereof by BECIL

13. PENALTIES

- 13.1. In the event of any penalties, deductions, disincentives, or charges levied by the Client due to poor or substandard quality of work, non-compliance with service standards, or any deficiencies related to the assigned scope of work, the same shall be recovered from the Bidder.
- 13.2. The Bidder shall bear the full financial responsibility for such penalties or deductions imposed on BECIL by the Client and will not be entitled to claim any reimbursement or adjustment for the same.

14. CONFIDENTIALITY

- 14.1 The Bidder recognizes, accepts and agrees that disclosure of Confidential information to the Staff shall be only on a need-to-know basis and only those staff who are involved in rendering the services and need to have access would alone be informed of Confidential information.

14.2 The Bidder recognizes, accepts and agrees that all tangible and intangible information obtained or disclosed to the Bidder's and/or its staff, including all details, documents, data, business/ customer information and the BECIL 's practices and trade secrets (all of which are hereinafter collectively referred to as "confidential information") which may be communicated to the Bidder 's and/or its facility staff may be privy under or pursuant to this Contract and/or in the course of performance of the Bidder 's obligations under this Contract shall be treated, as absolutely confidential and the Bidder irrevocably agrees and undertakes and ensures that all its facility staff shall keep the same as secret and confidential and shall not disclose the same at all in whole or part to any Person or persons (including legal entities) an any time or use nor shall allow information to be used for any purpose other than that as may be necessary for the due performance of the Bidder's obligations hereunder except when required to disclose under the due process and authority of law.

15. RIGHT TO INSPECTION

15.1 That BECIL and its field officers or its Auditors, shall have the right to carry out inspection checks and tests, and do audit of the Bidder's premises, personnel and records relating to the project in order to ensure there is no compromise on the quality of goods/services provided by the Bidder to the BECIL and its Client. The BECIL has a right to review and monitor the security practices and control procedures adopted by the Bidder. The Bidder shall produce and make available all such books, records, information, etc., related to project work for the purpose of Inspection/ audit as sand when required.

15.2 That BECIL shall have the right to review and monitor the performance of the Bidders on a continuous basis system integrator shall furnish necessary particulars, statements, etc., as desired by the BECIL in a periodical manner for the purpose of assessment of their performance.

16. TERMINATIONS

16.1 Termination of Contract by BECIL due to unsatisfactory performance

- a) If the Bidder refuses or fails to execute the specified quantum of work or any separate part thereof with diligence or ensure its completion within the time specified in the RFP, or subsequent work order issued thereto, then it shall be open to BECIL at its option by written notice to the Agency/Bidder to:

- b) To terminate the contract without prejudice to any other remedy available under the Contract. That a notice of cure, highlighting the deficiency or problem shall be served on the Agency /Bidder by BECIL, with an opportunity to cure the same within a period of 15 days. That on the non-resolution of deficiency, a notice of termination shall be served on the Agency/Bidder and the Contract shall be deemed terminated after a period of 15 days from the date of notice of termination.

16.2 Termination due to Breach

- a) BECIL may, without prejudice to any other remedy available for the breach of contract, may terminate the contract in sub-sequence to non –resolution of deficiency after the service of a notice of cure with a window period of fifteen days. After the end of the cure period, a 15 (fifteen) days’ notice shall be served on the Agency/ Bidder, and the contracts shall be deemed terminated after the end of the period of fifteen days from the date of notice of termination.
- b) The following sub-clauses shall attract the provision of termination, on the occurrence of the following events -:
 - (i) If the Bidder has abandoned or repudiated the Contract;
 - (ii) If the Bidder has without valid reason failed to commence work on the project promptly;
 - (iii) If the Bidder has persistently failed to execute the works/express deliverable in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause;
 - (iv) If the Bidder defaults in proceeding with the works/job with due diligence and continues to do so after a notice in writing of fifteen (15) days from BECIL;
 - (v) If the Bidder has obtained the contract as a result of undue influence or adopted unethical means/ corrupt practices.
 - (vi) if the information submitted/furnished by the Bidder is found to be incorrect;

16.3 Termination due to Insolvency

- a) If the Agency/Bidder dissolves or become bankrupt or insolvent or cause or suffer any receiver to be appointed for its business of any assets thereof compound with his Creditors, or being a corporation commence to be wound

up, not being a member's voluntary winding up for the purpose of amalgamation or reconstruction, or carry on its business under a Receiver for the benefits of its Creditors any of them, then BECIL shall be at liberty :-

- b) To terminate the contract forthwith upon coming to know of the happening of any such event as aforesaid by a fifteen day notice in writing to the Agency/Bidder or to give the Receiver or liquidator or other person, the option of carrying out the contract subject to its providing a guarantee upto an amount to be agreed upon by BECIL for due and faithful performance of the contract.

16.4 Termination for Convenience

BECIL can terminate the Agreement by serving a 30 day notice without assigning any cause or reason to the Bidder/ selected agency. The contract shall be deemed terminated after a period of 30 days from the date of termination notice.

17. POST TERMINATION RESPONSIBILITY

- 17.1. In all cases of termination herein set forth, the obligations of BECIL to pay shall be limited to the period upto the date of termination, subject to the receipt of such payment from the Client.
- 17.2. That any pending bills raised by the Bidder, prior to or post the termination of the Contract on account of the breach of the terms and conditions of the contract, shall be put on hold, till the time , the corresponding payment is received from the Client and any amount deducted by the Client against the bills raised by BECIL shall be consequently deducted from the bills raised by the Bidder respectively.
- 17.3. The Bidder shall forthwith stop any of its work then in progress, except such work as BECIL may, in writing, require to be executed at the designated site/premises.
- 17.4. That in the event of termination under clause 17.1 and 17.2 the whole or part of the performance security furnished by the Agency/Bidder is liable to be forfeited without prejudice to the right of BECIL to recover from the Agency/Bidder any accruing or incurred losses or damages, on account of termination of contract due to unsatisfactory performance/ delay in execution of work.

18. NOTICES

- 18.1. Any notice, invoice, approval, advice, report or notification in connection

with this Contract shall be in writing and any notice or other written communication pursuant hereto shall be signed by the party issuing the same and shall be addressed to the BECIL or the Bidder and may be given by delivering the same by hand or sending the same-by prepaid registered mail, official e-mail or facsimile to the relevant address forth below or such other address as each Party may notify in writing to the ether Party from time to time. Any such notice given as aforesaid shall be deemed to be served or received at the time upon delivery (if delivered by hand) or upon actual receipt (if given official e-mail or facsimile) or Fifteen (15) clear days after posting (if sent by post) at the Party's principal or registered office address as set out below:

**Broadcast Engineering Consultants India Ltd,
C-56/ A-17, Sector-62, Noida-201307, U.P., India.**

Email: pravinkumar@becil.com

19. NO WAIVER

No waiver of any term, provision, or condition of this Contract , whether by conduct or otherwise, in any one or more instances, will be deemed to be or be construed as a further or continuing waiver of any such term, provision, or condition or as a waiver of any other term, provision, or condition of this Contract, unless the same is agreed upon and recorded in writing with mutual consensus of both the parties.

20. AMENDMENT:

Unless otherwise stated expressly, this Contract shall be modified only by an instrument in writing duly executed by both the parties.

21. ARBITRATION

21.1. Conciliation of Dispute

- a. Any dispute(s) / difference(s)/issue(s) of any kind whatsoever between/amongst the Parties arising under/out of/in connection with this contract shall be settled mutually and amicably between the Parties, within a time span of **thirty days** from the date of invocation of dispute vide a written notice by the Aggrieved party. The Aggrieved Party shall notify the other party in writing about such dispute(s)/difference(s)/issue(s) between/amongst the Parties and that such a Party wishes to refer the dispute(s)/ difference(s)/issue(s) to Conciliation. Such Notice/Invitation for Conciliation shall contain sufficient information as to the dispute(s)/ difference(s)/issue(s) to enable the other

Party to be fully informed as to the nature of the dispute(s)/ difference(s)/issue(s), as well as the amount of monetary claim.

- b. That in the event of reference of dispute for Conciliation, a committee comprising of two members, nominated by each party i.e. the Bidder and BECIL respectively shall try to amicably resolve/settle the dispute.

21.2. Reference of Dispute to Arbitration proceeding post conciliation

- a) In the event of failure in mutual resolution of the issue, any dispute(s)/ controversy(s)/ issue(s) arising out of or in connection with the contract, including any question regarding its existence or validity shall be referred to and finally resolved by Arbitration administered by the Delhi International Arbitration Centre as per the Delhi International Arbitration Centre proceeding Rules 2023.
- b) The Aggrieved party wishing to refer a dispute to Arbitration shall give a notice to the Defaulting Party specifying all the points of dispute(s) with details of corresponding the claim amount.
- c) The Arbitration Proceeding shall commence within a span of **thirty days** from the date of receipt of Invocation Notice complete in all respects as mentioned above,
- d) The dispute(s)/ difference(s)/controversy(s) shall be adjudicated by a single/sole Arbitrator empanelled with the Delhi International Arbitration Centre.
- e) The seat of Arbitrations shall be at New Delhi and the Arbitration proceeding shall be conducted in English.
- f) The award of Sole Arbitrator shall be final and binding on the parties and unless directed/awarded otherwise by the Sole Arbitrator, the cost of arbitration proceedings shall be shared equally by both the parties.
- g) The provision of the Arbitration and Conciliation Act, 1996 as amended and applicable from time to time shall apply to the Arbitration proceedings under this Contract.
- h) That any claim of damage(s) or losse(s) incurred by BECIL as a consequence of the invocation of the litigation/arbitration proceeding owing to the suspension or abandonment of work by the Bidder/Agency shall be reimbursed by the Bidder/Agency.

- i) In the event of initiation of AMRCD proceedings between BECIL and the client, the decision / mutual settlement arrived at, on the conclusion of the proceeding between the parties, shall in turn become applicable on the selected agency/Bidder in all respects.

22. JURISDICTION

This Agreement, and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with it or its subject matter or formation, shall be governed by, and construed in accordance with, the laws of India. The Courts at Delhi shall have the exclusive jurisdiction to entertain any matter arising out of or in relation to this Contract.

23. Force Majeure

- 23.1. For the purpose of this Contract, the term “Force Majeure” shall mean an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable and not brought about by or at the instance of the Party claiming to be affected by such events and which has caused the non-performance or delay in performance ,and which makes a Party’s performance of its obligations hereunder impossible or impractical as reasonable to be considered impossible in the circumstance, inclusive of but not limited to war, riots, civil disorder, earthquake, fire, strikes, lockouts or other industrial action (except where such strikes lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent) , confiscation or nay other action by the Government Agencies.
- 23.2. Force Majeure shall not include (i) any event which is the caused by the negligence or intentional action of a Party or by of such Party ‘s agents or employees , nor(ii) any event which a diligent party could reasonably have been expected both to take into account at the time of the acceptance of the work order under this RFP, and avoid or overcome with persistent effort in carrying out its respective obligations.
- 23.3. In the case of failure to perform this Agreement due to any force majeure, neither party shall be liable for such failure, and this Agreement shall be terminated automatically, if the persistence of such force majeure event continues for more than three months. In the case of failure to perform any part of this Agreement due to any force majeure, the party suffering from such force majeure may be exempted from corresponding liability to the extent of the impact of such force majeure. However, such party shall continue to perform other obligations under this Agreement which have not been affected by such force majeure.

24. SUBCONTRACTING

The Bidder shall not subcontract the entire or any portion of the work to be performed by it, without the prior written consent of BECIL.

25. EXTENSION OF TIME

25.1. It is hereby agreed that BECIL shall by mutual agreement update and extend the timeline/ milestone for the completion of work after discussion with the Client and its officials.

25.2. Any period within which Bidder is unable to complete the work or perform its obligations due to persistence of force majeure event, shall be extended for a period equal to the time during which the Bidder was unable to perform such action.

25.3. Any extension of time agreed upon mutually shall be documented in writing and signed by both the parties to be affected.

26. TRANSFER AND SUB-LETTING:

Transfer and sub-letting is not allowed.

27. ASSIGNMENT:

27.1. All terms and provisions of this RFP and subsequent Contract/ Agreement / work order with the successful Bidder shall be binding on both the parties and their respective successors and permitted assigns.

27.2. Subject to clause mentioned above, the selected Agency shall not be permitted to assign its rights and obligations, under the Contract/ Agreement / work order, to any third party.

27.3. BECIL may assign or novate all or any part of the Contract/ Agreement / work order and the Agency shall be a party to such novation, to any third party contracted to provide outsourced services to BECIL or any of its nominees.

28. CONSORTIUM: ALLOWED (Format given at Annexure-20)

28.1. In case of a Consortium, Power of Attorney issued by Board of Directors/

Chairman/CEO / MD / Company Secretary of the Consortium Lead Member as well as Consortium Member(s) of the Consortium, **in favour of the authorised employee(s) of the Consortium**, for signing the documents on behalf of the Bidder, in respect of this particular tender, to sign the Bid and all subsequent communications, agreements, documents etc. pertaining to the tender and act and take any and all decisions on behalf of the Consortium, are to be submitted.

- 28.2. The authorized employee(s) of the Bidder shall be signing the Bid and any consequence resulting due to such signing shall be binding on the Bidders Consortium.
- 28.3. Bids from consortium of **only 2 members including a “Lead bidder”** is acceptable provided that they jointly fulfill the qualification criteria and requirements stated in the Tender Documents. Participating Consortium shall submit the **Agreement as per the format attached**, clearly defining the roles and responsibility of each member. Members of consortium shall assume responsibility jointly & severally. The bid security / EMD shall be submitted by the Lead Member of the Consortium. In case Consortium is found to be winner in tendering process, the work order shall be awarded to lead Member. BECIL will accept invoicing from Lead Member of the Consortium. However, it is the responsibility of lead bidder to share the details of escrow bank account of members of Consortium, for the release of applicable payments for this Project.
- 28.4. The Consortium Agreement must clearly define the Consortium Leader, who shall be responsible on behalf of the Consortium during the period of evaluation of the bid as well as during the execution and timely completion of all the contractual obligations and shall receive/ send instructions for and on behalf of the Consortium.
- 28.5. A Consortium once established at the time of submitting the Bid shall not be allowed to be altered with respect to constituting members of the Consortium or their respective roles/ scope of supply/work, except with prior written approval of BECIL. If during the evaluation of bids, a Consortium propose any alteration/ changes in the orientation of Consortium or replacements or inclusions or exclusions of any partner(s)/ member(s) which had originally submitted the bid, bid from such Bidder shall be liable for rejection.
- 28.6. Any member of the Consortium shall not be eligible either in an individual capacity or be a part of any other Consortium to participate in this tender. Further, no member of the Consortium should have been put on ‘Holiday’ or banned/ blacklisted by BECIL/ Government department/ Public Sector as on the due date of submission of bid. Offer submitted by such Consortium shall not be considered for opening/evaluation/Award.

- 28.7. Lead bidder of the consortium will be whole sole responsible for the Project execution and maintenance / CAMC period, and cannot disown the Project at any instance of time. In case of any such liability transfer noticed, BECIL may revoke the PBG submitted by the lead bidder.
- 28.8. All the members of the consortium shall be jointly and severally liable.
- 28.9. Lead bidder will be held responsible even if the Project is hampered due to its consortium partner.
- 28.10. Any other back end agreement between consortium members will not be accepted against the said Project. All such agreements will be treated as null and void.
- 28.11. The term Bidder used throughout the RFP shall mean Lead Bidder in the context of RFP.
- 28.12. The lead member of the Consortium shall submit a Power of Attorney, authorizing it to do all the acts and deeds necessary for the execution of the Project. **(Format attached as Annexure-23)**

29. FORFEITURE OF EMD

The EMD deposited by the Bidder shall be forfeited in following cases:-

- 29.1. If a Bidder withdraws or amends their tender during the validity period.
- 29.2. Tender changes: If a Bidder changes the terms, conditions, or prices after the opening date
- 29.3. Order acceptance: If a Bidder fails to accept an order after it's placed
- 29.4. False documents: If a bidder submits false or fabricated documents
- 29.5. In the case of a successful bidder, if the Bidder fails to sign the Contract or to furnish Performance Bank Guarantee within specified time.
- 29.6. During the bid process, if a Bidder indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization.
- 29.7. If a bidder indulges in any unlawful/unethical/immoral act during the process of bidding/order finalization.

The successful bidder's EMD will be discharged upon the bidder's acceptance of the LOI / SO/PO satisfactorily and submission of Performance Bank Guarantee (PBG).

30. NON-EXCLUSIVE:

- 30.1 It is agreed and certified that this Contract is on a non-exclusive basis and the parties are at liberty to enter into similar Contracts with others (Provided however, the system integrator shall ensure that it is entering into Contract, with other parties shall not in any way conflict with or affect the BECIL interests, rights, remedies under this Contract or in law).

31. PERSONNEL:

- 31.1. The personnel assigned by the Bidder to perform the Services shall be the employees of the Bidder , and under no circumstances shall such personnel be considered employees of BECIL or its nominated agencies. The Bidder shall be responsible for the supervision and control of its personnel and for payment obligations of such personnel's compensation, including salary, withholding of income taxes and social security taxes, workers compensation, employee and disability benefits and the like and shall be responsible and accountable for all obligations of an employer according to applicable laws, rules and regulations.
- 31.2. The Bidder shall use its best efforts to ensure that sufficient personnel are assigned to perform the Services and those personnel have appropriate qualifications, skills and experience to perform the Services. If BECIL requests that any personnel employed by the Bidder be replaced, the substitution of such personnel shall be accomplished as per the terms of this RFP and subsequent Contract/ WO
- 31.3. The selected Bidder shall be responsible for the performance of all its obligations under the Contract and shall be liable for compliance with all relevant labor acts and statutory legislations.

32. COMPLIANCE WITH APPLICABLE LAW:

Each Party to the Contract/ Agreement / work order accepts that its individual conduct shall (to the extent applicable to it) always comply with all laws, rules and regulations of government and other bodies having jurisdiction over the area in which the Services are undertaken. In case of changes in such laws, rules and regulations which result in a change to the Services, shall be dealt with as an exceptional situation with the objective to realign the part getting violated under the revised laws with minimal changes to achieve the objective existent prior to the change. For avoidance of doubt, the obligations of the Parties to the Contract are subject to their respective compliance with all local, state, national, supra-national, foreign and international laws and regulations.

33. SEVERABILITY:

If any provision of the Contract/ Agreement / work order, or any part thereof, shall be found by any court or administrative body of competent jurisdiction to be

illegal, invalid or unenforceable; the illegality, invalidity or un-enforceability of such provision or part provision shall not affect the other provisions of the Contract/ Agreement / work order or the remainder of the provisions in question which shall remain in full force and effect. The concerned Parties shall negotiate in good faith to agree to substitute for any illegal, invalid or unenforceable provision with a valid and enforceable provision which achieves to the greatest extent possible the economic, social, legal and commercial objectives of the illegal, invalid or unenforceable provision or part provision.

34. ENTIRE CONTRACT:

The Contract/ Agreement / work order with all Appendices and Schedules appended thereto, contents and scope/ specifications of the RFP, all the corrigendum's, response to queries etc. that may be issued against this RFP and the Bidder's offer including presentation and all supporting documents shall constitute the entire Contract/ Agreement / work order between the Parties with respect to their subject matter, and as to all other representations, understandings or agreements which are not fully expressed herein, provided that nothing in this clause shall be interpreted so as to exclude any liability in respect of fraudulent misrepresentation.

35. LIQUIDATED DAMAGES

- 35.1. If the Bidder fails to achieve the completion of the work in accordance with the scheduled completion date as given in the Contract or the subsequent Work Order issued thereto, BECIL may without prejudice to any other right or remedy available to it as under the Contract or Law:
- 35.2. Recover from the Bidder liquidated damages equivalent to a sum of **0.5% of the value of the undelivered goods/services** for each week of delay beyond the scheduled date of completion or delivery or such liquidated damage, subject to a **maximum of 10% of the contract value** or **such liquidated damages as may be imposed by the Client**, whichever is higher (due to the failure of the Bidder to meet the contractual obligations)
- 35.3. The amount towards Liquidated Damages shall become leviable from the scheduled completion date or from the expiry of the extension, if any, given by BECIL without the levy of Liquidated damages.
- 35.4. BECIL may without prejudice to its right to effect recovery by any other method, deduct the amount of Liquidated Damages from any money belonging to the Bidder which has become due or payable (which shall also include BECIL's right to claim such amount against Bidder's Bank Guarantee)

35.5. Any such recovery of Liquidated Damages shall not in any way relieve the Bidder from any of its obligations to complete the works or from any other of its other obligation and liabilities under the Contract.

36. POWER OF ATTORNEY (Format given at Annexure-18)

36.1. Duly filled Technical Bid with proper seal and signature of authorized person on each page of the bid submitted. The person signing the bid should be the duly authorized representative of the firm/ company whose signature should be verified and certificate of authority should be submitted. The power of attorney or authorization or any other document consisting of adequate proof of the ability of the signatory to bind the firm/ company should be annexed to the bid.

36.2. In case of consortium, **all consortium members must submit the Power of Attorney** as per the format provided in tender document from their respective companies.

37. COMPLIANCE STATEMENT (Format given at Annexure-13)

37.1. A separate **point by point compliance statement** of Scope of work and Specifications including Bill of Material (BOM) for all the equipment/item(s) duly signed & stamped **by bidder** on their letter head must be submitted.

37.2. A separate **point by point compliance statement to be submitted by major OEMs (Server, Storage, Switch, workstations / desktops, Cooling Rack, Firewall, HDR (Extended Detection and Response), SIM (Security Information and Event Management), Monitoring software, PAC & Air/Gas Phase filtration system)** for their respective equipment / software Scope of work and Specifications including Bill of Material (BOM) duly signed & stamped **by OEM** on their letter head must be submitted.

37.3. In case of consortium, point by point compliance statement is required from lead bidder only.

38. UN-PRICED BILL OF MATERIAL (Format given at Annexure-1)

38.1. Bidder should submit the Unpriced Bill of Material (BoM) stating the Make & Model of the equipment proposed by the bidders. **No Financial Cost shall be disclosed in technical bid.**

38.2. In case of consortium, un-priced BoM is required from lead bidder only.

39. **Copy of RFP and respective corrigendum/addendum** should be duly signed and stamped by the bidder at each page as the **token of acceptance** of all the terms and conditions given in referred RFP. (To be submitted by lead bidder only)

E. ELIGIBILITY CRITERIA

1. The bidder should be Registered company / Limited Liability Partnership (LLP) Firm in India under “Indian Company Act, 2013 / 1956” or Partnership Firm registered under “The Indian Partnership Act, 1932”.

A copy of certificate of incorporation (Company registration certificate) for company & LLP Firms or Partnership Deed for Partnership Firm should be submitted. ***(To be submitted by all Consortium members)***

2. Bidder should submit the **Vendor Information Form** as per **Annexure-2**. ***(To be submitted by all Consortium members)***
3. Bidder must not have suffered **bankruptcy/insolvency during the last 5 years**. The Bidder should submit the undertaking on its company letter head duly signed and stamped by bidder. ***(To be submitted by all Consortium members)***
4. Sole Bidder/Lead bidder will provide **Solvency Certificate/Credit Facility** certificate of **INR 12.5 Crores** issued by nationalized bank. ***(To be submitted by lead bidder only)***
5. The bidder must have successfully implemented at least **one similar** kind of project related to **Logging & Monitoring Setup / IT / ICT Infrastructure / Broadcasting services/ Heterogeneous System Integration/Network Operation Center** in India for central / state Government / PSUs / autonomous body / Public Listed Company during in last **Three financial years** i.e. 2022-23, 2023-24, 2024-25 and till the date of issue of this RFP, of value equal to or more than **INR 39 Crores**.

(or)

Two similar kind of project related to **Logging & Monitoring Setup / IT / ICT Infrastructure / Broadcasting services/ Heterogeneous System Integration/Network Operation Center** in India for central / state Government / PSUs / autonomous body / Public Listed Company during in last **Three financial years** i.e. 2022-23, 2023-24, 2024-25 and till the date of issue of this RFP, each of value equal to or more than **INR 24 Crores**.

(or)

Three similar kind of project related to **Logging & Monitoring Setup / IT / ICT Infrastructure / Broadcasting services/ Heterogeneous System Integration/Network Operation Center** in India for central / state Government / PSUs / autonomous body / Public Listed Company during in last **Three financial years** i.e. 2022-23, 2023-24, 2024-25 and till the date of issue of this RFP, each of value equal to or more than **INR 20 Crores**.

(Copy of work orders along with performance / completion certificate should be submitted.) (To be submitted by either of the Consortium members)

6. The Bidder should have **average annual turnover equal to atleast INR 24 Crores** for the last three audited financial years i.e. 2021-22, 2022-23 and 2023-24. **(Copy of Chartered Accountant (CA) Certificate and Audited Balance sheets should be submitted. CA Certificate should be issued after the date of publication of this RFP) (To be submitted by either of the Consortium members)**
7. The Bidder should be **profitable** in all the last three audited financial years i.e. 2021-22, 2022-23 and 2023-24. **(Copy of Chartered Accountant (CA) Certificate and Audited Balance sheets should be submitted. CA Certificate should be issued after the date of publication of this RFP) (To be submitted by either of the Consortium members)**
8. The Bidder should be **Positive Net Worth** in all the last three audited financial years i.e. 2021-22, 2022-23 and 2023-24. **(Copy of tender specific CA certificate indicating positive networth of the bidder company. CA Certificate should be issued after the date of publication of this RFP) (To be submitted by either of the Consortium members)**
9. The Bidder should not have been **blacklisted** by any central / state government and its department / Organizations / Central / State PSUs etc. Self-declaration to that effect should be submitted and undertaking on a non-judicial stamp paper of Rs 100/- certified by Notary along with the technical bid. Format is provided in **“Annexure-9”** of this RFP. **(To be submitted by all Consortium members)**
10. **The bidder is required to submit following documents:**
 - a) Copy of company **PAN Card**.
 - b) Copy of company **GST registration**.
 - c) Copy of **Audited balance sheet** for the financial Year 2021-22, 2022-23 and 2023-24 clearing indication profit and loss statement.
(To be submitted by all Consortium members)

11. Bidder should submit original copy of **Letter of Authorization (Manufacturer Authorization Form (MAF))** from major **Original Equipment Manufacturer (OEMs)** (Server, Storage, Switch, workstations / desktops, Cooling Rack, Firewall, HDR (Extended Detection and Response), SIM (Security Information and Event Management), **Monitoring software, PAC & Air/Gas Phase filtration system**) to quote against the tender Reference No. Ref No. BECIL/EMMC/Logging & Monitoring/2025-26/01 Dated: 07.06.2025 enlisting confirmation for Sales and Service Support for all equipment mentioned. **(Annexure-8).**
12. Bidder should provide **Site Survey Certificate** on their company letter head duly signed by their authorized person & verified by the Client / BECIL official. Format for Site Survey Certificate is provided as “**Annexure-10**”. **Bids without “Site Survey Certificate” will be rejected without any further clarification. (To be submitted by lead bidder only)**
13. Bidders should submit **Comprehensive Warranty / CAMC Certificate** as per the format attached in **Annexure-11. (To be submitted by lead bidder only)**
14. Bidders should submit **undertaking for the procurement of miscellaneous items & accessories to make system functional** as per the format attached in **Annexure-12. (To be submitted by lead bidder only)**
15. Bidders should submit the duly signed and stamped copy of “**Pre-Contract Integrity Pact**”. **(Annexure-19) (To be submitted by all Consortium members)**
16. Bidders should submit the duly signed and stamped “**Pre-qualification proposal submission form**” as per the format attached in **Annexure-7. (To be submitted by lead bidder only)**

F. COMMERCIAL TERMS AND CONDITIONS

Each bidder is required to accept the following terms and conditions:-

1.	Earnest Money Deposit (EMD)	:	<p>EMD Amount of Rs. 96,00,000/- (Rupees Ninety Six Lakh only) should be paid only in form of Demand Draft/Bank Guarantee (BG) in favour of Broadcast Engineering Consultants India Limited, New Delhi. (As per Annexure – 3). (No other mode of payment will be accepted). Bids submitted without EMD will be treated as rejected.</p> <p>EMD is to remain valid for a period of forty-five days beyond the final bid validity period.</p> <p>EMD of the unsuccessful bidders will be returned to them at the earliest after expiry of the final bid validity and latest on or before the 30th day after the award of the contract. The Bid Security of the successful bidder would be returned, without any interest whatsoever, after the receipt of Performance Security from them as called for in the contract. EMD is not required to be submitted by those Bidders who are registered with the Central Purchase Organization and Micro and Small Enterprises (MSEs) as defined in MSEs Procurement Policy issued by Department of MSME as per Rule 170 of GFR-2017.</p> <p>The EMD will be forfeited, if the bidder withdraws or amends, impairs or derogates from the tender in any respect within the validity period of their tender.</p> <p>EMD will not be accepted in any other</p>
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form. Bid without EMD will not be accepted. No interest is payable on EMD amount.

(To be submitted by lead bidder only)

Beneficiary Details:

Bank Name: HDFC Bank

Branch Name: Ansals Fortune Arcade, K-Block, Sector - 18, Noida - 201301, Uttar Pradesh

Account Number: 50200076192513

Type of Account: DOD Account

IFSC Code: HDFC0000088

NOTE: Exempted firms must submit Bid Security Declaration (as per format given in Annexure-6) in lieu of Bid Security (i.e. EMD) along with valid exemption certificate, else bids will be rejected.

Important Note:

- The EMD amount will not accrue any interest.
- For bidders opting to submit a Bank Guarantee / DD, the original BG / DD must be delivered to BECIL's Noida Office before the bid submission deadline (due date and time). The validity of BG shall be valid for a period of forty-five days beyond the final bid validity period.
- Failure to submit the original BG within the stipulated time will result in the rejection of the bid, and such bids will be considered null and void.
- In case BG is found to be forged, bid will be rejected and BECIL can take suitable action as per law.
- In case a bid is submitted without EMD as mentioned above, BECIL reserves the right to reject the bid without providing opportunity for any further correspondence to the bidder concerned.
- Bidder's EMD will be discharged after the

			<p>finalization of Qualified bidder.</p> <ul style="list-style-type: none"> • BECIL may ask bidders to submit additional documents in case any clarification is required through GeM-CPPP Portal or through official email correspondence.
2.	Prices	:	<p>The Prices should be quoted in Indian Rupees only and prices should be FOR destination at Site (EMMC, 10th Floor, Soochna Bhawan, New Delhi)</p> <p>The prices should be quoted exclusive of taxes and all applicable taxes are to be indicated as per format given in RFP/ GeM-CPPP.</p> <p>In case, taxes are not mentioned in Financial bid, prices shall be considered inclusive of taxes.</p>
3.	Payment Terms for INR	:	<p>PAYMENTS WILL BE RELEASED AS PER THE FOLLOWING PAYMENT MILESTONES:</p> <p><i>(Payment will only be released on escrow bank account of consortium members)</i></p> <p>PART-A OF BILL OF MATERIAL (BOM): PROCUREMENT OF HARDWARE AND SOFTWARE (INCLUDING 5 YEARS OF COMPREHENSIVE WARRANTY):</p> <p><u>Milestone-1 (delivery of equipment):</u> 70% of the charges against line items “Supply, Installation, Testing and Commissioning” of Part-A of the Bill of Material (BoM) will be released on completion of delivery of all equipment and on completion of Quantitative Handing / Taking Over (QHTO) of whole equipment at client site i.e. EMMC, 10TH Floor, Soochna Bhawan.</p> <p><u>Milestone-2 (on installation, testing & commissioning of equipment and</u></p>

		<p><u>completion of other activities mentioned in Part-A of BoM):</u></p> <p>30% of the charges against line items “<i>Supply, Installation, Testing and Commissioning</i>” and 100% of the other line items of Part-A of the Bill of Material (BoM) will be released on completion of installation, testing, commissioning of whole system and on completion of Functional Handing / Taking Over (FHTO) by the client for complete setup.</p> <p>Documents required:</p> <p><u>For Milestone-1:</u></p> <p>On submission of original tax invoice of 100% value of line items “<i>Supply, Installation, Testing and Commissioning</i>” of Part-A of the Bill of Material (BoM) along with the copy of Quantitative Handing / Taking Over (QHTO) duly signed by client (EMMC). (Format for QHTO is enclosed as Annexure-14)</p> <p><u>For Milestone-2:</u></p> <p>On submission of copy of tax invoice of 100% value of line items “<i>Supply, Installation, Testing and Commissioning</i>” of Part-A of the Bill of Material (BoM) and original copy of tax invoice of 100% of the other line items of Part-A of the Bill of Material (BoM) along with the copy of Functional Handing / Taking Over (FHTO) documents for complete system duly signed by client (EMMC). (Format for FHTO is enclosed as Annexure-15)</p> <p>PART-B OF BILL OF MATERIAL (BOM): RECURRING CHARGES FOR THE PERIOD OF 5 YEARS:</p> <p><u>Milestone-1 (Recurring / CAMC quarterly charges for equipment and softwares):</u></p> <p>100% of the Quarterly charges of Part-B of the Bill of Material (BoM) will be released on successful completion of respective</p>
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		<p>quarterly service period which includes 1 preventive maintenance activity per quarter for installed hardware / software.</p> <p>Documents required:</p> <p><u>For Milestone-1:</u> On submission of original tax invoice of 100% of the quarterly charges of Part-B of the Bill of Material (BoM) along with the copy of quarterly satisfactory service certificate against completion of respective CAMC period of installed equipment.</p> <p>Note: Along with Invoice, E-WAY Bill (if any), a copy of GST Undertaking & Certificate duly filled, signed and stamped has to be submitted to BECIL as per format enclosed.</p> <p><u>TERMS & CONDITIONS FOR PAYMENTS:</u></p> <ol style="list-style-type: none"> 1. There is no separate costing for Buy-back of the equipment will be taken from bidders. Therefore, bidder shall quote rates in Bill of Material (BoM) after deducting Buy-back costing. 2. The payments terms between BECIL & selected agency are on back to back basis and the payment shall be released by BECIL only if and when received by BECIL from our client (EMMC) and subject to terms & conditions of the RFP and submission of complete required documents. 3. Selected agency will not demand or make any claim under any law with respect to the pending payment till the time corresponding payment is received by BECIL from the Client (EMMC). BECIL shall not be responsible in any manner whatsoever for any delay in releasing the payments or withholding of payments by the Client.
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			<p>4. The (day) date of delivery of goods and/or rendering of services by selected agency shall be the date of realization of payment from the client once the goods and/or services are accepted by client.</p> <p>5. The stage wise invoices raised by selected agency may be accepted by BECIL, however, the date of completion of the milestone / delivery of goods or services shall only be recognized for invoice and its payment when the respective acceptance of goods or services and payment thereof is received from the Client (EMMC).</p> <p>6. If in the instant contract, selected agency is acting only as trader / reseller / distributor/ authorized agents and/ or is engaged in a WORKS contract, no benefits under MSME Act 2006 and PPP Policy 2012 as per MSE Guidelines issued by Ministry of MSME would be applicable to it on account of acceptance of back to back payment terms as above. By agreeing to the terms of RFP, the selected agrees to forgo its rights under this Act and Policy.</p>
4.	Consignee	:	The equipment/Software/item should be consigned to Electronic Media Monitoring Centre (EMMC), 10 th Floor, Sochna Bhawan, New Delhi C/o Project Manager, BECIL.
5.	Tax Invoice	:	<p>All Tax invoices should be raised in the name of</p> <p>“Broadcast Engineering Consultants India Limited, 14-B, Ring Road, I.P. Estate, New Delhi -110002”</p> <p>For -Electronic Media Monitoring Centre, Ministry of Information and Broadcasting, Govt. of India, New Delhi</p>

		<p>BECIL GST: 07AAACB2575L1ZK</p> <p>Note:</p> <p>1. In case of Consortium Bidder, Invoice from lead member of the consortium will only be accepted.</p> <p>2. Along with Invoice, E-WAY Bill (if any), a copy of GST Undertaking & Certificate duly filled, signed and stamped has to be submitted to BECIL as per format enclosed.</p> <p>3. All the tax invoice must be raised ONLY after the completion of milestone along with supporting documents. Invoice received without completion of respective milestone will not be considered.</p> <p>4. Selected agency hereby agrees to ensure timely GST compliances as per the statutory requirements. All the costs pertaining to any GST non-compliance including but not limited to any loss of eligible input tax credit due to non-payment/non-filing of GST return and applicable interest/penalties shall be borne/indemnified by selected agency. Further, selected agency hereby agrees that BECIL reserves the right for reimbursement of any such cost incurred out of the aforesaid noncompliance(s). Selected agency will provide proof of payment of GST i.e. GSTR-1, GSTR-3B, etc. for taking GST payment from BECIL against invoices.</p>
6.	Delivery schedule and Commissioning	<p>: <u>DELIVERY SCHEDULE AND COMMISSIONING:</u></p> <p>PART-A OF BILL OF MATERIAL (BOM): PROCUREMENT OF HARDWARE AND SOFTWARE (INCLUDING 5 YEARS OF COMPREHENSIVE WARRANTY):</p> <p><u>Milestone-1 (delivery of equipment):</u> Supply of equipment at Project site and signing of Quantitative Handing / Taking</p>

		<p>Over (QHTO) of all the equipment should be completed within 10 weeks from the date of issue of work order.</p> <p><u>Milestone-2 (installation, testing & commissioning of equipment and completion of other activities mentioned in Part-A of BoM):</u> Installation, testing, commissioning of whole system including integration of hardware / softwares as per Par-A of BoM and signing of Functional Handing / Taking Over (FHTO) should be completed within 8 weeks from the date of issues of signing of QHTO.</p> <p><u>NOTE:</u> All the equipment / software procured under this project will be under comprehensive warranty for the period of 5 years from the date of signing of Functional Handing / Taking Over (FHTO)</p> <p>PART-B OF BILL OF MATERIAL (BOM): RECURRING CHARGES FOR THE PERIOD OF 5 YEARS:</p> <p><u>Milestone-1 (Recurring / CAMC for equipment and softwares):</u></p> <p>Maintenance & upkeeping of the 24x7 storage of 300 TV channels on the MeiTY empanelled Cloud as per the RFP terms & conditions for the period of 5 years from the date of signing of “<i>Functional Handing / Taking Over (FHTO)</i>” by client (EMMC).</p> <p>CAMC of Pre-owned equipment and Monitoring Software will be under Comprehensive Annual Maintenance Contract (CAMC) for the period of 5 years from the date of signing of “<i>Functional Handing / Taking Over (FHTO)</i>” by client (EMMC).</p> <p><u>NOTE:</u></p>
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		<p>1. Dismantling of old equipment: Selected agency will be responsible for taking out the old material under buy back from client site (EMMC) within 1 week from the date of signing of “<i>Functional Handing / Taking Over (FHTO)</i>” by client (EMMC).</p> <p>2. It is bidder’s responsibility to deliver all the software and hardware/equipment at site i.e. EMMC, 10th Floor, Soochna Bhawan, New Delhi.</p> <p>3. Any damage / loss made to any property of the client during delivery of equipment at Project site will be recovered from selected agency.</p> <p>4. SLA need to be complied during this phase of Project and any other activity defined in tender document must be performed.</p> <p>5. Quarterly satisfactory service certificate duly signed by client (EMMC) against completion of respective CAMC period of installed monitoring software.</p>
7.	Comprehensive Warranty / Comprehensive Annual Maintenance Contract (CAMC)	<p>: All the hardware/equipment & softwares procured for the project will be under Comprehensive Warranty / Comprehensive Annual Maintenance Contract (CAMC) for the period of 5 years from the date of signing of “<i>Functional Handing / Taking Over (FHTO)</i>” by client (EMMC).</p> <p>NOTE:</p> <p>1. Here terms COMPREHENSIVE means that selected agency need to repair the defective equipment by using original spares parts from genuine OEM and if at any stage of the Project it was found that the forge parts are used for the repair / replacement of equipment, BECIL / EMMC may take the appropriate action against the</p>

			<p>selected agency, which includes revoking of PBG.</p> <p>2. During warranty / CAMC, if it was found that the repairing of any equipment is not possible, then engaged agency need to replace the complete equipment with the equivalent specification or higher specification equipment.</p> <p>3. Selected agency must ensure the 24x7x365 functioning of the system as per SLA of the system. To ensure this level of availability of the system, bidder must maintain the stock of spares at its own cost.</p> <p>4. Bidder system must be open to integrate with the other systems as and when required by the EMMC.</p>
8.	Period of Contract	:	<p>Effective date of the contract period will start from the date of issue of work order and the end date of contract will be 5 years (Comprehensive warranty / CAMC) from the date from the date of Functional Handing / Taking Over (FHTO) for complete setup.</p> <p>Please note that Contract can be cancelled unilaterally by the customer/buyer in case services are not received as per quality and standard specified in the RFP and contract within the contracted period.</p> <p>BECIL/EMMC may extend the warranty/ CAMC for the period of three (3) more years to the selected agency on mutual consent.</p>
9.	Packing	:	<p>The material/equipment should be securely packed to withstand transit hazards during different modes of transportation.</p>
10.	Performance Bank Guarantee	:	<p>The successful bidder shall have to furnish Performance Bank Guarantee (PBG) (<i>Format is given at Annexure-4</i>) within 15 days from the date of issue of work order for an amount equal to 5% of total order value and it will be valid till beyond 3 months of</p>

		<p>the date of completion of warranty / CAMC period. <i>(PBG will only be submitted by the lead member of Consortium)</i></p> <p>Performance Bank Guarantee (PBG) to be addressed/ in favour of Chairman & Managing Director (CMD), Broadcast Engineering Consultants India Limited (BECIL), Registered & Corporate Office: C-56, A/17, Sector- 62, Noida-201307, U.P.</p> <p>Beneficiary Details: Bank Name: HDFC Bank Branch Name: Ansals Fortune Arcade, K-Block, Sector - 18, Noida - 201301, Uttar Pradesh Account Number: 50200076192513 Type of Account: DOD Account IFSC Code: HDFC0000088</p> <p>NOTE:</p> <ol style="list-style-type: none"> BECIL may forfeit the PBG/ Security on account of any failure on part of the selected Bidder to complete its obligations under the Agreement. In case the System Integrator performs the Supplies and installation part of the equipment's and does not perform the CAMC services, BECIL shall forfeit the PBG submitted by the SI for the entire project cost. Performance security shall be extended from time to time sufficiently beyond the date of completion of the works to cover the defect liability / warranty or maintenance period up to final acceptance by BECIL.
11.	Technical/ Operational Manual	<p>: Two print copies of Technical Manual / Operation Manual and one CD version / Soft copy of the same have to be supplied with the equipment.</p> <p>All software in original with perpetual</p>

			license certificate has to be provided wherever possible.
12.	Special Terms and Conditions	:	<ol style="list-style-type: none"> 1. The Signatory signing the Bid on behalf of the Bidder should be duly authorized by the Board of Directors/Partners of the Bidder to sign the Bid on their behalf. Bidder should submit the Power of attorney-Notarized as given in the prescribed format. 2. BECIL reserves the right to reject/cancel/terminate work order awarded to bidder in case of unsatisfactory performance as per the requirement of EMMC/BECIL and BECIL will not release any payment to the bidder/vendor in this particular case with the provision to revoke Performance Bank Guarantee (PBG). 3. BECIL reserves the right to reject/terminate/cancel the bid of the bidder in case of providing wrong/hidden information during submission of bid and may revoke the EMD / PBG submitted by bidder. 4. BECIL reserves the right to inspect and monitor/assess the progress / performance of the selected agency at any time during the Contract. 5. Change Orders/ Alteration/ Variation: The Bidder should agree that the requirements and Service requirements given in the Tender documents are indicated minimum requirements and are in no way exhaustive and guaranteed by the Purchaser. 6. If the rate quoted by a Bidder is found to be either abnormally high or low with in the permissible ceiling limits prescribed but under collusion or due

			<p>to unethical practices adopted at the time of tendering process, such tenders shall be rejected by tender evaluation committee.</p> <p>7. BECIL reserves the right to accept or reject any or all bids or to re-tender at BECIL's sole discretion at any stage of the bidding process without assigning any reasons to anybody whatsoever.</p>
13.	Taxes	:	Taxes as applicable.

G. VENDORS REQUIREMENT

1. Additional information

Vendors should provide the following additional information.

- a. A copy of the latest / last annual report of the company and wherever applicable of the key principals. This is required, amongst other things, to understand the financial strengths, growth rate etc. of System Integrator (S.I.).
- b. List with details (including name of client) of similar work executed in India.
- c. Particulars of the partners or related / inter-linked company in India for sales, installation / commissioning and support (for Bidder/Agency OR, principals with whom you have a tie-up (in the case of integrators).
- d. Any other detailed information of relevance (such as market shares etc.) with supporting documents or references.

2. Logistics arrangements

- a. All arrangements required for transportation of equipment and lodging/boarding of maintenance personnel would be the responsibility of Bidder.
- b. Bidder shall coordinate with client EMMC for Road permit/E-way Bill for movement of material to and from Site.

3. Functional Workflow Diagram

Bidder must provide complete functional workflow diagram (specifically as per the BOM of this RFP.

H. PROPOSAL RESPONSE FORMAT

All the bidders are requested to use the same or similar format as given below while submitting the commercial bids / format given on GeM-CPPP Portal. The proposal shall be submitted in two distinct parts: a Technical Proposal & a Commercial Proposal.

1. Proposals must respond to the RFP requirements by restating the number and text of the requirement in sequence and writing the response immediately after the requirement statement.
2. Figures and tables must be numbered and referenced in the text by that number. They should be placed as close to possible to the referencing text.

Pages must be numbered consecutively within each section of the proposal showing proposal section and page number.

3. Proposals shall be based only on the items contained in this RFP and its standard required accessories. The RFP includes official response to pre-proposal conference questions, addenda, and any other material published by the BECIL pursuant the RFP. The bidder is to disregard any previous draft materials and any oral representations it may have received. All responses to the requirements in Sections (list appropriate section) of this RFP must clearly state whether the proposal will satisfy the referenced requirements, and the manner in which the requirement will be satisfied.
4. Pricing information shall appear only in the commercial bid and the technical bid shall contain details of material offered and a compliance statement with reference to the bid document highlighting any deviations.

I. METHOD OF EVALUATION AND AWARD

Evaluation Criterion

Proposals will be evaluated for meeting all technical requirements and system completeness as per Tender document.

All bids which are technically qualified shall be shortlisted and Financial bids of only technically qualified bidders shall be opened.

Lowest bidder (L1) will be the bidder with lowest financial offer and will be the winner for the said tendering process.

Note: Bidder is required to do the site visit for the understanding of the nature of work and obtain the **Site Survey Certificate** signed by Site incharge, EMMC/BECIL and attached with the Technical bid for the Technical evaluation.

NOTE: Bids submitted without “Site Survey Certificate” will be rejected, without further clarification. Therefore, all the bidders must conduct the site survey & analyse the condition of equipment at the site, before the submission of bid (Technical & Financial Bid).

Factors which may be considered as a part of evaluation amongst others will include the following.

1.	Product Quality	:	Only reputed industry tested equipment and solutions with reliability will be accepted, non-standard make/model of equipment will disqualify the proposal technically.
2.	Compatibility	:	System is envisaged to be compatible with the other quoted equipment (including of NMW)
3.	Up-gradation/ Modular design	:	System/equipment should be future looking, modular in design and open to technology upgradation besides being capable of add on facility and features in phased manner.
4.	Assurance of supply	:	Vendor's technical capability, Organizational stability, reliability of equipment and ability to meet timelines.
5.	Spares	:	The bidder has to certify that spares shall be available for a minimum period of 5 years after completion of Project.
6.	Quality	:	Equipment stability, guaranteed uptime

			parameters, life of equipment.
7.	Service	:	After sales service, availability of spare parts/technical support, warranty offered.
8.	Cost	:	Cost of the system as proposed and the apparent future financial implications, CAMC and Total cost of Ownership.
9.	Integration Experience	:	Expertise and experience of the bidder in system / sub system of integration of similar nature.
10.	Delivery Schedule	:	Delivery timeline will be critical parameter for evaluation and final decision.
11.	Regulatory	:	Should meet the Regulatory compliance, Safety requirements and Environmental objectives.

SECTION II

TECHNICAL SYSTEM REQUIREMENT

CONTENTS

- A. SCOPE OF WORK**
- B. FUNCTIONALITY REQUIRED FOR LOGGING AND MONITORING SOFTWARE**
- C. TECHNICAL SPECIFICATIONS**
- D. TENTATIVE LIST OF BUYBACK EQUIPMENT**
- E. BILL OF MATERIAL**

A. SCOPE OF WORK

1. Background

Electronic Media Monitoring Centre (EMMC) is a subordinate office under the Indian Ministry of Information and Broadcasting tasked to monitor content of television channels and report on violations of the Programme and advertising code.

Broadcast Engineering Consultants India Limited (BECIL) has been engaged as a turnkey partner for the revamp of A/V Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC), Soochna Bhawan, New Delhi.

To perform the Logging & Monitoring of the 900 TV channels, EMMC has bifurcated the whole requirement into following three components, which are been separately handled with sequential flow of operations:

1. Downlink of TV channels through C-Band antenna and thereafter, with the help of technical setup all the channels feed are shared on IP to next setup i.e. A/V Logging & Monitoring Setup.

2. A/V Logging & Monitoring Setup is the combination of hardware (storage, servers, switches, work stations, etc.) & software (for logging and monitoring), which are responsible for storing received TV channels for the period of 90 days on First in First out (FIFO) basis at central storage with the facility to retrieve the particular channels as per the time stamping. This system was designed to work for 24x7x365 basis.

3. Through monitoring software, EMMC's **Manpower** views the multiple channels as per their respective viewing rights on monitoring software installed at work stations and manually types the report and submit the same to the higher officials.

NOTE: All of the above, components are independent of each other and managed separately. This RFP intent is for the revamp of second component only i.e. A/V Logging & Monitoring Setup.

Since the existing hardware is 8-10 years old and no longer supports the latest available monitoring software, therefore, it is now decided to revamp the complete Logging & Monitoring Setup as per the terms & conditions laid in this RFP.

Scope of this RFP is to develop a new Logging & Monitoring setup which will be equipped with latest available hardware & software in market.

Intended setup should have the capacity to cater all the functionality mentioned in this RFP. Additionally, this should have the capacity to integrate with the other setup such as NMW's Integrated Dashboard for its capacity enhancement in terms of AI analysis.

2. Scope of Work

The proposed RFP is to select/hire an agency, which would in turn, provide the following equipment / services as per the procedure defined in this tender document.

The selected Bidder will be responsible for function, operation and maintenance as per the terms & conditions listed in this RFP.

The selected Bidder must have all the facility and solution, so that the project must be made operational within the stipulated time frame and is to keep it functional thereafter for the warranty / CAMC Period.

2.1. CONSIDERING THE SCHEDULING, PROJECT IS TO BE EXECUTED IN TWO PHASES:

2.1.1. PHASE-I: SCOPE OF WORK

(i) PROCUREMENT OF EQUIPMENT FOR DATACENTER ALONG WITH WORK STATIONS SETUP:

- Selected agency will need to procure the equipment such as Server, Storage, Switch, desktop and other miscellaneous hardware **(such as Air /Gas filtration Solution & Access Control System)** for the completeness / functionality of the system as per the specifications laid down in this tender documents.
- Selected agency will be responsible for all the rectification work related to already laid cable network and its connectors at EMMC premise.
- If required, selected agency will be responsible for the minor civil / electrical work required for the completion of the Project at no additional cost.
- In case of any additional equipment quantity is required for the Project completion, the same shall be procured by the agency at no additional cost.
- It may be noted that the Bill of Material (BoM) mentioned in the RFP is drafted considering the minimum requirement. This does not limit the selected bidder's responsibility to complete the Project with desired functionalities. If required, bidder will be responsible for the purchase of additional quantities beyond BoM quantities without any additional cost.
- To ensure the complete understanding of requirement, bidders must conduct the site survey and submit their bid accordingly.

(ii) BUY BACK OF OLD EQUIPMENT:

- Selected agency will be responsible to take out old equipment from the premises of EMMC under the provision of buy back. To assess the conditions of equipment under buy back, all bidders should complete the site survey and obtain the site survey certificate duly signed by EMMC official.
- Indicative list of Buy Back equipment are enclosed with this RFP.

(iii) UPGRADATION OF MONITORING SOFTWARE

Selected agency will need to complete the **upgradation of existing Monitoring Software** and customization of monitoring software as per the functionality defined in the tender document and thereafter, conduct the **training** of designated manpower.

(iv) PROCUREMENT AND MAINTENANCE OF DISASTER RECOVERY (DR) SETUP AT CLOUD:

Selected agency will be responsible to purchase and maintenance of the CLOUD STORAGE to store the entire 24x7 feed of 300 TV channels (*list will be shared separately to the selected agency*) for the period of 90 days on cloud on First in First out (FIFO) basis for the period of 5 years from the date of signing of FHTO document. Ministry/ EMMC may vary this list as and when required, therefore, bidder must design its solution accordingly.

Selected cloud service provider must be a Ministry of Electronics and Information Technology (MeiTY) empanelled. **Empanelment certificate / letter of the cloud service provider must be submitted by the participated bidder.**

Indicative specification for the cloud for the period of 90 days storage, total 180 TB data (6.5 GB per channel in 24 hours for 300 channels). Estimated daily data storage: 1.5 TB per day.

Selected agency will be responsible for the conversion of formats required for the storage of 300 TV channels. In case of any hardware / software is required for the same, bidder will provide it at no additional cost.

Selected agency will be responsible for the up-linking / downlinking of the data to/from the stored cloud. If required, agency must be able to retrieve the data from cloud within 60 Minutes.

Selected agency must ensure that the infrastructure required for the said DR setup must be maintained for the period of 5 years from the date of signing of FHTO document at no additional cost.

(v) INTEGRATION OF 300 CHANNELS TO NMW'S INTEGRATED DASHBOARD:

New Media Wing (NMW) is the department under Ministry of Information & Broadcasting and has already selected an agency for the design, development, and maintenance of an AI & ML based Integrated Dashboard, which will be doing AI based analytics on the 300 TV channels to be shared by EMMC.

Selected agency will be responsible for the integration of EMMC's 300 TV channels to NWM's Integrated Dashboard and must be completed before the signing of FHTO documents. Selected agency will be responsible for the following

activities:

(V).1. Sharing of 300 TV channels feed to NMW's Integrated Dashboard:

- Installation, testing & commissioning of Infrastructure (Hardware / software) required for the transmission of 300 TV channels feeds to the cloud of Integrated Dashboard. Any type of format conversion or communication required for this transmission will be done by the selected agency.
- Any kind of customization required in Monitoring Software for the streaming of these channels to Integrated Dashboard cloud.
- These channels list will be shared separately to the selected agency and Ministry/ EMMC may vary this list as and when required, therefore, bidder must design its solution accordingly.
- Any additional hardware / software required for the completeness of the transmission of these streams to Integrated Dashboard will be procured and maintained at no additional cost till the validity of the Project.
- Selected agency will be responsible for the maintenance of infrastructure required for the sharing of 300 TV channels feed to Integrated Dashboard for the period of 5 years from the date of signing of FHTO document.

(V).2. API Integration of the Monitoring Software with Integrated Dashboard:

- AI based analysis on the 300 TV Channels (*shared by EMMC*) will be done by the Integrated Dashboard.
- This analyzed data need to be accessed from Monitoring Software through **API integration** with Integrated Dashboard. Following functionality must be achieved with the integration of **Integrated Dashboard (NMW) & Monitoring Software (EMMC)**:
 - (i) Since, EMMC's logging & monitoring setup has the provision of storing the video streams of selective 300 TV Channels for the period of 90 days. Integrated Dashboard must be able to access the storage server of EMMC's setup as and when required basis for the analysis & reporting purpose.
 - (ii) Thereafter, EMMC user can access the AI analyzed data from Integrated Dashboard from its own Monitoring Software through API integration.
 - (iii) EMMC users must be able to access the data from Integrated Dashboard based on the time-stamping i.e. able to select the specific time & date, TV channel name, type of analysis to be performed on the selected video clips and must be able to download the analyzed report from Monitoring software

itself. It may be noted that analysis will be done by the Integrated Dashboard and Monitoring Software will only pull the analyzed data.

(iv) Upgradation to the integration need to be performed till the functionality of the integrated system is accepted by the EMMC.

- Selected agency must ensure the smooth integration with the Integrated Dashboard's vendor.
- Any additional hardware / software required for the completeness of the integration of the Monitoring Software with Integrated Dashboard will be done at no additional cost till the validity of the Project.
- Selected agency will be responsible for the maintenance of infrastructure required for the integration between *Integrated Dashboard & Monitoring Software* for the period of 5 years from the date of signing of FHTO document.

NOTE: In case of any change in the NMW's vendor for Integrated Dashboard, selected agency may need to perform the integration with the new Integrated Dashboard's agency at no additional cost. Further, any escalation in the scope of work due to the revamped functionality of Integrated Dashboard must be done by the selected agency at no additional cost.

(vi) PROCUREMENT AND INTEGRATION WITH LEASED LINES

Lease line setup is required for the streaming of TV channels for following cases:

1. Uplink / downlink of 300 TV channels streams to DR setup at cloud.
2. Uplink / downlink of 300 TV channels to NMW's Integrated Dashboard cloud.

Selected agency will be responsible for the following activities till the Project validity:

- Procurement of lease line with **1+1 redundancy (from 2 different ISPs)** as per indicative specification defined in this tender document.
- Integration of lease line with the logging & mentoring system as per the client requirement.
- Up-linking / downlinking of the data on these lease line.
- Selection and alteration of channels to be stored at cloud or to be shared with Integrated Dashboard.

- Any switch or hardware required for the integration need to be procured by the bidder at no additional cost.
- Bidder will be responsible for the coordination and arrangements of lease line required for the respective services.
- Any other miscellaneous work related to lease line, at no additional cost.
- During the any maintenance phase of lease line, selected agency will be responsible for the early rectification of the issues and maintain the system availability as per the SLA terms & conditions.
- All the hardware / software required for the maintenance of the lease line must be done by selected agency at no additional cost for the period of 5 years from the date of signing of FHTO document.

(vii) CUSTOMIZATION OF MONITORING SOFTWARE:

Selected agency will be responsible for the customization of Monitoring Software as per the **functionality** defined in tender document and as per the client requirement.

All the applicable customization must be completed before the signing of FHTO document.

During the 5 years CAMC period of the contract, selected agency need to perform the customization as and when required by the client i.e. EMMC.

2.1.1.1. TERMS & CONDITIONS FOR PHASE-I (SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF EQUIPMENT AND SOFTWARE):

- a) Proposed Bill of Material of the system configuration is listed in the **Annexure-1**.
- b) Detailed specifications of the hardware / software are given in specification section of the RFP.
- c) Proposal should be for a complete system / sub system. Incomplete or part component will not be considered.
- d) Each equipment/software must be accompanied with operational / technical manual.
- e) The electrical load of each equipment is to be specified. Further, executing agency will specify the additional load requirement before the commencement of work.
- f) Bidder/Agency should submit the **detailed system Workflow diagram**, Block Schematic, Layout Plan (LOP) (if any) etc. for equipment and power supply system along with Technical bid.
- g) Bidder/Agency should also submit the **PERT Chart** indicating the schedule for the commissioning of the project with the terms & conditions as stipulated in the delivery schedule.
- h) Cross reference in reference of supporting documents should be given with proper page number and volume number.
- i) Selected agency will be responsible for the integration and must ensure that the all the quoted equipment are compatible with each other. Any delay due to integration between equipment may not be relaxed and LD will be recovered as per the terms of this RFP.
- j) Selected agency will be responsible for providing necessary **firewall and IT security measures** (like XDR (extended Detection and Response) with Identity Access Management to ensure better security) along with its associated hardware / software (free updates & upgrades) and shall maintain the same for the period of 5 years from the date of signing of FHTO documents. Any kind of loss due to malware / virus attack on the logging & monitoring system will be recovered as per actuals for the due payments to be made to selected agency. Further, in case of any data loss due to malware attack, then selected agency will be responsible to re-establish the lost data and repair the corrupted hardware at no additional cost. The selected agency will be responsible for **network segmentation**/network zones to limit the spread of

attacks. **Security Information and Event Management (SIEM)** to aggregate logs from across network, data center, and cloud to detect and respond to security incidents in real-time.

- k) Any permit required for the transit of equipment up to the Project location i.e EMMC, 10th floor, Soochna Bhawan, New Delhi must be borne by the selected agency.
- l) Selected agency will be responsible for obtaining necessary approvals from concern Department or their Competent Authority for the **import of equipment (if any) in India**.
- m) Working hours may be limited at the Project location, interested bidder must examine the same before the bid submission and ensure that the Project must be completed well within the timeline specified in the tender documents.
- n) Selected agency must ensure that the proper safety measures were taken for the manpower engaged in the Project.
- o) Selected agency will be responsible to follow all the prevailing Government of India guidelines with respect the manpower involved in the Project.
- p) Selected agency must share the **single point of contact** along with escalation matrix.
- q) **Project implementation plan** must be submitted by the selected agency for the efficient monitoring of the Project.
- r) Any other terms & conditions defined in the RFP will also be applicable for the said Project.

2.1.2. PHASE-II:

On completion of Phase-I of the project, all the hardware & software will be under Comprehensive Warranty / Comprehensive Annual Maintenance Contract (CAMC) for the period of 5 years from the date of completion of Functional Handing / Taking Over (FHTO) for complete Setup.

Bidder shall be responsible to rectify all the network related issues at **no extra cost** which includes all the cables along with its connectors and switches installed at EMMC and keep the system up as per the client satisfaction.

(i) COMPREHENSIVE WARRANTY OF ALL THE EQUIPMENT PROCURED UNDER THIS RFP:

All the procured equipment will be under **Comprehensive Warranty for the period of 5 years** from the date of completion of Functional Handing / Taking Over (FHTO) for complete Setup.

(ii) COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT (CAMC) OF PRE-OWNED EQUIPMENT AT EMMC:

Selected agency will need to undertake the CAMC of the pre-owned equipment such as **3 Nos. of PACs installed at Data Centre & the entire existing cabling network** situated at EMMC. Selected agency will be responsible for the repair / replacement of the spares for the proper functioning of the complete system, at no additional cost. **Comprehensive Annual Maintenance Contract (CAMC)** of the pre-owned equipment will be for the period of 5 years from the date of completion of Functional Handing / Taking Over (FHTO) for complete Setup.

(iii) COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT (CAMC) OF MONITORING SOFTWARE:

Monitoring software will be under Comprehensive Maintenance which includes free upgrades and updates for the period of 5 years from the date of completion of Functional Handing / Taking Over (FHTO) for complete Setup.

During the 5 years CAMC period of the contract, selected agency need to perform the customization as and when required by the client i.e. EMMC without any additional cost.

NOTE:

- a) In either case, selected bidder need to provide the “Perpetual license” for Monitoring Software, whereas validity of the license shall never go end-of –life. Bidders will be responsible for providing unlimited free upgrades / updates for

Monitoring Software, since the license is a perpetual license. All the customization arises due to upgrades / updates of monitoring software, bidder need to complete the same at no additional cost.

- b) In case of additional requirement of additional TV channels to be monitored, bidder must ensure that the Monitoring Software must be **capable of scaling** as and when required by EMMC.

2.1.2.1. TERMS & CONDITIONS FOR PHASE-II (COMPREHENSIVE WARRANTY / CAMC FOR THE PERIOD OF 5 YEARS):

- a) In continuation of the compliances to be followed as per the terms & conditions bought out in Phase-I and RFP. Selected agency must ensure that the same will be maintained at the Phase-II of the Project.
- b) Selected agency shall be responsible for the comprehensive maintenance of all the equipment & Monitoring Software procured under this tender for the period of 5 years as per the Project schedule.
- c) All the equipment procured under this tender will be under comprehensive warranty / CAMC. The term Comprehensive means bidder will diagnose repair/ replace the faulty items/ equipment/ system/ component/ peripherals using its own resources and equipment within time frame of preferably 1 week or time period allowed by EMMC/BECIL to make system operational. The bidder shall carry out Corrective Maintenance/ Break-down Maintenance as and when required.
- d) Selected agency will ensure that the equipment mentioned in said Tender / RFP will be repaired / replaced from the OEM or replaced by the equivalent or higher brand with prior written consent from BECIL/EMMC. The original bills/ documents related to repair/purchase from OEM/supplier shall be submitted as documentary proof to BECIL/EMMC. The replaced parts will be the property of EMMC. The replaced parts will be deposited with the technical department of EMMC for further reference and record.
- e) Procured equipment must not be end of life within warranty / CAMC period. In case of any hardware is found to be end of life during warranty period and there is a difficulty of arranging spares for the repair work, then selected agency will be responsible to provide the upgraded hardware subject to integration with existing setup at no additional cost.
- f) Selected agency will need to provide the regular upgrades and updates for the **Monitoring Software** without any additional cost and ensure that the monitoring & logging set will run on the latest available version.
- g) All other softwares such as Operating System (OS) & MS Office in workstation setup, MS Window server, drivers, inbuilt hardware firmware etc. must be updated by selected agency as and when required without any additional cost.
- h) For hardware & Software, bidder need to provide the latest available security patches / updates for the complete setup on regular basis.
- i) OEM support must not be end of life within CAMC period of 5 years. In case of

any hardware / software version (including built-in softwares & standalone software) is found to be end of life during CAMC period, then selected agency will be responsible for the Procurement of updated version of software at no additional cost.

- j) Repair of the equipment must be done with the original make spares only and if particular equipment is non-repairable, then selected agency must procure the new equipment with similar make & model. If same make & model equipment is not available due to unforeseen circumstances, alternate equipment with equal or better specification may be procured after the approval from EMMC. However, it is sole discretion of EMMC to accept or reject such change in make & model during CAMC / warranty phase, since selected agency is intended to ensure the availability of spares for the upkeeping of equipment for the period of 5 years from the date of signing of FHTO. If required, EMMC may recover the amount deemed fit due to the non-reparability of the hardware. Compatibility of the new hardware with existing hardware / software must be ensured by selected agency at no additional cost.
- k) Cabling must be maintained throughout the contract period. Any repair and replacement required must be done without any additional cost.
- l) Selected agency will be responsible for the integration and must ensure that the **all the quoted equipment are compatible with each other**. Any delay due to integration between equipment may not be relaxed and LD will be recovered as per the terms of this RFP.
- m) Selected agency will be responsible for providing necessary **firewall and IT security measures** (as stated in 2.1.1.1. (J)) along with its associated hardware / software (free updates & upgrades) and shall maintain the same for the period of 5 years from the date of signing of FHTO documents. Any kind of loss due to malware / virus attack on the logging & monitoring system will be recovered as per actuals for the due payments to be made to selected agency. Further, in case of any data loss due to malware attack, then selected agency will be responsible to re-establish the lost data and repair the corrupted hardware at no additional cost.
- n) It may be noted that, all the hardware, software, cable along with its connectors, pre-owned equipment of EMMC mentioned in this RFP and any other miscellaneous items procured under this RFP will be under Comprehensive Warranty / CAMC for the period of 5 years from the date of signing of FHTO and EMMC/ BECIL is not liable to pay any amount (except the BoM quoted) to vendor during this period.

2.2. CONDITION FOR THE SIGNING OF QHTO & FHTO:

2.2.1. Conditions for the signing of Quantitative Handing / Taking Over (QHTO):

- Delivery of all equipment must be completed within the stipulated time schedule.
- On completion of physical delivery of all the equipment, selected agency must submit the duly filled three copies of QHTO documents as per the format given in tender document.
- EMMC representative will check the delivered equipment as per the tendered specifications and quantity.
- Upon completion of above listed conditions, QHTO document will be jointly signed by representative of EMMC & selected agency.
- For **part delivery** of equipment, duly signed copy of delivery Challan is to be obtained from client (EMMC). But final delivery of equipment will be considered on completion of QHTO.
- On completion of other formalities (if any) related to this milestone, mentioned in tender document.

2.2.2. Conditions for the signing of Functioning Handing / Taking Over (FHTO):

- Installation, Testing & Commissioning of all the equipment.
- **Upgradation** of the existing Monitoring Software and its customization as per the specifications, functionality & features defined in tender documents and as per the requirement of EMMC.
- Submission of **three sets** of “*User manual /technical manual, product brochures / data sheets, warranty certificate from major OEMs (Server, Switch, Storage and Workstation / desktop Setup), cabling layout drawings and final data center layout drawings*”.
- Completion of Training of designated manpower.
- Submission of duly filled three copies of FHTO documents as per the format given in tender document.
- Upon completion of above listed conditions, FHTO document will be jointly signed by representative of EMMC & selected agency.
- Submission of complaint **escalation matrix** upto 3 levels with name, designation, email IDs and official contact number.
- On completion of other formalities (if any) related to this milestone, mentioned in tender document.

3. SERVICE LEVEL AGREEMENT:

Will comes in effect from the date of signing of FHTO documents and will be applicable till the completion of CAMC / Comprehensive Warranty.

- **SLA Duration**

Timings: 24x7 Period

Five years (from the date of signing of FHTO Document)

- **SLA Objectives:**

The contractor is required to provide utmost service satisfaction and minimum 99 % overall uptime. Contractor shall provide support on-site in terms of CAMC along with warranty and operation support services.

- The successful bidder shall ensure that the system is working at optimal efficiency and **quarterly preventative maintenance** services are done to achieve this objective.
- Bidder shall prepare required CAMC Certificate along with maintenance service reports of each maintenance activity carried out and get duly certified by Client i.e. EMMC.
- The maximum permissible down time is **one working day**. To meet this down time Bidder should stock sufficient spares at local office in Delhi. Parts/ equipment duly replaced/repared should be of same type and capacity. In case any parts replaced by lower capacity; the original capability should be restored within **2 weeks or as per time period permitted by EMMC**. In case of non-availability of identical replacement, **suitable new equivalent replacement with similar of better specification** should be carried out with approval of BECIL/EMMC. If a complaint is not resolved within 2 week or delayed despite multiple escalations, BECIL/EMMC may take appropriate action as per the tender terms & conditions.
- At the end of contract period / termination of CAMC, the successful bidder shall demonstrate satisfactory testing and operation of all the Equipment and complete the Handing over formalities as per the client satisfaction. Further, PBG of the engaged agency will only be released after the completion of all the **HANDING OVER FORMALITIES**, in case of any delay in the handing over, engaged agency must extend the PBG validity in accordance with the expected timeline of completion of handing over formalities. If agency disagrees for the extension of PBG due to delayed handing over, then BECIL reserves the right to revoke the PBG submitted by the engaged agency.

- Selected agency should be responsible for the complete maintenance of the hardware & software. In case of any spares part or consumables required for the rectification of system, the same must be provided without any additional cost.
- Any complaint raised during the CAMC period must be attended within 1 working day and same should be resolved within **2 week** by providing unique complaint / docket number. If the registered complaint is not rectified within the stipulated time frame and despite multiple escalations, if no satisfactory resolution was provided, BECIL/EMMC may take appropriate action as per the tender terms & conditions.
- During the operation and maintenance (Warranty / CAMC) phase of the Project, following manpower must be deputed (**in General Shift**) by the selected agency for the efficient Project management:
 1. **Project Manager (1 Nos.)** - B.Tech graduate in Electronics and Communication engineering or IT (*or equivalent branch*) and having experience of more than **5 years** in the similar field. He will be the single point of contact for all the communication related to the Project and will be responsible for the day to day progress of the Project.
 2. **Project Engineer (2 Nos.)** - B.Tech / Diploma in Electronics and Communication or IT engineering (*or equivalent branch*) and having experience of more than **2 years** in the similar field. He will be assisting the Project Manager in day to day activities.
- Selected agency shall appoint as many team members, over and above the manpower specified, as deemed fit by them, to meet out the time Schedule and SLA requirements. EMMC/ BECIL would not be liable to pay any additional cost for this.
 - Selected agency shall always maintain above minimum manpower on-site throughout the period of the contract without any additional cost.
 - Warranty/AMC involves comprehensive maintenance and repairs of all hardware and/or software for the said systems, including free of cost replacement of parts, consumables if any, modules, sub-modules, assemblies, sub-assemblies, spares, checking of instrument health, etc to keep the system operational.
- Selected agency has to attend all the faults during operation period/services. In case of any complaint, it should be attended and replacement of the equipment shall be performed during the CAMC / warranty period. No any extra cost shall be bear by the EMMC/ BECIL during this period for the

replacement of the equipment.

- The safety measures shall be taken care by the contractor to ensure the safety of human and equipment.
- Selected agency has to make payment to the deputed Manpower as per the **minimum wage rule** as per the applicable category and area on monthly basis, and if required, he may be asked to submit the proof for the same.
- The EMMC / BECIL reserve right to expel or recommend to the selected agency to remove the particular or all deployed staff on the observation of any malpractice, illegal involvement, Unsatisfactory works, unsatisfactory and miss-behaviors, delay in response and unethical practice. The contractor shall be bounded to replace the staff in such cases.
- EMMC / BECIL will not be responsible for any case or illegal involvement, compliance of the labour court, accidental support/claim or any. The contractor will be solely responsible for all the affairs related to the deployed manpower at the site. If any required manpower is not deputed at the site, then this will be considered as the breach of SLA terms and appropriate action will be taken.
- If there is any recovery amount (either due to deduction in manpower and its compliance or due to defect liability of material), shall be recovered from the subsequent payments to be released by EMMC / BECIL. The maximum allowable time for the replacement of the requirement will be **2 week**. However, meanwhile the makeshift arrangement shall be made by the selected agency and no any extra payment shall be made.
- Bidder should ensure **99.0 % availability** of the all the systems. This will include all kind of breakdown, corrective & preventive maintenance.
- The system availability shall be calculated on monthly basis. Availability will be based on the report of representative of EMMC, based on system logs, equipment logs, downtime and rectification reporting etc. In case the availability for each of the system under Warranty/CAMC is less than 99 % the non-performance deduction from payments for the system under Warranty/CAMC shall be as per the following table:

Sr. No	Uptime	Non- performance deduction in each case
1.	99% or above	No deduction
2.	Less than 99% up to 95%	0.10% of the total Project cost will be recovered on monthly basis from the

		subsequent due payments towards engaged agency, if the system performance is below the prescribed limit for a particular months in a CAMC / warranty period.
3.	Less than 95% upto 90%	0.20% of the total Project cost will be recovered on monthly basis from the subsequent due payments towards engaged agency, if the system performance is below the prescribed limit for a particular months in a CAMC / warranty period.
4.	Less than 90%	0.30% of the total Project cost will be recovered on monthly basis from the subsequent due payments towards engaged agency, if the system performance is below the prescribed limit for a particular months in a CAMC / warranty period.

NOTE: In case of repetitive noncompliance of SLA, selected agency may be blacklisted and PBG may also be revoked.

- The CAMC service provider should have back to back tie-up with the OEM and its authorized service provider for the period of 5 years (CAMC / Warranty period) from the date of signing of FHTO. Documents pertaining to backend tie ups with OEMs must be submitted before start of commissioning of the Project.
- Documents pertaining to backend tie-ups with OEMs must be submitted before start of commissioning of the project.
- The AMC service provider may replace the hardware with the same make, at least same configuration to ensure the genuineness.
- **Spare Parts in stock:** sufficient stock shall be maintained to avoid the last hour rush. Makeshift arrangement: In case of replacement or anticipated delay, the service provider will ensure the makeshift arrangement of the spares and personnel.
- It is the responsibility of the selected agency to provide certification of OEM/Manufacture for complete support for the period of **Five years** in case of product upgrades or discontinue of product and has sufficient provision for spares.

4. CUSTOMER CARE SUPPORT

- Bidder shall provide a single contact point with dedicated help desk (preferably at Delhi) for all break down calls reported under this contract.
- Help desk shall have a contact phone no., Email, Fax, & address etc. and shall be available from Monday to Sunday 24x7 to carry out the activities under the scope of warranty.
- Selected agency must confirm complain/ docket no. to user and maintain log book.

5. SITE SURVEY CERTIFICATE:

Site Survey is to be done before preparation of bids and site survey certificate should be submitted with technical bid as per **Annexure-10**.

Contact Details for site survey is as below:

Contact No. 0120-4177850 (Ext. 228), Email: pravinkumar@becil.com

6. TECHNICAL CONDITIONS

1. Proposed Bill of Material of the system configuration is listed in the **Annexure-1**.
2. Proposal should be for a complete system / sub system. Incomplete or part component will not be considered.
3. Each equipment/software must be accompanied with operational / technical manual.
4. The electrical load of each equipment is to be specified.
5. Bidder/Agency should submit the detailed system Workflow diagram, Block Schematic, Layout Plan (LOP) (if any) etc. for equipment and power supply system along with Technical bid.
6. Bidder/Agency should also submit the PERT Chart indicating the schedule for the commissioning of the project with the terms & conditions as stipulated in the delivery schedule.
7. Vendor should specify the recommended spare parts for each of the major equipment. However, this will not be a part of commercial evaluation process.
8. Cross reference in reference of supporting documents should be given with proper page number and volume number.

9. The bidder should ensure that the equipment/spare parts mentioned in the tender document should be repaired / replaced from the OEM or replaced by.

B. FUNCTIONALITY REQUIRED FROM LOGGING AND MONITORING SOFTWARE:

- 1. Capable of supporting number of TV:** The Software should be highly scalable to be able to take care of the further expansion plan of the project.
- 2. Monitoring on 24 x 7x 365 basis:** The Monitoring of content should be possible on 24 x 7 x 365 basis. The system should be able to work non-stop all the year.
- 3.** The Monitoring should be possible on both live as well as recorded content.
- 4. Input Format:** All TV channels stations will be input to the proposed system via Transport Stream (T/S) Internet Protocol (IP). 75% of the TV input channels shall be SD and 25% shall be HD channels.
- 5. Retention** All recorded files will be retained at 512 Kbps for TV and for a period of 90 days in central storage on FIFO basis.
- 6. Multi-Channel and Multi-user Support:** The System should provide Instant-Real Time Access of the broadcast Content. The system Software should support the combination of unlimited number of real-time channels that can be accessed live or from archived data. This data (live/archived) should be available to 400 Nos. of simultaneous concurrent users. The System software should be able to interface seamlessly compliant to a TCP/IP network

Users should be able to interact with the system from any PC/Laptop/Mobile phone/Tablet via a common high-speed INTERNET OR INTRANET.

The software should be able to cater multiple unique users logging and Monitoring at same time.

- 7. Automated Process of Log, Search, Track, Monitor and Reporting:** The Monitoring System should continuously capture, encode, analyze and store live video streams in an automatically maintained storage system containing 90 days of recorded audio/video.
- 8. User Friendly Interface:** The System should provide the most user friendly and intuitive user interface which is easy to understand and can be used by both Technical and Non-technical staff.

9. Editing and Storage of Recordings

Inbuilt Clip Editor: The System Software should support Editing on selected clips (Metadata)

The users can upload the clips in the editing suite and can edit the clip as per

requirement.

Clip Creation: The System Software should have a clip creation tool that allows users to monitor and save multiple clips, from multiple stations, in organized clip lists with notes and description.

The System shall support exporting selected clips/segments of recordings to external storage (e.g. hard disk of user's PC, DVD, flash drive, etc.).

Created clips can be shared.

Allow for export of entire programs as media files in a range of formats. Ability to add any other format when needed, even not in the list.

10. Supported Video Formats / Codecs

MPEG4 (H.265, H.264, VP8), MPEG2-TS (MPEG2, MPEG1, H.264, H.265,), 3GP (H.265, H.264, VP8, H.263, MPEG4), MOV (H.264, H.265), WMV (VC1, WMV v8, WMV v9), MPEG2 (MPEG2), AV1, AVI (DivX, Xvid, MPEG4, H.264, H.265), FLV, SWF, SVCD, VCD, DIVXDVP, DVD.

11. Supported Audio Formats / Codecs

AC3, AAC3, AAC, MP3, AMR, FLAC, DVP, MMF, MPEG2, OGG, WAV, WMA, ALAC, AIFF, WavPack or other latest audio formats.

While export (extract), the user should be given an option to export with overlay or without, option to export with or without a thumbnail picture (still photo) for the clip and/or for any segment of the clip and with or without metadata.

Ability to define export profile: bitrate, frame size, format, destination (like FTP, You tube, social media, Network, etc.)

Allow exported programs or clips to optionally include subtitles/audio tracks.

Allow sending a clip by mail, save as file, or sent directly to FTP, YouTube/other.

Allow to create clips that are frame accurate, so no frames will be removed in the exported clip.

12. Front-End User Interface: The System shall be fully web-based such that its front-end user interface is graphical and accessible using common Internet browser.

The System shall support use of Firefox, Chrome, Microsoft Edge, running on

Microsoft Windows 10/11 or higher & Mac OSX/ Linux for front-end access. It shall also be compatible with common PC software being used in EMMC.'

Selected agency will be responsible for making monitoring software available for web based access. In case of any additional hardware / software / internet connectivity with firewall / internet security measures required for the completion of said requirement, the same must be provided without any additional cost.

13. Playback of Recordings: The System shall support fast decoding and recording of broadcasts recordings can be played back with no more than 30 seconds of delay in comparison with the real-time broadcasts off the air/ cables.

The System shall support displaying the recording date and time (in the format of dd.mm.yyyy hh:mm:ss) on the screen during playback of the recording.

The System shall support smooth fast forward and backward playback of the recordings. The user interface should have option to select media play-bar length of different time duration viz 5min, 15 min, 30min, 1 hour and 4 hours.

The System shall support viewing/ listening to playback up to 4 distinct video/ audio of recorded

Likewise system shall support viewing/ listening to playback up to 4 distinct video/ audio of recorded Channels initially and 4 distinct video/audio of Live Channels on rest of the workstations/terminals for comparison or monitoring.

The System shall support playback of recordings/ excerpts stored in the System using streaming technology such that the video/audio can be played from the beginning or any position immediately (or with a short delay) without the need of downloading the entire or a significant portion of the video/audio to the computer memory in the first place.

14. Database for Metadata: The System Software should manage a database for metadata with Clockwise File scheduling in First In First Out (FIFO) manner.

15. Date and time Stamping on Clips: The System Software should automatically insert date and time stamp for all the metadata that is entered manually or system generated. This makes the data hyperlinked into audio and video allowing the user to zero in on the specific moment in time and giving the user a comprehensive context.

16. Automated Keyword Search Capability: Keyword alerts should be set to

receive proactive notifications when specific words appear in broadcasted Content.

- 17. Library of Keywords and updating in library:** The System Software should allow for easy adding/deleting/updating of the keywords library. The system provides for very flexible keyword management and alerts based on the keywords
- 18. Audio Finger Printing:** The System Software should have capability to fingerprint and track content on Audio Signature for ad detection
- 19. Content Detection** Ability to detect repetitive video/audio clips: ads, promos, election campaigns. Ability to detect shorter version of the same content, like same advertisement, shorter version. Ability to detect content by audio finger printing concurrently for 50% of channel. Content detection accuracy must be above 95%.
- 20. Media Extraction:** Users can extract video segments or still photos as MPEG and JPEG files for sharing and presentation.
- 21. Search Facility:** Search Engine should be highly powerful, fast, scalable and User friendly. The Users can access any channel of the installed loggers over common TCP-IP network for searching and viewing of any content based on several parameters like date, time, and channel index etc. The offered system should have powerful search facility and should be user configurable.

The software should automatically import as-run logs daily, providing users with a searchable and sort able list of content.

Inbuilt Search Engine to search Metadata. The search option should include search by keywords, broadcast media type, Channel, date, program , etc

The Monitoring Software should be able to automatically detect repetitive clips such as ads, promos, election campaign ads with spot duration, ad run before/after a particular designated advertisement, ads played, ads dropped, ads extra etc.

- 22. Alerts:** The System software should provide facility for Auto Alerts to the designated receiver as per the decision of administrator through SMS, Email, Mobile devices like iPhone, Android phones, tablet etc based on keywords and content flagging.
- 23. Scalability:** The system software should be scalable keeping in view of future expansion of system setup for monitoring of **1500 TV channels**. The system should be expandable to add additional channels without major

downtime or re-engineering.

24. Broadcast Multiviewer: The System Software should support multiple views of multiple channels, including full screen and split-screen.

View of all broadcast channels from a single large screen, including a combination of video, audio, internet inputs, and configurations across multiple channels.

The System Software should have the ability to monitor, log and automatically send alerts in real time basis for any of the following signal quality irregularities immediately

C. TECHNICAL SPECIFICATIONS:

1. COMPREHENSIVE SOLUTION FOR 900 TV CHANNEL MONITORING, STORAGE, AND ANALYSIS

The proposed RFP is to select/hire an agency, which would in turn, provide the equipment / services as per the procedure defined in this tender document.

2. PROPOSED HYBRID MODEL

The proposed solution adopts a hybrid model that combines robust on-premises infrastructure with cloud-based backup.

The on-premises system will manage high-performance storage and processing to continuously record and monitor 900 TV channels with a retention period of 90 days.

AI based analysis will be performed by the NMW's Integrated Dashboard. However, stream of 300 TV channels for the AI analysis will be provided the logging and monitoring system developed at EMMC.

Monitoring software will be responsible for the fetching of analysis performed by NMW's Integrated Dashboard.

3. KEY ACTIVITIES

The following activities will be performed under this solution:

3.1. 24x7 Recording & Monitoring:

- Continuous recording and monitoring of 900 TV channels for 90 days.
- Utilization of specialized logging & monitoring software for efficient data handling.

3.2. Sharing of 300 TV channels feeds to NMW's Integrated Dashboard:

- Selected agency need to perform the API integration with the Integrated Dashboard for the sharing of 300 TV channels feeds.

3.3. Fetching of Cloud-Based AI Analysis from Integrated Dashboard:

- Once the AI analysis is done by Integrated Dashboard, selected agency will fetch the analyzed data on its Monitoring Dashboard Interface.

3.4. Cloud Backup

- 24x7 secure storage for 300 news channels on cloud for the period of 90 days. This list of channels will be chosen by EMMC and can be modified as and when required.

- Ensuring redundancy and data security through cloud-based backup solutions.

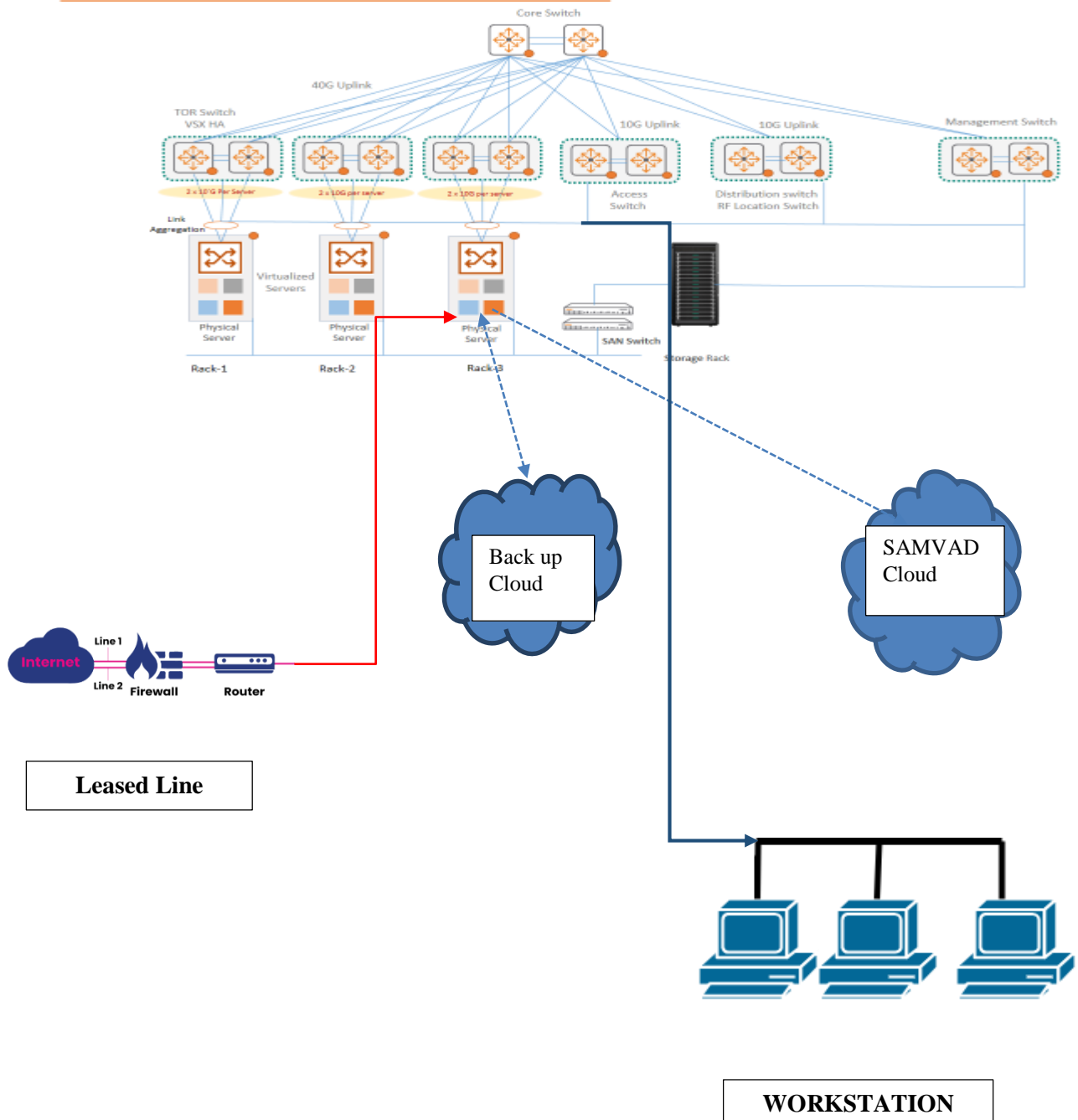
3.5. Workstation Setup

- Monitoring of the channels will be performed by the monitors (manpower) deputed by EMMC with respective workstation.
- Enables clients to fetch reports of specific channels and time slots.

4. SOLUTION ARCHITECHTURE

NETWORK DIAGRAM

Soochna Bhawan - High Level Network Diagram



5. SPECIFICATION OF HARDWARE:

5.1. BRIEF DESCRIPTION OF SPECIFICATION OF HARDWARE OF DATACENTER

5.1.1. SERVERS

Server:	Compute- Servers Specs-UI
Item	Description of Requirement
Chassis	2U Rack Mountable
CPU	Should support up to 5th Generation Intel Xeon processors. 2*28 C*XeonGold 5520+ Processor
Memory	32DIMM slots. 4* 32GB DDR4 Smart Memory DIMMS in Servers should be scalable upto 8.0TB using DDR5 Load Reduced DIMM (LRDIMM) operating at 4800 MT/s (depending on processor model)
HDD Bays	Must support Up to 12+4+4 LFF HDD/SSD
Disk Drive for OS	2* 960GB SATA LFF SSD with RAID1 Configuration
Disk Drive for Data	Hot Plug LFF SATA/SAS/SATA SSD/SAS SSD and NVMe drives must be supported with Server should support up to 360TB of space in Single server for future expansion. Server should be populated with 6 * 4TB on day 1
Networking features	1* 10 Gbps 2-port Intel Ethernet Adapter with Transceivers Server should support below networking cards for future requirements : 1. 1Gb 4-port network adaptors 2. 10Gb 2-port Ethernet adaptor 3. 10Gb 4-port Ethernet Adapter 4. 10GBaseT 2-port Ethernet adaptor 5. 10/25Gb 2-port SFP28 Ethernet adaptor 6. 10/25Gb 4-port SFP28 Ethernet adaptor 7. 100Gb QSFP28 Ethernet 8. 100Gb 2-port QSFP56 Ethernet 9. 200Gb QSFP56 Ethernet 9. Pensando Distributed Services Platform DSC-25 Enterprise 10/25Gb 2-port SFP28 Card Infiniband Options: 100Gb or 200Gb Single or Dual port Adapter
SAN	1 x 32Gbps - 2 port FC HBA Card should be bundled

Interfaces	Serial - 1 (Optional) USB support with Up to 5 total: 1 front, 2 rear, 2 internal. 1GbE Dedicated management port
Bus Slots	Server should support upto eight PCI-Express 4.0 slots, atleast two x16 PCIe slots
Power Supply	Should support hot plug redundant low halogen power supplies with minimum 94% efficiency 2 x 800W Power supplies should be there with Flex slotsd
Fans	Redundant hot-plug system fans
Industry Standard Compliance	ACPI 6.3 Compliant PCIe 4.0 Compliant WOL Support Microsoft® Logo certifications PXE Support USB 3.0 Compliant Energy Star SMBIOS 3.2 Redfish API IPMI 2.0 Secure Digital 4.0 TPM 1.20 and 2.0 Support Advanced Encryption Standard (AES) Triple Data Encrytion Standard (3DES) SNMP v3 TLS 1.2 DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP) Active Directory v1.0 ASHRAE A3/A4 UEFI (Unified Extensible Firmware Interface Forum) 2.6

System Security	<p>UEFI Secure Boot and Secure Start support</p> <p>Tamper-free updates – components digitally signed and verified</p> <p>Immutable Silicon Root of Trust</p> <p>Ability to rollback firmware</p> <p>FIPS 140-2 validation</p> <p>Secure erase of NAND/User data</p> <p>Common Criteria certification</p> <p>TPM (Trusted Platform Module) 1.2 option</p> <p>Configurable for PCI DSS compliance</p> <p>TPM (Trusted Platform Module) 2.0 option</p> <p>Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser</p> <p>Bezel Locking Kit option</p> <p>Support for Commercial National Security Algorithms (CNSA)</p> <p>Chassis Intrusion detection option</p> <p>Secure Recovery – recover critical firmware to known good state on detection of compromised firmware</p>
Latest Operating Systems and Virtualization Software Support	<p>Microsoft Windows Server</p> <p>Red Hat Enterprise Linux (RHEL)</p> <p>SUSE Linux Enterprise Server (SLES)</p> <p>Vmware , Oracle linux and Oracle VM , Citrix , Ubuntu</p>
Provisioning	<p>1. Should support tool to provision server using RESTful API to discover and deploy servers at scale</p> <p>2, Provision one to many servers using own scripts to discover and deploy with Scripting Tool (STK) for Windows and Linux or Scripting Tools for Windows PowerShell</p>
Firmware security	<p>1. For firmware security, system should support remote management chip creating a fingerprint in the silicon, preventing servers from booting up unless the firmware matches the fingerprint. This feature should be immutable</p> <p>2. Should maintain repository for firmware and drivers recipes to aid rollback or patching of compromised firmware. Should also store Factory Recovery recipe preloaded to rollback to factory tested secured firmware</p>

<p>Embedded Management and firmware security</p>	<ol style="list-style-type: none"> 1. System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication 2. Server should have dedicated 1Gbps remote management port 3. Server should have storage space earmarked to be used as a repository for firmware, drivers and software components. The components can be organized in to install sets and can be used to rollback/patch faulty firmware 3. Server should support agentless management using the out-of-band remote management port 4. The server should support monitoring and recording changes in the server hardware and system configuration. It assists in diagnosing problems and delivering rapid resolution when system failures occur 5. Applications to access the server remotely using popular handheld devices based on Android or Apple IOS should be available 6. Remote console sharing upto 6 users simultaneously during pre-OS and OS runtime operation, Console replay - Console Replay captures and stores for replay the console video during a server's last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption and Secure Shell Version 2 support. Should provide support for AES and 3DES on browser. Should provide remote firmware update functionality. Should provide support for Java free graphical remote console. 7. Should support managing multiple servers as one via <ul style="list-style-type: none"> Group Power Control Group Power Capping Group Firmware Update Group Configuration Group Virtual Media and Encrypted Virtual Media Group License Activation 8. Should support RESTful API integration
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	<p>9. System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support</p> <p>10. Server should have security dashboard : displaying the status of important security features, the Overall Security Status for the system, and the current configuration for the Security State and Server Configuration Lock features.</p> <p>11. One-button Secure Erase designed to decommission/repurpose servers</p> <p>12. NVMe wear level display</p> <p>13. Workload Performance Advisor - Provides server tuning recommendations to improve server performance</p>
Cloud Enabled Monitoring and Analytics	<p>1. Offered servers shall have cloud enabled monitoring and analytics engine for proactive management. All required licenses for same shall be included in the offer.</p> <p>2. Cloud Enabled Monitoring and analytics engine shall have capability to provide following:</p> <ul style="list-style-type: none"> a. Providing Firmware upgrade and patch upgrade recommendations proactively. b. Providing power and support entitlement status. c. Recommendations to eliminate performance bottlenecks and critical events, based on Analytics engine having capability of proactive recommendation for arresting the issues / problems. d. Automatic creation of support cases e. Detection of the Service Pack for Server and notifications for any hotfixes that may be available for the particular Configuration. f. Customer advisories based on their relevance to server configuration. g. Should have continuous, proactive health monitoring and recording of required system parameters as well as diagnostic telemetry data on a 24x7 basis. h. Should have monitoring & analytics feature for the offered server/chassis along with its sub-components to predict, prevent, and auto-resolve problems and by providing automating case creation and log file submission for the problems that can't be auto resolved.

Server:	Compute-- Servers Specs-Recording server (RSA)
Item	Description of Requirement

Chassis	2U Rack Mountable
CPU	Should support up to 5th Generation Intel Xeon processors. 2*28 C*XeonGold 5520+ Processor
Memory	32DIMM slots. 4* 32GB DDR4 Smart Memory DIMMS in Servers should be scalable upto 8.0TB using DDR5 Load Reduced DIMM (LRDIMM) operating at 4800 MT/s (depending on processor model)
HDD Bays	Must support Up to 12+4+4 LFF HDD/SSD
Disk Drive for OS	2* 960GB SATA LFF SSD with RAID1 Configuration
Disk Drive for Data	Hot Plug LFF SATA/SAS/SATA SSD/SAS SSD and NVMe drives must be supported with Server should support up to 360TB of space in Single server for future expansion. Server should be populated with 6 * 6TB on day 1
Networking features	1* 10 Gbps 2-port Intel Ethernet Adapter with Transceivers Server should support below networking cards for future requirements: <ol style="list-style-type: none"> 1Gb 4-port network adaptors 10Gb 2-port Ethernet adaptor 10Gb 4-port Ethernet Adapter 10GBaseT 2-port Ethernet adaptor 10/25Gb 2-port SFP28 Ethernet adaptor 10/25Gb 4-port SFP28 Ethernet adaptor 100Gb QSFP28 Ethernet 100Gb 2-port QSFP56 Ethernet 200Gb QSFP56 Ethernet 9. Pensando Distributed Services Platform DSC-25 Enterprise 10/25Gb 2-port SFP28 Card Infiniband Options: 100Gb or 200Gb Single or Dual port Adapter
SAN	1 x 32Gbps - 2 port FC HBA Card should be bundled
Interfaces	Serial - 1 (Optional) USB support with Up to 5 total: 1 front, 2 rear, 2 internal. 1GbE Dedicated management port
Bus Slots	Server should support upto eight PCI-Express 4.0 slots, atleast two x16 PCIe slots
Power Supply	Should support hot plug redundant low halogen power supplies with minimum 94% efficiency 2 x 800W Power supplies should be there with Flex slotsd
Fans	Redundant hot-plug system fans

Industry Standard Compliance	ACPI 6.3 Compliant PCIe 4.0 Compliant WOL Support Microsoft® Logo certifications PXE Support USB 3.0 Compliant Energy Star SMBIOS 3.2 Redfish API IPMI 2.0 Secure Digital 4.0 TPM 1.20 and 2.0 Support Advanced Encryption Standard (AES) Triple Data Encryption Standard (3DES) SNMP v3 TLS 1.2 DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP) Active Directory v1.0 ASHRAE A3/A4 UEFI (Unified Extensible Firmware Interface Forum) 2.6
System Security	UEFI Secure Boot and Secure Start support Tamper-free updates – components digitally signed and verified Immutable Silicon Root of Trust Ability to rollback firmware FIPS 140-2 validation Secure erase of NAND/User data Common Criteria certification TPM (Trusted Platform Module) 1.2 option Configurable for PCI DSS compliance TPM (Trusted Platform Module) 2.0 option Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser Bezel Locking Kit option Support for Commercial National Security Algorithms (CNSA) Chassis Intrusion detection option Secure Recovery – recover critical firmware to known good state on detection of compromised firmware

Latest Operating Systems and Virtualization Software Support	Microsoft Windows Server Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) Vmware , Oracle linux and Oracle VM , Citrix , Ubuntu
Provisioning	1. Should support tool to provision server using RESTful API to discover and deploy servers at scale 2, Provision one to many servers using own scripts to discover and deploy with Scripting Tool (STK) for Windows and Linux or Scripting Tools for Windows PowerShell
Firmware security	1. For firmware security, system should support remote management chip creating a fingerprint in the silicon, preventing servers from booting up unless the firmware matches the fingerprint. This feature should be immutable 2. Should maintain repository for firmware and drivers recipes to aid rollback or patching of compromised firmware. Should also store Factory Recovery recipe preloaded to rollback to factory tested secured firmware
Embedded Remote Management and firmware security	1. System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication 2. Server should have dedicated 1Gbps remote management port 3. Server should have storage space earmarked to be used as a repository for firmware, drivers and software components. The components can be organized in to install sets and can be used to rollback/patch faulty firmware 3. Server should support agentless management using the out-of-band remote management port 4. The server should support monitoring and recording changes in the server hardware and system configuration. It assists in diagnosing problems and delivering rapid resolution when system failures occur 5. Applications to access the server remotely using popular handheld devices based on Android or Apple IOS should be available. 6. Remote console sharing upto 6 users simultaneously during pre-OS and OS runtime operation, Console replay - Console Replay captures and stores for replay the console

	<p>video during a server's last major fault or boot sequence.</p> <p>Microsoft Terminal Services Integration, 128 bit SSL encryption and Secure Shell Version 2 support.Should provide support for AES and 3DES on browser.Should provide remote firmware update functionality.Should provide support for Java free graphical remote console.</p> <p>7. Should support managing multiple servers as one via</p> <ul style="list-style-type: none"> Group Power Control Group Power Capping Group Firmware Update Group Configuration Group Virtual Media and Encrypted Virtual Media Group License Activation <p>8. Should support RESTful API integration</p> <p>9. System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support</p> <p>10. Server should have security dashboard : displaying the status of important security features, the Overall Security Status for the system, and the current configuration for the Security State and Server Configuration Lock features.</p> <p>11. One-button Secure Erase designed to decommission/repurpose servers</p> <p>12. NVMe wear level display</p> <p>13. Workload Performance Advisor - Provides server tuning recommendations to improve server performance</p>
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Cloud Monitoring and Analytics	Enabled and	<p>1. Offered servers shall have cloud enabled monitoring and analytics engine for proactive management. All required licenses for same shall be included in the offer.</p> <p>2. Cloud Enabled Monitoring and analytics engine shall have capability to provide following:</p> <ul style="list-style-type: none"> a. Providing Firmware upgrade and patch upgrade recommendations proactively. b. Providing power and support entitlement status. c. Recommendations to eliminate performance bottlenecks and critical events, based on Analytics engine having capability of proactive recommendation for arresting the issues / problems. d. Automatic creation of support cases e. Detection of the Service Pack for Server and notifications for any hotfixes that may be available for the particular Configuration. f. Customer advisories based on their relevance to server configuration. g. Should have continuous, proactive health monitoring and recording of required system parameters as well as diagnostic telemetry data on a 24x7 basis. h. Should have monitoring & analytics feature for the offered server/chassis along with its sub-components to predict, prevent, and auto-resolve problems and by providing automating case creation and log file submission for the problems that can't be auto resolved.
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5.1.2. STORAGE:

Parameter	Functionality
Capacity & Scalability	<p>1. Offered Storage array shall be supplied minimum with 1400TiB Capacity using encrypted NL-SAS drives and shall be configured in Raid 6. Vendor shall not use more than 10D+2P while sizing the array.</p> <p>2. Offered array shall support at-least 550 drives.</p> <p>4. Offered Storage shall be able to protect at-least 2 drives failure simultaneously within a given raid group.</p> <p>5. Offered storage shall support both SSD and HDD. HDD shall support both SAS and NL SAS drives.</p> <p>6. Offered Storage shall be compatible with existing HPE 3PAR7400 SAN Storage.</p> <p>7. Proposed storage system should be from same OEM who are providing server, Network Switch and SAN Switch in this tender.</p>
Data Availability	<p>1. Offered storage shall be an enterprise storage array & 100% data availability guaranteed architecture. Shall be published as enterprise array on the vendor web site.</p> <p>2. 100% data availability guaranty shall be clearly mentioned on vendor web site for the offered model. If vendors are not supporting the 100% data availability as per their web site then vendor shall quote additional Controller and 10% additional capacity as cold spare along with array for mitigating the failure situations.</p>
Operating System & Clustering Support	The storage array should support industry-leading Operating System platforms & clustering including: Windows Server 2019 / 2022, VMware 7/8, Linux and etc.
Storage Encryption	<p>1. Vendor shall offer only the encrypted drives with appropriate encryption licenses and shall meet FIPS 140-2 – Level 2 security requirements. Vendor shall not offer any controller based or Software based encryption.</p> <p>2. Offered FIPS 140-2 Validated encryption drives shall support both KMIP 1.3 and KMIP 1.4 for key management</p>

	solutions. Vendor shall offer at-least internal Key manager engine for key management.
No. of Controllers	<p>1. Offered Storage shall be supplied with at-least Quad controller from day one. Vendor shall ensure that all controllers, with and without scalability, shall be connected to a common back-plane and shall not use any loosely connected architecture like through SAN Switches, Ethernet Switches, InfiniBand switches etc.</p> <p>2. If vendor doesn't support common backplane architecture then every pair of controller shall be complied with all RFP requirements along with 100% data availability guarantee.</p>
Cache and CPU Processing Power	<p>1. Offered Storage array should have at-least 1024 GB protected DRAM cache.</p> <p>2. Complete offered cache shall be both Global and coherent.</p> <p>3. DRAM Cache shall be completely dynamic for read and write ratios and operations and vendor shall not offer any additional card / module / drive for write cache operations.</p> <p>4. Offered storage shall be based upon latest generation Intel CPUs, minimum skylake series, and shall be supplied with at-least 40 numbers of CPU cores.</p>
Processing Power - Parallel processing engine	<p>1. Offered Storage shall have dedicated, separated parallel processing engines, apart from CPU cores for effectively handling Raid-Rebuilding and data striping, thin re-claim etc.</p> <p>2. Storage array shall be supplied with at-least 8 dedicated above processing engines either in the form of ASICs or other equivalent technologies and shall be scalable to at-least 16 such engines without replacing the existing controllers.</p> <p>3. If vendor doesn't support above critical feature, then additional 16 CPU Cores shall be supplied.</p>

Architecture & Processing Power	<p>1. Controllers shall be true symmetric active-active so that a single logical unit can be shared across all offered controllers in symmetrical fashion, while supporting all the major functionalities like Thin Provisioning etc.</p> <p>2. Offered storage array shall have native virtualization support so that Raid can be carved out from a logical space instead of dedicating separate physical disks for each application.</p>
No Single point of Failure	Offered Storage Array shall be configured in a No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc.
Cloud Enabled Monitoring and Analytics	<p>a. Providing Firmware upgrade and patch upgrade recommendations proactively along with release notes and with awareness of the peripheral infrastructure connected to the array.</p> <p>b. Dashboard shall clearly highlight whether there is any issue with array with respect to best practices and shall recommend the required action, if any.</p> <p>c. Providing extremely granular per-minute historical capacity and performance trend analysis by default, without the need to enable extra logging, install any appliances (physical or virtual), or install any software.</p> <p>d. Vendor cloud enabled monitoring and analytics engine shall be completely integrated with their support team so that it can provide history of support cases logged with Support team under different column like Critical, Normal and low severity along with closed cases. Cloud monitoring tool shall be able to provide the complete month-wise breakup.</p> <p>e. Shall be able to provide the executive Dashboard covering various critical and must aspects of Total Capacity, overall health / wellness score of array. De-duplication and compression ratio, over-all front-end performance etc.</p>

Cloud Enabled - Analytics	<p>Cloud enabled Analytics engine shall have capability to provide following:</p> <p>a. Shall have capability of global learning – Analytics engine shall collect control information from at-least 50000+ arrays across vendor installed base for meaningful output. Vendor shall provide the documentary proof for it.</p> <p>b. Analytics engine shall have capability of proactive recommendation for arresting the issues / problems noticed at other install base of vendor after identifying the problematic signature.</p>
Cloud Enabled - HyperVisor Integration	<p>Cloud enabled monitoring and analytics engine integration with Hypervisor</p> <p>a. Offered Cloud enabled monitoring and analytics engine shall be tightly integrated with Hypervisor layer and shall be certified to work with at-least VMware.</p> <p>b. Hypervisor integration shall be able to provide end to end monitoring of hypervisor Datacenter, Data-store, Hypervisor Host and VMs running within the hypervisor datacenter and shall be able to link with offered storage array.</p> <p>c. Cloud monitoring and integration tool shall provide the detailed analysis of CPU Contention, Memory contention, IO contention for each VM – including the latency.</p> <p>d. Cloud monitoring and integration tool shall have capability to identify the top VMs which are contributing towards maximum IOs and Latency.</p> <p>e. In case vendor doesn't support the above offered functionality then Vendor shall supply the enterprise license for VMware vRealize suite for at-least 20 Physical servers, each running with dual physical CPUs.</p>

<p>Cloud native data console (Management)</p>	<p>Offered Storage array should have cloud native data console for managing unlimited number of arrays. Cloud native console shall provide following functionalities:</p> <ul style="list-style-type: none"> a. Common Dashboard for all managing multiple arrays through a single cloud native data console. b. Main Dashboard shall provide the information of Total number of Arrays, Volumes, hosts, Capacity and performance information of top Arrays and Volumes. c. Common role based access control for managing multiple arrays through a single data console instead of creating users and assigning roles individually at each array. d. Common Audit management for all arrays e. Shall have capability for tagging the Storage volume to given host applications so that performance charts can be drawn for application instance for easy management and troubleshooting. f. Offered console shall advise about Placement of application on best fit system based on workload after application tagging. g. Shall be able to provide the context aware software updates on the storage array. h. Shall be able to offer storage management and configuration as a service instead of controlling, patching and upgrading the management application by onsite team
<p>Cloud Native data console Management - Life Cycle</p>	<ul style="list-style-type: none"> 1. Management application shall be truly cloud native so that there shall be no need to configure, upgrade, patching of management application during the life-cycle of support contract and shall be offered as a service. 2. In case, vendor need any additional service like clustering / federation for managing multiple arrays from a single console and doesn't have cloud native data console – then all required accessories like dual Ethernet switches, cables, at-least dual management server in HA

	etc. shall be provided upfront for at-least 16 arrays.
Site Assessment	<p>1. Vendor shall do comprehensive Cloud based assessment, at-least for VMware environment on a quarterly basis and shall factor the required services for it.</p> <p>2. Assessment shall provide the detailed analysis of VMware Hosts – CPU & Memory utilization, Storage analysis and relevant findings of contention, Culprit and Victim VMs in the environment attached to offered storage. Offered assessment shall do complete analysis of licensing as well.</p>
Data Protection	<p>1. In case of power failure, storage subsystem shall have de-staged mode so that un-committed information can be protected. De-staging shall happen to vault drives and vault drives shall be encrypted.</p> <p>2. Vendor shall not use any Vault drive as data drives for capacity calculation. Offered Vault drives shall not be the part of supplied disk enclosures.</p>
Host Ports and Back-end Ports	<p>1. Offered Storage array shall have minimum of 16 x 32Gbps Fiber Channel ports 8 x 25Gbps ISCSI ports. All ports shall have capability to work at line speed.</p> <p>2. Offered Storage array shall be scalable to at-least 32 x 32Gbps Fiber channel ports and 16 x 25Gbps ISCSI ports.</p> <p>3. Offered Storage array shall have minimum of 32 SAS lanes in the back-end for disk connectivity running at 12Gbps speed and shall be scalable to 64 SAS Lanes without replacing the existing controllers.</p> <p>4. Offered Storage array system shall be supplied with quad additional native 10Gbps IP ports for storage based replication and shall be scalable to 8 Native 10Gbps IP ports. All ports shall be provided with SFP+ transceiver for fiber connectivity.</p>
Investment Protection	Offered Storage shall support data in place non-disruptive upgrade without any downtime to next model of array within the same offered series and shall be scalable to at-least 4TB Cache

Global Hot Spare	<p>1. offered Storage Array shall support distributed Global hot Spare for offered Disk drives.</p> <p>2. Global hot spare shall be configure as per industry practice.</p>
Quality of service	<p>1. Offered storage array shall support quality of service for critical applications so that appropriate and required response time can be defined for application logical units at storage. It shall be possible to define different service / response time for different application logical units.</p> <p>2. Quality of service engine shall allow to define minimum and maximum cap for required IOPS / bandwidth for a given logical units of application running at storage array.</p> <p>3. It shall be possible to change the quality of service Response time (In both milliseconds as well as Sub-milliseconds), IOPS, bandwidth specification at real time.</p>
Capacity efficiency	<p>1. Offered storage array shall support inline data efficiency engine (Supporting Thin Zero detect and re-claim, De-duplication and Compression) and shall be enabled by default.</p> <p>2. Vendor shall have flexibility to enable / disable the data efficiency engine at the time of Volume creation.</p> <p>3. Storage subsystem shall be supplied with Thin Provisioning, Thin Re-claim, Snapshot, De-duplication, Compression, Performance Monitoring, and Quality of service on day 1 for the maximum supported capacity of array.</p>
Firmware Upgrade	<p>Offered storage shall support online non-disruptive firmware upgrade for both Controller and disk drives without any reboot of controller.</p>

Storage Management	<p>Offered Storage array management console shall be able to manage at-least 8 arrays from a single console. Management console shall provide following functionalities:</p> <ul style="list-style-type: none"> a. Common Dashboard for all managed arrays through a single management console. b. Data migration through same console for all supported heterogeneous arrays c. On-premise performance analysis, workload planning etc. through a single console. d. End to end connected topology view in pictorial format within management console, from Hypervisor to Storage arrays. At-least one of the hypervisor among VMware or Hyper-V shall be qualified. e. In case, vendor need any additional service like clustering / federation for managing multiple arrays from a single console – then all required accessories like dual Ethernet switches, cables shall be provided upfront for at-least 8 arrays.
Integration – VMWARE	<ul style="list-style-type: none"> 1. Offered storage array shall be tightly integrated with VMware and shall be certified for VVOL. Shall provide following functionalities for VVOL 2. Shall be certified for vVol based replication 3. Shall support more than 25,000 vVol and at-least 5000VMs using Vvol. 4. Shall support both compression and de-duplication for VVOL 5. Shall be qualified to work with both Fiber Channel and ISCSI for VVOL.

Integration – Container	<p>Offered Storage array shall be integrated with Red-hat OpenShift, Kubernetes and other industry K8 based container platform through CSI driver set. Vendor shall support at-least following functionalities through their CSI / CSP integration :</p> <ul style="list-style-type: none"> a. Shall support both Static and Dynamic provisioning b. Shall be able to expand, re-size the persistent volumes given to statefulset applications. c. Shall be able to create and delete the snapshots. d. Shall support CSI Raw block volume as well as CSI Volume cloning. e. Support for both Fiber channel as well as ISCSI.
Snapshot / Point in time copy & No. of Volumes	<ul style="list-style-type: none"> 1. The storage array should have support for controller-based snapshots (At-least 1024 copies for a given volume). 2. Offered Storage array shall support more than 32000 base volume on the storage array without snapshot and clone.
Multi-tenancy	<p>Offered storage array shall be true multi-tenant and shall support more than 512 Tenant per storage array. Every tenant shall be treated as a separate logical storage array with its own user control access.</p>

5.1.3. SWITCH

	Item Name: Core Switch (Layer-2 and Layer-3) Chassis based
Sr. No	Minimum Technical Specification
1	General Features
	Core switch should be Gigabit Layer 2 and Layer 3 switch with console/auxiliary ports and redundant Switch Fabric/CPU and RPS, along with all accessories.
	It shall be a chassis based switch with at least 5 payload slots for line cards and additional two slots to accommodate two nos. of switch processor/MPU.
	The switch will have redundant CPUs installed from day-1. Should support Non-Stop Forwarding and Stateful Switchover to ensure information between supervisor engines/CPU/MPU /equivalent technology is fully to allow the standby supervisor engine/CPU/MPU/equivalent technology to take over in sub-second time if the primary supervisor fails.
	Switch should have Hot Swappable redundant Power Supply from day 1 Include Power supply units and Power cords Indian Standard
	Switch should have non-blocking per-slot throughput from day 1.
	Should have blank slot for future expansion
	Chassis should support 1G, 10G, 25G, 50G, 40G, 100G port or line card for future expansion
	Software upgrades, updates shall be included as part of the warranty
	The switch should be based on programmable ASICs purpose-built to allow for a tighter integration of switch hardware and software to optimize performance and capacity
	Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source
	Operating temperature of 0°C to 45°C
	All mentioned features (above & below) should be available from day 1. Any license required to be factored from day 1
2	Performance
	Shall support In Service Software Upgrade (ISSU) or Hit less update to provide an upgrade of the entire chassis or an individual task/process without impacting hardware forwarding.
	Switch should support field replaceable components such as Supervisor/MPU/CPU/equivalent technology, Line cards, Power-supply and Fan trays.

	Should have 8 GB DRAM and 16 GB Flash.
	The switch will have at up to 14 Tbps switching capacity and support non-blocking 2.8Tb fabric per slot .
	Forwarding rates: The switch should have minimum total 3 Bpps or minimum 900Mpps forwarding rates on a per slot basis.
	IPv4 Routing entry support : 600K or more.
	IPv6 Routing entry support : 600K or more.
	Multicast Routing entry support : 6K or more.
	MAC addresses support: 32K or more.
	VLANs ID: 4K or more and 4K VLANs simultaneously.
	ACL & QOS entry support : 5K or more.
	Packet buffer : 32 MB or more
	The device should be IPv6 ready from day one.
	Should support the ability to configure backup of the previous configuration automatically.
3	Functionality:
	Must support RIPv2, RIPv6, EVPN, BGP, BGP4, VRF, VXLAN, EVPN, OSPFv2 and v3 Routed Access, Policy-Based Routing (PBR), PIM SM, PIM-DM, PIM-SSM and Virtual Router Redundancy Protocol (VRRP) from Day 1
	The switch should support IEEE 802.3ad link-aggregation control protocol (LACP) and port trunking
	The switch should support IEEE 802.1s Multiple Spanning Tree
	STP, Trunking, Private VLAN (PVLAN), Q-in-Q, Shaped Round Robin (SRR)/Deficit Weighted Round-Robin(DWRR) scheduling, Committed Information Rate (CIR)/Equivalent and eight egress queues per port
	Switch shall support rolled back to the previous successful configuration
	The switch should support SNMPv1, v2, and v3, SSL, SSHv2, Telnet, ping, traceroute
	The switch should support Zero-Touch Provisioning (ZTP). The switch shall support IP SLA for Voice monitors quality of voice traffic using the UDP Jitter and UDP Jitter for VoIP tests
	The switch should be manageable from cloud NMS or On-premises NMS solution offered
	The switch should support IEEE 802.1X
	The switch should support Port-based authentication
	The switch should support MAC-based authentication
	The switch should provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number

	The switch should support Source-port filtering
	The switch should support RADIUS/TACACS+, Dynamic ARP protection, Port Security, STP route guard, BPDU guard.
	OS should have support for Management automation via Netconf/Yang/REST-API, Python or equivalent technology
	Should support Netflow/Sflow/Jflow, Port mirroring or equivalent technology
4	Interface Requirement
	i) 48 nos. of 1G/10G/25G SFP28 ports
	ii) 24 nos. of 40G/100G SFP28 distributed in 2 slots.
5	Regulatory Compliance
	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 or equivalent Indian Standard like IS-13252:2010 or better for Safety requirements of Information Technology Equipment.
	Switch shall conform to EN 55022/55032 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B or equivalent Indian Standard like IS 6873 (Part 7): 2012 or better for EMC (Electro Magnetic Compatibility) requirements.
	Switch or Switch's Operating System on different hardware platform should be tested for EAL 2/NDPP or above under Common Criteria Certification.

	Distribution Switch 24 Ports 1G/10G SFP+ and 4 x 1G/10G/25G/50G SFP56 uplink ports
Sr. No	Minimum Technical Specification
1	General Features
	The switch should be Gigabit Layer 2 and Layer 3 switch with console/auxiliary ports along with all accessories.
	Switch should have hot swappable redundant Power Supply and fan tray from day-1.
	Switch should have non-blocking per-slot throughput from day 1.
	Software upgrades, updates shall be included as part of the warranty
	The switch should be based on programmable ASICs purpose-built to allow for a tighter integration of switch hardware and software to optimize performance and capacity

	Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source
	Operating temperature of 0°C to 45°C
	All mentioned features (above & below) should be available from day 1. Any license required to be factored from day 1
2	Performance
	Should have 8GB DRAM and 32GB Flash.
	The switch will have at up to 880 Gbps switching capacity.
	Forwarding rates: The switch should have 650Mpps forwarding rates.
	IPv4 Routing entry support : 60K or more.
	IPv6 Routing entry support : 60K or more.
	IPv4 and IPv6 Multicast Routes : 4K or more.
	MAC addresses support: 32K or more.
	VLANs ID: 4K or more and 4K VLANs simultaneously.
	ACL /QOS entry support : 4K or more.
	Packet buffer : 8 MB or more
	The device should be IPv6 ready from day one. Should support the ability to configure backup of the previous configuration automatically.
3	Functionality:
	The switch should support front plane stacking on uplink port or Backplane stacking and should have Stacking Performance of minimum 160 Gbps. The switch should support minimum 10 switch in stack
	The Switch should support long distance across the Rack and Floor Switch Stacking.
	Must support RIPv2, RIPv6, EVPN, BGP, BGP4, VRF, VXLAN, EVPN, OSPFv2 and v3 Routed Access, Policy-Based Routing (PBR), PIM SM, PIM-DM, PIM-SSM and Virtual Router Redundancy Protocol (VRRP) from Day 1
	The switch should support IEEE 802.3ad link-aggregation control protocol (LACP) and port trunking
	The switch should support IEEE 802.1s Multiple Spanning Tree
	The switch should support STP, Trunking, Private VLAN (PVLAN), Q-in-Q, Deficit Weighted Round-Robin(DWRR) or equivalent scheduling, Committed Information Rate (CIR)/Equivalent and eight egress queues per port
	Switch shall support rolled back to the previous successful configuration

	The switch should support SNMPv1, v2, and v3, SSL, SSHv2, Telnet, ping, traceroute
	The switch should support Zero-Touch Provisioning (ZTP). The switch shall support IP SLA for Voice monitors quality of voice traffic using the UDP Jitter and UDP Jitter for VoIP tests
	The switch should be manageable from cloud NMS or On-premises NMS solution offered
	The switch should support IEEE 802.1X
	The switch should support Port-based authentication
	The switch should support MAC-based authentication
	The switch should provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number
	The switch should support Source-port filtering
	The switch should support RADIUS/TACACS+, Dynamic ARP protection, Port Security, STP route guard, BPDU guard. OS should have support for Management automation via Netconf/Yang/REST-API, Python or equivalent technology Should support Netflow/Sflow/Jflow, Port mirroring or equivalent technology
4	Interface Requirement
	i) 24 nos. of 1G/10G SFP+ ports
	ii) 4 nos. of 1G/10G/25G/50G or 40G uplink ports.
5	Regulatory Compliance
	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 or equivalent Indian Standard like IS-13252:2010 or better for Safety requirements of Information Technology Equipment.
	Switch shall conform to EN 55022/55032 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B or equivalent Indian Standard like IS 6873 (Part 7): 2012 or better for EMC (Electro Magnetic Compatibility) requirements.

Distribution Switch / Access Switch 48 Ports and 4 x 1G/10G SFP+ uplink ports	
Sr. No	Minimum Technical Specification
1	General Features
	Access switch should be Gigabit Layer 2/Layer 3 switch with console/auxiliary ports along with all accessories.

	Switch should support dual redundant Power Supply and fan tray.
	Switch should have non-blocking per-slot throughput from day 1.
	Software upgrades, updates shall be included as part of the warranty
	The switch should be based on programmable ASICs purpose-built to allow for a tighter integration of switch hardware and software to optimize performance and capacity
	Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source Operating temperature of 0°C to 45°C All mentioned features (above & below) should be available from day 1. Any license required to be factored from day 1
2	Performance
	Should have 8 GB DRAM and 16 GB Flash.
	The switch will have at up to 176 Gbps switching capacity.
	Forwarding rates: The switch should have 130Mpps forwarding rates.
	IPv4 Routing entry support : 2K or more.
	IPv6 Routing entry support : 1K or more.
	IGMP Groups and MLD Group : 1K or more.
	MAC addresses support: 32K or more.
	VLANs ID: 4K or more and 2K VLANs simultaneously.
	ACL /QOS entry support : 1K or more.
	Packet buffer : 8 MB or more
	The device should be IPv6 ready from day one.
	Should support the ability to configure backup of the previous configuration automatically.
3	Functionality:
	The switch should support front plane stacking on uplink port or Backplane stacking and should have Stacking Performance of minimum 40 Gbps. The switch should support minimum 8 switch in stack
	The Switch should support long distance across the Rack and Floor Switch Stacking.
	Must support RIPv2, RIPv6, VXLAN, OSPFv2 and v3 Routed Access, Policy-Based Routing (PBR), PIM SM, PIM-DM and Virtual Router Redundancy Protocol (VRRP) from Day 1
	The switch should support IEEE 802.3ad link-aggregation control protocol (LACP) and port trunking
	The switch should support IEEE 802.1s Multiple Spanning Tree

	<p>The switch should support STP, Trunking, Private VLAN (PVLAN), Q-in-Q, Deficit Weighted Round-Robin(DWRR) or equivalent scheduling, Committed Information Rate (CIR)/Equivalent and eight egress queues per port</p> <p>Switch shall support rolled back to the previous successful configuration</p>
	<p>The switch should support SNMPv1, v2, and v3, SSL, SSHv2, Telnet, ping, traceroute</p> <p>The switch should support Zero-Touch Provisioning (ZTP). The switch shall support IP SLA for Voice monitors quality of voice traffic using the UDP Jitter and UDP Jitter for VoIP tests</p>
	The switch should be manageable from cloud NMS or On-premises NMS solution offered
	The switch should support IEEE 802.1X
	The switch should support Port-based authentication
	The switch should support MAC-based authentication
	The switch should provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number
	The switch should support Source-port filtering
	The switch should support RADIUS/TACACS+, Dynamic ARP protection, Port Security, STP route guard, BPDU guard.
	OS should have support for Management automation via Netconf/Yang/REST-API, Python or equivalent technology
	Should support Netflow/Sflow/Jflow, Port mirroring or equivalent technology
4	Interface Requirement
	i) 48 nos. of 1000 Base-T ports
	ii) 4 nos. of 1G/10G SFP+ uplink ports.
5	Regulatory Compliance
	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 or equivalent Indian Standard like IS-13252:2010 or better for Safety requirements of Information Technology Equipment.
	Switch shall conform to EN 55022/55032 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B or equivalent Indian Standard like IS 6873 (Part 7): 2012 or better for EMC (Electro Magnetic Compatibility) requirements.

	ToR Switch 48 Ports 1G/10G SFP+ and 4 x 40G/100G QSFP28 Uplink ports
Sr. No	Minimum Technical Specification
1	General Features
	The switch should be Gigabit Layer 2 and Layer 3 switch with console/auxiliary ports along with all accessories.
	Switch should have hot swappable redundant Power Supply and fan tray from day-1.
	Switch should have non-blocking per-slot throughput from day 1.
	Software upgrades, updates shall be included as part of the warranty
	The switch should be based on programmable ASICs purpose-built to allow for a tighter integration of switch hardware and software to optimize performance and capacity
	Switch should have integrated trusted platform module (TPM) or equivalent for platform integrity to ensure the boot process is from trusted source
	Operating temperature of 0°C to 45°C
	All mentioned features (above & below) should be available from day 1. Any license required to be factored from day 1
2	Performance
	Should have 16GB DRAM and 32GB Flash.
	The switch will have at up to 1.7 Tbps switching capacity.
	Forwarding rates: The switch should have 1000 Mpps forwarding rates.
	IPv4 Routing entry support : 24K or more. IPv6 Routing entry support : 12K or more.
	IPv4 and IPv6 Multicast Routes : 4K or more.
	MAC addresses support: 32K or more.
	VLANs ID: 4K or more and 1K VLANs simultaneously.
	ACL /QOS entry support : 4K or more.
	Packet buffer : 32 MB or more
	The device should be IPv6 ready from day one.
	Should support the ability to configure backup of the previous configuration automatically.
3	Functionality: The swith should support front plane stacking on uplink port or Backplane stacking and should have Stacking Performance of minimum 160 Gbps. The Switch should support long distance across the Rack and Floor Switch Stacking.

	Must support RIPv2, RIPv6, EVPN, BGP, BGP4, VRF, VXLAN, EVPN, OSPFv2 and v3 Routed Access, Policy-Based Routing (PBR), PIM SM, PIM-DM, PIM-SSM and Virtual Router Redundancy Protocol (VRRP) from Day 1
	The switch should support IEEE 802.3ad link-aggregation control protocol (LACP) and port trunking
	The switch should support IEEE 802.1s Multiple Spanning Tree
	The switch should support STP, Trunking, Private VLAN (PVLAN), Q-in-Q, Deficit Weighted Round-Robin(DWRR) or equivalent scheduling, Committed Information Rate (CIR)/Equivalent and eight egress queues per port
	Switch shall support rolled back to the previous successful configuration
	The switch should support SNMPv1, v2, and v3, SSL, SSHv2, Telnet, ping, traceroute
	The switch should support Zero-Touch Provisioning (ZTP). The switch shall support IP SLA for Voice monitors quality of voice traffic using the UDP Jitter and UDP Jitter for VoIP tests
	The switch should be manageable from cloud NMS or On-premises NMS solution offered
	The switch should support IEEE 802.1X
	The switch should support Port-based authentication
	The switch should support MAC-based authentication The switch should provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number
	The switch should support Source-port filtering
	The switch should support RADIUS/TACACS+, Dynamic ARP protection, Port Security, STP route guard, BPDU guard.
	OS should have support for Management automation via Netconf/Yang/REST-API, Python or equivalent technology
	Should support Netflow/Sflow/Jflow, Port mirroring or equivalent technology
4	Interface Requirement
	i) 48 nos. of 1G/10G SFP+ ports
	ii) 4 nos. of 40G/100G SFP28 uplink ports.
5	Regulatory Compliance
	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 or equivalent Indian Standard like IS-13252:2010 or better for Safety requirements of Information Technology Equipment.

Switch shall conform to EN 55022/55032 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B or equivalent Indian Standard like IS 6873 (Part 7): 2012 or better for EMC (Electro Magnetic Compatibility) requirements.

SAN Switch Specifications		
S. No.	Parameters	Minimum Specification required
1.	Architecture	The SAN switch shall support non- blocking architecture with minimum 48*32G FC active ports with full duplex in single domain with no over subscription and all 48 ports on the supplied FC. SAN switch must be licensed and should be fully populated from day one.
2.	Rack Mount	The switch shall be rack mountable and be supplied with proper rack mount kit to mount.
3.	High Availability	SAN Switch shall be deployed in high availability (1+1) configuration
4.	Management	Support for web-based management and shall also support CLI.
5.	ISL Trunking	The switch shall be able to support frame based ISL trunking with consecutive ports (using 16/32 Gbit/sec SFPs). Switch should support ISL Trunking from day one and a minimum of 2 number of licenses should be provisioned from day one.
6.	Performance	The SAN Switch must support aggregate bandwidth of 1.5Tbps.
7.	Power Supply	Switch should have dual power (RPS) supply, Switch should have no single point of failure and all components should be hot swappable.
8.	Fabric Services	Switch shall provide features like IVR, QoS, FC-SP, FC traceroute, call home, Port security, Link diagnostics, POST, fabric isolation, Hardware zoning, traffic encryption, Multi-pathing, Port tracking, Registered State Change Notification (RSCN).
9.	SFP	The switch shall be provided with SFPs for all active ports from day 1
10.	Fiber Cables	The switch shall be provided with fiber cables of appropriate lengths for all active ports as to connect to servers, storage array.

5.1.4. SPECIFICATION FOR COOLING RACK

- i. Floor Standing Rack with dimensions 43U x 800W x 1200D with Rack accessories.
- ii. EFC Units – Front & rear.
- iii. Front Display (HMI).
- iv. Cooling Rack with sensors like
 - Temperature
 - Temperature & Humidity
 - Door contact sensors
 - Fluid Spot sensor
 - Smoke sensor
 - Alarm beacon
- v. 1U 19" Black Modular Toolless Blanking Panel
- vi. a. 3.5kW split system Indoor unit, Gravity Drain
b 3.5kW split system Outdoor unit, Pre-charged refrigerant
- vii. Rack mount Kit
- viii. Network/Modbus card
- ix. Rack PDU, Metered, Zero U, 32A, 230V, (36)C13 & (6)C19
- x. Any other hardware / software required for the completeness of the Cooling Rack system must be procured at no additional cost.
- xi. Selected agency need
- xii. Temperature to be maintained at Minimum 24°C.

Additional Terms and Conditions for the period of 5 years Comprehensive warranty:

- The scope of maintenance contract shall also include periodical checking, cleaning, servicing, inspection and testing, preventive maintenance/Health Check-up (monthly), necessary repair and replacement etc. ensuring continuous and effective functioning of all the cooling rack installed at EMMC, New Delhi.
- Upkeep of the system and maintaining log book of Works carried out.
- Bidder shall be solely responsible for the maintenance, repair, replacements

and supply of required parts etc. No extra payment will be made for change/replacement of any part.

- No extra payments will be paid for any repair / replacement work of cooling rack which includes refilling of REFRIGERANT GAS.
- It is bidder responsibility to keep the PACs in working condition and efficient cooling throughout the CAMC period.

5.2. Specification of the Pre-owned equipment at EMMC, to be undertaken for the Comprehensive Annual Maintenance Contract (CAMC) of 5 years:

5.2.1. CAMC of 3 PACs installed at EMMC:

Currently installed system Configuration:

Make & Model: Stulz India - SEC 271A

Capacity (TR): 7 TR

Last date of validity of CAMC for 3 PACs: 31.03.2026

NOTE:

1. Selected agency must undertake the site survey to access the conditions of the PACs installed at Data Centre, EMMC and accordingly, submit its quotation against this RFP.
2. In case of any repair / replacement required to make all PACs functional before the CAMC or during the CAMC, the same is to be done by the selected agency without any additional cost.
3. Bidder must have the back to back OEM support for the duration of CAMC. MAF from the OEM must be submitted in bid document.

Additional Terms and Conditions for the period of 5 years CAMC:

- Guaranteed 4 hours on site response, 7 days/week, and 24 hours/day.
- Includes 100% parts coverage.
- Includes 100% labor and travel coverage 7 days/week, and 24 hours/day.
- Performed by trained Engineers. Bidder will be responsible for any fault arises during the repair work and bidder shall do the rectification for the same at no additional cost.
- Includes monthly Preventive Maintenance. Detailed preventive maintenance reports to be submitted along with the quarterly invoices.
- The scope of maintenance contract shall also include periodical checking, cleaning, servicing, inspection and testing, preventive maintenance/Health Check-up (monthly), necessary repair and replacement etc. ensuring continuous and effective functioning of all the ACs installed at EMMC, New Delhi.
- Upkeep of the system and maintaining log book of Works carried out.
- Bidder shall be solely responsible for the maintenance, repair, replacements and supply of required parts etc. No extra payment will be made for

change/replacement of any part.

- No extra payments will be paid for any repair / replacement work of PACs which includes refilling of PAC's REFRIGERANT GAS.
- It is bidder responsibility to keep the PACs in working condition and efficient cooling throughout the CAMC period.
- Subject to all Terms & Conditions as noted in this tender document.

SERVICE PERFORMED

➤ Preventive Maintenance Service

- Cleaning up of Unit, Air Filter, cooling coil & condense coil (if required with water)
- Cleaning of Humidifier bottle, electrodes water supply, Strainer and drain inside the Machine.
- Checking of belt & replace, if necessary.
- Lubrication of bearings, if necessary.
- Checking up of operation of Unit, Controller & condenser.
- Combing of fins of condenser & Evaporator coil, if necessary.
- Measurement of current of each individual equipment.
- Checking of all the overload relay settings.
- Checking of all electrical components for loose connections and tightening, if necessary.
- Checking of refrigeration piping for any gas leakage.
- Checking of refrigeration system and pressure readings.
- Checking of pulleys, motor mounts and Condenser fan mounts.
- Checking of panel insulation.
- Checking of temperature reading.
- Checking of microprocessor controllers for operation.
- Checking of valve functioning in case of Chilled water unit

5.3. Specification of Miscellaneous system:

5.3.1. Procurement of Gas Phase filtration system:

Feature as per below or better:

- Solution for Gas Phase Filtration for Data centre purifier to remove the corrosive gases.
- It should be a self-contained unit.
- It should be Customization as per requirement.
- It should be Optimum space utilization energy saving due to low pressure drop.
- It should be Standard variants available in 850-3400 CMH (500-2000 CFM) and engineered above.
- It should be Combine particulate filters, honeycomb chemical filters to create total clean air solutions.
- It should removes gases such as H₂O, SOX, NOX, Cl₂, NH₃, O₃, HF and all other VOCs.
- Bidder must ensure the actual requirement on the basis of actual Project site and may procure the specify system accordingly.

Additional Terms and Conditions for the period of 5 years warranty:

- i. **Selected agency must replace all the chemical filters atleast once in every year and if required, this frequency of replacement can be higher as per the minimum standard required for the air filtration.**
- ii. Inspect, service and do the corrective actions regarding supplied Gas Phase Filtration unit, during normal working hours for the period of contract.
- iii. Attend to service call within 24-48 Hr. for trouble diagnosis/Break down of the unit as and when required.
- iv. Repair / replace the faulty parts etc. of the equipment without any additional cost.
- v. Cable replacement/repair will not be charged separately.
- vi. The scope of maintenance contract shall also include periodical checking, cleaning, servicing, inspection and testing, preventive maintenance/Health

Check-up (monthly), necessary repair and replacement etc. ensuring continuous and effective functioning of the System.

- vii. Upkeep of the system and maintaining log book of Works carried out.
- viii. Agency shall be solely responsible for the maintenance, repair, replacements and supply of required parts etc. No extra payment will be made for change/replacement of any part.

During this period Agency will also undertake:-

1. Agency need to attend the service call for trouble diagnosis/break down of the unit as and when required.
2. Agency need to report to the EMMC/BECIL about the condition of the unit at the time of inspection and replace the necessary spares if required in the unit without any additional cost.
3. Agency must replace all 4 number of chemical filters atleast once in every year and if required, must be able to
4. is to be done as and when required at client site i.e. EMMC, New Delhi.

RESPONSE TIME

Normally within 12 working hours from the time the break down call is logged.

SERVICING

- Checking the motors and starter / contractors.
- Checking the operation and proper functioning of controls.
- Inspecting and cleaning the air filters.
- Inspection of all seals.
- Checking of all other components furnished with the unit and their appropriate functioning as per system design.
- Attend to service call for trouble diagnosis/Break down of the unit.
- Inform maintenance department/plant attendant of charges or adjustments made and advice on possible improvements in the maintenance of the unit.
- Report the condition of the unit at the time of inspection and do the necessary repairs and replace the spares when found non-operating at no additional cost.
- Chemical filter sampling on quarterly basis.

5.3.2. Procurement of Access Control System for data centre:

Specification for the Access Control System:

S.No.	Description of Items	Qty	Unit
1	Control Pane (4 door Control Panel)	2	Pcs
2	Door Reader (Biometric and RF card Reader)	16	Pcs
3	Electromagnetic Lock	8	Pcs
4	Bracket	8	Pcs
5	SMPS	2	Pcs
6	Cable (6 core Multi Strand shielded cable ,100% Copper)	600	Mtr
7	Software(Web based Software License. PC/Desktop will be in customer account)	1	Unit

Additional Terms and Conditions for the period of 5 years warranty:

- i) Diagnose the faults and rectify the defect detected in above mentioned time.
- ii) Repair / replace the faulty parts etc. of the equipment.
- iii) Cable replacement/repair will not be charged separately.
- iv) The scope of maintenance contract shall also include periodical checking, cleaning, servicing, inspection and testing, preventive maintenance (quarterly), necessary repair and replacement etc. ensuring continuous and effective functioning of Access control system.
- v) Upkeep of the system and maintaining log book of Works carried out.
- vi) Selected agency shall be solely responsible for the maintenance, repair, replacements and supply of required parts etc. No extra payment will be made for change/replacement of any part.

RESPONSE TIME

Normally within 12 working hours from the time the break down call is logged.

5.4. Specification of the Lease Lines:

Following are the set of lease line:

- (i) **2 Gbps Lease line** for the storage of 300 TV Channels on its cloud.
- (ii) **2 Gbps Lease line** for the sharing of 300 TV Channels feed to NMW's Integrated Dashboard Cloud:

Product : Internet Leased Line on Fiber	
SLA :	99.5% Uptime
Bandwidth	Symmetric (Upload Speed = Download Speed)
Contention Level	Dedicated 1:1
Medium	Optical Fiber / IP-1
Network Redundant	Ring Type
LAN IP/29 Pool	8 IP
Network Type	GPON/Core Fiber
Latency:	Low latency (e.g., <20ms round-trip time) to support real-time delivery.
Jitter:	Minimal jitter (e.g., <5ms) to maintain stream stability.
Packet Loss:	Ideally below 0.1% to ensure high-quality transmission.

Technical Parameters	Proposed Solution
Access Technology to connect customer premise	Wireline IP- Fiber
WAN Routing Protocol between Customer Device and RJIO Router	Static
ILL delivery model	LAN + WAN
LAN public IP address requirement	IPv6 Dual Stack
No of public IPv4 LAN IP address	/29, 8 IP addresses
No of public IPv6 LAN IP address	/64
Router Procurement & Management by	Customer
Interface required in Router	GigE Electrical (RJ 45)/Optical
Ownership of DHCP and NAT functionality	Customer

NOTE:

- 1. Above mentioned specifications are indicative only. Bidder should check the feasibility of the site for smooth functioning of the system.**
- 2. In case of any additional arrangement / equipments required for the completeness of the connectivity through leased line as per Project requirement, the same must be provided by selected agency at no additional cost.**
- 3. Selected agency must check the actual requirement of data flow as per system requirement and in case of higher bandwidth required for leased line, the same should be provided by selected agency at no additional cost.**

5.5. Technical Specifications of the cloud services required from the storage of 300 TV Channels at cloud:

Selected agency will be responsible to purchase and maintenance of the CLOUD STORAGE to store the entire 24x7 feed of 300 TV channels (*list will be shared separately to the selected agency*) for the period of 90 days on cloud on First in First out (FIFO) basis for the period of 5 years from the date of signing of FHTO document. Ministry/EMMC may vary this list as and when required, therefore, bidder must design its solution accordingly.

Selected cloud service provider must be a Ministry of Electronics and Information Technology (MeiTY) empanelled. **Empanelment certificate / letter of the cloud service provider must be submitted by the participated bidder.**

Indicative specification for the cloud for the period of 90 days storage, total 180 TB data (6.5 GB per channel in 24 hours for 300 channels). Estimated daily data storage: 1.5 TB per day.

Selected agency will be responsible for the conversion of formats required for the storage of 300 TV channels. In case of any hardware / software is required for the same, bidder will provide it at no additional cost.

Selected agency will be responsible for the up-linking / downlinking of the data to/from the stored cloud. If required, agency must be able to retrieve the data from cloud within 60 Minutes.

Selected agency must ensure that the infrastructure required for the said DR setup must be maintained for the period of 5 years from the date of signing of FHTO document at no additional cost.

5.6. Network Security:

5.6.1. Fire wall with Load Balancer with 5year Warranty:

S. No.	Specifications
1	Hardware Architecture
1.1	The appliance-based security platform should be capable of providing firewall, application visibility, IPS and Anti-malware functionality in a single appliance
1.2	Firewall appliance should be supplied with at least 14x 1GE RJ-45 interfaces, 8 x 1G SFP slots, 4 x10G SFP+ and 4x25G SFP28 ports. Solution should include all transceivers of populated modules (8x1G SFP, 4x10G SFP+) for fiber ports from day 1.
1.3	The appliance hardware should be a multicore CPU architecture with a hardened 64-bit operating system
1.4	Console and management ports to access device
1.5	Appropriate energy efficient redundant (N+N) hot swappable power supplies.
1.6	Should support Active:Active & Active:Passive modes
2	Performance & Scalability
2.1	IPS Throughput : 24 Gbps
2.2	Threat Protection Throughput: 20 Gbps
2.3	Firewall should support at least 15 million or higher concurrent sessions
2.4	Firewall should support at least 700K or higher sessions per second
2.5	Firewall should support at least 1000 VLANs
2.6	Firewall should support at least 45 Gbps or higher of IPSEC VPN throughput
3	Firewall Features
3.1	Should provide application detection for DNS, FTP, HTTP, SMTP, ESMTP, LDAP, RTSP, SIP, SQLNET, H.323, SNMP
3.2	Should support creating access rules with IPv4 & IPv6 objects simultaneously
3.3	Should support operating in routed & transparent mode.
3.4	Should support Static, RIP, OSPF, OSPFv3 and BGP
3.5	Should support manual NAT and Auto-NAT, static nat, dynamic NAT, dynamic pat
3.6	Must support Nat66 (IPv6-to-IPv6), Nat 64 (IPv6-to-IPv4) & Nat46 (IPv4-to-IPv6) functionality or firewall should be capable of supporting dual stack.
3.7	Should support DHCPv6
3.8	VXLAN support - interVTEP (VXLAN Tunnel End Point)

3.9	Should support Multicast protocols like IGMP, PIM, etc.
3.10	Should support security policies based on group names in source or destination fields or both
3.11	Should support capability to limit bandwidth on basis of apps/groups, Networks / Geo, Ports, etc.
3.12	Should be supplied with 1000 SSL VPN users license.
3.13	Ability to configure, manage and monitor NGFW using CLI and GUI both without central management solution. University would like to have full feature parity of centralized management tool on the Next Generation Firewall itself, in case there is any connectivity issues between Next Generation Firewall and central management tool or failure in central management tool
3.14	Solution should have inbuilt feature for two factor authentication via OTP (email or mobile) for atleast two admin users access.
3.15	Number of Supported Virtual Systems - 10 from day 1
3.16	The proposed system/virtual systems shall be able to operate on either Transparent (bridge) mode to minimize interruption to existing network infrastructure or NAT/Route mode. Both modes can also be available concurrently using Virtual firewalls.
3.17	Proposed firewall OEM should have on-premise Anti-APT solution if required in future
4	High-Availability Features
4.1	Firewall should support Active/Standby and Active/Active failover and should not be based on stacking units in clustering.
4.2	Firewall should support ether channel or equivalent functionality for the failover control and providing additional level of redundancy.
4.3	Firewall should support redundant interfaces to provide interface level redundancy before device failover.
4.4	Firewall should support 802.3ad Ether channel or equivalent functionality to increase the bandwidth for a segment.
4.5	Firewall should have integrated redundant power supply.
5	Threat Prevention Features/IPS/AntiVirus
5.1	Should have the IPS capability to inspect SSL traffic and SSL inspection throughput of 15 Gbps.
5.2	Should be capable of tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.) with minimal human intervention.
5.3	Should be capable of automatically providing the appropriate inspections and protections for traffic sent over non-standard communications ports.
5.4	Should be able to link Active Directory and/or LDAP usernames to IP addresses related to suspected security events.

5.5	Should be capable of detecting and blocking IPv6 attacks.
5.6	The solution must provide IP reputation feed that comprised of several regularly updated collections of poor reputation of IP addresses determined by the proposed security vendor
5.7	Should must support URL and DNS threat feeds to protect against threats
5.8	Should support the capability of providing network-based detection of malware by checking the disposition of unknown files using SHA-256 file-hash or signature (update to be provided in 300 seconds) as they transit the network and capability to do dynamic analysis on-premise on purpose built-appliance
5.9	Proposed solution shall have required subscription like Threat Intelligence for proper functioning.
5.1	Should cater to reputation and category based URL filtering offering comprehensive alerting and control over suspect web traffic and enforces policies in more than 75 categories from day one.
5.11	Should support more than 2000+ application layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.
5.12	The appliance OEM should have global presence from last 15 years in the industry with inhouse threat intel database to prevent against known and unknown malware.
5.13	The detection engine should support capability of detecting and preventing a wide variety of threats (e.g., malware, network probes/reconnaissance, VoIP attacks, buffer overflows, P2P attacks, etc.).
5.14	Should be able to identify attacks based on Geo-location and define policy to block on the basis of Geo-location
5.15	The detection engine should support the capability of detecting variants of known threats, as well as new threats
5.16	The detection engine must incorporate multiple approaches for detecting threats, including at a minimum exploit-based signatures, vulnerability-based rules, protocol anomaly detection, and behavioral anomaly detection techniques.
5.17	Should be able to detect active content like macros etc. & malicious URLs/Links in the document in real time and remove the same to give a flat sanitized file
5.18	Should have DNS threat intelligence license and feeds to protect against threats
	Web Application Firewall Protection
	Proposed appliance should have in-build WAF with Reverse proxy support, SQL injection protection, Cross-site scripting protection, HTTPS (TLS/SSL) encryption offloading.

5.19	The Firewall should support integration of on-prem sandbox solution of same OEM in future.
6	Management & Logging/Reporting
6.1	The management must be accessible via a web-based interface and ideally with no need for additional client software
6.2	Solution must provide a highly customizable/user friendly dashboard.
6.3	Solution must provide multiple report output types or formats, such as PDF, HTML, and CSV.
6.4	Solution must provide robust reporting capabilities, including a selection of pre-defined reports and the ability for complete customization and generation of new reports.
6.5	The log/reporting server should be on-premise and support minimum of usable 5TB storage space in RAID configuration.
6.6	Solution must provide risk reports like advanced malware, attacks and network
6.7	Solution must ingest alerts, enrich and orchestrate with visual playbooks editor for automatic response for SOC operation with atleast 2 user licenses from day 1. It should able to connect with existing infrastructure devices to ingest alert and take action with help of playbooks.
6.8	The solution must include an integration mechanism, preferably in the form of open APIs and/or standard interfaces, to enable events and log data to be shared with external network and security management applications, such as Security Information and Event Managers (SIEMs), and log management tools.
7	Certification
7.1	NGFW solution must have: USGv6/IPv6, FIPS-140-2 / Common criteria EAL4 / ICSA.
7.2	OEM should be ISO 27001 and 27017 certified and SOC2 compliant.

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5.6.2. XDR (Extended Detection and Response) for the network comprising 200 Desktop, servers, switches etc. with 5 years Warranty:

S. No.	Technical Specifications
1	The proposed solution must be compatible with the following operating systems: Windows (32-bit & 64-bit) XP SP2 / SP3, 7, 8, 8.1 and 10
2	The proposed solution must be compatible with the following operating systems: Windows Server 2003 R2 SP2, 2008 R1 SP2, 2008 R2, 2012, 2012 R2, 2016 y 2019
3	The proposed solution must be compatible with the following operating systems: macOS Versions: El Capitan (10.11), Sierra (10.12), High Sierra (10.13), Mojave (10.14), Catalina (10.15), Big Sur (11.x), and Monterey (12.x)
4	The proposed solution must be compatible with the following operating systems: Linux Versions: RedHat Enterprise Linux and CentOS 6.x, 7.x, and 8.x, Ubuntu LTS 16.04.x, 18.04.x, 20.04.x server, 64-bit only Oracle Linux 7.7+ and 8.2+, Amazon Linux AMI 2 SuSE SLES 15.1
5	The solution must be compatible with the following operating systems: Virtual Desktop Infrastructure (VDI) environments on VMware and Citrix. VMware Horizons 6 and 7, and Citrix XenDesktop 7
6	The proposed XDR solution utilizes less than 1% to 2% CPU, 200 MB to 350 MB of memory usage, 750 MB to 1 GB of disk space, and generates minimal network traffic.
7	The solution should have the option to ask for a password to uninstall the workstation agent & should have Anti-Tamper Protection
8	The proposed solution must support mass installation using tools such as MS System Center, JAMF, and Satellite.
9	The proposed solution must have the ability to update the endpoint without user interaction or without requiring a restart of the station
10	The Agent shall be deployable along with other AV solutions wherever required and shall have the capability to replace the AV eventually over a period of time
11	Solution should provide off-network detection to detect potentially malicious activity when not connected to the corporate network.
12	Solution should Detect running processes, process starts, process stops, and cross process interaction.
13	Solutoin should provide command line visibility , Detect Malicious Registry changes and Monitor DNS requests and Network connections from host
14	Solution should Detect suspicious activity associated with DLLs & should detect Suspicious user and workstation behavior to Identifies suspicious user and workstation behavior.

15	Solution should Incorporates threat intelligence into detection scheme to Provides contextual threat intelligence into detection scheme.
16	Solution should Incorporate MITRE ATT&CK into detection scheme to Provides MITRE ATT&CK technique scheme into detection scheme.
17	The proposed solution should work offline when the system has no access to the corporate network and internet providing complete protection to that workstation.
18	The proposed solution should have the ability to load the indicators (IOC) such as IP address, domain, file name, file hash, etc. for threat search
19	The proposed solution should have the ability to categorize the detected events into different categories such as Malicious, Suspicious, Inconclusive, Probably Safe
20	The proposed solution should block malicious traffic from data exfiltration (data leakage) & Block malicious traffic from communicating toward C&C (Command & Control)
21	The proposed solution should incorporate a kernel-based software engine (NGAV) with the capability of "Machine Learning" & should have the ability to control USB Devices
22	Solution should provide single endpoint agent for both pre- and post-infection protection even when machines are not connected to the cloud so that you can protect your endpoints anywhere.
23	Must protect against malicious powershell , Cscript scripts & Office Macros
24	Solution should have the ability to create playbooks for different response actions for different incidents based on parameters
25	Solution should have the ability to obtain memory snapshot or memory dump which points to the smoking gun forensics
26	Solution should have the ability to fetch any file or memory at any point. Ability to terminate processes remotely.
27	Solution should have the API available to allow for tracking of detection investigations with pertinent information regarding the detection (i.e. IP address, host name, user, date/time occurred, suspicious activity, etc.) to allow for ticket creation.
28	Solution should provide ransomware prevention policy and behavioural analysis offer real-time automated prevention of ransomware encryption.
29	Solution should be deployed on premises and required agent licenses should be provisioned from day 1
30	The proposed solution shall have the ability to perform free-text query-based Threat Hunting
31	Ability to whitelist/blacklist based on application name, version and

	vendor.
32	Must store meta-data generated by the devices on the management console so that they are used for forensic investigation
33	Must have the ability to take snapshots of memory (dumps) that allow forensic analysis to be performed
34	The proposed solution administration console should allow the use of dual-factor authentication(2Fa) to allow access to the same
35	The solution administration console should allow the use of access roles in a granular manner, with different access levels, for solution administrators
36	The solution administration console should allow you to view the health of installed agents.
37	The administration console should allow remote uninstall of the agent installed on the devices & Remote deactivation or Activation
38	The administration console should allow remote updating of agents installed on the devices.
39	The administration console should allow the creation of executive reports containing the summary of the description of security events and system state
40	The administration console should allow the creation of organizational groups in which each group can have protection rules independent of the others.
41	The administration console must allow the export of agent-generated logs from a single point and the information to be password protected
42	The administration console should allow the creation of inventory reports of installed agents containing information such as: IP address, Hostname, Operating system, MAC address, installed agent version, agent state, last day seen in console
43	The admin console should provide visibility into the events generated by devices or events according to the process performed
44	The proposed admin console should allow integration with an external SMTP service for sending alerts via electronic mail
45	The admin console should allow auditing of changes made by administrators/operators. These audits can be downloaded into a file in CSV or excel format
46	The solution shall have remote shell capability to remotely execute commands in user systems via central console
47	The proposed solution must provide the ability to automatically capture record and analyse wide array of endpoint parameters,

	behaviour, execution and subsequent events in order to assess system operations and enable threat hunting and Incident forensic activities. Below is the minimum, your proposed solution shall be capable of capture out of box including registry, user activity, process & services, software changes, file activity, login activity, process tracking.
48	Solution should have the full process data collection at all times to collect any process/thread/library/driver related activities including creation/termination/start/load.
49	Solution should be able to collect full file data all the time which includes ability to collect any file related activities including creation/read/write/rename/delete.
50	Solution should be able to collect any network related activities including socket connect/bind/listen/accept/close.
51	Solution should be able to have ability to collect any registry related activities including key/value create/delete/rename.
52	Solution should have the ability to create custom classified rules based on threat hunting collected data.
53	Solution should enable dynamic search suggestions as most active devices, activity types, source process, signing, target files, protocols etc.
54	Solution should allow to detect known techniques over raw normalized data as lateral movement, extended privilege escalation, log deletion, scheduled tasks, startup tampering, memory violations, commands and arguments spoofing etc.
55	Must have the ability to take snapshots of memory (dumps) that allow forensic analysis to be performed
56	Solution should have the ability to obtain memory snapshot or memory dump which points to the smoking gun forensics
57	Solution should have the ability to fetch any file or memory at any point. Ability to terminate processes remotely.
58	The OEM must be registered in India since more than 15 Years
59	The OEM should not be Blacklisted even once by any Central/State/PSU or any Government organization in last 5 years
60	The OEM must have 24x7 TAC Support in India
61	The OEM must have a valid ISO 9001:2015 and ISO 27000 certificates

5.6.3. SIEM (Security Information and Event Management) system for the entire network with 5 years Warranty:

S. No.	Technical Requirement
1	Security Analytics Solution would be acting as a core technological solution for Organization. Solution must act as central log management, correlation, analytical and executive dashboard to facilitate continuous threat and event monitoring. Solution with capacity of 3,000 from Day 1 and scalable to 10,000 EPS.
2	Bidder must ensure seamless migration of existing solutions (without any impact to Organization system) to new solution to provide log collection, management, and central correlation with Analytical capabilities.
3	Bidder to provide solution for complete Organization with 5000 EPS for log collection with central log processing and capability of On-Demand scalability at log collection, management, and central correlation.
4	Proposed solution should be software with support of 3 months of online logs retention. The architecture should be scalable to scale for retention of 6 months logs and 10,000 EPS, whichever is required on-demand basis. In case of Software based bidder to provide required server and storage to run the infra.
5	The solution is expected to collect logs from security and network devices, servers, and application security logs spread across locations.
6	The proposed solution should provide time based, criticality-based store and forward feature at each log collection point
7	The proposed solution should have the ability to gather information on real time threats and zero-day attacks issued by anti-virus vendors or audit logs and add this information as intelligence feed in to the solution via patches or live feeds
8	The proposed solution should generate the following reports (but not restricted to): User activity reports, Configuration change reports, Incident tracking report, Attack source reports etc.
9	The proposed solution must have a robust alerting framework that can be tailored to the specific needs of the organization, ensuring relevant stakeholders are notified of incidents in a timely manner.
10	The proposed solution should provide the ability to monitor and alert on non- compliance events in real-time and provide necessary reports and dashboards. Dashboard should support reporting for consolidated relevant compliance across all major standards and regulatory requirements.
11	The proposed solution should have a mechanism to track security incidents across a wide range of relevant attributes (i.e., IP addresses, usernames, MAC address, log source, correlation rules, user defined, etc.).

12	The proposed solution should be possible to define purging and retention rules for log storage.
13	The proposed solution should support creation of automated incident management workflows to track incident from creation to closure, provide reports on pending incidents.
14	The proposed solution should seamlessly integrate with existing IT and security infrastructure, monitoring tools, and other critical applications.
15	The should provide role based access to restrict access to the data and also restrict access to the GUI.
16	Ability to integrate Threat Intelligence (TI) feeds:
	a. Integration via REST API with different supported data format (CSV, Custom, STIX)
	b. Support for STIX/TAXII
	c. Support for but not limited to IP Addresses, Domains, Hashes, URLs, Malware Process Names
	d. Ability to correlate TI data in real-time, in memory against event data.
	e. Ability to correlate TI data against historic event data.
17	Ability to collect network device configuration, identify changes and provide side-by-side comparison.
18	PCI dashboard that provides a Red Amber Green status of the logging status of the monitored devices.
19	Notification and Incident Management
	a. Policy-based incident notification framework
	b. API-based integration to external ticketing systems — ServiceNow, ConnectWise, and Remedy
20	Solution shall have Built-in ticketing/case management system or the vendor shall propose one that has the below minimum capabilities:
	i. Ability to define an escalation policy that sends an email to management when thresholds reached.
	ii. Ability to add PDF and PNG to tickets
	iii. Ability to assign tickets to other operators
	iv. Timeline view to capture activities on a Case and on related incidents
	v. Provides Mean Time To Resolution metric
21	The proposed solution shall have automated response and remediation capabilities as integrated or as a separate solution to be integrated with SIEM.
22	i. The solution must have over built-in Response & Remediation actions for a number of different vendors such as but not limited to :Microsoft, Linux, Fortinet, Palo Alto, Infoblox, Cisco, Aruba. The solution shall also provide for manual remediation capabilities wherever required
23	Powerful and Scalable Analytics

	a. Search events in real-time— without the need for indexing and using logical operators such as AND, OR, NOT and parenthesis.
	b. Schedule reports and deliver results via email
	i. Ability to export reports in CSV and PDF
	c. Search events across the entire organization, or down to a physical or logical reporting domain
	d. Dynamic watch lists for keeping track of critical violators — with the ability to use watch lists in any report or rule
	e. Correlation Rules should be mapped to MITTRE (https://attack.mitre.org/matrices/enterprise/) categories and the Incidents view must include a dashboard mapping devices, incidents and their MITTRE category.
	f. Able to automatically correlate user to location and IP address:
24	i. Provide ability to report and search on user to IP address to location. Location may be physical switch port, mac address or VPN.
25	ii. Enrich events where no user context is provided based on IP address.
26	Solution shall have capability to perform an automated response should an incident occur
27	Policy based archiving of data to another location such as an NFS mount. Data must be able to be restored via the GUI for analytics searches.
28	Solution shall include File integrity monitoring capabilities as integrated or separate solution to be integrated with SIEM, wherein deletion or modification of any critical file needs to be monitored and alerted
29	SIEM should provide capabilities of Network Traffic Analysis and Behaviour Anomaly, if not the vendor shall propose a solution that can be integrated into SIEM
30	The vendor shall mandatorily provide their own Threat Intel along with the SIEM solution
31	The vendor should consider User and Entity Behaviour Analytics (UEBA) capability as integrated solution.
32	Solution shall have Threat Hunting Capability based on Machine Learning
33	The proposed solution should be a challenger or leader in the latest Magic Quadrant
34	The solution shall have AI based capabilities to predict Risk based on data collected from network, user systems, vulnerability scanners etc.
35	Solution should have Agent based discovery for collectiong performance metric on Windows,Linux, OS Version,Software,Processes,Disk interfaces etc.
36	Solution should have inbuilt feature for forensic monitoring through OSQUERY which provide processes,users,registry,software and can schedule task which is not typically avialable in usual logs.

37	Solution should have generative AI assistance capability and integration available to guide the incident response based on alert/Threat category
38	Solution should have Python based framework for threat feed integrations with SIEM platform.
39	SIEM must be able to provide SIEM solution migration to new proposed platform. Detailed migration plan and strategy to be proposed by bidders.
40	Proposed solution must have capability to identify attack at early stage through decoy activity and attack confidence to be highlighted centrally at SIEM level.
41	Solution must provide embedded generative AI assistance to guide and turbocharge SOC analysts actions during incident investigation, response, threat hunting, and more.
42	Proposed gen-AI should automatically interpret security events, generating a detailed summary, potential impact, and remediation recommendations.
43	Analysts must have capability to query AI in natural language to create rich reports and get product help. It must have built-in prompts to make it simple for analysts to invoke AI help during typical workflow activities.
44	Solution must have capability to provide guided investigation and analytical support by accelerating many of the time-consuming tasks of SecOps. Below key use cases to be achieved:-
	1. Make events, alerts, and incidents easier to understand through auto response via AI.
	2. Speed response activity and effectiveness through AI.
	3. Translate natural language requests into the technical queries required to execute complex database queries and automatically build rich reports.
	4. Provide guidance on playbook templates, recommend playbook components, and even build entire playbooks.

5.7. Specification for the Workstation Setup

Item	Qty.
Desktop - 13th Generation/I5,Memory 16 GB RAM, Hard Drive-512 SSD, Window Pro 11 with 23.5" Monitor, Key board and mouse.	200
MS Office 2019 professional MOLF+F25	200
Printer Scanner(MFD)	5

All the workstation procured against this RFP will be under comprehensive warranty for the period of 5 years.

Selected agency will be responsible for the miscellaneous work (*at no additional cost*) required for the complete the installation of work station as per the locations specified by the client and if relocation of the work station is required during the period of contract, selected need to do this at no additional cost.

5.8. Specification / requirement from logging & Monitoring Software:

5.8.1. Clipping and repurposing:

System must provide both a simple clipping tool for engineers and basic needs plus one for advanced needs and content repurposing and export clips in multiple user-selectable formats like MP4, MPG, MXF, FLV, MOV, AVI, and TS

System must automatically provide thumbnails for easy content searching and marking in and out points.

System must support all editing functions prior to third-party transcoding and then receive completed file back for exporting.

System must support exporting clips to multiple destinations including local drives, cloud storage, FTP sites, and NAS solutions.

System must be able to automatically export all clips to cloud storage (such as S3) or a subset based on rules.

System must support exporting clips and metadata packaging to social media platforms - including Facebook, Twitter/X, and YouTube.

System must provide the ability crop videos into different aspect ratios and screen shapes.

System must provide the ability to crop multiple areas and arrange them for a single exportable clip.

System must provide the ability to add text screens before or after a crafted clip.

System must provide the ability to add stored still and/or video content before or after a crafted clip.

System must be able to overlay caption and subtitle data onto clips.

System must provide the ability to overlay, text, graphics (such as logo and banners), and overlay date and time anywhere onto a crafted clip.

System must provide the ability to overlay compliance data, such as loudness measurements, onto clips.

System must support cut-to-cut editing and the ability to create multi-segment clip.

System must support each segment of a clip having its own metadata and thumbnail.

System must support the definition of multiple segments within a recording so that they can easily be included or excluded.

System must provide the ability to add metadata, dynamic metadata, and tags to clip segments and the clip as a whole.

System must provide marking zooming options in the time line while creating and editing clips.

System must support any quantity of user-defined and customizable metadata.

System must provide a means to store and recall an unlimited number of export profiles containing bitrate, format, destination, and other key attributes.

System must support exporting recordings or clips with optional captions, subtitles, and audio tracks and also generate clips directly from as-run logs, EPG, etc.

System must be able to automatically mark clip in and out points based on the as-run log

System must be able to generate clips and automatically exclude/include content (like ads and promos) based on the as-run log, EPG, and other metadata

System must support export a clips captions and subtitles, if exist, to standard file formats - including text, SRT, WebVTT, and SAMI

System must show an interactive audio waveform, for use as an in/out point guide, while making clips

5.9.2. Architecture:

System must support an unlimited quantity of concurrent users.

System must be based on the Microsoft Windows 2019/2022 operating system.

System must run on COTS servers from well-supported brand companies.

System must run on customer-provided servers, Virtual machines (VMs) and on cloud server.

System must be able to be run as a hybrid, deploying on two or more platform types (servers, VMs, clouds, etc.).

System must accommodate latest operating system and anti-virus patches.

System must support customer security measures including firewalls and VPNs.

System must be highly-scalable and not require the complete replacement of existing hardware when adding channels/sources.

System must support expansion for additional channels, sources, and servers without major down-time or re-engineering.

System must support administration of user accounts, group accounts, user rights, and group rights.

System must support user right's management and control access to individual features via privileges.

5.9.3. API:

System must provide a REST API to access recordings - including activation of the video playing features and use of clipping functionality

System must provide a REST API to access compliance data and alerts

System must provide a REST API to access all system data and produce reports

System must provide a REST API for seamless integration with external workflows

5.9.4. Content Matching:

System must have the ability to find and track content automatically using audio fingerprints on all or specific channels including shorter version of advertisement.

System must be able to scan for ads in both newly-recorded and archived files.

System must be able to provide reports (such as ad detection on specific channels and dates) from a build-in report generator.

System must be able to detect repetitive video and clips - such as for ads, promos, election campaigns, etc.

System must provide content detection accuracy greater than 95%.

System must provide tools to easily activate and deactivate specific ad (or other content) detection.

System must provide functionality to show the original ad alongside the detected ad, for comparison and assurance

System must be able to generate content searches (ads, etc.) directly from the as-run log.

System must be able to detect new ads automatically which have not been

previously marked

5.9.5. Compliance and Logging:

System must be able to receive and record television sources of any type - including, RF, ASI, SDI, HDMI, Composite, and DVB.

System must be able to receive and record sources of any standard IP type - including SPTS, MPTS, HLS, RTMP, 2110, 2022-6/7, and MPEG-DASH.

System must support input sources in any format - including SD, HD, UHD, and 4K.

System must support recording, logging, and monitoring on a 24 x 7 x 365 basis.

System must be scalable and have no limits on the quantity of television channels, radio channels, streams, and other source types.

System must monitor audio loudness, on any type of channel/signal, and offer visual data and meters.

System must support calculating, displaying, and reporting loudness in LKFS.

System must implement European Broadcasting Union (EBU) and International Telecommunication Union (ITU) recommendations for audio loudness.

System must compute both Short Term Average (S) and Integrated Average (I) for loudness calculations.

System must display loudness data on an interactive graph which causes content playout to automatically reposition based on clicking within the graph.

System must display the average loudness for a defined time period or for a program (or content ID) based on the as-run log or EPG.

System must support the download of a summary or detailed report of loudness data.

System must be able to monitor, log, and send real-time alerts for video issues - including static/frozen frames, black/blue screens, and color bars.

System must be able to monitor, log, and send real-time alerts for audio issues - including below or above an acceptable level.

System must be able to monitor, log, and send real-time alerts for missing captions (CC) or subtitles.

System must be able to monitor, log, and send real-time alerts for missing SCTE-35/104 digital triggers.

5.9.6. Reports and Data Integration:

System must support user-buildable reports which can be displayed and downloaded.

System must automatically import as-run logs, EPG, and playlists from external data sources.

System must support different as-run log, EPG, and playlist formats for each channel or signal source.

5.9.7. GUI:

System must support user access from any standard web browser, without installing additional local client access software

System must support the use of HTML5 web browsers (such as Chrome, Edge, and Firefox) without the need for additional plug-ins or drivers

System GUI interface must support a dark or light coloured background and theme

System must support the playing/display of all live (real-time) television sources with no more than 5 seconds of delay

System must provide fast retrieval and playout of recorded content within 5 seconds of the request or GUI click

System must be able to display the as-run log and EPG/EPG for any channel and enable users to click any entry to load the corresponding content

System must support adding individual or multiple channels/sources onto a single screen without needing a full multiviewer

System must support loading channels/sources which have been grouped (perhaps by region or type) into a display screen

System must support independent playout controls within the window for each channel/source

System must support smooth content playout with fast forward and fast backward acceleration up to 10 times

System must provide content playout with frame-by-frame advancement either forward or backward

System must allow users to pin channel/source players to side of GUI so the players remain visible while accessing other GUI functions

System must provide an ability to assign and customize keyboard shortcuts

System must allow users to go backwards (seconds, minutes, or longer) while watching live for a quick review or just-seen content

System must provide a single button to click which will jump forward to live playout after reviewing just-seen content

System must provide an option to change the duration of the timeline bar while viewing live channels

System must provide an ability create clips form the live channels with a single button click, with an adjustable default duration

System must provide an ability to mark the in-point and out-point of a clip within the live channel viewer

System must provide an ability to create a screen shot of live or recorded content, when a single button is pressed

System must provide the ability to bookmark and annotate content while it's playing live

System must provide the ability to create any number of custom metadata tags for use while dynamically tagging live content

5.9.8. Multiviewers:

System must provide multiviewers that are accessed from a standard web browser, not requiring additional workstation software or drivers.

System must enable users to create as many unique multiviewer mosaics/layouts as they need.

And provide configurable multiviewers that be sized according to any user preferences (2x2, 10x10, 30x30, etc.).

System must provide multiviewers that are capable of displaying 70 channels and sources on a single screen.

System must provide configurable multiviewers allowing users to "build" the mosaic from multiple channel and tool widgets.

System must provide configurable multiviewers that support having clocks which can be displayed as analog or digital

System must be capable of hosting multiviewers on the same server/platform as the recordings or completely independently without the need of any I/O capture hardware.

System must provide multiviewers that accurately display closed caption and/or subtitles in any available languages.

System must provide multiviewers that can display all captions and subtitles in a window adjacent to the content viewing window.

System must provide multiviewers that provide the ability to hear any available audio tracks.

System must provide multiviewers which can display vertical audio meters for all available audio tracks in a user-configurable position.

System must provide multiviewers which can display loudness information on the mosaic.

System must provide multiviewers which display real-time alerts for compliance and quality issues.

System must provide multiviewers which can display an integrated Penalty Box providing monitoring by exception on any channel/input type.

System must provide multiviewer Penalty Boxes that support temporarily muting alarms instead of deleting or disabling them.

System must provide multiviewer Penalty Boxes that support rewinding the channel/source within the Penalty Box view.

5.9.9. Security and Support:

System must support customer Active Directory and other customer SSO policies and technology (LDAP, etc.)

System must support and integrate with any SAML 2.0 identity provider - such as OKTA

System must support the installation and usage of anti-virus software for a Microsoft Windows operating system

Company must provide 24x7 remote customer support utilizing multiple sites in different time zones

System must include on-site, next business day hardware support.

D. TENTATIVE LIST OF BUYBACK EQUIPMENT:

All the interested bidders required to visit the site to analyze the actual conditions of the equipment under buyback.

It may be noted, that the following list is indicative only and actual number of quantity may be checked during site visit and accordingly, factor the buyback material costing in their Financial Bid.

S. No.	Description	Qty.	Make / Model
I.	Content Acquisition System		
1.1	Server Intel ® Xeon ® CPU E5-2670 v2 @2.50GHz (2 processors)	53	HP / DL380P G8 / G9
2	Central Storage (NAS Configuration)		
2.1	HPE 3Par Storage 7400 & accessories	2	HP / 3 PAR Storage 7400
2.2	EVO Storage – 32 TB	1	EVO
3	Desktop Computers complete with Monitor, Keyboard, and Mouse etc.		
3.1	HP/DELL/Think Centre etc. CPU	200	
3.2	HP/DELL/BenQ etc. Monitors	200	
4	Networking Components & Topology Core switches & Multi Layered Open Architecture		
4.1	Core Switches	2	HP A 7510 SWITCH
4.2	Distribution Switches	7	HP 5120 48G- SI SWITCH
5	RACK RITTAL	9	RITTAL

E. BILL OF MATERIAL

Table-1							
PART-A: PROCUREMENT OF HARDWARE AND SOFTWARE (INCLUDING 5 YEARS OF COMPREHENSIVE WARRANTY):							
S. No.	Items	Make & Model	Qty .	Unit of Measurement	Unit Price without GST	GST on Unit Price	Total Price (including GST)
			A		B	C	D=A*(B+C)
1	Supply, Installation, Testing and Commissioning of UI Server with required Operating Software.		2	Nos.			
2	Supply, Installation, Testing and Commissioning of Recording Server A with required Operating Software.		26	Nos.			
3	Supply, Installation, Testing and Commissioning of Storage.		1	Nos.			
4	Supply, Installation, Testing and Commissioning of SAN Switch.		2	Nos.			
5	Supply, Installation, Testing and Commissioning of Core Switch.		2	Nos.			
6	Supply, Installation, Testing and Commissioning of TOR Switch.		6	Nos.			
7	Supply, Installation, Testing and Commissioning of Access Switch.		5	Nos.			
8	Supply, Installation, Testing and Commissioning of Distribution Switch.		2	Nos.			
9	Supply, Installation, Testing and Commissioning of Management 48 Port , 1Gbps Switch.		2	Nos.			

10	Supply, Installation, Testing and Commissioning of KVM Switch.		4	Nos.			
11	Supply, Installation, Testing and Commissioning of Cabling (Fiber) as per the actual requirement at site.		1	Lot			
12	Supply, Installation, Testing and Commissioning of 6 Cooling Rack solution along with all the required accessories.		1	Nos.			
13	Repair / replacement of all the already laid cabling along with its connectors, at data center and various monitor rooms along with miscellaneous work (such as civil work, packaging & transportation charges of goods, labour work, etc.) required for the completeness of the Project and Maintenance of the whole system during 5 year warranty period.		1	Lot			
14	Supply, Installation, Testing and Commissioning of work station: Desktop - 13th Generation/I5, Memory 16 GB RAM, Hard Drive-512 SSD, Window Pro 11 with 23.5" Monitor, Key board and mouse. MS Office 2019 professional MOLP+F25 Including Miscellaneous work & cabling required for the complete installation of work stations at the locations specified by the client.		200	Nos.			
15	Supply, Installation, Testing and Commissioning of Printer Scanner (MFD).		5	Nos.			

16	Supply, Installation, Testing and Commissioning of Gas Phase filtration system for data centre as per the specification including miscellaneous work & cabling required for the complete installation of the system at the locations specified by the client.		1	Lot			
17	Supply, Installation, Testing and Commissioning of Access Control System for data centre as per the specification including miscellaneous work & cabling required for the complete installation of the system at the locations specified by the client.		1	Lot			
18	Procurement of Cloud storage (MeiTY empanelled) for the storage of 300 TV channels and its integration with Logging & Monitoring setup & its customization as per the terms & conditions of RFP. This includes the charges for the Hardware / Software required for the establishment of Cloud Storage setup.		1	Lot			
19	Upgradation of the existing Monitoring Software and its customization as per the functionality defined in tender document & client i.e. EMMC) along with MS Windows server 2019/2022.		1	Lot			

20	Charges for the API integration of Monitoring Software with NMW's Integrated Dashboard as per the terms & conditions defined in the RFP and as per the requirement of EMMC. This is includes the requirement of any additional hardware and maintenance activities to be carried out as and when required basis to keep the integrated system functional 27x7 throughout the contract period i.e. 5 years from the FHTO.		1	Lot			
21	Supply, Installation, Testing and Commissioning of Fire wall with Load Balancer and other miscellaneous work / accessories for the completeness of the Project.		1	Lot			
22	XDR (Extended Detection and Response) for the network comprising 200 Desktops, servers, switches etc. SIEM (Security Information and Event Management) system for the entire network. (Other miscellaneous work / accessories for the completeness of the Project.)		1	Lot			
Total (Part-A)							

PART-B: RECURRING CHARGES FOR THE PERIOD OF 5 YEARS:

S. No.	Items	Make & Model	Qty .	Unit of Measurement	Unit Price per quarter without GST	GST on per quarter Price	Total Price
							(including GST)
			A		B	C	D=A*(B+C)
1	Comprehensive Annual Maintenance Contract (CAMC) of Monitoring Software for the period of 5 years which includes free upgrades and updates.		20	Quarter			
2	Charges for the maintenance & upkeep of the 24x7 storage of 300 TV channels on the MeiTY empanelled Cloud for the period of 90 days on FIFO basis as per the tender terms and conditions. Time to time customization of list of channels stored at cloud as per the recommendation of user. Includes charges for the download of data and make it viewable on the monitoring dashboard as and when required by the client.		20	Quarter			
3	Charges for the 2 Gbps Lease line for the storage of 300 TV Channels on MeiTY empanelled Cloud. (These charges include periodic maintenance & regular upkeep of leased line and any other miscellaneous expenditure required to uplink /		20	Quarter			

	downlink the data from designated cloud storage locations for respective leased line).						
4	Charges for the 2 Gbps Lease line for the sharing of 300 TV Channels feed to NMW's Integrated Dashboard Cloud. (These charges include periodic maintenance & regular upkeeping of leased line and any other miscellaneous expenditure required to uplink / downlink the data from designated cloud storage locations for respective leased line).		20	Quarter			
5	Comprehensive Annual Maintenance Contract (CAMC) of 3 PACs installed at EMMC for the period of 5 years.	Stulz India - SEC 271A	20	Quarter			
	Total (Part-B)						
	Grand Total for the Project ((A+B)) (including GST)						
	Grand Total in words (including GST):						

NOTE:

- Bidder need to quote the **rates as per the Bill of Material (BoM) format provided** on GeM-CPPP Portal (inclusive of taxes).
- Rate to be quoted in INR only. **“Grand Total for the Project (including GST)”** quoted in BoM will be considered for the selection of lowest bid (L1).
- Bidder should NOT quote the financial cost / financial figures / rates in the technical bid in any case.
- During the whole project duration, if any damage is made to the client property i.e. EMMC, then the same will be recovered from the engaged agency as per actuals.
- **No separate charges will be paid beyond this BoM.** Bidder must ensure that all the charges including miscellaneous

activities to be carried out at site for the completeness of the Project are been considered and factored in the Bill of Material.

- There is **no separate costing for Buy-back** of the equipment will be taken from bidders. Therefore, bidder shall quote rates in Bill of Material (BoM) after deducting Buy-back costing.

SECTION III

ENCLOSURES

CONTENT

- A. VENDOR INFORMATION FORM**
- B. CUSTOMER REFERENCE FORMAT**
- C. ANNEXURES**
- D. CHECKLIST**

ANNEXURE-2**A. VENDOR INFORMATION FORM**

Short Responses can be placed within the cells provided in the tables below. Additional Information can be attached as appendices, but should be explicitly referenced from within the appropriate cells.

<u>VENDOR INFORMATION FORM</u>	
<u>GENERAL INFORMATION</u>	
Vendor Name	
Corporate Office	
Address	
Web	
E-mail	
Telephone/Mobile	
Fax	
<u>COMMERCIAL INFORMATION</u>	
PAN No.	
GST	
Annual Turnover(In Cr)	FY 2022-23: FY 2023-24: FY 2024-25:
<u>PRIMARY VENDOR CONTACT OR SALES REPRESENTATIVE</u>	
Name and Title	
Address	
E-mail	
Telephone/Mobile	
Fax	
<u>PERSON(S) AUTHORIZED TO NEGOTIATE AND MAKE COMMITMENT FOR VENDOR</u>	
Name and Title	
Address	
E-mail	
Telephone	

Fax		
<u>DESIGNATED TECHNICAL CONTACT FOR RESPONSE CLARIFICATION AND QUESTIONS</u>		
Name and Title		
Address		
E-mail		
Telephone		
Fax		
	INFORMATION ITEM	VENDOR RESPONSE
1.	Date your company was incorporated	
2.	Number of people employed by your company and how many are in the following areas: -Pre-Sales and Marketing -Research and Development -Post-Sales Support -Technical Support -Training and Consulting -Management -other	
3.	Company's sales revenues for the last three fiscal years.	
4.	Number of implementations conducted for customers in the last three fiscal years. Group these implementations by numbers of end-users, dollar cost of engagements, and scope of engagements.	
5.	Indicate your agreement not to share the contents of this RFP with any other organization, including potential coordinator.	

6.	Optionally, provide any additional background information about your company that the BECIL would find useful in its deliberations.	
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B. CUSTOMERS REFERENCES:

Provide at least three references with comparable network size and complexity for whom you have provided similar implementation and / or integration services . Please use this format for your response.

ITEM	VENDOR RESPONSE
REFERENCE 1	
Company / Institution Name Address Scope of Project Dates of Engagement Contact Name and Title E-mail Telephone	
REFERENCE 2	
Company / Institution Name Address Scope of Project Dates of Engagement Contact Name and Title E-mail Telephone	
REFERENCE 3	
Company / Institution Name Address Scope of Project Dates of Engagement Contact Name and Title E-mail Telephone	

BANK GUARANTEE FORMAT FOR EARNEST MONEY DEPOSIT

(on Rs 100 Non Judicial Stamp Paper)

Bank Guarantee No. -----

Ref. No.

To

Broadcast Engineering Consultants India Limited
14B IP Estate , Ring Road
New Delhi.

Dear Sir,

Whereas The Broadcast Engineering Consultants India Limited, New Delhi (hereinafter called the "tenderer/Purchaser") include all its successors, administrators, executors and assignees has invited bids dated for _____ vide Tender reference No.

KNOW ALL MEN by these presents that We M/s _____ (hereinafter called the "Bidder") and include alt its successors, administrators executors and assignees having Head Office/ Registered office at _____ have submitted a quotation Reference No. _____ and Bidder having agree to furnish as a conditions precedent for participation in tender as unconditional and irrevocable bank guarantee of Rs _____ (Rupees _____ only) for the due performance of Bidder's obligations as contained in the terms of the Notice inviting tender and other terms and conditions contained in the tender Documents supplied by the BECIL specially :

The Conditions of obligations are-

- a) If the Bidder withdraws or amends, impairs or derogates from the Bid in any respect within the period of validity of this tender.
- b) If the Bidder having been notified of the acceptance of his tender by the Buyer during the period of its validity.
- c) If the Bidder fails to furnish the Performance Security for the due performance of the contract.
- d) Fails or refuses to accept/execute the contract.

2. Therefore, we _____ (indicate the name of Bank) under the laws of _____ having head/registered office at (hereinafter referred to as the "Bank") which expression shall, unless repugnant to the context or BECIL thereof, include all its successors, administrators and executors hereby

issue irrevocable and unconditional bank guarantee and undertake to pay immediately on first demand in writing Rupees all money to the extent of Rs _____ (Rupees _____ only) at any time immediately on such demand without any demur, reservations, recourse, contest or protest and/or without any reference to the Bidder and any such demand made by the BECIL on the bank shall be conclusive and binding notwithstanding any difference between the BECIL and the Bidder or any dispute pending before any court/arbitrator or any other matter whatsoever. We also agree to give that Guarantee herein the BECIL in writing. This guarantee shall not be determined/discharged/affected by the liquidation, winding up, dissolution or insolvency of the Bidder and will remain valid, binding and operative against the bank.

3) We _____ (Bank name) further agree that this guarantee shall not be affected by any change in our constitution, in the constitution of the BECIL or that of the Bidder. We _____ (Bank name) also undertake not to revoke, in any case, this Guarantee during its currency.

4) The bank agree with the BECIL that the BECIL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms of the tender or get extension of the validity period from time to time. We shall not be relieved from our liability by reason of any such variation or extension of the validity period or for any forbearance, act of omission and commission on the part of the BECIL or any indulgence shown by the BECIL to the said Bidder or by any such matter or thing whatsoever which under the law relating to sureties, would, but for this provision, have the effect of so relieving us.

5) This guarantee will remain in force upto _____ and any demand in respect thereof should reach the Bank not later than _____.

6) Notwithstanding anything contained herein above.

(i) Our liability under this guarantee shall not exceed Rs. _____/- (Rupees _____ Only)

(ii) This Guarantee shall be valid up to and including _____ and

(iii) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you have served upon us a written claim of demand on or before expiry of this guarantee i.e. _____, .

Dated the _____ day _____ (year)

PERFORMANCE BANK GUARANTEE FORMAT

(on Rs 100 Non Judicial Stamp Paper)

No.....

Dated:.....

To,

Broadcast Engineering Consultants India Limited,
14-B, I.P.Estate, Ring Road,
New Delhi

1. Against purchase order no. _____
dated _____ for _____ (hereinafter called the
said contract) entered into between Broadcast Engineering Consultants India Ltd.
(BECIL), 14-B, Ring Road, I.P. Estate, New Delhi (herewith called the Purchaser)
and _____(hereinafter called the
supplier), this is to certify that at the request of the supplier we
_____ (hereinafter referred to as the Bank), do as
primary obligor and not merely as surety, hereby irrevocably unconditionally
and absolutely undertake against any loss or damage caused to or suffered or
would be caused to or suffered by the Purchaser by reason of any failure of the
supplier to perform or omission or negligence to perform any part of his/their
obligation, viz. the performance of the contract till warranty period, to the
satisfaction of the purchaser in term of the contract.

2. We _____ do hereby
undertake to pay the amount due and payable under this guarantee without any
demur merely on a demand from the Purchaser stating that the amount claimed
is due by way of loss or damage caused to or would be caused to or suffered by
the Purchaser by reason of any breach by the said supplier (s) or any of the
terms and conditions contained in the said contract or by reason of the
supplier(s) failure or omission or negligence to perform the said contract till
warranty period or any part thereof. Any such damage made on the bank shall
be conclusive as regards the amount due and payable by the bank upon this
guarantee, which shall not be considered as satisfied by any intermediate
payment or satisfaction of any part of or obligation hereunder. However, our
liability under this guarantee shall be restricted to an amount not exceeding

3. We undertake to pay to the Purchaser any amount so demanded by the
Purchaser, notwithstanding:

- (i) Any dispute or difference between the Purchaser or the supplier or any other person or between the supplier or any person or any suit or proceeding pending before any court or tribunal or arbitrator relating thereto, or
- (ii) The invalidity, irregularity or unenforceability of the contract or
- (iii) Any other circumstances which might otherwise constitute discharge of this guarantee including any act or omission or commission on the part of the Purchaser to enforce the obligation by the Purchaser or any other person for any reason whatsoever.

4. We _____ further agree that the Guarantee herein contained shall be contained one and remain in full force and effect during the period that would be taken for the performance of the said agreement till warranty period and that it shall continue to be enforceable till all the dues of the Purchaser under or by virtue of the said agreement till warranty period have been fully paid and its claims satisfied or discharged or till BECIL certifies that the terms and conditions of the said agreement till warranty period have been fully and properly carried out by the said supplier and accordingly discharge this guarantee.

5. We _____ hereby agree and undertake that any claim which the bank may have against the supplier shall be subject and subordinate to the prior payment and performance in full of all the obligations of the bank hereunder and the Bank will not, without prior written consent of the Purchaser, exercise any legal rights or remedies of any kind in respect of any such payment or performance so long as the obligations of the Bank hereunder remaining owing and outstanding regardless of the insolvency liquidation or bankruptcy of the supplier or otherwise howsoever. We will not counter claim or set off against its liabilities to the Purchaser with it.

6. We _____ further agree with Purchaser that the Purchaser shall have the fullest liberty without or consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said suppliers from time to time or to postpone from any time or from time to time and of powers exercisable by the Purchaser against the said suppliers and forbearor enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said suppliers or for any forbearance, act or omission on the part of the Purchaser or any indulgence by the Purchaser to the said suppliers or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

7. This guarantee will not be discharged due to the change in the constitution of the Bank or the supplier

8. We _____ - lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Purchaser in writing.

9. Notwithstanding anything contained herein above.

i. Our liability under this guarantee shall not exceed _____)

ii. This guarantee shall be valid up to and including _____; and

iii. We are liable to pay the guaranteed amount or any part there of under this Bank Guarantee only and only if you have served upon us a written claim of demand on or before expiry of this guarantee.

Dated the.....date of.....

UNDERTAKING OF “NO CONFLICT OF INTEREST”

(On Bidder’s letterhead to be signed by authorized signatory)

Ref. No.

Date:

**To,
Broadcast Engineering Consultants India Ltd.,
BECIL Bhawan, Noida. UP**

**Subject: Undertaking of “No Conflict of Interest” for <Tender Name> for
Tender/RFP Ref No. : dated:**

Dear Sir,

We hereby offer to <Name of the work> at EMMC, New Delhi as specified in this RFP at the prices specified in the commercial bid.

We, the undersigned, do hereby confirmation that we are not involved in any conflict-of-interest situation with one or more parties in this bidding process, including but not limited to:

- (a) receive or have received any direct or indirect subsidy from any of them; or
- (b) have common controlling shareholders; or
- (c) have the same legal representative for purposes of this Bid; or
- (d) have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or
- (e) influence the decisions of BECIL regarding this bidding process.

We, the undersigned, do hereby confirmation that we have not participated in more than one bid in this bidding process and if we participate in more than one bid, then it shall result in the disqualification of all bids in which we are involved,

For M/s _____ (Name of the Bidder)

Signature & company seal

Name

Designation

Email

Mobile No.

Bid Security Declaration Form

(Applicable only for MSME):

<To be submitted in company's letterhead>

To,

**Broadcast Engineering Consultants India Limited (BECIL)
BECIL BHAWAN , C56 A/17 Sector62 , Noida -201307 U.P.**

Subject: Bid Security Declaration form for “Revamp of A/V Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC), Soochna Bhawan, New Delhi” vide Ref. No. dated

Dear Sir,

We, the undersigned, solemnly declare that:

We understand that according to the conditions of this Tender Document, the MSE OEM/System Integrator/Service provider registered with MSME/NSIC/KVIC or such Central procuring agencies/Ministries registered with DPIIT are exempted from submission of Earnest Money Deposit. Accordingly, we M/s eligible for exemption from EMD as per the Govt of India OM and Guidelines/Directives and relevant documents/certificates are attached. Accordingly, we hereby declare that :-

We unconditionally accept the conditions of this Bid Security Declaration. We understand that we shall stand automatically suspended from being eligible for bidding in any tender in BECIL for 2 years from the date of opening of this Bid if we breach our obligation(s) under the tender conditions if we:

- 1) withdraw/ amend/ impair/ derogate, in any respect, from our bid, within the Bid validity; or
- 2) being notified within the bid validity of the acceptance of our bid by the Procuring Entity: refused to or failed to produce the original documents for scrutiny or the required Performance Security within 15 days from the date of issue of supply order/contract.
- 3) Fail or refuse to sign/accept the contract.

We know that this bid-security Declaration shall expire if the contract is not awarded to us, upon:

- 1) receipt by us of your notification of cancellation of the entire tender process or rejection of all bids or of the name of the successful bidder or
- 2) forty-five days after the expiration of the bid validity or any extension to it.

Sincerely,

(Signature with date)

.....

(Name and designation)

Duly authorized to sign bid for and on behalf of.....

[name & address of Bidder and seal of company]

Dated on [insert date of signing]

Place [insert place of signing]

Pre-Qualification Proposal Submission Form

<To be submitted in company's letterhead>

To,

Broadcast Engineering Consultants India Limited (BECIL)

BECIL BHAWAN, C56 A/17 Sector62, Noida -201307 U.P.

Subject: Pre-Qualification proposal form for the Revamp of A/V Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC), Soochna Bhawan, New Delhi vide Ref. No. dated

Dear Sir,

With reference to your RFP Document <reference no.><dated> I/we, the undersigned, having Aforementioned all relevant documents and understood their contents, hereby submit our offer to provide services for “*Revamp of A/V Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC), Soochna Bhawan, New Delhi*”. We are hereby submitting our proposal, which includes this Prequalification proposal, Technical Proposal, and a Commercial Proposal as mentioned in the above RFP. This submitted proposal is unconditional.

I/We hereby declare that all the information and statements made in this Proposal and in the Appendices are true and correct, nothing has been omitted which renders such information misleading; and all documents accompanying such Proposal are true copies of their respective originals and accept that any misinterpretation contained in it may lead to our disqualification. I/We shall make available to the BECIL any additional information it may deem necessary or require for supplementing or authenticating the Proposal.

I/We declare that I/We have Examined and have no reservations to the RFP Documents, including any Addendum/Clarification issued by the BECIL and I/We do not have any conflict of interest in accordance with RFP Document.

I/We undertake, if our Proposal is accepted and we have been engaged for providing the services to BECIL, we shall abide by the conditions of the RFP and subsequent corrigendum/addendum and service Contract.

I/We understand that you may cancel the Selection Process at any time

and that you are neither bound to accept any Proposal that you may receive nor to select the agency, without incurring any liability to the Bidders in accordance with clauses of the RFP document. I/We understand that you have right to reject our application without assigning any reason or otherwise. I/we hereby waive our right to challenge the same on any account whatsoever.

I/We agree and understand that the proposal is subject to the provisions of the RFP document. In no case, shall I/we have any claim or right if proposal is not opened or rejected.

I/We agree to keep this offer valid for 180 days after the last date of submission of bids specified in the RFP.

A Power of Attorney in favor of the authorized signatory to sign and submit this Proposal and documents is attached herewith.

The Financial Proposal is being submitted separately as specified in RFP. This prequalification proposal read with Technical Proposal and Financial Proposal shall constitute the Application which shall be binding on us.

I/We certify that M/s<(Company Name)> is a Single Bidder in response to your RFP for Providing “*Revamp of A/V Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC), Soochna Bhawan, New Delhi*” vide Ref. No. dated” to BECIL.

I/We agree and undertake to abide by all the terms and conditions of the RFP Document. I/we hereby unconditionally accept the RFP conditions of BECIL’s RFP documents in its entirety for the above work.

In witness thereof, I/we submit this Proposal under and in accordance with the terms of the RFP Document.

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Company:

Address

Date:

Seal / Stamp of Bidder:

FORMAT FOR MANUFACTURER AUTHORISATION FORM (MAF)
(ON OEM LETTERHEAD)

Date:

To,

Broadcast Engineering Consultants India Limited (BECIL)
BECIL BHAWAN , C56 A/17 Sector62 , Noida -201307 U.P.

Tender/RFP Ref No. : **dated:**

Subject: **Manufacturer authorization towards tender no.**
dated: **for**

Dear Sir,

We, M/s _____ (Name of the manufacturer) having registered office at _____ (address of the manufacturer) by virtue of being manufacturer for _____ (Name of the product/s), hereby authorize M/s _____ (Name of the bidder) having their office at _____ (Address of bidder) to submit quote, negotiate, supply, install and provide after sales support for our range of products quoted by them to meet the above mentioned tender requirements.

M/s _____ (Name of the manufacturer) within the scope of requirement as per the tender mentioned above through its authorized partner M/s _____ (Name of the bidder) shall provide product CAMC / Warranty *<whichever is applicable>* support services for a minimum period of five years from the date of signing of FHTO and Support for a period of five more years from date of expiry of warranty.

M/s _____ (Name of the manufacturer) undertakes that the quoted equipment / software are of latest year of manufacturing and will **not go end of life** during CAMC / warranty period and will provide the spares during the validity of this contract.

The undersigned is authorized to issue such authorization on behalf of M/s _____ (Name of the manufacturer).

For M/s _____ **(Name of the manufacturer)**

Signature & company seal

Name
Designation
Email
Mobile No.

FORMAT FOR BLACKLISTING UNDERTAKING

(On Rs. 100 non-judicial stamp paper)

Date:

To,

**Broadcast Engineering Consultants India Limited (BECIL)
BECIL BHAWAN , C56 A/17 Sector62 , Noida -201307 U.P.**

Tender / RFP Ref. No. : _____ dated: _____

Subject: Undertaking for Black listing.

Dear Sir,

This undertaking is in reference to the above mentioned tender for

In this regard, we, M/s _____(Name of the Bidder) having
registered office at _____(address of the Bidder) hereby certify
that we have not been debarred/black-listed by any PSU / Autonomous Body /
central/state Government Agency.

For M/s _____(Name of the Bidder)

Signature & company seal

Name

Designation

Email

Mobile No.

SITE SURVEY CERTIFICATE

(On Bidder's letterhead to be signed by EMMC)

Ref. No.

Date:

To,

**Broadcast Engineering Consultants India Limited (BECIL)
BECIL BHAWAN , C56 A/17 Sector62 , Noida -201307 U.P.**

Subject: Certificate of Site Survey at EMMC, Soochna Bhawan for <Tender Name> for Tender/RFP Ref No. : dated:

Dear Sir,

We, M/s _____ (Name of the bidder) having registered office at _____ (address of the bidder) had completed the site survey of the project site and completely understood the condition of the equipment to be replaced under buy-back provision and accordingly, we have prepared the bid (technical and financial bid).

We have analyzed the possible requirement for the backward integration of new equipment with the existing setup and accordingly, submitted our quotation.

We have checked the current condition of the **cabling & its connectors** at the EMMC to connect the Data center with the Monitoring Rooms through raceways and undertake to provide the maintenance of the whole cabling till the validity of the contract. If required, we will replace the cabling & its connectors as and when required for the smooth functioning of the system.

As per site survey and site condition, we further confirm that the rates quoted by M/s _____ (Name of the bidder) on the **GeM-CPPP Portal** is all inclusive of complete functionality of the system.

If any additional accessories or equipment required for the completeness and proper functioning of the proposed system will be provided by M/s _____ (Name of the bidder) without any additional cost.

For M/s _____ (Name of the Bidder)

Signature & company seal

Name

Designation

Email

Mobile No.

Signature of the EMMC

COMPREHENSIVE WARRANTY / CAMC CERTIFICATE

(On company letter head)

To,

Broadcast Engineering Consultants India Limited (BECIL)

BECIL BHAWAN , C56 A/17 Sector62 , Noida -201307 U.P.

**Subject: Comprehensive Warranty for <Tender Name> for Tender/RFP Ref
No. : dated:**

Dear Sir,

This is with reference to RFP Ref. No. Dated: In this regard we M/s _____ (Name of the bidder) have registered office at _____ (address of the bidder) undertake that we as a system integrator of referred project will be solely responsible for the uninterrupted functioning of whole system including cabling as per tender terms & conditions, which includes all the accessories / software mentioned in this tender document.

Warranty / CAMC for all the hardware & software procured under referred RFP will be for the period of 5 years from the date of signing of FHTO.

For M/s _____(Name of the Bidder)

Signature & company seal

Name

Designation

Email

Mobile No.

**FORMAT FOR UNDERTAKING TO PROVIDE ALL REQUIRED
MISCELLANEOUS ITEMS AND ACCESSORIES TO MAKE SYSTEM
FUNCTIONAL**

(To be given on Non-Judicial Stamp paper of Rs. 100/-)

Date:

To,

**Broadcast Engineering Consultants India Limited (BECIL)
BECIL BHAWAN , C56 A/17 Sector62 , Noida -201307 U.P.**

Subject: Undertaking for providing system functional.

Tender Ref No. _____ dated _____

Dear Sir,

This undertaking is in reference to the above mentioned tender for the selection of agency for the *“revamp of A/V Logging and Monitoring Setup installed at Electronic Media Monitoring Centre (EMMC), Soochna Bhawan, New Delhi”*.

In this regard, we M/s _____ (Name of the Bidder) hereby undertake that we will provide all required miscellaneous items including minor civil work, coordination with dependent agencies & other departments and accessories to make system functional during installation, commissioning & warranty / CAMC phase of Project, without any additional cost.

For M/s _____ (Name of the Bidder)

Signature & company seal

Name

Designation

Email

Mobile No.

COMPLIANCE STATEMENT PERFORMA
(On OEM / Bidder letter head)

Sr. No.	Sr. No. of Specification	Description of Specification	Page number of Specifications in RFP	Compliance (Yes/No)	Deviation ,if any, to the specification	Optional Items ,if any, required for the completeness of system	Features in the offered product in addition to BECIL specs

For M/s_____ (Name of the OEM / Bidder)

Signature & company seal

Name

Designation

Email

Mobile No.

FORMAT FOR QUANTITATIVE HANDING / TAKING OVER (QHTO)

S. No.	Name of Equipment with Make & Model	Equipment Serial Number	Technical Specification of equipment as per tender document	Delivery Date

NOTE: All the above mentioned items / equipment are successfully delivered at EMMC.

For M/s _____ (Name of the Bidder)

**For Electronic Media Monitoring Center
(EMMC)**

Signature & company seal

Name

Designation

Email

Mobile No.

Signature & EMMC Seal

Name

Designation

Email

Mobile No.

FORMAT FOR FUNCTIONAL HANDING / TAKING OVER (FHTO)

S. No.	Name of Equipment with Make & Model	Equipment Serial Number	Technical Specification of equipment as per tender document	Date of Functional Testing

NOTE: All the above mentioned items / equipment are successfully delivered and installed at EMMC.

For M/s _____ (Name of the Bidder)

For Electronic Media Monitoring Center (EMMC)

Signature & company seal

Name

Designation

Email

Mobile No.

Signature & EMMC Seal

Name

Designation

Email

Mobile No.

Undertaking Regarding Payment of GST/ Filing Of GST Return
(On company letter head)

Date:

To,

Broadcast Engineering Consultants India Limited (BECIL)
BECIL BHAWAN , C56 A/17 Sector62 , Noida -201307 U.P.

Subject: Undertaking regarding Payment of GST/ Filing of GST Return.

Tender Ref No. _____ dated _____

Dear Sir,

This is in connection to the works awarded by M/s Broadcast Engineering Consultants India Limited (BECIL), we hereby undertake that we will comply with Goods and Services Tax 2017 and subsequent amendment and Various Rules Relating to GST Act, 2017(herein after referred to as GST Act and Rules) wherever we are obliged to comply with the GST Act and GST Rules.

We further hereby undertake that we will issue proper **“Tax Invoice”** and/or any other Relevant Document as required under GST Act and Rules. We will furnish appropriate GST return and pay GST as required under GST Act and Rules on timely basis and will provide GST credit on timely basis through GST Portal (and/or by any other means as provided by GST Act and Rules).

We hereby certify & undertake that we will not alter, delete or modify the tax invoices and other details uploaded at GST Portal unless approved by BECIL in writing. We hereby certify all the relevant document along with tax invoice as the case may be

We also hereby certify & undertake that we indemnify BECIL on account of any loss of GST input credit as well as any interest, penalty, demands or other costs, expenses suffered by BECIL because of any failure on our part to file appropriate Return on time and/or pay Tax to Government/Appropriate Authority.

In case we do not make payment the tax/interest/penalty/other expenses etc. on demand raised by Government/Tax Authorities due to default/delay on our part/action, we also authorize BECIL to forfeit/deduct from security held by BECIL, equivalent amount of interest/penalty/tax etc. for the amount so withheld.

For M/s_____ (Name of the Bidder)

Signature & company seal

Name

Designation

Email

Mobile No.

Signature of the site Incharge EMMC

Self-Declaration for the Code of Integrity

(To be Included in the RFP on bidder's letter head)

I/We shall maintain a high degree of integrity during the course of my/our dealings business/contractual relationship with BECIL. If it is discovered at any stage that any business/ contract was secured by playing fraud or misrepresentation or suspension of material facts, I/We authorize BECIL to term such contract as voidable at the its sole option.

Place:

Date:

Address:

Mobile:

Email ID:

Signature of Authorized Signatory on behalf of Agency

Power of Attorney for signing the Bid on Rs. 100 Stamp Paper (Notarized)

KNOW ALL MEN BY THESE PRESENTS,

We, *[Name of Bidder]* do hereby irrevocably constitute, nominate, appoint and authorize _____, who is presently employed with us and holding the position of “_____”, as our true and lawful attorney (*hereinafter referred to as the “Attorney”*) to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our application for qualification and submission of our bid for the Project “*Name of Project*” of “_____” (*the “client”*) including but not limited to signing and submission of all applications, bids and other documents and writings, participate in pre- applications and other conferences and providing information/ responses to the client, representing us in all matters before the client, signing and execution of all contracts including the Agreement and undertakings consequent to acceptance of our bid, and generally dealing with the client in all matters in connection with or relating to or arising out of our bid for the said Project and/ or upon award thereof to us and/or till the entering into of the Agreement with the client. The act done by _____ (Name of authorized person) will be binding on the selected bidder.

IN WITNESS WHEREOF WE, ____(*Name of Bidder*)____, THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF Date_____.

For Name of Bidder,

Accepted

Witnesses:

1. (Notarized)

Pre Contract Integrity Pact
(₹ 100/- non-judicial stamp paper)

INTEGRITY PACT

BETWEEN

BROADCAST ENGINEERING CONSULTANTS INDIA LIMITED (BECIL)

HEREINAFTER REFERRED TO AS

" PURCHASER",

AND

(.....)
Hereinafter referred to as
"The Bidder/Contractor"

PREAMBLE

BECIL intends to award, under laid-down organizational procedures, contract(s) **for**, BECIL values full compliance with all relevant laws and regulations, and the principles of economical use of resources, and of fairness and transparency in its relations with its Bidders/ Contractors.

In order to achieve these goals, BECIL and the above-named Bidder/Contractor enter into this agreement called 'Integrity Pact' which will form a part of the bid.

It is hereby agreed by and between the parties as under:

SECTION I - COMMITMENTS OF BECIL

- (1) **BECIL** commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a) No employee of **BECIL**, personally or through family members, will in connection with the tender, or the execution of the contract, demand, take a promise for or accept, for him/herself or third person, any material or other benefit which he/she is not legally entitled to.

- b) BECIL will, during the tender process treat all Bidder(s) with equity and fairness. BECIL will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- c) BECIL will exclude from evaluation of Bids its such employee(s) who has any personnel interest in the Companies/Agencies participating in the Bidding/Tendering process If Chairman and Managing Director obtains information on the conduct of any employee of BECIL which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, he will inform its Chief Vigilance Officer and in addition can initiate disciplinary actions under its Rules.

SECTION II - COMMITMENTS OF THE BIDDER/CONTRACTOR

- (1) The Bidder/Contractor commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution:
 - a) The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to BECIL, or to any of BECIL's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange an advantage during the tender process or award for the execution of the contract.
 - b) The Bidder/Contractor will not enter into any illegal agreement or understanding, whether formal or informal with other Bidders/Contractors. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c) The Bidder/Contractor will not commit any criminal offence under the relevant Anti-corruption Laws of India; further, the Bidder/Contractor will not use for illegitimate purposes or for purposes of restrictive competition or personal gain, or pass on to others, any information provided by BECIL as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d) The Bidder/Contractor of foreign origin shall disclose the name and address of the Agents/representatives in India, if any, involved

directly or indirectly in the Bidding. Similarly, the Bidder/Contractor of Indian Nationality shall furnish the name and address of the foreign principals, if any, involved directly or indirectly in the Bidding.

- e) The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, or committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and/or with the execution of the contract.
 - f) The Bidder/Contractor will not misrepresent facts or furnish false/forged documents/information's in order to influence the bidding process or the execution of the contract to the detriment of BECIL.
- (2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

SECTION III- DISQUALIFICATION FROM TENDER PROCESS AND EXCLUSION FROM FUTURE CONTRACTS

- (1) If the Bidder, before contract award, has committed a serious transgression through a violation of Section II or in any other form such as to put his reliability or credibility as Bidder into question, BECIL may disqualify the Bidder from the tender process or terminate the contract, if already signed, for such reason.
- (2) If the Bidder/Contractor has committed a serious transgression through a violation of Section II such as to put his reliability or credibility into question, BECIL may after following due procedures also exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder/ Contractor and the amount of the damage. The exclusion will be imposed for a minimum of 12 months and maximum of 3 years.
- (3) If the Bidder/Contractor can prove that he has restored/recouped the damage caused by him and has installed a suitable corruption prevention system, BECIL may revoke the exclusion prematurely.

SECTION IV - LIABILITY FOR VIOLATION OF INTEGRITY PACT

- (1) If BECIL has disqualified the Bidder from the tender process prior to the award under Section III, BECIL may forfeit the Bid Guarantee under the Bid.
- (2) If BECIL has terminated the contract under Section III, BECIL may forfeit the Contract Performance Guarantee of this contract besides resorting to other remedies under the contract.

SECTION V- PREVIOUS TRANSGRESSION

- (1) The Bidder shall declare in his Bid that no previous transgressions occurred in the last 3 years with any other Public Sector Undertaking or Government Department that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

SECTION VI - EQUAL TREATMENT TO ALL BIDDERS / CONTRACTORS

- (1) BECIL will enter into agreements with identical conditions as this one with all Bidders.
- (2) BECIL will disqualify from the tender process any bidder who does not sign this Pact or violate its provisions.

SECTION VII - PUNITIVE ACTION AGAINST VIOLATING BIDDERS / CONTRACTORS

If BECIL obtains knowledge of conduct of a Bidder or a Contractor or his subcontractor or of an employee or a representative or an associate of a Bidder or Contractor or his Subcontractor which constitutes corruption, or if BECIL has substantive suspicion in this regard, BECIL will inform the Chief Vigilance Officer (CVO).

SECTION VIII - INDEPENDENT EXTERNAL MONITOR/MONITORS

- (1) BECIL has appointed a panel of Independent External Monitors (IEMs) for this Pact with the approval of Central Vigilance Commission (CVC), Government of India, out of which one of the IEMs has been indicated in the NIT/IFB.
- (2) The IEM is to review independently and objectively, whether and to

what extent the parties comply with the obligations under this agreement. He has right of access to all project documentation. The IEM may examine any complaint received by him and submit a report to Chairman-cum- Managing Director, BECIL, at the earliest. He may also submit a report directly to the CVO and the CVC, in case of suspicion of serious irregularities attracting the provisions of the PC Act. However, for ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process, the matter shall be referred to the full panel of IEMs, who would examine the records, conduct the investigations and submit report to Chairman-cum-Managing Director, BECIL, giving joint findings.

- (3) The IEM is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairman-cum-Managing Director, BECIL.
- (4) The Bidder(s)/Contractor(s) accepts that the IEM has the right to access without restriction to all documentation of BECIL related to this contract including that provided by the Contractor/Bidder. The Bidder/Contractor will also grant the IEM, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his documentation. The same is applicable to Subcontractors. The IEM is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality.
- (5) BECIL will provide to the IEM information as sought by him which could have an impact on the contractual relations between BECIL and the Bidder/Contractor related to this contract.
- (6) As soon as the IEM notices, or believes to notice, a violation of this agreement, he will so inform the Chairman-cum-Managing Director, BECIL and request the Chairman-cum- Managing Director, BECIL to discontinue or take corrective action, or to take other relevant action. The IEM can in this regard submit non-binding recommendations. Beyond this, the IEM has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the IEM shall give an opportunity to BECIL and the Bidder/Contractor, as deemed fit, to present its case before making its recommendations to BECIL.
- (7) The IEM will submit a written report to the Chairman-cum-Managing Director, BECIL within 8 to 10 weeks from the date of reference or intimation to him by BECIL and, should the occasion arise, submit

proposals for correcting problematic situations.

- (8) If the IEM has reported to the Chairman-cum-Managing Director, BECIL, a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairman- cum-Managing Director, BECIL has not, within the reasonable time taken visible action to proceed against such offence or reported it to the CVO, the Monitor may also transmit this information directly to the CVC, Government of India.

- (9) The word '**IEM**' would include both singular and plural.

Section IX - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor after the closure of the contract and for all other Bidder's six month after the contract has been awarded.

Section X - Other Provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the establishment of BECIL. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.
- (2) Changes and supplements as well as termination notices need to be made in writing.
- (3) If the Contractor is a partnership firm or a consortium or Joint Venture, this agreement must be signed by all partners, consortium members and Joint Venture partners.
- (4) Nothing in this agreement shall affect the rights of the parties available under the General Conditions of Contract (GCC) and Special Conditions of Contract (SCC).
- (5) Views expressed or suggestions/submissions made by the parties and the recommendations of the IEM in respect of the violation of this agreement, shall not be relied on or introduced as evidence in the arbitral or judicial proceedings (arising out of the arbitral proceedings) by the parties in connection with the disputes/differences arising out of the subject contract.

- (6) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

For & On behalf of BECIL

(Office Seal)

(Name & Address)

Witness 1:

Date:

Place

For & On behalf of Bidder/Contractor

(Office Seal)

(Name & Address)

Witness 2:

Date:

Place

Consortium Agreement

(On Rs. 100 Non-Judicial Stamp Paper duly notarized by the Notary Public)

In compliance to **Clause No..... of RFP Ref. No. dated**, a consortium has been formed on <Date> between **M/s (Lead Bidder) and M/s (Consortium partner)** to meet various eligibility conditions and experience criteria specified in the said Tender.

It has been agreed among bidder and the consortium partners that **M/s (Lead bidder)** is designated to submit the Bid on behalf of this consortium and henceforth called as Bidder. “Lead Bidder” and the “Bidder” have been used interchangeably. It is also confirmed that all the members of the said consortium meet the eligibility conditions **jointly** as specified in the above referred RFP and have authorised the “Lead bidder” by way of duly executed power of attorney in his favour to act on their behalf.

It has been agreed that the Lead bidder shall furnish Performance Bank Guarantees (PBGs) for Work order (WO).

It has also been agreed that the in its capacity as lead Bidder, M/s will interact with BECIL for all obligations including signing the agreements (if any) and commercial transactions.

The details of Bidder and consortium partners are as under: -

<Lead Bidder Name>: <Details containing Registered office & correspondence address>

<Consortium Partners>: <Details containing Registered office & correspondence address>

IN WITNESS WHEREOF the parties have caused this AGREEMENT to be executed by their duly authorised officers as of the day first above written

For <Bidder's Name> Signature of Authorised Signatory Name: - Designation: - Contact Phone: - Email-ID: - Date: - Witness-1 Signature: - Name: -	For <Consortium Partner (s)> Signature of Authorised Signatory Name: - Designation: - Contact Phone: - Email-ID: - Date: - Witness-1 Signature: - Name: -
--	---

Designation: - Contact Phone: - Email-ID: - Date:	Designation: - Contact Phone: - Email-ID: - Date:
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NOTE: Both consortium members separately must submit the *Power of Attorney* as per the format provided in tender document from their respective companies.

LAND BORDER DECLARATION CERTIFICATE

Restrictions on procurement from Bidders from a country or countries, or a class of countries under Rule 144(xi) of the General Financial Rules 2017.

Tender Document No: **Date:**

Bidder's Name, Address & contact details:

Bidder's Reference No. **Date:**

Restrictions on procurement from Bidders from a country or countries, or a class of countries under Rule 144(xi) of the General Financial Rules 2017.

I/We certify that this Bidder is not from such a 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

I/We certify that this Bidder is not from such a country or if from such a country has been registered with the competent authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.

Penalties for false or misleading declarations:

We hereby confirm that the particulars given above are factually correct and nothing is concealed and also undertake to advise any future changes to the above details. We understood that any wrong or misleading self-declaration by us would be violation of Code of integrity and would attract penalties as mentioned in this tender document, including debarment.

(Signature with date)

(Name and designation)

Duly authorized to sign Bid for and on behalf of

(Name & address of the Bidder and Seal of Company)

*Kindly delete this part, if not applicable.

NON-DISCLOSURE AGREEMENT**For Tender Reference No.- dated**

THIS AGREEMENT is made on this the day of 2025 at, by and between:

M/s Broadcast Engineering Consultants India Limited, a Mini Ratna, Public Sector Enterprise, falling under the purview of the Ministry of Information and Broadcasting under the Government of India having its Registered Office at 56-A/17, Block-C, Sector-62, Noida -201301 (U.P.) and Head Office at 14-B IP Estate Ring Road, New Delhi -110002 acting through[**name of officer**], authorized vide a Board Resolution dated Hereinafter referred to as "**BECIL or “Disclosing Party ”**) which expression shall unless repugnant to the context or meaning thereof, include its successors, authorized representatives and permitted assigns.

AND

M/s, a Private Limited Company incorporated on under the purview of the provisions of the Companies Act 1956, having its registered address at authorized vide a Board Resolution dated, Hereinafter referred to as the “Second Party” or “Receiving Party”) which expression shall unless repugnant to the context or meaning thereof, include its successors, authorized representative and permitted assigns

Whereas Broadcast Engineering Consultants India Limited is an ISO 9001:2015, 27001:2013, ISO/IEC 20000:2012 is a certified, Mini Ratna, Central Public Sector Enterprise (CPSE) falling under the purview of Ministry of Information and Broadcasting, Government of India, and was established on 24th March 1995. That M/s BECIL provides Project Consultancy services, turnkey solutions, System integration, Operation & Maintenance services for the entire gamut of radio and television broadcast engineering projects and has also gradually diversified into the domain of businesses pertaining to strategic national importance and has won major Projects/ Tenders in the field of security & surveillance, IT networking, Data center and Communication Intelligence

Whereas M/s BECIL has floated a RFP /Tender with reference no. dated for the selection of an agency for the execution of the

WHEREAS in pursuance to this RFP, it is recognized that certain confidential information shall be disclosed by BECIL to the Receiving Party That the

Confidential Information shall belong to BECIL/Disclosing Party as the case may be and shall be transferred to the Receiving Party to be used only for the business purpose and hence there is a need to protect such information from unauthorised use and disclosure

NOW THEREFORE, in consideration of the mutual covenants, promises, assurances, representations and provisions set forth herein, the Parties hereto agree as follows:

1. INTERPRETATION

1.1 In this agreement, unless otherwise specified:

(i) references to clauses, Sub-clauses, Paragraphs and Schedules are to clauses, sub-clauses, paragraphs of and schedules to this Agreement;

(ii) use of any gender includes the other genders;

(iii) references to a 'company' shall be construed so as to include any company, corporation or other body corporate, wherever and however incorporated or established;

(iv) references to a 'person' shall be construed so as to include any individual, firm, company, government, state or agency of a state, local or municipal authority or government body or any joint venture, association or partnership (whether or not having separate legal personality);

(v) a reference to any statute or statutory provision shall be construed as a reference to the same as it may have been, or may from time to time be, amended, modified or re-enacted;

(vi) any reference to a 'day' (including within the phrase 'business day') shall mean a period of 24 hours running from midnight to midnight;

(vii) references to a 'business day' shall be construed as a reference to any day that is not a Sunday or a public holiday and starts at 9 am;

(viii) references to times are to Indian standard time;

(ix) a reference to any other document referred to in this Agreement is a reference to that other document as amended, varied, novated or supplemented at any time; and

(x) all headings and titles are inserted for convenience only. Ambiguities w.

2. TERM

2.1 This Agreement will remain in effect till a six (6) month period post the expiry of the contract unless explicitly extended by BECIL.

3. SCOPE OF THE AGREEMENT

3.1 This Agreement shall apply to all confidential and proprietary information disclosed by Disclosing Party to the Receiving Party and other information which the disclosing party identifies in writing or otherwise deems confidential before or within (30) thirty days after disclosure to the Receiving Party as ("Confidential Information").

3.2 Such Confidential Information shall consists of RFP, certain specifications, documents, software, prototypes and/or technical information, and all copies and derivatives containing such Information that may be disclosed to the Disclosing Party for and during the Business Purpose, which a party considers proprietary or confidential.

3.3 Such Confidential Information may be in any form or medium, tangible or intangible, and may be communicated/disclosed in writing, orally, or through visual observation or by any other means to the Receiving Party.

4. OBLIGATIONS OF THE RECEIVING PARTY

4.1 The Receiving Party shall –

- (i) use the Confidential Information only for the Business Purpose and shall hold the Confidential Information in confidence using the same degree of care as it normally exercises to protect its own proprietary information, taking into account the nature of the Confidential Information, and
- (ii) grant access to Confidential Information only to its employees on a "need to know basis" and restrict such access as and when not necessary to carry out the Business Purpose.
- (iii) cause its employees to comply with the provisions of this agreement;
- (iv) reproduce Confidential Information only to the extent essential to fulfilling the Business Purpose, and
- (v) disclose the Confidential Information to its consultants/ contractors/ any third parties on a "need to know basis"; provided that by doing so, the Receiving Party agrees to bind such consultants/ contractors to terms at least as restrictive as those stated herein.
- (vi) The Receiving Party upon making a disclosure under this clause shall – a. advise the consultants/contractors of the confidentiality obligations imposed on them by this clause.
- (vii) upon the Disclosing Party's request, the Receiving Party shall either return to the disclosing party all Confidential Information or shall certify to the disclosing party that all media containing Confidential Information have been destroyed.

Provided, however, that an archival copy of the Confidential Information may be retained in the files of the Receiving Party's counsel, solely for the purpose of proving the contents of the Confidential Information.

- (viii) not to remove any of the other Party's Confidential Information from the premises of the Disclosing Party without prior written approval.
- (ix) exercise extreme care in protecting the confidentiality of any Confidential Information which is removed, only with the Disclosing Party's prior written approval, from the Disclosing Party's premises. Each Party agrees to comply with any and all terms and conditions the disclosing party may impose upon any such approved removal, such as conditions that the removed Confidential Information and all copies must be returned by a certain date, and that no copies are to be made off of the premises.
- (x) Upon the Disclosing Party's request, the Receiving Party shall promptly return to the Disclosing Party all tangible items containing or consisting of the disclosing party's Confidential Information all copies thereof.

5. EXCEPTIONS TO CONFIDENTIAL INFORMATION

5.1 The foregoing restrictions on each party's use or disclosure of Confidential Information shall not apply to the Confidential Information that the Receiving Party can demonstrate that such Confidential Information –

- (i) was independently developed by or for the Receiving Party without reference to the Information, or was received without restrictions; or
- (ii) has become generally available to the public without breach of confidentiality obligations of the Receiving Party;
- (iii) was in the Receiving Party's possession without restriction or was known by the Receiving Party without restriction at the time of disclosure;
- (iv) is the subject of a subpoena or other legal or administrative demand for disclosure; provided, however, that the Receiving Party has given the disclosing party prompt notice of such demand for disclosure and the Receiving Party reasonably cooperates with the disclosing party's efforts to secure an appropriate protective order; or
- (v) is disclosed with the prior consent of the disclosing party;
- (vi) was in its possession or known to it by being in its use or being recorded in its files or computers or other recording media prior to receipt from the disclosing party and was not previously acquired by the Receiving Party from the disclosing party under an obligation of confidence; or

(vii) the Receiving Party obtains or has available from a source other than the disclosing party without breach by the Receiving Party or such source of any obligation of confidentiality or non-use towards the disclosing party.

6. OWNERSHIP OF THE CONFIDENTIAL INFORMATION

6.1 Each Party recognises and agrees that all of the disclosing Party's Confidential Information is owned solely by the Disclosing Party (or its licensors) and that the unauthorised disclosure or use of such Confidential Information would cause irreparable harm and significant injury, the degree of which may be difficult to ascertain.

6.2 By disclosing the Confidential Information or executing this agreement, Disclosing Party does not grant any license, explicitly or implicitly, under any trademark, patent, copyright, mask work protection right, trade secret or any other intellectual property right. The Disclosing Party disclaims all warranties regarding the information, including all warranties with respect to infringement of intellectual property rights and all warranties as to the accuracy or utility of such information.

6.3 Access to Confidential Information hereunder shall not preclude an individual who has seen such Confidential Information for the purposes of this agreement from working on future projects for the Disclosing Party which relate to similar subject matters, provided that such individual does not make reference to the Confidential Information and does not copy the substance of the Confidential Information during the Term. Furthermore, nothing contained herein shall be construed as imposing any restriction on the Receiving Party's disclosure or use of any general learning, skills or know-how developed by the Receiving Party's personnel under this agreement.

6.4 Execution of this agreement and the disclosure of Confidential Information pursuant to this agreement do not constitute or imply any commitment, promise, or inducement by either Party to make any purchase or sale, or to enter into any additional agreement of any kind.

7. DISPUTE RESOLUTION

7.1 If a dispute arises in relation to the conduct of this Contract (Dispute), a both the parties shall try to amicably resolve the dispute before invoking the arbitration clause.

7.2 any dispute(s)/ controversy(s)/ issue(s) arising out of or in connection with the contract, including any question regarding its existence or validity shall be referred to and finally resolved by Arbitration administered by the Delhi International Arbitration Centre as per the Delhi International Arbitration Centre proceeding Rules 2023.

7.3 The Aggrieved party wishing to refer a dispute to Arbitration shall give a notice to the Defaulting Party specifying all the points of dispute(s) with details of corresponding the claim amount.

7.4 The Arbitration Proceeding shall commence within a span of **thirty days** from the date of receipt of Invocation Notice complete in all respects as mentioned above.

7.5 The dispute(s)/ difference(s)/controversy(s) shall be adjudicated by a single/sole Arbitrator empanelled with the Delhi International Arbitration Centre.

7.6 The seat of Arbitration shall be at New Delhi and the Arbitration proceeding shall be conducted in English.

7.7 The award of Sole Arbitrator shall be final and binding on the parties and unless directed/awarded otherwise by the Sole Arbitrator, the cost of arbitration proceedings shall be shared equally by both the parties.

7.8 The provision of the Arbitration and Conciliation Act, 1996 as amended and applicable from time to time shall apply to the Arbitration proceedings under this Contract.

8. INJUNCTION

8.1 The Receiving Party agrees that the Disclosing Party shall have the right to obtain an immediate injunction enjoining any breach of this agreement, as well as the right to pursue any and all other rights and remedies available at law or in equity for such a breach.

9. VARIATION

9.1 This agreement may only be varied in writing and signed by both Parties.

10. WAIVER

10.1 Waiver including partial or conditional waiver, by either Party of any default by the other Party in the observance and performance of any provision of or obligations under this agreement:-

(i) shall be in writing

(ii) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions of or obligations under this agreement;

(iii) shall be executed by a duly authorised representative of the Party; and

(iv) shall not affect the validity or enforceability of this agreement in any manner.

11. EXCLUSION OF IMPLIED WARRANTIES

11.1 This agreement expressly excludes any warranty, condition or other undertaking implied at law or by custom or otherwise arising out of any other agreement between the Parties or any representation by either Party not contained in a binding legal agreement executed by both Parties.

12. ENTIRE AGREEMENT

12.1 This agreement together constitute a complete and exclusive statement of the terms of the agreement between the Parties on the subject hereof, and no amendment or modification hereto shall be valid and effective unless such modification or amendment is agreed to in writing by the Parties and duly executed by persons especially empowered in this behalf by the respective Parties. All prior written or oral understandings, offers or other communications of every kind pertaining to this agreement are abrogated and withdrawn.

13. SEVERABILITY

13.1 If for any reason whatever, any provision of this agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties shall negotiate in good faith with a view to agreeing to one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to the dispute resolution procedure set forth under this agreement or otherwise.

14. NO PARTNERSHIP

14.1 This agreement shall not be interpreted or construed to create an association, joint venture or partnership between the Parties, or to impose any partnership obligation or liability upon either Party, and neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party except as expressly provided under the terms of this agreement.

15. THIRD PARTIES

15.1 This agreement is intended solely for the benefit of the Parties and their respective successors and permitted assigns, and nothing in this agreement shall

be construed to create any duty to, standard of care with reference to, or any liability to, any person not a Party to this agreement.

16. SUCCESSORS AND ASSIGNS

16.1 The agreement shall be binding on and shall inure to the benefit of the Parties and their respective successors and permitted assigns.

17. NOTICES

17.1 Any notice or other communication to be given by any Party to the other Party under or in connection with the matters contemplated by this agreement shall be in writing and shall be given by hand delivery, recognised courier, registered post, email or facsimile transmission and delivered or transmitted to the Parties at their respective addresses set forth below –

**Broadcast Engineering Consultants India Ltd,
C-56 A/17, Sector -62, Noida 201 307
Tel: 0120-4177850 Fax: 0120-4177879**

Name of the authorised person-

Contact:

E-mail:

M/s-----

Name of the authorized person

Designation of the authorized person

Contact:

Email:

17.2 All notices required to be given by one Party to the other Party and all other communications, documentation and proceedings which are in any way relevant to this agreement shall be in writing and in the English language.

18. MITIGATION

18.1 Without prejudice to any express provisions of this agreement on any mitigation obligations of the Parties, each of BECIL and the Receiving party shall at all times take all reasonable steps to minimize and mitigate any loss for which the relevant Party is entitled to bring a claim against the other Party pursuant to this agreement.

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

SIGNED

SIGNED

**For and on behalf of BECIL
Party**

For and on behalf of the Receiving

(Signature)

(Signature)

In the presence of:

1. _____

2. _____

POWER OF ATTORNEY (FOR CONSORTIUM) ON RS. 100 STAMP PAPER
(NOTARIZED)

WHEREAS, M/s Broadcast Engineering Consultants India Limited is **Mini Ratna**, Public Sector Enterprise, falling under the purview of the Ministry of Information and Broadcasting under the Government of India having its Registered Office at 56-A/17, Block-C, Sector-62, Noida -201301 (U.P.) and Head Office at 14-B IP Estate Ring Road, New Delhi -110002 and Corporate office at

That M/s BECIL floated a tender document numbered Ref. No. dated:, for the

WHEREAS **M/s.**, and **M/s.** **[Insert names of all Members of Consortium]**, the members of the Consortium are desirous of submitting a Bid in response to the Tender **No.**, **dated:**, if selected, undertaking the responsibility of implementing the Project as per the terms of the Tender;

WHEREAS the Consortium Members have agreed under the Consortium Agreement dated (*The date of "Consortium Agreement"*), entered into between M/s and submitted along with the Bid to appoint M/s as the Lead Consortium Member to represent the Consortium for all matters regarding the Tender and the Bid;

AND WHEREAS pursuant to the terms of the Tender and the Consortium Agreement, we, the Members of the Consortium hereby designate M/s as the **Lead Consortium Member** to represent us in all matters regarding the Bid and the Tender, in the manner stated below:

Know all men by these presents, we do hereby constitute, appoint and authorize M/s [*Insert name and registered office address of the Lead Consortium Member*], which is one of the Members of the Consortium, to act as the Lead Member and our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of Consortium's Bid in response to the Tender issued by M/s Broadcast Engineering Consultants India Limited including signing and submission of the Bid and all documents related to the Bid as specified in the Tender document, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document, which M/s Broadcast Engineering Consultants India Limited may require us to submit.

The aforesaid attorney shall be further authorized for making representations to

M/s Broadcast Engineering Consultants India Limited and providing information/ responses to it and representing us and the Consortium in all matters before That M/s Broadcast Engineering Consultants India Limited named in the Tender, and generally dealing with all the matters in connection with the tender till completion of the bidding process as well as implementation of the Project, if applicable, in accordance with the Tender.

We, as Members of the Consortium, hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the Tender. Insert the name of the executant Consortium Members] through the hand of Mr./ Ms. duly authorized by the Board to issue such Power of Attorney.

Accepted

[Signature of Lead Consortium as Attorney]

.....

[Signature of Authorized Representative as Executant]

[Name of Authorized Representative]

[Designation of Authorized Representative]

.....

[Signature of Other Consortium Member]

[Signature of Authorized Representative as Executant, of other Consortium Member]

[Name of Authorized Representative]

[Designation of Authorized Representative]

Witness

1.

2.

Attested: [Signature]

Date:

(Notary Public)

Place:

D. CHECK LIST

Please ensure that following documents have been enclosed along with the bid proposal.

1. EMD amount of **INR 96,00,000/- (Rupees Ninety Six Lakhs Only)** should be paid only in the form of Demand Draft / Bank Guarantee (BG) in favour of **Broadcast Engineering Consultants India Limited, New Delhi.** Documentary proof along with the completion certificate of the project executed successfully related to scope of work (as mentioned in this RFP) in last three years.
2. Original ink signed copy of Power of Attorney (PoA) in favour of person authorized to sign the bid document on behalf of bidding firm.
3. Copy of Company registration certificate (Registered Company / Limited Liability Partnership / Partnership Firm) under applicable law.
4. Original ink signed copy of all applicable Annexures duly signed and stamped by the Authorized Signatory with its name & designation.
5. Copy of work orders and its completion certificate as per the tender document.
6. Copy of PAN Card, GST Registration, Audited Balance Sheet of last 3 Financial Years.
7. A point by point compliance statement duly signed by bidder / OEM in respect to all points laid down in the specifications for all the equipment/item(s) must be submitted.
8. No cost details are to be included in the technical bid under any circumstances. The signed and stamped copies of the technical bid containing requisite documents are to be uploaded online appropriately.
9. The financial bid should be uploaded as per the format given in tender document / online tendering portal.
10. Any other document as per tender document.
11. The tender has to be addressed to

**Broadcast Engineering Consultants India Ltd,
C-56 A/17, Sector -62, Noida 201 307
Tel: 0120-4177850
Fax: 0120-4177879**

NOTE: All documents must be duly signed & stamped by Authorized Signatory. No page of bid documents shall be left unsigned.