

NATIONAL COMPETITIVE BIDDING

(ONLINE)

Standard Bidding Document (SBD)

Procurement of Goods and Service

BANK NOTE PAPER MILL INDIA PRIVATE LIMITED

Administrative Building,

Gate 1, Paper Mill Compound

Note Mudran Nagar, Mysuru 570003

Phone: 0821-2401 182/184, FAX: 0821- 2401120

Website: www.bnpmindia.com; Email: Scm.tender@bnpmindia.com

Not Transferable

Security Classification: Non-security

TENDER DOCUMENT FOR UPGRADATION OF CCTV SYSTEM AT BNPM PLANT PREMISES, MYSURU

e-Tender No. BNPM/NCB/CCTV/0483/2020-21 Dated 23.10.2020

This tender document contains 140 pages

The tender document is sold to:

M/s.

Address _____

Details of Contact person in BNPMIPL regarding this tender:

Name: Shri B.P.Singh,

Designation: Assistant General Manager

**Address: Bank Note Paper Mill India Private Limited
Administrative Building
Gate 1, Paper Mill Compound
Note Mudran Nagar, Mysuru - 570 003
Telephone No. 0821 - 2401 177**

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SECTION I – NOTICE INVITING TENDER

NATIONAL COMPETITIVE BIDDING Standard Bidding Document (SBD)

Procurement of Goods

**BANK NOTE PAPER MILL INDIA PRIVATE LIMITED
Administrative Building,
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Phone: 0821-2401 182/184, FAX: 0821- 2401120**

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e-Tender No. BNPM/NCB/CCTV/0483/2020-21 Dated 23.10.2020

E-tenders are invited from eligible and qualified tenderers for supply of following:

Schedule No	Brief Description of Goods	Tentative Quantity (with unit)	**Earnest Money Deposit (in Rs.)	Remarks
1	Upgradation of CCTV Infrastructure	1 lot	5,00,000/-	Refer Section-VI for List of Requirements

*Submission of EMD is exempted for Micro and small enterprises (MSEs) as per the Public Procurement Policy for MSEs Order, 2012. MSEs should be registered and also will continue to remain registered during the tender validity period with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or Directorate of Handicrafts and Handlooms or Udyog Aadhaar Memorandum or Any other body specified by Ministry of MSME.

Type of Tender (Two Bid / PQB / EOI / RC / Development / Indigenization / Disposal of Scrap / Security item etc.	Two Bid System (Part-I Techno-commercial bid & Part-II Financial /Price Bid)
Date of Sale of tender documents	From 23.10.2020 to 20.11.2020 (Online)
Tender Processing Fee	Rs. 3,000/- + taxes as applicable (Online)
Bid submission mode	Online Through e-tendering portal, www.tenderwizard.com/BNP
Closing date and time for receipt of tenders	20.11.2020 at 15.00 Hours

SECTION I – NOTICE INVITING TENDER

1. Interested tenderers may obtain further information about this requirement from the above office selling the documents. They may also visit our website www.tenderwizard.com/BNP mentioned above for further details.
2. Non-refundable tender processing fee is Rs. 3,000/- per set plus applicable taxes. The payment shall be made through Electronic mode only.
3. Aspiring Bidders/Contractors who have not registered in e-tendering should register through the website E-Tendering (www.tenderwizard.com/BNP) for participating in the Online Tenders. The registration charges will be Rs. 3,000/- plus applicable taxes (per year) which needs to be paid through electronic mode only.
4. For details, registration and e-payment, please visit e-tendering website www.tenderwizard.com/BNP (or) contact Ms. Smitha (from KEONICS) +91-96861 15309.
5. The NIT Form with standard tender documents will be accessible in the e-Tendering website (viz www.tenderwizard.com/BNP).
6. Class III Digital Signature Certificate (DSC) is mandatory to participate in e-Tenders. Participating bidders/Contractors have to make sure that they have the valid DSC. If not, they can procure from any of the RAs approved by CCA.
7. Bidders/Contractors should upload and attach all the Scanned copies of technical documents/certificates in e-tendering website www.tenderwizard.com/BNP pertaining to their eligibility criteria mentioned in the NIT, failing which, the bid will not be considered.
8. The tenderer shall satisfy BNPMIPL that they are competent and authorized to submit tender and/or to enter into a legally binding contract with the BNPMIPL. To this effect, any person giving a tender shall render documentary evidence that his signature on the tender submitted by him is legally binding upon himself, his firm or company as the case may be.
9. For those tenderers whose technical bids do not satisfy the eligibility criteria, their financial Bids will not be opened.
10. In the event of any of the above mentioned dates being declared as a holiday/ closed day for the purchase organization, the tenders will be sold/received/opened on the next working day at the appointed time.
11. The tender documents are not transferable.

Yours faithfully,

For and on behalf of BNPMIPL

Deputy General Manager

IMPORTANT POINTS AT A GLANCE FOR TENDERERS

1. Tenders are to be uploaded on e-tendering portal www.tenderwizard.com/BNP only in two part bid system.
 - i) **Part-I – Prequalification Bid & Techno-commercial Bid:** Scanned copy of Technical offer (catalogue/brochure etc.), supportive documents related to eligibility criteria, Tax related documents etc. along with all sections of this tender (except section – XI which has to be submitted as mentioned in **Part II** below) signed & stamped in each & every page. (To be submitted through E-portal only).
 - ii) **Part II – Price Bid:**
Price shall be furnished through e-portal only.
Price offer submitted in any other format will be liable for rejection.
2. **Delivery Schedule:** Successful bidder has to complete the work within 09 months of issue of LOI/WO by BNPM
3. **Quantity:** (Please refer section VI of this tender).
4. **EMD: Rs. 5,00,000/- shall be released after submission of Bank Guarantee.**
5. **AMC period: 3 Years Comprehensive AMC after completion of two years warranty period.**
 - The performance of the firm will be reviewed during the two years warranty period and only on satisfactory performance, AMC contract will be awarded the succeeding year.
 - If BNPM opts to avail AMC for successive years after warranty period, AMC has to be offered at same price and at same terms and conditions as per tender mandatorily by the vendor.
6. Performance of the bidder in executing the previous contracts/orders of BNPMIPL shall be taken into account during technical evaluation. The bids of the tenderers who were unsuccessful in completing the previous orders of BNPMIPL without any valid reason, categorized as Grade-C, unsatisfactory performance is liable to be ignored /rejected.
7. Parties who have been black listed /debarred by BNPMIPL/BRBNMPL/SPMCIL or any PSU or any Government Departments are not eligible for submission of this tender.
8. Bidder may visit BNPMIPL (if required), before submitting the offer after taking due permission to understand the requirements.
9. Copies of Certificates/Documents related to GST Registration, PAN etc. to be provided along with the Bid.
10. No counter conditions shall be accepted.
11. Bidders are advised to write the page number on each page of the Technical Bid documents submitted.

SECTION II – GENERAL INSTRUCTIONS TO TENDERERS

Section II: General Instructions to Tenderers (GIT)

PART 1: GENERAL INSTRUCTIONS APPLICABLE TO ALL TYPES OF TENDERS

A. PREAMBLE

1. Introduction

- 1.1. Definitions and abbreviations which have been used in these documents shall have the meanings as indicated in GCC.
- 1.2. For convenience, whole of this Standard Bidding Document (including all sections) is written with reference to Procurement of Goods Tenders. However this SBD would be utilized for all types of Tenders e.g. EOI, PQB, Rate Contract, Tenders involving Samples, Sale/Disposal of Scrap Material and Development/ indigenization etc., Procurement of Services etc. Therefore the construction of all clauses are to be interpreted in the context of particular type of tender beyond the letter of the clause, read with the additional clauses for the specific type of tenders in Part II GIT/GCC. Sections, which are not applicable have been marked as Not Applicable
- 1.3. These tender documents have been issued for the requirements mentioned in Section- VI - "List of Requirements", which also indicates, inter-alia, the required delivery schedule and terms & place (i.e. destination) of delivery.
- 1.4. This section (Section II - General Instruction to Tenderers" - GIT) provides the relevant information as well as instructions to assist the prospective tenderers in preparation and submission of tenders. It also includes the mode and procedure to be adopted for receipt and opening as well as scrutiny and evaluation of tenders and subsequent placement of contract. With this limited objective, GIT is not intended to be complete by itself and the rest of this document- SIT, GCC and SCC in particular may also be thoroughly studied before filling up the Tender Document. There would be certain topics covered in GIT/SIT as well as in GCC/ SCC from different perspectives. In case of any conflict between these, provisions of GCC/ SCC would prevail.
- 1.5. The tenderers shall also read the Special Instructions to Tenderers (SIT) related to this purchase, as contained in Section III of these documents and follow the same accordingly. Whenever there is a conflict between the GIT and the SIT, the provisions contained in the SIT shall prevail over those in the GIT.

2. Language of Tender

The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and BNPM, shall be written in the English language, unless otherwise specified in the Tender. However, the language of any printed literature furnished by the tenderer in connection with its tender may be written in any other language provided the same is accompanied by English translation. For purposes of interpretation of the tender, the English translation shall prevail.

3. Eligible Tenderers

This invitation for tenders is open to all suppliers who fulfil the eligibility criteria specified in these documents. Please refer to Section IX: Qualification/ Eligibility Criteria

4. Eligible Goods and Services

All goods and related services to be supplied under the contract shall have their origin in India or other countries, subject to any restriction imposed in this regard in Section III (SIT). The term "origin" used in this clause means the place where the goods are mined, grown, produced, or manufactured or from where the related services are

arranged and supplied.

5. Tendering Expense

The tenderer shall bear all costs and expenditure incurred and/ or to be incurred by it in connection with its tender including preparation, mailing and submission of its tender and for subsequent processing the same. BNPM will, in no case be responsible or liable for any such cost, expenditure etc. regardless of the conduct or outcome of the tendering process.

B. TENDER DOCUMENTS

6. Content of Tender Documents

6.1 The tender documents include:

VOLUME I

1. Notice Inviting Tender (NIT)
2. General Instructions to Tenderers (GIT)
3. Special Instructions to Tenderers (SIT)
4. General Conditions of Contract (GCC)
5. Special Conditions of Contract (SCC)
6. List of Requirements – Included in Volume II
7. List Of Approved Vendors
8. Quality Control Requirements
9. Qualification/Eligibility Criteria
10. Tender Form
11. Price Schedule
12. Commercial Questionnaire for indigenous & imported items
13. Bank Guarantee Form for EMD
14. Manufacturer's Authorization Form
15. Bank Guarantee Form for Performance Security
16. Contract Form
17. Letter of Authority for attending a Bid Opening
18. Shipping Arrangements for Liner Cargoes
19. Proforma of Bills for Payments
20. Additional conditions of works contract
21. Application for pre-qualification
22. Proforma for Integrity Pact

6.2 The relevant details of the required goods and services, the terms, conditions and procedure for tendering, tender evaluation, placement of contract, the applicable contract terms and, also, the standard formats to be used for this purpose are incorporated in the above-mentioned documents. The interested tenderers before formulating the tender and submitting the same to BNPM should read and examine all the terms, conditions, instructions etc. contained in the tender documents. Failure to provide and/ or comply with the required information, instructions etc. incorporated in these tender documents may result in rejection of its tender.

7. Amendments to Tender Documents

7.1 At any time prior to the deadline for submission of tenders, BNPM may, for any reason deemed fit by it, modify the tender

SECTION II – GENERAL INSTRUCTIONS TO TENDERERS

- documents by issuing suitable amendment(s) to it.
- 7.2. Such an amendment will be notified in writing by registered/speed post or by fax/ telex/ e-mail, followed by copy of the same by suitable recorded post to all prospective tenderers, which have received the tender documents and will be binding on them.
- 7.3. In order to provide reasonable time to the prospective tenderers to take necessary action in preparing their tenders as per the amendment, BNPM may, at its discretion, extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline.
- 8. Pre-Bid Meeting**
If found necessary, a proposal to call for a pre-bid conference may be put-forth in the SIT, for clarification/amendment to Technical specifications/techno-commercial conditions in two bid tender.
- 9. Clarification of Tender Documents**
A Tenderer requiring any clarification or elucidation on any issue of the tender documents may take up the same with BNPM in writing or by fax I e-mail/ telex. BNPM will respond in writing to such request provided the same is received by BNPM not later than twenty one days (unless otherwise specified in the SIT) prior to the prescribed date of submission of tender. Copies of the query and clarification shall be sent to all prospective bidders who have received the bidding documents and/or hosted in its website.
- C. PREPARATION OF TENDERS**
- 10. Documents Comprising the Tender**
- 10.1. The tender to be submitted by Tenderer shall contain the following documents, duly filled in, as required:
- Tender Form and Price Schedule along with list of deviations (ref Clause 19.4) from the clauses of this SBD, if any.
 - Documentary evidence, as necessary in terms of GIT clauses 3 and 16 establishing that the tenderer is eligible to submit the tender and, also, qualified to perform the contract if its tender is accepted.
 - Documents and relevant details to establish in accordance with GIT clause 17 that the goods and the allied services to be supplied by the tenderer conform to the requirement of the tender documents along with list of deviations if any (ref clause 17.3 of GIT).
 - Earnest money furnished in accordance with GIT clause 18.1.
 - Commercial questionnaire for indigenous & imported items in Volume I.
 - Manufacturer's Authorization Form (ref Section XIV, if applicable)
- NB: The tenderers may also enclose in their tenders, technical literature and other documents as and if considered necessary by them.
- 10.2. A tender, that does not fulfil any of the above requirements and/ or gives evasive information/ reply against any such requirement, shall be liable to be ignored and rejected.
- 10.3. Tender sent by fax/email/ telex/ cable shall be ignored.
- 11. Tender currencies**
- 11.1. Unless otherwise specified, the tenderer shall quote only in Indian rupees.
- 11.2. Where the tender condition specifies acceptance of quotations in different currencies, then, for domestic goods, prices shall be quoted in INR only and for imported goods, prices shall be quoted either in INR or in the currency stipulated in the SIT, mentioning, inter-alia, the exchange rate adopted for converting foreign currency into INR. As regards price(s) for allied services, if any, required with the goods, the same shall be quoted in Indian Rupees if such services are to be performed I undertaken in India. Commission for Indian Agent, if any and if payable shall be indicated in the space provided for in the price schedule and quoted in INR only.
- 11.3. Tenders, where prices are quoted in any other way shall be treated as unresponsive and rejected.
- 12. Tender Prices**
- 12.1. The Tenderer shall indicate on the Price Schedule provided under Volume I all the specified components of prices shown therein including the unit prices and total tender prices of the goods and services it proposes to supply against the requirement. All the columns shown in the price schedule should be filled up as required. If any column does not apply to a tenderer, same should be clarified accordingly by the tenderer.
- 12.2. If there is more than one schedule in the List of Requirements, the tenderer has the option to submit its quotation for any one or more schedules and, also, to offer special discount for combined schedules. However, while quoting for a schedule, the tenderer shall quote for the complete requirement of goods and services as specified in that particular schedule.
- 12.3. The quoted prices for goods offered from within India and that for goods offered from abroad are to be indicated separately in the applicable Price Schedules attached under Volume I.
- 12.4. While filling up the columns of the price schedule, the following aspects should be noted for compliance:
- 12.5. For goods offered from within India, the prices in the corresponding price schedule shall be entered separately in the following manner:
- The price of the goods, quoted ex-factory, ex-showroom, ex-warehouse or off- the-shelf, as applicable including all taxes and duties like sales tax, VAT, custom duty, excise duty etc. already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc.
 - Any taxes/duties including excise duty, which will be payable on the goods in India if the contract is awarded.
 - Charges towards inland transportation, insurance and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and
 - The price of incidental services, as and if mentioned in List of Requirements.
- 12.6. For goods offered from abroad, the prices in the corresponding price schedule shall be entered separately in the following manner:
- The price of goods quoted FAS/FOB port of shipment, CIF port of entry in India or CIF specified place of destination in India as indicated the List of Requirements.
 - The amount of custom duty and import duty on the goods to be imported, wherever applicable.
 - The charges for inland transportation, insurance and other local costs incidental to delivery of the goods from the port of entry in India to their final destination, as specified in the List of Requirements and
 - The charges for incidental services, as and if mentioned in the List of Requirements.
- 12.7. Additional information and instruction on Duties and Taxes:
If the Tenderer desires to ask for excise duty, sales tax, custom duty etc. to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.
- 12.8. Excise Duty:
- If reimbursement of excise duty intended as extra over the quoted prices, the supplier must specifically say so also indicating the rate, quantum and nature of the duty applicable. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of excise duty will be entertained after the opening of tenders.
 - If a Tenderer chooses to quote a price inclusive of excise duty and also desires to be reimbursed for variation, if any, in the excise duty during the time of

SECTION II – GENERAL INSTRUCTIONS TO TENDERES

- supply, the tenderer must clearly mention the same and also indicate the rate and quantum of excise duty included in its price. Failure to indicate all such details in clear terms may result in statutory variations being denied to the tenderer.
- c) Subject to sub clauses 12.8 (a) & (b) above, any change in excise duty upward/ Downward as a result of any statutory variation in excise duty taking place within original Delivery Period shall be allowed to the extent of actual quantum of excise duty paid by the supplier. In case of downward revision in excise duty, the actual quantum of reduction of excise duty shall be reimbursed to BNPM by the supplier. All such adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the supplier.
- 12.9. Sales Tax/ VAT/ CST/ GST/ Service Tax, work Contract Tax
If a tenderer asks for sales tax/ VAT/ CST/ GST/ Service Tax/ Work Contract Tax to be paid extra, the rate and nature of such taxes applicable should be shown separately. Such taxes will be paid as per the rate at which it is liable to be assessed or has actually been assessed provided the transaction of sale is legally liable to such taxes and is payable as per the terms of the contract. The tenderer shall examine the nature of transactions and applicability of taxes and duties.
- 12.10. Wherever Value Added Tax is applicable, the following may be noted:
- a) The tenderer should quote the exact percentage of VAT that they will be charging extra.
- b) While quoting the rates, tenderer should pass on (by way of reduction in prices) the set off/input tax credit that would become available to them by switching over to the system of VAT from the existing system of sales tax, duly stating the quantum of such credit per unit of the item quoted for.
- c) The tenderer while quoting for tenders should give the following declaration:
- "We agree to pass on such additional set off/input tax credit as may become available in future in respect of all the inputs used in the manufacture of the final product on the date of supply under the VAT scheme by way of reduction in price and advise the purchaser accordingly."
- d) The supplier while claiming the payment shall furnish the following certificate to the paying authorities: "We hereby declare that additional set offs/input tax credit to the tune of Rs.....has accrued and accordingly the same is being passed on to the purchaser and to that effect the payable amount may be adjusted.
- 12.11. Octroi and Local Taxes:
Unless otherwise stated in the SIT, the goods supplied against contracts placed by BNPM are not exempted from levy of Town Duty, Octroi Duty, Terminal Tax and other Levies of local bodies. In such cases, the supplier should make the payment to avoid delay in supplies and forward the receipt of the same to the purchasing department for reimbursement and also, for further necessary action. In cases where exemption is available, suppliers should obtain the exemption certificate from the purchasing department to avoid payment of such levies and taxes.
- 12.12. Duties/ Taxes on Raw Materials
BNPM is not liable for any claim from the supplier on account of fresh imposition and/or increase (including statutory increase) of excise duty, custom duty, sales tax etc. on raw materials and/or components used directly in the manufacture of the contracted goods taking place during the pendency of the contract, unless such liability is specifically agreed to in terms of the contract.
- 12.13. Imported Stores not liable to Above-mentioned Taxes and Duties:
Above mentioned Taxes and Duties are not leviable on imported Goods and hence would not be reimbursed.
- 12.14. Customs Duty:
In respect of imported stores offered from abroad, the tenderer shall specify the rate as well as the total amount of customs duty payable. The tenderer shall also indicate the corresponding Indian Customs Tariff Number applicable for the goods in question.
- 12.14.1. For transportation of imported goods offered from abroad, relevant instructions as incorporated under GCC Clause 11 shall be followed.
- 12.14.2. For insurance of goods to be supplied, relevant instructions as provided under GCC Clause 12 shall be followed.
- 12.14.3. Unless otherwise specifically indicated in this tender document, the terms FOB, FAS, CIF etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris
- 12.14.4. The need for indication of all such price components by the tenderers, as required in this clause (viz., GIT clause 12) is for the purpose of comparison of the tenders by BNPM and will no way restrict BNPM's right to award the contract on the selected tenderer on any of the terms offered.
- 13. Indian Agent**
If a foreign tenderer has engaged an agent in India in connection with its tender, the foreign tenderer, in addition to indicating Indian agent's commission, if any, in a manner described under GIT sub clause 11.2 above, shall also furnish the following information:
- a) The complete name and address of the Indian Agent and its permanent income tax account number as allotted by the Indian Income Tax authority.
- b) The details of the services to be rendered by the agent for the subject requirement.
One manufacturer can authorize only one agent/Dealer. Also one agent cannot represent more than one supplier or quote on their behalf in a particular tender enquiry. Such quote is likely to be rejected. There can be only one bid from
- i.) The principal manufacturer directly or one Indian agent on his behalf.
- ii.) The foreign principal or any of its branch/ division
- iii.) Indian/ Foreign Agent on behalf of only one Principal.
- 14. Firm Price/Variable Price**
- 14.1. Unless otherwise specified in the SIT, prices quoted by the tenderer shall remain firm and fixed during the currency of the contract and not subject to variation on any account.
- 14.2. In case the tender documents require offers on variable price basis, the price quoted by the tenderers will be subject to adjustment during original Delivery Period to take care of the changes in the cost of labour and material components in accordance with the price variation formula to be specified in the SIT. If a tenderer submits firm price quotation against the requirement of variable price quotation that tender will be prima-facie acceptable and considered further, taking price variation asked for by the tenderer as zero.
- 14.3. However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated in GIT clause 12 will apply for both firm price tender and variable price tender.
- 14.4. Subject to provisions of Clause 11 above, where prices are quoted in foreign currencies, involving imports - Foreign Exchange Rate Variation (ERV) would be borne by the Purchaser within the original Delivery Period. The offer of the Tenderer should indicate import content and the currency used for calculating import content.
- 14.5. Base Exchange rate of each major currency used for calculating FE content of the contract should be indicated. The base date of ERV would be contract date and variation on the base date can be given up to the midpoint manufacture, unless firm has already indicated the time schedule within which material will be imported by the firm.
- 14.6. In case delivery period is refixed/ extended, ERV will not be admissible, if this is due to default of the supplier.
- 14.7. Documents for claiming ERV:
- a) A bill of ERV claim enclosing working sheet
- b) Banker's Certificate/debit advice detailing F.E. paid and

SECTION II – GENERAL INSTRUCTIONS TO TENDERES

- exchange rate
- c) Copies of import order placed on supplier
- d) Invoice of supplier for the relevant import order
- 15. Alternative Tenders**
Unless otherwise specified in the Schedule of Requirements, alternative tenders shall not be considered.
- 16. Documents Establishing Tenderer's Eligibility and Qualifications**
- 16.1. Pursuant to GIT clause 10, the tenderer shall furnish, as part of its tender, relevant details and documents establishing its eligibility to quote and its qualifications to perform the contract if its tender is accepted.
- 16.2. The documentary evidence needed to establish the tenderer's qualifications shall fulfil the following requirements:
- a) In case the tenderer offers to supply goods, which are manufactured by some other firm, the tenderer has been duly authorized by the goods manufacturer to quote for and supply the goods to BNPM. The tenderer shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Volume I in this document.
- b) The tenderer has the required financial, technical and production capability necessary to perform the contract and, further it meets the qualification criteria incorporated in the Volume I in these documents.
- c) In case the tenderer is not doing business in India, It is/will be duly represented by an agent stationed in India fully equipped and able to carry out the required contractual functions and duties of the supplier including after sale service, maintenance & repair etc. of the goods in question, stocking of spare parts and fast moving components and other obligations, if any, specified in the conditions of contract and/or technical specifications.
- d) In case the tenderer is an Indian agent quoting on behalf of a foreign manufacturer, the Indian agent is already enlisted under the Compulsory Enlistment Scheme of Ministry of Finance. Govt. of India operated through Directorate General of Supplies & Disposals (DGS&D), New Delhi.
- 17. Documents establishing good's Conformity to Tender document**
- 17.1. The tenderer shall provide in its tender the required as well as the relevant documents like technical data. Literature, drawings etc. to establish that the goods and services offered in the tender fully conform to the goods and services specified by BNPM in the tender documents. For this purpose the tenderer shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by BNPM in the tender documents to establish technical responsiveness of the goods and services offered in its tender.
- 17.2. In case there is any variation and/or deviation between the goods & services prescribed by BNPM and that offered by the tenderer, the tenderer shall list out the same in "Schedule of deviations from Technical specifications" in Volume I of the tender without ambiguity along with justification.
- 17.3. If a tenderer furnishes wrong and/or misguiding data, statement(s) etc. about technical acceptability of the goods and services offered by it, its tender will be liable to be ignored and rejected in addition to other remedies available to BNPM in this regard.
- 18. Earnest Money Deposit (EMD)**
- 18.1. Pursuant to GIT clause 10.1(d) the tenderer shall furnish along with its tender, earnest money for amount as shown in the List of Requirements/NIT Clause I. The earnest money is required to protect BNPM against the risk of the tenderer's unwarranted conduct as amplified under sub-clause 23.23.2 below.
- 18.2. The earnest money shall be denominated in Indian Rupees.
- 18.3. The earnest money shall be furnished in one of the following forms:
- a) Account Payee Demand Draft or
- b) Banker's cheque or
- c) Bank Guarantee, (only if EMD amount is above Rs. 1 Lakh)
- 18.4. The demand draft or banker's cheque shall be drawn on any scheduled commercial bank in India, in favour of Bank Note paper Mill India Private Limited payable at Bangalore. In case of bank guarantee, the same is to be provided from/confirmed by any scheduled commercial bank in India as per the format specified in Volume I in these documents.
- 18.5. The earnest money shall be valid for a period of forty five days beyond the validity period of the tender.
- 18.6. Unsuccessful tenderers' earnest money will be returned to them without any interest, after expiry of the tender validity period, but not later than thirty days after conclusion of the resultant contract. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.
- 18.7. Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender. The successful tenderer's earnest money will be forfeited if it fails to furnish the required performance security within the specified period.
- 19. Tender Validity**
- 19.1. If not mentioned otherwise in the SIT, the tenders shall remain valid for acceptance for a period of 90 days (Ninety days) in case of single bid tender system and 120 days in case of two-bid system after the date of tender opening prescribed in the tender document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.
- 19.2. In exceptional cases, the tenderers may be requested by BNPM to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by surface mail or by fax/email/ telex/cable followed by surface mail. The tenderers, who agree to extend the tender validity, are to extend the same without any change or modification of their original tender and they are also to extend the validity period of the EMD accordingly.
- 19.3. In case the day up to which the tenders are to remain valid falls on/subsequently declared a holiday or closed day for BNPM, the tender validity shall automatically be extended up to the next working day.
- 19.4. Compliance with the Clauses of this Tender Document: Tenderer must comply with all the clauses of this Tender Document. In case there are any deviations, these should be listed in a chart form without any ambiguity along with justification.
- 20. Signing and Sealing of Tender**
- 20.1. An authenticated copy of the document which authorizes the signatory to commit on behalf of the firm shall accompany the offer. The individual signing the tender or any other documents connected therewith should clearly indicate his full name and designation and also specify whether he is signing,
- a) As Sole Proprietor of the concern or as attorney of the Sole Proprietor;
- b) As Partner (s) of the firm;
- c) As Director, Manager or Secretary in case the of Limited Company duly authorized by a resolution passed by the Board of Directors or in pursuance of the Authority conferred by Memorandum of Association.
- 20.2. The authorized signatory of the tenderer must sign the tender at appropriate places and initial the remaining pages of the tender.
- 20.3. The tenderers shall submit their tenders as per the instructions contained in GIT Clause 10.
- 20.4. Unless otherwise mentioned in the SIT, a tenderer shall submit two copies of its tender marking them as "Original and "Duplicate".
- 20.5. The original and other copies of the tender shall either be typed or written in indelible ink and the same shall be signed by the tenderer or by a person(s) who has been duly authorized to bind the tenderer to the contract. The letter of authorization shall be by a written power of attorney, which shall also be furnished along with the tender.

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- 20.6. All the copies of the tender shall be duly signed at the appropriate places as indicated in the tender documents and all other pages of the tender including printed literature, if any shall be initialled by the same person(s) signing the tender. The tender shall not contain any erasure or overwriting, except as necessary to correct any error made by the tenderer and, if there is any such correction; the same shall be initialled by the person(s) signing the tender.
- 20.7. The tenderer is to seal the original and each copy of the tender in separate envelopes, duly marking the same as "Original", "Duplicate" and so on and writing the address of BNPM and the tender reference number on the envelopes. The sentence "NOT TO BE OPENED before (The tenderer is to put the date & time of tender opening) are to be written on these envelopes. The inner envelopes are then to be put in a bigger outer envelope, which will also be duly sealed, marked etc. as above. If the outer envelope is not sealed and marked properly as above, BNPM will not assume any responsibility for its misplacement, premature opening, late opening etc.
- 20.8. For purchasing capital equipment, high value plant, machinery etc. of complex and technical nature, tender document will seek quotation in two parts (Two Bid System)- first part containing the relevant technical details of the equipment/machinery etc., and in the second part, price quotation along with other allied issues. First part will be known as 'Technical Bid', and the second part 'Financial bid'. Tenderer shall seal separately 'Technical Bid' and 'Financial bid' and covers will be suitably super scribed. Both these sealed covers shall be put in a bigger cover and sealed and evaluation would be done as described in clause 25.24.4 below. Further details would be given in SIT, if considered necessary.
- 20.9. If permitted in the SIT, the tenderer may submit its tender through a-tendering procedure.

D. Submission of Tenders

21. Submission of Tenders

- 21.1. Unless otherwise specified, the tenderers are to deposit the tenders in the tender box kept for this purpose at a place as indicated in para 1 of NIT. In case of bulky tender, which cannot be put into tender box, the same shall be submitted by the tenderer by hand to the designated officers of BNPM, as indicated in clause 1 of NIT. The officer receiving the tender will give the tenderer an official receipt duly signed with date and time.
- 21.2. The tenderers must ensure that they deposit their tenders not later than the closing time and date specified for submission of tenders. In the event of the specified date for submission of tender falls on/is subsequently declared a holiday or closed day for BNPM, the tenders will be received up to the appointed time on the next working day.

22. Late Tender

A tender, which is received after the specified date and time for receipt of tenders will be treated as "late" tender and will be ignored.

23. Alteration and Withdrawal of Tender

- 23.1. The tenderer, after submitting its tender, is permitted to alter/modify its tender so long as such alterations/modifications are received duly signed, sealed and marked like the original tender, within the deadline for submission of tenders. Alterations/modifications to tenders received after the prescribed deadline will not be considered.
- 23.2. No tender should be withdrawn after the dead line for submission of tender and before expiry of the tender validity period. If a tenderer withdraws the tender during this period, it will result in forfeiture of the earnest money furnished by the tenderer in its tender besides other sanctions by BNPM.

E. TENDER OPENING

24. Opening of Tenders

- 24.1. The tenders will be opened at the specified date and time and at the specified place as indicated in clause 1 of NIT. In case the specified date of tender opening falls on/is subsequently declared a holiday or closed day for BNPM, the tenders will be opened at the appointed time and place on the next working day.
- 24.2. Authorized representatives of the tenderers, who have submitted tenders on time may attend the tender opening, provided they bring with them letters of authority as per the format in Volume I of the corresponding tenderers. The tender opening official(s) will prepare a list of the representatives attending the tender opening. The list will contain the representatives' names & signatures and corresponding tenderers' names and addresses.
- 24.3. During the tender opening, the tender opening official(s) will read the salient features of the tenders like description of the goods offered, price, special discount if any, delivery period, whether earnest money furnished or not and any other special features of the tenders, as deemed fit by the tender opening official(s).
- 24.4. In-case of two bid system mentioned in clause 20.8 above, the technical bids are to be opened in the first instance, at the prescribed time and date. These bids shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the tender document. Thereafter, in the second stage, the financial bids of only the technically acceptable offers (as decided in the first stage) shall be opened for further scrutiny and evaluation. Other financial bids would be returned unopened to the respective bidders under Registered AD/ Reliable Courier or any other mode with proof of delivery.

F. SCRUTINY AND EVALUATION OF TENDERS

25. Basic Principle

Tenders will be evaluated on the basis of the terms & conditions already incorporated in the tender document, based on which tenders have been received and the terms, conditions etc. mentioned by the tenderers in their tenders. No new condition will be brought in while scrutinizing and evaluating the tenders.

26. Preliminary Scrutiny of Tenders

- 26.1. The tenders will first be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the tender document. The tenders, that do not meet the basic requirements, are liable to be treated as unresponsive and ignored.
- 26.2. The following are some of the important aspects, for which a tender may be declared unresponsive and ignored;
- Tender is unsigned.
 - Tenderer is not eligible.
 - Tender validity is shorter than the required period.
 - Required EMD has not been provided.
 - Tenderer has quoted for goods manufactured by a different firm without the required authority letter from that manufacturer.
 - Tenderer has not agreed to give the required performance security.
 - Goods offered are not meeting the required specification etc.
 - Tenderer has not agreed to essential condition(s) specially incorporated in the tender enquiry.
 - Against a schedule in the List of Requirement (incorporated in the tender Enquiry), the Tenderer has not quoted for the entire requirement as specified in that schedule. (Example: In a schedule, it has been stipulated that the Tenderer will supply the equipment, install and commission it and also train BNPM's operators for operating the equipment. The Tenderer has however, quoted only for supply of the equipment).

27. Minor Infirmary/Irregularity/ Non-Conformity

If during the preliminary examination, BNPM find any minor infirmity and/ or irregularity and/ or non-conformity in a

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tender, BNPM may waive the same provided it does not constitute any material deviation and financial impact and, also, does not prejudice or affect the ranking order of the tenderers. Wherever necessary, BNPM will convey its observation on such 'minor' issues to the tenderer by registered/ speed post etc. asking the tenderer to respond by a specified date. If the tenderer does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that tender will be liable to be ignored.

28. Discrepancy in Prices

- 28.1. If, in the price structure quoted by a tenderer, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless BNPM feels that the tenderer has made a mistake in placing the decimal point in the unit price, in which case the total price as quoted shall prevail over the unit price and the unit price corrected accordingly.
- 28.2. If there is an error in a total price, which has been worked out through addition and/ or subtraction of subtotals, the subtotals shall prevail and the total corrected; and
- 28.3. If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail, subject to sub clause 28.1 and 28.2 above.
- 28.4. If, as per the judgment of BNPM, there is any such arithmetical discrepancy in a tender, the same will be suitably conveyed to the tenderer by registered/speed post. If the tenderer does not agree to the observation of BNPM, the tender is liable to be ignored.

29. Discrepancy between original and copies of Tender

In case any discrepancy is observed between the text etc. of the original copy and that in the other copies of the same tender set, the text etc. of the original copy shall prevail. Here also, BNPM will convey its observation suitably to the tenderer by register/speed post and, if the tenderer does not accept BNPM's observation, that tender will be liable to be ignored.

30. Clarification of Bids

During evaluation and comparison of bids, purchaser may, at its discretion ask the bidder for clarification of its bid. The clarification should be received within 7 days from the bidder from date of receipt of such request. The request for clarification shall be in writing and no change in prices or substance of the bid shall be sought, offered or permitted. No post bid clarification at the initiative of the bidder shall be entertained.

31. Qualification/ Eligibility Criteria

Tenders of the tenderers, who do not meet the required qualification/ eligibility criteria prescribed in Section IX, will be treated as unresponsive and will not be considered further.

32. Conversion of tender currencies to Indian Rupees

In case the tender document permits the tenderers to quote their prices in different currencies, all such quoted prices of the responsive tenderers will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the B.C. selling exchange rates established by the State Bank of India for similar transactions, as on the date of tender opening.

33. Schedule-wise Evaluation

In case the List of Requirements contains more than one schedule, the responsive tenders will be evaluated and compared separately for each schedule. The tender for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the tender. However, as already mentioned in GIT sub clause 12.2, tenderers have the option to quote for any one or more schedules and offer discounts for combined schedules. Such discounts, wherever applicable, will be taken into account to

determine the tender or combination of tenders offering the lowest evaluated cost for BNPM in deciding the successful tenderer for each schedule, subject to that tenderer(s) being responsive.

34. Comparison on CIF Destination Basis

Unless mentioned otherwise in Volume I - Special Instructions to Tenderers and List of Requirements, the comparison of the responsive tenders shall be on CIF destination basis, duly delivered, commissioned, etc. as the case may be.

35. Additional Factors and Parameters for Evaluation and Ranking of Responsive Tenders.

Further to GIT Clause 33 above, BNPM's evaluation of a tender will include and take into account the following:

- In the case of goods manufactured in India or goods of foreign origin already located in India, sales tax & other similar taxes and excise duty & other similar duties, which will be contractually payable (to the tenderer), on the goods if a contract is awarded on the tenderer; and
- In the case of goods of foreign origin offered from abroad, customs duty and other similar import duties/taxes, which will be contractually payable (to the tenderer) on the goods if the contract is awarded on the tenderer.

35.2. BNPM's evaluation of tender will also take into account the additional factors, if any, incorporated in SIT in the manner and to the extent indicated therein.

35.3. As per policies of the Government from time to time, the purchaser reserves its option to give price preference to Small Scale Industries in comparison to the large scale Industries. This price preference cannot however be taken for granted and every endeavour need to be made by such firms to bring down cost and achieve competitiveness.

35.4. If the tenders have been invited on variable price basis, the tenders will be evaluated, compared and ranked on the basis of the position as prevailing on the day of tender opening and not on the basis of any future date.

36. Tenderer's capability to perform the contract

36.1. BNPM, through the above process of tender scrutiny and tender evaluation will determine to its satisfaction whether the tenderer, whose tender has been determined as the lowest evaluated responsive tender is eligible, qualified and capable in all respects to perform the contract satisfactorily. If, there is more than one schedule in the List of Requirements, then, such determination will be made separately for each schedule.

36.2. The above mentioned determination will, inter-alia, take into account the tenderer's financial, technical and production capabilities for satisfying all the requirements of BNPM as incorporated in the tender document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the tenderer in its tender as well as such other allied information as deemed appropriate by BNPM.

37. Cartel Formation (Pool Rates)

Cartel formation or quotation of Pool/ Co-ordinated rates, leading to "Appreciable Adverse Effect on Competition" (AAEC) as identified in Competition Act, 2002, as amended by Competition (Amendment) Act, 2007, would be considered as a serious misdemeanour and would be dealt accordingly as per Clause 44 below.

38. Negotiations

Normally there would be no price negotiations. But BNPM reserves its right to negotiate with the lowest acceptable bidder (L1), who is technically cleared /approved for supply of bulk quantity and on whom the contract would have been placed but for the decision to negotiate, under special circumstances in accordance with prevailing guidelines.

39. Contacting BNPM

39.1. From the time of submission of tender to the time of awarding the contract, if a tenderer needs to contact BNPM for any reason relating to this tender enquiry and/or its tender it should do so only in writing.

39.2. It will be treated as a serious misdemeanour in

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case a tenderer attempts to influence BNPM's decision on scrutiny, comparison, evaluation and award of the contracts. In such a case the tenderer of the tenderer shall be liable for rejection in addition to appropriate administrative actions being taken against that tenderer, as deemed fit by BNPM, in terms of clause 44 of GIT.

G. Award Of Contract

40. BNPM reserves the right to accept any Tender and to reject any or all Tenders. BNPM also reserves the right to accept in part or in full any tender or reject any tender without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of contract, without incurring any liability, whatsoever to the affected tenderer or tenderers.

41. Award Criteria

Subject to GIT clause 36 above, the contract will be awarded to the lowest evaluated responsive tenderer decided by BNPM in terms of GIT Clause 34.

42. Variation of Quantities at the Time of Award

No variation of quantities at the time of awarding the contract.

43. Parallel Contracts

BNPM reserves its right to conclude Parallel contracts with more than one bidder (for the same tender). If this is foreseen at the time of Tendering, a clause would be included in SIT giving further details.

44. Serious Misdemeanours

44.1 Following would be considered serious misdemeanours:

- a) Submission of misleading/ false/ fraudulent information/ documents by the bidder in their bid
- b) Submission of fraudulent / un-encashable Financial Instruments stipulated under Tender or Contract Condition.
- c) Violation of Code of Ethics laid down in Clause 32 of the GCC.
- d) Cartel formation or quotation of Pool/ Co-ordinated rates leading to "Appreciable Adverse Effect on Competition" (AAEC) as identified under the Competition Act, 2002.
- e) Deliberate attempts to pass off inferior goods or short quantities.
- f) Violation of Fall Clause by Rate Contract holding Firms.
- g) Attempts to influence BNPM's Decisions on scrutiny, comparison, evaluation and award of Tender.

44.2 Besides, suitable administrative actions, like rejecting the offers or delisting of registered firms, BNPM would ban/blacklist Tenderers committing such misdemeanour, including declaring them ineligible to be awarded BNPM contracts for indefinite or for a stated period.

45. Notification of Award

45.1 Before expiry of the tender validity period, BNPM will notify the successful tenderer(s) in writing, by registered/speed post or by fax/email / telex/ cable (to be confirmed by registered/speed post that its tender for goods & services, which have been selected by BNPM, has been accepted, also briefly indicating therein the essential details like description, specification and quantity of the goods & services and corresponding prices accepted. The successful tenderer must furnish to BNPM the required performance security within twenty one days from the date of this notification. Relevant details about the performance security have been provided under GCC Clause 6 under Section IV.

45.2 The notification of award shall constitute the conclusion of the contract.

46. Issue of Contract

46.1 Within seven working days of receipt of performance security, BNPM will send the contract form (as per Section XVI) duly completed and signed, in duplicate, to the

46.2 successful tenderer by registered / speed post. Within seven days from the date of issue of the contract, the successful tenderer will return the original copy of the contract, duly signed and dated, to BNPM by registered / speed post.

47. Non-receipt of Performance Security and Contract by BNPM

Failure of the successful tenderer in providing performance security within 21 days of receipt of notification of award and/or returning contract copy duly signed in terms of GIT clauses 45 and 46 above shall make the tenderer liable for forfeiture of its EMD and, also for further sanctions by BNPM against it.

48. Return of EMD

Earnest money of the successful tenderer and the unsuccessful tenderers will be returned to them without any interest, whatsoever, in terms of GIT Clause 18.6.

49. Publication of Tender Result

The name and address of the successful tenderer(s) receiving the contract(s) will be mentioned in the web site of BNPM.

PART II: ADDITIONAL GENERAL INSTRUCTIONS APPLICABLE TO SPECIFIC TYPES OF TENDERS

50. Rate Contract Tenders- **NOT APPLICABLE**

50.1 In addition to GIT in Part I above, following GIT will be applicable to rate contract Tenders:

- a) Earnest Money Deposit (EMD) is not applicable.
- b) In the Schedule of Requirement, no commitment of quantity is mentioned: only the anticipated requirement is mentioned without any commitment.
- c) BNPM reserves the right to conclude more than one rate contract for the same item.
- d) Unless otherwise specified in SIT, the currency of a Rate Contract would normally be for one year.
- e) During the currency of the Rate Contract, BNPM may withdraw the rate contract by serving suitable notice. The prescribed notice period is generally thirty days.
- f) During the currency of the Rate Contract, BNPM would have the option to renegotiate the price with the rate contract holders.
- g) During the currency of the Rate Contract, in case of emergency, BNPM may purchase the same item through ad hoc contract with a new supplier.
- h) Usually, the terms of delivery in rate contracts are FOR dispatching station.
- i) Supply orders, incorporating definite quantity of goods to be supplied along with all other required conditions following the rate contract terms, will be issued by nominated Direct Demanding Officers (DDO) for obtaining supplies through the rate contract.
- j) BNPM is entitled to place supply orders up to the last day of the validity of the rate contract and, though supplies against such supply orders will be affected beyond the validity period of the rate contract, all such supply will be guided by the terms & conditions of the rate contract.
- k) The rate contract will be guided by "Fall Clause" as described below.

50.2 Fall Clause

If the rate contract holder reduces its price or sells or even offers to sell the rate contracted goods, following conditions of sale similar to those of the rate contract, at a price lower than the rate contract price, to any person or organization during the currency of the rate contract, the rate contract price will be automatically reduced with effect from that date for all the subsequent supplies under the rate contract and the rate contract amended accordingly. Any violation of the fall clause would be considered a serious misdemeanour under clause 44 of the GIT and action, as appropriate, would be taken as per provision of that clause.

50.3 Performance Security

Value of Performance Security would be stipulated in the SIT. Performance Security shall, however, not be demanded again in the individual supply orders issued subsequently against rate contracts.

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- 50.4 Renewal of Rate Contracts
In case, it is not possible to conclude new rate contracts before the expiry of existing ones, due to some special reasons, the existing rate contracts would be extended with same terms, conditions etc. for a suitable period, with the consent of the rate contract holders. Rate contracts of the firms, who do not agree to such extension, will be left out. Period of such extension would generally not be more than three months.
51. **Prequalification Bidding**
- 51.1 Prequalification bidding is for short-listing of qualified Bidders who fulfil the Prequalification criteria as laid down in SIT or in Volume I of SBD - "Qualification Criteria" for procurement of Goods or Services as listed in Section VI of SBD - "List of Requirements". Shortlisted Bidders would be informed of their qualification and short listing in accordance with the stipulations laid down in the SIT Unless otherwise stipulated in the SIT the PQB short listing would be valid only till the next procurement tender. Further conditions will be elaborated in the SIT.
- 51.2 If stipulated in the SIT, only these shortlisted qualified bidders would be invited to participate in the Procurement process. Otherwise SIT may also indicate that instead of floating a separate PQB tender, it may be combined with the Procurement Tender, as a three bid tender. Initially the first Packet containing PQB would be opened and evaluation would be done. Thereafter the rest of tender would be handled as a two bid system for only those bidders who succeed in PQB.
52. **Tenders involving Samples- NOT APPLICABLE**
- 52.1 Normally no sample would be called along with the offer for evaluation.
- 52.2 Purchaser's Samples:
If indicated in the SIT, A Purchaser's sample may be displayed to indicate required characteristics over and above the Specifications for perusal of the bidders Name and Designation of the Custodian, Place, Dates and Time of inspection of Purchaser's sample will be indicated in the SIT. The supplies in the contract will have to meet the indicated required characteristics for which the Purchaser's sample was displayed, besides meeting the specification listed in "Technical Specifications" of the Tender. He would be issued a sealed Purchaser's sample for the purpose at the time of award of the contract.
- 52.3 Pre-Production Samples:
If stipulated in SIT, successful contractor would be required to submit a Pre-Production sample(s) to the Inspecting Officer/ or the nominated authority mentioned in the contract within the time specified therein. If the Contractor is unable to do so, he must apply immediately to the Office issuing the acceptance of tender for extension of time stating the reasons for the delay. If the Purchaser is satisfied that a reasonable ground for an extension of time exists, he may allow such additional time as he considers to be justified (and his decision shall be final) with or without alteration in the delivery period stipulated in the contract and on such conditions as he deems fit. In the event of the failure of the Contractor to deliver the pre-production sample by the date specified in the acceptance of tender or any other date to which the time may be extended as aforesaid by the Purchaser or of the rejection of the sample, the Purchaser shall be entitled to cancel the contract and, if so desired, purchase or authorize the purchase of the stores at the risk and cost of the Contractor (unless specified otherwise in the SIT). In such an event, in case of Security Items where urgency develops due to such delays, BNPM reserves its right to procure not more than one year's requirement against this "Risk & Cost" tender from existing pre-qualified and security cleared firms. Bulk production and supply will only be allowed if this sample(s) pass the Tests laid down in the "Quality Control Requirements" of Volume I.
- 52.4 Testing of Samples
Tests, procedures and testing laboratories for testing samples would be detailed in the Section VIII- "Quality Control Requirements" in the SBD.
- 52.5 Validation/ Prolonged Trials
If specified in SIT or in the Section VIII- "Quality Control Requirements" in the SBD, pre-production samples may have to undergo validation or extended trial before their performance can be declared satisfactory.
- 52.6 Parameters Settings and duration of Validation Tests would be indicated in Volume I - "Quality Control Requirements". It would also stipulate the period or event marking end of validation trials. It would also be indicated therein whether the Permission to start bulk production will have to wait full validation or it can go on in parallel.
53. **Expression of Interest (EOI) Tenders: NOT APPLICABLE**
- 53.1 EOI tenders are floated for short listing firms who are willing and qualified for: -
- a) Registration of Vendors for Supply of particular Stores or certain categories of Stores.
- b) Development of new items or indigenization of Imported stores
- 53.2 The qualification /eligibility criteria required and the format of submission of such Data would be indicated in the "Qualification Criteria" of Volume I.
- 53.3 Objectives and scope of requirement would be indicated in the Section VI - "List of Requirements" in the SBD. Indicative quantity required yearly and its future requirements would also be indicated.
- 53.4 In case of EOI for Development of new Items or for indigenization, prospective firms would be given opportunity to inspect the Machine/ Item at the place of installation at the place, dates and time mentioned in SIT.
- 53.5 In case EOI is for registration of vendors, Registration Fees and validity period of registration would be detailed in the SIT.
- 53.6 Short List of Suppliers: The suppliers shall be evaluated for short listing, inter-alia, based on their past experience of supplying goods in similar context, financial strength, technical capabilities etc. Each supplier will be assigned scores based on weightages assigned to each of the criteria mentioned in the "Qualification Criteria" in Volume I.
- 53.7 If stipulated in the SIT, the Firm's capacity and Capability may be assessed by a nominated Committee or by a third party nominated by BNPM.
- 53.8 All suppliers who secure the minimum required marks (normally 50% unless otherwise specified in the "Qualification Criteria" in Volume I) would be short listed. "Qualification Criteria" may alternatively specify minimum qualifying requirement for each of the criteria i.e. minimum years of experience, minimum number of assignments executed, minimum turnover etc. Under such circumstances, all suppliers who meet the minimum requirement, as specified, will be short listed.
- 53.9 In case of EOI for registration of vendors, registration letters would be issued to the shortlisted tenderers.
- 53.10 In case of EOI for development/ indigenization, these shortlisted tenderers would only be allowed to participate in the subsequent development/ indigenization tenders.
54. **Tenders for Disposal of Scrap: NOT APPLICABLE**
- 54.1 **Introduction:**
The tender is for Sale of Scrap material lying at various locations. Details of scrap for sale including Description, Present Condition, Lot Size and its Location would be given in the Section VI -"List of Requirements".
- 54.2 "As Is; Where Is; Whatever Is" Basis of This Sale:
- 54.2.1 This sale of Scrap is strictly on "As Is; Where Is; Whatever Is" basis. Tenderer must satisfy himself on all matters with regard to quality, quantity; nature of stores etc., before tendering as no complaint or representation of any kind shall be entertained after the sale contract is concluded.
- 54.2.2 The description of lot in the particulars of sale has been given for the purpose of identification thereof only and the use of such description shall not constitute the sale thereof to be sale by description and no sale shall be invalid by reason of any defect or deviation or variation in any lot or on account

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- of any lot not being exactly described and the purchaser shall not be entitled to claim any damage or compensation whatsoever on account of such fault, error in description, weight or the like.
- 54.2.3 All quantities of scrap whether by weight or measurement mentioned in the Tender notice are only approximate and should the quantity, on actual weight or measurement basis as the case may be and whenever delivered on such basis, works out less than the advertised and /or projected quantity, the BNPM shall not under any circumstances be liable to make good any such deficiency
- 54.2.4 BNPM reserves right to increase or decrease the quantity of any item or items or terminate the contract at any stage by giving one week's notice. No claim whatsoever shall lie against the BNPM on account of such termination of the contract or variation in the quantity.
- 54.2.5 BNPM shall have the right to remove certain items which it feels were not intended for sale but were inadvertently made a part of the scrap material or of the lot offered for sale lying at the premises or were joined or attached to the material offered for sale.
- 54.2.6 Tenderers desirous of purchasing and participating in the tender must visit the site before submitting the offer, after taking due permission from the concerned Stock Holders. The Tenderers submitting the offers shall be deemed to have visited the site and acquainted themselves thoroughly with materials intended for sale in all respect.
- 54.2.7 Any person giving offer shall be deemed to have made himself fully conversant with the Terms and Conditions of the Tender Sale, as well as the location and condition of the materials being sold and shall be deemed to have agreed to all the stated terms and conditions herein under.
- 54.3 Submission of Offer:
- 54.3.1 Unless specified otherwise in the SIT, tenders shall hold good for acceptance for a minimum period of 90 days (ninety days) from the date of opening of the tenders. The offers of the tenderers shall be irrevocable.
- 54.3.2 BNPM reserves right to reject any offer without assigning any reason therefore.
- 54.3.3 Unless otherwise stated in the SIT, the amount of EMD in such tenders would be 5% of the value of the tender. The Earnest Money shall be forfeited if the tenderer unilaterally withdraws, amends, impairs or derogates from his offer in any respect within the period of validity of his offer.
- 54.3.4 If the offer of the tenderer is not accepted by the BNPM, the Earnest Money deposit made by the tenderer shall be refunded to him. No interest shall be payable on such refunds. The EMD deposited by the successful tenderer shall remain with the BNPM till payment of the security deposit (SO) money, as stipulated in relevant Clause, has been made. It may be adjusted as part of the total SO money at the discretion of the BNPM.
- 54.3.5 Commercial tax/terminal tax, Octroi, municipal tax or any other taxes/duties etc. whatever in force shall be payable extra by the purchaser as per rules applicable to BNPM. Current and valid PAN and sales/commercial tax registration number wherever applicable must be provided in the Bid of the Tenderer.
- 54.3.6 All arrangement for lifting and transportation of scrap material, including manpower, crane, transport vehicle and trolley etc., if required shall be made by the purchaser concerned only and the BNPM shall not provide or help in providing any such arrangements and the rate quoted by the purchaser must include such and all incidental charges.
- 54.3.7 Registered dealers who are exempted from payment of Sales Tax must submit copies of their Registration certificate of concerned authority and shall be required to submit necessary form duly completed in all respect to BNPM or its
- 55.8 If specified in SIT, Advance and Intermediate Payment to Suppliers may be allowed.
- 55.9 Quantity for Development Commitment
- In Next three years, after the newly developed firm is able to successfully complete Development orders with +/-5% tolerance, 20% of annual quantity requirement may be reserved for Newly Developed firms.
- 54.3.8 representatives before obtaining delivery order, duly signed by the partner of the firm or the person authorized to do so. Evaluation of tenders for Disposal of scrap will be done on similar basis as Tenders for Procurement of Goods, except that the selection of the bidders shall be on the basis of the highest responsive Bidder (H1). In case full quantity is not offered to be taken by the Highest Bidder, parallel contracts would be placed.
- 54.4 Notification of Acceptance and Award of Contract:
- 54.4.1 The successful tenderer, herein after referred to as purchaser, shall have to submit security deposit (SO) @ 10% of the total sale value of the contract within 5 working days of issue of the sale contract (excluding the date of issue of sale contract). The SO shall be deposited in the form of bank draft/pay order, drawn on any nationalized or recognized bank in favour of same officer as mentioned in clause 3 of NIT in connection with EMD.
- 54.4.2 The purchaser has to pay balance payment within 20 days from the date of notification of acceptance, which is to be issued by BNPM or his authorized representative, in form of Bank draft drawn on any nationalized or recognized bank in favour of same authority as mentioned above. In case of any, default to deposit balance payment, BNPM reserves right to terminate the contract and forfeit the security deposit.
- 54.5 Disposal Tenders for Security and Sensitive Machinery and Items:
- 54.5.1 Non-Misuse Declaration: The bidder is required to give an undertaking that he or his employees or legal heirs will ensure that such items purchased from BNPM, will be utilized only for scrap recovery and will not be misused for any other purpose. He will also ensure that this undertaking is honoured and it got underwritten from further down the line scrap processors/ re-purchasers, if any. In case his firm changes hands, it will be his responsibility to ensure that the new owners honour and underwrite this undertaking.
- 54.5.2 If stipulated in SIT delivery would be given only in dis-mantled/cut-up condition.
55. **Development and indigenization Tenders: NOT APPLICABLE**
- 55.1 Already developed firms or firms who have already received development orders for the item (with whatever results) would not be considered in such tenders.
- 55.2 If specified in SIT the tender documents may be issued free of cost, and submission of earnest money deposit and security deposit may be relaxed.
- 55.3 If specified in SIT, The Tenderers may quote separately for
- a) Price/rate for bulk supply of item in development/indigenization supplies and
 - b) Separately, cost of development including cost of pre-production samples. Firms would be paid only for the number of samples specified in the Tender. If he has to manufacture more samples due to failure of earlier one, he would not be paid for it.
- 55.4 L1 would be determined on the basis of rate of item quoted including reference to total cost of the development cost (including the cost of prototype) plus the notional total cost of quantities that will be required over next three years, wherever applicable.
- 55.5 Development contracts may, as far as feasible, be concluded with two or more contractors in parallel.
- 55.6 The ratio of splitting of the supply order between various development agencies/firms in cases of parallel development, including criteria thereof, would be specified in the SIT.
- 55.7 However, in case the requirement is meagre and complex technology is involved, or quantity of the equipment spares is limited/small/uneconomic if distributed between two vendors, the entire order could be placed upon the L1 vendor only.
- 55.10 Period of Development Commitment
A newly developed firm would be granted this facility till only three years after completing the initial Development order. However this facility is not a bar to the firm from competing with already established firms for quantities larger than 20% provided their prices and performance so warrant. Thereafter they would have to compete on equal terms with other already developed firms.

SECTION III – SPECIAL INSTRUCTIONS TO TENDERERS

SIT:

The following Special Instructions to Tenderers will apply for this purchase. These special instructions will modify/ substitute/ supplement the corresponding General Instructions to Tenderers (GIT) incorporated in Section II. The corresponding GIT clause numbers have also been indicated in the text below:

In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

(Clauses of GIT listed below include a possibility for variation in their provisions through SIT. There could be other clauses in SIT as deemed fit.)

Sl. No.	GIT Clause no	Topic	SIT Provision
1	1,2,3,4,5,6, 7	PREAMBLE-Introduction, Language of Tender, Eligible Tenderers, Eligible Goods and Services (Origin of Goods), Tendering Expense, Tender Documents, Amendments to Tender Documents	No Change
2	8	Pre-bid Conference	Will be held on 04/11/2020 at 1100hrs BNPM premises, Mysuru.
3	9	Time Limit for receiving request for clarification of Tender Documents	Should not be later than 14 days prior to prescribed date of submission of tender.
4	10,11,12, 13,14,15	Documents Comprising the Tender, Tender Currencies, Tender Prices, Indian Agent, PVC Clause & Formula, Alternative tenders	No Change except the taxes will be applicable as per GST rules (Clause 12.7 to Clause 12.13)
5	16	Documents Establishing Tenderer's Eligibility and Qualifications	No Change
6	17	Documents establishing Good's Conformity to Tender document	No Change
7	18	Earnest Money Deposit (EMD) Note: Bidders claiming exemption of EMD should submit the DGS&D (or) NSIC registration certificate without fail along with their techno-commercial offer. EMD exemption for DGS&D (or) NSIC registered firm. Cost of tender to be submitted.	a) Rs. 5,00,000/- b) Submission of EMD is exempted for Micro and small enterprises (MSEs) as per the Public Procurement Policy for MSEs Order, 2012. MSEs should be registered and also will continue to remain registered during the tender validity period with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or Directorate of Handicrafts and Handlooms or Udyog

SECTION III – SPECIAL INSTRUCTIONS TO TENDERES

			Aadhaar Memorandum or Any other body specified by Ministry of MSME. b) EMD has to be submitted through Electronic Transfer only (GIT: Clause 18.4) (To be remitted through online mode only)
8	19	Tender Validity (120 days in case of two-bid system after the date of tender opening prescribed in the tender document)	No Change
9	20	Signing and Sealing of Tender Note: The following SIT provision is made with respect the following clause 20.4. Number of Copies of Tenders to be submitted : NIL 20.9: E procurement: Permitted.	Only - E procurement
10	21,22,23	Submission of Tenders, Late Tender, Alteration and Withdrawal of Tender	No Change
11	24	Opening of tenders Note: Please read the guidelines for filling up two part bid tender as mentioned in NIT above which is described in detail w.r.to clause 24.4	No Change
12	25	Basic Principle	No Change
13	26,27,28, 29,30,31, 32,33,34	Preliminary Scrutiny of Tenders, Minor Infirmary / Irregularity / Non-Conformity, Discrepancy in Prices, Discrepancy between original and copies of Tender, Clarification of Bids, Qualification / Eligibility Criteria, Conversion of tender currencies to Indian Rupees, Schedule-wise Evaluation, Comparison on CIF Destination Basis.	Clause 26.2 (d) - Required tender processing fee and EMD have not been provided. Clause 33: (Refer below Sl. No. 16) No change for other clauses.

SECTION III – SPECIAL INSTRUCTIONS TO TENDERES

14	35 to 49	Additional Factors and Parameters for Evaluation and Ranking of Responsive Tenders, Tenderer's capability to perform the contract, Tenderer's capability to perform the contract, Cartel Formation / Pool Rates, Negotiations, Contacting BNPMIPL, Award of contract, Award Criteria, Variation of Quantities at the Time of Award, Parallel Contracts, Serious Misdemeanors, Notification of Award, Issue of Contract, Non-receipt of Performance Security and Contract by BNPMIPL, Return of EMD, Publication of Tender Result.	No Change
15	50 to 55	Rate Contract Tenders, PQB Tenders, Tenders involving Purchaser's and Pre-Production Samples, EOI Tenders, Tenders for Disposal of Scrap, Development / Indigenization Tenders	NA

16. The bidder should consider the following points while quoting GST Rate in their bids:

- a) In case of unregistered bidders, the rate and amount of GST shall be shown as “Nil”.
- b) In case of a compounding dealer, GST shall be quoted as “Nil” as compounded dealers cannot collect GST from the consumers. The price quoted therefore shall be construed as all inclusive.
- c) In case of work contracts or pure labor contracts, the bidder shall quote single GST rate for the work.
- d) In case of composite supplies, i.e., a supply consisting of one principal supply and other ancillary supplies, the supply will attract the GST Rate of the principal supply. For example, if Item A in the supply order is the major or principal supply and other items are ancillary supplies, the bidder shall quote the GST Rate applicable to the principal goods (i.e., Item A) being supplied.
- e) In case of mixed supply, i.e., a combination of two or more individual goods made together for a single price (each of these items can be supplied separately and is not dependent on any other), the total supply will attract the GST rate of the item which has the highest rate of tax. For example, if Item A in the mixed supply attracts highest rate of tax, the bidder shall quote the GST rate applicable to item A for total mixed supply.
- f) In case of supplies which are neither composite nor mixed supplies, the bidder shall quote the GST Rate applicable to each item of supply separately.
- g) If there is any difference of opinion regarding classification in HSN code, the bidder should sought clarification/raise query within the given time from the date of tender and it would be clarified before submitting the bid. Once clarified then that will be final & binding and no deviation shall be granted.

17. Evaluation Criteria:

- i. The technical bids shall be opened in the first instance and these bids shall be scrutinized and evaluated by the competent committee/authority with reference to the parameters prescribed in the tender document. Subsequently, in the second stage the financial bids of only technically acceptable offers as decided in first stage shall be opened for further scrutiny and evaluation. Tenderers may check the e-tendering portal (www.tenderwizard.com/BNP) for status of bids.

SECTION III – SPECIAL INSTRUCTIONS TO TENDERES

- ii. The method of evaluation of bidder for awarding the Contract shall be based on L1 price arrived after subtracting total price of Form B5 from total price of Form B1 (L1 price will be arrived from total price of Form B1 - total price of Form B5) and will be decided taking into consideration of the offered price for delivery up to BNPM, Mysore. Evaluation shall be carried out inclusive of GST rates.
- iii. Evaluation shall be carried out inclusive of GST rates. Bidder has to quote GST rate as per the HSN/SAC code provided in Section XI: Price Schedule. In case of any mismatch in HSN/SAC code with respect to offered product, same shall be decided in consultation with winning bidder.
- iv. All tenderers should be registered under GST. They should be eligible to pass on input credit. Bid will be evaluated all-inclusive though input credit will be deducted to arrive at the effective cost.

A. Indigenous/Domestic Bidder

1. If the tenderer/bidder does not include the details of GST separately in the tender/quotation, the same shall be rejected
2. The HSN code of the product/services shall be determined at the tendering stage itself and mentioned in the price bid format to quote the GST rate according to the specified HSN code.
3. The evaluation of tender for three categories of GST registration is provided below:

Particulars	Registered	Compounding	Unregistered*
Basic Price	xxx	xxx	xxx
Add: GST	X	-	X
Add: Cess on GST	xx	-	Xx
Less Input Credit	X	-	X
Total price	Xxx +X+xx -X	xxx	xxx +X+xx -X

*If the bidders participated in a tender is unregistered, the GST shall be payable by the purchaser under reverse charge and shall be added to the quoted rate to arrive at the Gross price and input credit, if any shall be deducted from the total landed cost to arrive at the net comparable price.

18. Other instructions for the bidders to claim any GST liability, failing which, the GST liability will not be paid/reimbursed/accepted:

- a. Registered/compounding Contractor/supplier should produce GST Invoice containing all the particulars stated in Rule 46 of the CGST Rules, 2017 in accordance with the provisions of Section 31 of the CGST ACT.
- b. The supplier should mandatorily update the invoice details in GSTR-1, details of outward supplies of goods or services within the prescribed time under GST Act
- c. The Payment shall be made net of TDS as per the provisions of CGST/SGST/IGST Act.
- d. Wherever there is difference in the amount admitted, the supplier may be directed to issue a Credit Note (in case of reduction in the Invoice value)/Debit Note (in case of increase in the Invoice value), and payment shall be released only after the receipt of such Debit or Credit Note
- e. Supplier should provide the relevant documents to confirm the tax charged on the invoice has been paid to the credit of Government after adjusting with ITC, if any.
- f. Supplier should provide indemnification as follows: "In the event of non-compliances with respect to GST ACT and Rules by the supplier, the supplier should refund the GST liability within 10 days from the date of GST reversal in GSTRN failing which the purchaser shall recover the GST amount from the retention amount (whether in BG or in Cash) held by the company".

19. Corrigendum/ Addendum, if any, including clarifications provided during pre-bid meeting shall be hosted on Company's website (www.bnpmindia.com) and (www.tenderwizard.com) only.

20. The Company discourages the engagement of agents for brokering contracts and hence intending bidders are requested to take note of the above that engagement of agents for brokering contracts may result in dis-qualification.

(To be signed & stamped and submitted along with Techno-commercial Bid Part-I)

SECTION IV – GENERAL CONDITIONS OF CONTRACT

"DGS&D" in Rate Contracts means Directorate General of Supplies and Disposals

"DP" Delivery Period

"ECS" Electronic clearing system

"ED" Excise Duty

"EMD" Earnest money deposit

"EOI" Expression of Interest (Tendering System)

"ERV" Exchange rate variations

"FAS" Free alongside shipment

"FOB" Freight on Board

"FOR" Free on Rail

"GCC" General Conditions of Contract

"GIT" General Instructions to Tenderers

"GST" Goods and Services Tax which will replace Sales Tax

"H1, H2 etc" means First Highest, Second Highest Offers etc. in Disposal Tenders means

"Incoterms" International Commercial Terms, 2010 (of ICC)

"L1, L2 etc" First or second Lowest Offer etc.

"LC" Letter of Credit

"LD or L/D" Liquidated Damages

"LSI" Large Scale Industry

"NIT" Notice Inviting Tenders.

"NSIC" National small industries corporation

"PQB" Pre-qualification bidding

"PSU" Public Sector Undertaking

"PVC" Price variation clause

"RC" Rate contract

"RR or RIR" Railway Receipt

"SBD" or "T Document" (Standard) BID / Tender Document

"SCC" Special Conditions of Contract

"SIT" Special Instructions to Tenderers

"BNPM" / Purchaser Bank Note Paper Mill India Private Limited

"SSI" Small Scale Industry

"ST" Sales Tax

"VAT" Value Added Tax

2. Application

2.1 The General Conditions of Contract incorporated in this section shall be applicable for this purchase to the extent the same are not superseded by the Special Conditions of Contract (SCC) prescribed under Section V of this document.

2.2 General Conditions of the contract shall not be changed from one tender to other.

2.3 Other Laws and Conditions that will govern the Contract:

Besides GCC and SCC following conditions and Laws will also be applicable and would be considered as part of the contract:

a) Indian Contracts Act, 1872

b) Sale of Goods Act, 1930

c) Arbitration and Conciliation Act, 1996

d) Competition Act, 2002 as amended (Amendment Act), 2007

e) Contractor's Tender Submissions including Revised Offer during Negotiations if any

f) Conditions in other parts of the Tender Documents

g) Correspondence including counter-offers if any; between the Contactor and BNPM during the Tender Finalization

h) Notification of award and Contract Documents

i) Subsequent Amendments to the Contract

j) Any other applicable law/ regulation

3. Use of contract documents and information

3.1 The supplier shall not, without BNPM's prior written consent, disclose the contract or any provision thereof including any specification, drawing, sample or any information furnished by or on behalf of BNPM in connection herewith, to any person other than the person(s) employed by the supplier in the performance of the contract emanating from this tender document. Further, any such disclosure to any such employed person shall be made in confidence and only so far as necessary for the purposes of such performance for this contract.

3.2 During the process of procurement of Security or Sensitive Machinery and Items, Tender Documents and the specifications/ drawings of such items would be issued only to Vendors having security clearance within the validity of such clearance and he shall maintain absolute secrecy and strictly control the number of copies and access to the documents and copies thereof, in addition to safeguards mentioned in sub-para above.

3.3 Further, the supplier shall not, without BNPM's prior written consent, make use of any document or information mentioned in GCC sub-clause 3.1 above except for the sole purpose of performing this contract.

3.4 Except the contract issued to the supplier, each and every other document mentioned in GCC sub-clause 3.1 above shall remain the property of BNPM and, if advised by BNPM, all copies of all such documents shall be returned to BNPM on completion of the supplier's performance and obligations under this contract.

4. Patent Rights

4.1 The supplier shall, at all times, indemnify BNPM, free of cost, against all claims which may arise in respect of goods & services to be provided by the supplier under the contract for infringement of any right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trademarks etc. being made against BNPM, BNPM shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to BNPM.

5. Country of Origin

5.1 All goods and services to be supplied and provided for the contract shall have the origin in India or in the countries with which the Government of India has trade relations.

SECTION IV – GENERAL CONDITIONS OF CONTRACT

5.2 The word "origin" incorporated in this clause means the place from where the goods are mined, cultivated, grown, manufactured, produced or processed or from where the services are arranged.

6. Performance Bond/ Security

6.1 Within twenty-one days after the issue of notification of award by BNPM, the supplier shall furnish performance security to BNPM for an amount equal to ten per cent of the total value of the contract, valid up to sixty days after the date of completion of all contractual obligations by the supplier, including the warranty obligations.

6.2 The Performance security shall be denominated in Indian Rupees or in the currency of the contract and shall be in one of the following forms:

a) Account Payee Demand Draft drawn on any commercial bank in India, in favour Bank Note Paper Mill India Private Limited.

b) Bank Guarantee issued by a commercial bank in India, in the prescribed form as provided in Volume I of this document.

6.3 In the event of any loss due to supplier's failure to fulfil its obligations in terms of the contract, the amount of the performance security shall be payable to BNPM to compensate BNPM for the same.

6.4 In the event of any amendment issued to the contract, the supplier shall, within twenty- one days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended.

6.5 Subject to GCC sub-clause 6.3 above, BNPM will release the performance security without any interest to the supplier on completion of the supplier's all contractual obligations including the warranty obligations.

7. Technical Specifications and Standards

7.1 The Goods & Services to be provided by the supplier under this contract shall conform to the technical specifications and quality control parameters mentioned in Technical Specifications in Volume II and Quality Control Requirements under volume I of this tender document.

8. Packing and Marking

8.1 The packing for the goods to be provided by the supplier should be strong and durable enough to withstand, without limitation, the entire journey during transit including transshipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.

8.2 The quality of packing, the manner of marking within & outside the packages and provision of accompanying documentation shall strictly comply with the requirements as provided in Technical Specifications and Quality Control Requirements under Volume II and in SCC under Section V. In case the packing requirements are amended due to issue of any amendment to the contract, the same shall also be taken care of by the supplier accordingly.

8.3 Packing instructions:

Unless otherwise mentioned in the Technical Specification and Quality Control Requirements and in SCC under Volume I, the

supplier shall make separate packages for each consignee (in case there is more than one consignee mentioned in the contract) and mark each package on three sides with the following with indelible paint of proper quality:

- a) Contract number and date
- b) Brief description of goods including quantity
- c) Packing list reference number
- d) Country of origin of goods
- e) Consignee's name and full address and
- f) Supplier's name and address

9. Inspection and Quality Control

9.1 BNPM and/or its nominated representative(s) will, without any extra cost to BNPM, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. BNPM shall inform the supplier in advance, in writing, BNPM's programme for such inspection and also the identity of the officials to be deputed for this purpose.

9.2 The Technical Specification and Quality Control Requirements incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to BNPM's inspector at no charge to BNPM.

9.3 If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, BNPM's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to BNPM and resubmit the same to BNPM's inspector for conducting the inspections and tests again.

9.4 In-case of re-inspection because of rejection of goods at first scheduled inspection due to non-conformity of goods to specifications or for any other reason attributable to the supplier, costs of the inspector(s), from second inspection onwards, towards travel & boarding shall be to vendor's account.

9.5 In case the contract stipulates pre-despatch inspection of the ordered goods at suppliers premises, the supplier shall put up the goods for such inspection to BNPM's inspector well ahead of the contractual delivery period, so that BNPM's inspector is able to complete the inspection within the contractual delivery period.

9.6 If the supplier renders the goods to BNPM's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to BNPM under the terms & conditions of the contract.

9.7 BNPM's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by BNPM's inspector during pre-despatch inspection mentioned above.

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9.8 Goods accepted by BNPM and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute BNPM's right to reject the same later, if found deficient in terms of the warranty clause of the contract, as incorporated under GCC Clause 16.

10. Terms of Delivery

10.1 Goods shall be delivered by the supplier in accordance with the terms of delivery specified in the contract.

11. Transportation of Goods

11.1 The supplier shall not arrange part-shipments and/or transshipment without the express/prior written consent of BNPM.

11.2 Instructions for transportation of domestic goods including goods already imported by the supplier under its own arrangement:

In case no instruction is provided in this regard in the specification, the supplier shall arrange transportation of the ordered goods as per its own procedure.

11.3 Shipping Arrangement for Foreign Contracts: In the case of FOB/FAS contracts, shipping arrangements shall be made by the Ministry of Shipping & Transport (Chartering Wing), New Delhi, INDIA, in accordance with details given in Volume I. The Contractor shall give adequate notice to the Forwarding Agents/Nominees about the readiness of the cargo from time to time and at least six weeks' notice in advance of the required position for finalising the shipping arrangements. In the case of C&F contracts, the Contractor shall arrange shipment in accordance with the requirements of the Ministry of Shipping & Transport, New Delhi, INDIA, indicated in the Volume I (as applicable).

12. Insurance

12.1 Unless otherwise instructed in the SCC, the supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner:

12.2 In case of supply of domestic goods on CIF destination basis, the supplier shall be responsible till the entire stores contracted for arrives in good condition at the destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured. The insurance cover shall be obtained by the Supplier in its own name and not in the name of BNPM or its Consignee.

12.3 In the case of FOB and C&F offers for import of Goods, insurance shall be arranged by the Purchaser. However, the supplier must give sufficient notice to the Purchaser prior to the date of shipment, so that the Insurance Cover for the shipment can be activated. The Supplier must co-ordinate so as to ensure that the Shipment sails only with Insurance cover in place.

12.4 In case of Import of Goods, even in case where the insurance is paid by the Purchaser, and loss or damage shall be made good by the Contractor free of cost, without waiting for the settlement of insurance claim. The payment after settlement of insurance claim shall be reimbursed by the Purchaser to the Contractor. Contractor shall be entirely responsible to make good loss/damage without waiting for settlement of insurance claim so that machine is commissioned within the time specified in the contract.

13. Spare parts

13.1 If specified in the List of Requirements and in the resultant contract, the supplier shall supply any or all of the following materials, Information etc. pertaining to spare parts manufactured and/or supplied by the supplier:

a) The spare parts as selected by BNPM to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and

b) In case the production of the spare parts is discontinued:

i) Sufficient advance notice shall be given to BNPM before such dis-continuation to provide adequate time to BNPM to purchase the required spare parts etc. &

ii) Immediately following such dis-continuation, the supplier shall provide BNPM designs, drawings, lay-outs & specifications of spare parts as required by BNPM free of cost.

13.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the goods so that the same are supplied to BNPM promptly on receipt of order from BNPM.

14. Incidental services

14.1 Subject to the stipulation, if any, in the SCC under volume I and the Technical Specifications, the supplier shall be required to perform any or all of the following services.

a) Providing required jigs and tools for assembly, start-up and maintenance of the goods

b) Supplying required number of operation & maintenance manual for the goods

c) Installation and commissioning of the goods

d) Training of BNPM's operators for operating and maintaining the goods

e) Providing after sales service during the tenure of the contract

f) Providing maintenance service after expiry of the warranty period of the goods if so incorporated in the contract

14.2 Prices to be paid to the supplier by BNPM for any of the required incidental services, if not already included in the contract price during the placement of the contract, shall be settled and decided in advance by BNPM and the supplier. However, such prices shall not exceed the contemporary rates charged by the supplier to other customers for similar services.

15. Distribution of Despatch Documents for Clearance/ Receipt of Goods

15.1 The supplier shall send all the relevant despatch documents well in time to BNPM to enable BNPM to clear or receive (as the case may be) the goods in terms of the contract. Unless otherwise specified in the SCC, the usual documents involved and the practice to be followed in general for this purpose are as follows:

15.2 For Domestic Goods, including goods already imported by the supplier under its own arrangement Within 24 hours of despatch, the supplier shall notify BNPM, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the following documents to them by registered post/speed post (or as instructed in the contract):

a) Supplier's Invoice indicating, inter alia description and specification of the goods, quantity, unit price, total value

b) Packing list

c) Insurance certificate

d) Railway receipt/Consignment note

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- e) Manufacturer's guarantee certificate and in-house inspection certificate
- f) Inspection certificate issued by BNPM's inspector, if applicable
- g) Expected date of arrival of goods at destination and
- h) Any other document(s), as and if specifically mentioned in the contract.

15.3 For Imported Goods, within 3 days of dispatch, the supplier shall notify BNPM, consignee and others concerned if mentioned in the contract, the complete details of dispatch and also supply the following documents to them by Courier (or as instructed in the Contract), besides advance intimation by Fax/email:

- a) Clean on Board Airway Bill/Bill of Lading (B/L)
- b) Original Invoice
- c) Packing List
- d) Certificate of Origin from Seller's Chamber of Commerce
- e) Certificate of Quality and current manufacture from OEM
- f) Dangerous Cargo Certificate, if any.
- g) Insurance Policy of 110% if CIF contract.
- h) Performance Bond / Warranty Certificate

16. Warranty

16.1 The supplier warrants that the goods supplied under the contract is new, unused and incorporates all recent improvements in design and materials unless prescribed otherwise by BNPM in the contract. The supplier further warrants that the goods supplied under the contract shall have no defect arising from design, materials (except when the design adopted and / or the material used are as per BNPM's specifications) or workmanship or from any act or omission of the supplier, that may develop under normal use of the supplied goods under the conditions prevailing in India.

16.2 This warranty shall remain valid for twelve months after the goods or any portion thereof as the case may be, have been delivered to the final destination and installed and commissioned at the final destination and accepted by BNPM in terms of the contract or for fifteen months from the date of despatch of the last item to be supplied under the contract from the supplier's premises for domestic goods (including goods already imported by the supplier under its own arrangement) or for eighteen months from the date of shipment from the port of loading in the source country for imported goods offered from abroad, whichever is earlier, unless specified otherwise in the specifications.

16.3 In case of any claim arising out of this warranty, BNPM shall promptly notify the same in writing to the supplier.

16.4 Upon receipt of such notice, the supplier shall, within a reasonable span of time (or within the period, if specified in the SCC), repair or replace the defective goods or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on BNPM for such replaced parts/goods thereafter.

16.5 In the event of any rectification of a defect or replacement of any defective goods during the warranty period, the warranty for the rectified/ replaced goods shall be extended

to a further period of twelve months from the date such rectified/ replaced goods starts functioning to the satisfaction of BNPM.

16.6 If the supplier, having been notified, fails to rectify/replace the defect(s) within a reasonable period (or within the period, if specified in the SCC), BNPM may proceed to take such remedial action(s) as deemed fit by BNPM, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which BNPM may have against the supplier.

17. Assignment

17.1 The Supplier shall not assign, either in whole or in part, its contractual duties, responsibilities and obligations to perform the contract, except with BNPM's prior written permission.

18. Sub Contracts

18.1 The Supplier shall notify BNPM in writing of all sub contracts awarded under the contract if not already specified in its tender. Such notification, in its original tender or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the contract.

18.2 Sub contract shall be only for bought out items and sub-assemblies.

18.3 Sub contracts shall also comply with the provisions of GCC Clause 5 "Country of Origin".

19. Modification of contract

19.1 Once a contract has been concluded, the terms and conditions thereof shall generally not vary. However if necessary, BNPM may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract in any one or more of the following:

- a) Specifications, drawings, designs etc. where goods to be supplied under the contract are to be specially manufactured for BNPM,
- b) Mode of packing
- c) Incidental services to be provided by the supplier
- d) Mode of dispatch
- e) Place of delivery, and
- f) Any other area(s) of the contract as felt necessary by BNPM depending on the merits of the case.

19.2 In the event of any such modification/alteration causing increase or decrease in the cost of goods and services to be supplied and provided, or in the time required by the supplier to perform any obligation under the contract, an equitable adjustment shall be made in the contract price and/or contract delivery schedule, as the case may be, and the contract amended accordingly. If the Supplier doesn't agree to the adjustment made by BNPM, the supplier shall convey its views to BNPM within twenty one days from the date of the supplier's receipt of BNPM's amendment/modification of the contract.

19.3 Option Clause: By a suitable provision in the SCC, the Purchaser may reserve the right to increase the ordered quantity by 25% at any time, till final delivery date of the contract, by giving reasonable notice even though the quantity ordered initially has been supplied in full before the last date of Delivery Period.

20. Prices

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20.1 Prices to be charged by the supplier for supply of goods and provision of services in terms of the contract shall not vary from the corresponding prices quoted by the supplier in its tender or during negotiations, if any, and incorporated in the contract except for any price adjustment authorized in the SCC.

21. Taxes and Duties

21.1 Supplier shall be entirely responsible for all taxes, duties, fees, levies etc. incurred until delivery of the contracted goods to BNPM.

21.2 Further instruction, if any, shall be as provided in the SCC.

22. Terms and Mode of Payment: Unless specified otherwise in SCC, the terms of payments would be as follows:

22.1 Unless otherwise specified in SCC, usual payment term is 100% on receipt and acceptance of goods by the Purchaser and on production of all required documents by the supplier.

22.2 For Domestic Goods: Unless otherwise specified in the SCC, payments to suppliers are usually made by account payee cheque or through ECS only.

22.2.1 Where the terms of delivery is FOR dispatching Station, the payment terms depending on the value and nature of the goods, mode of transportation etc. maybe - 60% to 90% (as specified in SIT) on proof of dispatch and other related documents and balance on receipt at site and acceptance by the consignee.

22.2.2 Where the terms of delivery is CIF destination/delivery at site/FOR destination, usual payment term is 100% on receipt and acceptance of goods by the consignee and on production of all required documents by the supplier.

22.2.3 Where goods to be supplied also need installation and commissioning by the supplier, the payment terms are generally as under:

a) For a contract with terms of delivery as F.O.R. dispatching station

i) 60% on proof of despatch along with the other specified documents.

ii) 30% on receipt of the goods at site by the consignee and balance

iii) 10% on successful installation and commissioning and acceptance by the Purchaser.

b) For a contract with terms of delivery as CIF destination/ Delivery at site/FOR destination

i) 90% on receipt and acceptance of goods by the consignee at destination and on production of all required documents by the supplier

ii) 10% on successful installation and commissioning and acceptance by the consignee.

22.3 For Imported Good: Unless otherwise specified in SCC, payments are made through an irrevocable Letter of Credit (LC).

a) Cases where Installation, Erection and Commissioning (if applicable) are not the responsibility of the Supplier- 100 % net FOB/FAS price is to be paid against invoice, shipping documents, inspection certificate (where applicable), manufacturers' test certificate, etc.

b) Cases where Installation, Erection and Commissioning are the responsibility of the Supplier-80%- 90% net FOB/FAS price (as specified in the SCC) will be paid against invoice, inspection certificate (where applicable), shipping documents etc.

and balance within 21-30 days of successful installation and commissioning at the consignee's premises and acceptance by the consignee.

c) Payment of Agency Commission against FOB/FAS Contract - Entire 100% agency commission is generally paid in Indian Rupees; after all other payments have been made to the supplier in terms of the contract.

22.4 Unless specified otherwise in the SCC, the following general conditions will apply for payment to the supplier.

22.5 The payment shall be made in the currency/ currencies authorized in the contract.

22.6 The supplier shall send its claim for payment in writing as per Section XIX - " Proforma for Bill for Payments", when contractually due, along with relevant documents etc., duly signed with date, as specified in sec and in a manner as also specified therein.

While claiming payment, the supplier is also to certify in the bill that the payment being claimed is strictly in terms of the contract and all the obligations on the part of the supplier for claiming that payment has been fulfilled as required under the contract. The supply should take place in sequence of erection and installation for claiming payment.

22.7 The important documents which the supplier is to furnish while claiming payment are:

a) Original Invoice

b) Packing List

c) Certificate of country of origin of the goods from seller's Chamber of Commerce.

d) Certificate of pre-dispatch inspection by BNPM's representative/ nominee

e) Manufacturer's test certificate

f) Performance/ Warrantee Bond

g) Certificate of Insurance

h) Bill of landing/ Airway bill/ Rail receipt or any other dispatch document, issued by a government agency (like postal department) or an agency duly authorized by the concerned ministry/department

i) Consignee's Certificate confirming receipt and acceptance of goods

j) Dangerous Cargo Certificate, if any, in case of Imported Goods.

k) Any other document specified.

22.8 While claiming reimbursement of duties, taxes etc. (like sales tax, excise duty, custom duty) from BNPM, as and if permitted under the contract, the supplier shall also certify that, in case it gets any refund out of such taxes and duties from the concerned authorities at a later date, it (the supplier) shall refund to BNPM, BNPM's share out of such refund received by the supplier. The supplier shall also refund the applicable amount to BNPM immediately on receiving the same from the concerned authorities.

22.9 In case where the supplier is not in a position to submit its bill for the balance payment for want of receipted copies of Inspection Note from the consignee and the consignee has not complained about the non-receipt, shortage, or defects in the supplies made, balance amount will be paid by the paying authority without consignee's receipt certificate after three

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months from the date of the preceding part payment for the goods in question, subject to the following conditions:

- a) The supplier will make good any defect or deficiency that the consignee (s) may report within six months from the date of despatch of goods.
- b) Delay in supplies, if any, has been regularized.
- c) The contract price where it is subject to variation has been finalized.
- d) The supplier furnishes the following undertakings:

"I/ We, ----- certify that I/ We have not received back the Inspection Note duly receipted by the consignee or any communication from BNPM or the consignee about non-receipt, shortage or defects in the goods supplied. I/ We agree to make good any defect or deficiency that the consignee may report within three months from the date of receipt of this balance payment".

23. Delay in the supplier's performance

23.1 The time for and the date specified in the contract or as extended for the delivery of the stores shall be deemed to be the essence of the contract and the supplier shall deliver the goods and perform the services under the contract within the time schedule specified by BNPM in the List of Requirements and as incorporated in the contract.

23.2 Subject to the provision under GCC clause 28, any delay attributable to the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all of the following sanctions besides any administrative action:

- a) Imposition of liquidated damages
- b) Forfeiture of its performance security and
- c) Termination of the contract for default.

23.3 If at any time during the currency of the contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly inform BNPM in writing about the same and its likely duration and make a request to BNPM for extension of the delivery schedule accordingly. On receiving the supplier's communication, BNPM shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.

23.4 When the period of delivery is extended due to delay for reasons attributable to the supplier, the amendment letter extending the delivery period shall, inter alia contain the following conditions:

- a) BNPM shall recover from the supplier, under the provisions of the clause 24 of the General Conditions of Contract, liquidated damages on the goods and services, which the Supplier has failed to deliver within the delivery period stipulated in the contract.
- b) That no increase in price on account of any ground whatsoever, including any stipulation in the contract for increase in price on any other ground and, also including statutory increase in or fresh imposition of customs duty, excise duty, sales tax or on account of any other tax or duty which may be levied in respect of the goods and services specified in the contract, which takes place after the date of delivery stipulated in the contract shall be admissible on the said goods and services delivered and performed after the date of the delivery stipulated in the contract.

c) But nevertheless, BNPM shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, excise duty, sales tax or any other duty or tax or levy or on account of any other grounds, which takes place after the expiry of the date of delivery stipulated in the contract.

23.5 The supplier shall not despatch the goods after expiry of the delivery period. The supplier is required to apply to BNPM for extension of delivery period and obtain the same before despatch. In case the supplier despatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and/or any other expense related to such supply shall lie against BNPM.

24. Liquidated damages

24.1 Subject to GCC clause 28, if the supplier fails to deliver any or all of the goods or fails to perform the services within the time frame(s) incorporated in the contract, BNPM shall, without prejudice to other rights and remedies available to BNPM under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to the 0.5% (Half) percent (or any other percentage if prescribed in the SCC) of the delivered price of the delayed goods and/ or services for each week of delay or part thereof until actual delivery or performance, subject to a maximum deduction of the 10% (or any other percentage if prescribed in the SCC) of the delayed goods' or services' contract price(s). During the above mentioned delayed period of supply and/ or performance, the conditions incorporated under GCC sub-clause 23.4 above shall also apply.

24.2 Liquidated Damage for not meeting performance guarantee shall be assessed and recovered from the Supplier, if applicable. The quantum of Liquidated damages shall be as specified in SCC.

24.3 If the equipment/system while testing, in accordance with the performance requirement of the Contract, fails to meet those performance parameters, the damages suffered by the purchaser may not be quantified in terms of money with any reasonable certainty. Therefore any Liquidated damage set forth in the Contract shall represent a reasonable determination of the amount of damage that the Purchaser will suffer, and shall not be considered as penalties. The Supplier thereby waives any defence to Purchaser's recovery of such Liquidated Damages on the plea that actual damages are ascertainable or that such Liquidated damages do not represent a reasonable determination of damages suffered by Purchaser or are penalties.

24.4 If the LD exceeds the specified limit, the Purchaser shall reserve the right to cancel/terminate the Contract as per clause 26 of GCC.

25. Custody and Return of BNPM Materials/ Equipment Documents loaned to Contractor

25.1 Whenever stores are required to be issued to the firm/contractor for fabrication or prototypes or sub-assemblies are issued for guidance in fabrication, these would be issued against appropriate Bank Guarantee as specified in SCC. In addition to the Bank Guarantee, appropriate insurance may be asked for if specified in the SCC.

25.2 In-case of failure of returning of all drawings and samples issued to the contractor in connection with the contract, besides withholding final payment, any other sanction, as deemed fit by BNPM, shall be issued against the supplier.

26. Termination for default

26.1 BNPM, without prejudice to any other contractual rights and remedies available to it (BNPM), may by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails

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to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by BNPM pursuant to GCC sub-clauses 23.3 and 23.4.

26.2 In the event of BNPM terminates the contract in whole or in part, pursuant to GCC sub-clause 26.1 above, BNPM may procure goods and/ or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit at the "Risk and Cost" of the supplier and the supplier shall be liable to BNPM for the extra expenditure, if any, incurred by BNPM for arranging such procurement.

26.3 Unless otherwise instructed by BNPM, the supplier shall continue to perform the contract to the extent not terminated.

27. Termination for insolvency

If the supplier becomes bankrupt or otherwise insolvent, BNPM reserves the right to terminate the contract at any time, by serving written notice to the supplier without any compensation, whatsoever, to the supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and I or will accrue thereafter to BNPM.

28. Force Majeure

28.1 In the event of any unforeseen event directly interfering with the supply of stores arising during the currency of the contract, such as war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, or acts of God, the Contractor shall, within a week from the commencement thereof, notify the same in writing to the Purchaser with reasonable evidence thereof. Unless otherwise directed by BNPM in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. If the force majeure condition(s) mentioned above be in force for a period of 90 days or more at any time, either party shall have the option to terminate the contract on expiry of 90 days of commencement of such force majeure by giving 14 days' notice to the other party in writing. In case of such termination, no damages shall be claimed by either party against the other, save and except those which had occurred under any other clause of this contract prior to such termination.

28.2 Notwithstanding the provisions contained in GCC clauses 23, 24 and 26, the supplier shall not be liable for imposition of any such sanction so long the delay and/ or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure.

28.3 In case due to a Force Majeure event BNPM is unable to fulfil its contractual commitment and responsibility, BNPM will notify the supplier accordingly and subsequent actions taken on similar lines described in above sub-paragraphs.

29. Termination for convenience

29.1 BNPM reserves the right to terminate the contract, in whole or in part for its (BNPM's) convenience, by serving written notice on the supplier at any time during the currency of the contract. The notice shall specify that the termination is for the convenience of BNPM. The notice shall also indicate inter-alia, the extent to which the supplier's performance under the contract is terminated, and the date with effect from which such termination will become effective.

29.2 The goods and services which are complete and ready in terms of the contract for delivery and performance within thirty days after the supplier's receipt of the notice of termination shall be accepted by BNPM following the contract

terms, conditions and prices. For the remaining goods and services. BNPM may decide:

a) To get any portion of the balance completed and delivered at the contract terms, conditions and prices; and / or

b) To cancel the remaining portion of the goods and services and compensate the supplier by paying an agreed amount for the cost incurred by the supplier towards the remaining portion of the goods and services.

30. Governing language

30.1 The contract shall be written in English language following the provision as contained in GIT clause 2. All correspondence and other documents pertaining to the contract, which the parties exchange, shall also be written accordingly in that language.

31. Notices

31.1 Notice, if any, relating to the contract given by one party to the other, shall be sent in writing or by cable or telex or facsimile and confirmed in writing. The procedure will also provide the sender of the notice, the proof of receipt of the notice by the receiver. The addresses of the parties for exchanging such notices will be the addresses as incorporated in the contract.

31.2 The effective date of a notice shall be either the date when delivered to the recipient or the effective date specifically mentioned in the notice, whichever is later.

32. Code of Ethics

BNPM as well as Bidders, Suppliers, Contractors, and Consultants under BNPM contracts shall observe the highest standard of ethics during the procurement or execution of such contracts. In pursuit of this policy, for the purposes of this provision, the terms set forth below are defined as follows:

a) "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;

b) "Fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;

c) "Collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Purchaser, designed to establish bid prices at artificial, non-competitive levels; and

d) "Coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property, procurement process or affect the execution of a contract.

e) A particular violation of ethics may span more than one of above mentioned unethical practices.

32.1 The following policies will be adopted in order to maintain the standards of ethics during procurement:

a) A proposal for award will be rejected if it is determined that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question.

b) A contract will be cancelled if it is determined at any time that BNPM representatives/officials have directly or indirectly, engaged in corrupt, fraudulent collusive or coercive practices during the procurement or the execution of that contract.

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c) In case any individual staff is found responsible, suitable disciplinary proceedings should be initiated against such staff under the applicable conduct rules. The existing provisions under the Indian law including the instructions of Central Vigilance Commission should be followed in this regard.

d) Firms or individuals shall be banned/ blacklisted after following due process, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a BNPM contract, if it at any time determines that they have, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a BNPM contract.

33. Resolution of disputes

33.1 If dispute or difference of any kind shall arise between BNPM and the supplier in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations. If the parties fail to resolve their dispute or difference by such mutual consultation within twenty one days of its occurrence, then, unless otherwise provided in the SCC, either BNPM or the supplier may seek recourse to settlement of disputes through arbitration as per The Arbitration and Conciliation Act 1996 as per following clause.

33.2 Arbitration Clause: - Any dispute or difference whatsoever arising between the Parties out of or relating to the construction, meaning, scope operation or effect of this Agreement or the validity or the breach thereof shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996 and under the Rules of Arbitration of the Indian Council of Arbitration and the award made in pursuance thereof shall be binding on the Parties. The Arbitral Tribunal shall consist of three Arbitrators. The venue of the Arbitration shall be Bangalore and it shall be conducted in English language.

34. Applicable Law

34.1 The contract shall be interpreted in accordance with the laws of India.

34.2 Irrespective of the place of delivery, or the place of performance or the place of Payments under the contract, the contract shall be deemed to have been made at the place from which the notification of acceptance of the tender has been issued.

34.3 The courts of the place from where the notification of acceptance has been issued- shall alone have jurisdiction to decide any dispute arising out or in respect of the contract.

35. Secrecy

35.1 The Contractor shall take all reasonable steps necessary to ensure that all persons employed in any work in connection with the contract, have full knowledge of the Official Secrets Act and any regulations framed thereunder.

35.2 Any information obtained in the course of the execution of the contract by the Contractor,; his servants or agents or any person so employed, as to any matter whatsoever, which would or might be directly or indirectly, of use to any enemy of India, must be treated secret and shall not at any time be communicated to any person.

35.3 Any breach of the aforesaid conditions shall entitle the Purchaser to cancel the contract and to purchase or authorise the purchase of the stores at the risk and cost of the Contractor, In the event of such cancellation, the stores or parts manufactured in the execution of the contract shall be taken by the Purchaser at such price as he considers fair and reasonable and the decision of the Purchaser as to such price shall be final and binding on the Contractor.

Part II: Additional General Conditions of Contract for specific Types of Tenders in addition/ modification to clauses mentioned above:

36. Disposal / Sale of Scrap by Tender

36.1 During the currency of contract, no variation in price or rate shall be admissible.

Integrity Pact

36.2 Payment and Default

36.2.1 Payment may be made in the form of cash or Demand Draft /Pay order issued by any scheduled commercial bank and drawn in favour of the Account mentioned in the NIT.

36.2.2 No interest will be paid to the purchaser for the amounts paid or deposited with the BNPM and subsequently found refundable to the purchaser under any of the conditions of the contract.

36.2.3 If the purchaser fails to deposit sale value for a sold lot within the allowed period as per relevant clause BNPMIPL may forfeit the security deposit. Requests for an extension of this period, made by the purchaser may be considered by the BNPMIPL and may at its discretion, on the merits of the case, allow further time not excluding 50 days from the date of the contract. Interest shall be leviable on such amount at a rate 2% per annum higher than the PLR of State Bank of India, from the date of expiry of the payment date to actual date of payment (actual date of payment inclusive).

36.2.4 The lot or lots in respect of which forfeiture has been made, shall be deemed to have been abandoned by the purchaser to all intents and purposes and may be re-sold or otherwise disposed of at the discretion of the BNPMIPL without reference to the purchaser concerned and without incurring any liability on part of BNPMIPL whatsoever in respect there under.

36.2.5 In case extension is granted by BNPMIPL and due to late payment of sale amount the delivery cannot be completed by the purchaser, in accordance with the relevant clause of Special Conditions of Tender sale, then ground rent shall also be leviable as per relevant clause of Special Conditions of Tender sale.

36.2.6 On production of proof of having made payment, nominated authority shall issue a delivery order authorizing the purchaser to take delivery of the Scrap Materials.

36.3 Deliveries, Delays and Breach of Contact

36.3.1 The Title of goods or material sold shall not be deemed to have been passed to the Purchaser / Bidder until and unless the full and final payment has been made by the purchaser, in accordance with the contract to the BNPMIPL and the authorized Officer has issued the Delivery Order in favour of the purchaser. The materials sold may be removed from the premises only on production of the cash receipt for the payment and a delivery order from the Officer authorized by the BNPMIPL.

36.3.2 Unless specified otherwise in SIT, delivery period for lifting of material shall be within 60 days from the date of finalization of contract agreement.

36.3.3 The work of delivery will be supervised by Stock Holder or his authorized representative, representative of accounts Department and Security Staff duly authorized by BNPMIPL for the propose of delivery. Delivery will be allowed during working hours.

36.3.4 No delivery of or materials sold shall be given on Sundays, Gazetted holidays and other shall holidays observed by BNPMIPL. The delivery of the goods or material shall be effected from the premises concerned only during its normal working hours. In

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order to complete the delivery within the working hours all loading must cease half an hour before the normal closing time of the concerned premises. The decision of the BNPMIPL with regard to the working hour shall be final and binding on the purchaser. Purchaser will not be allowed to lift the Scrap Material from more than one location at a time.

36.3.5 The purchased stores will be carried away by the purchaser at his risk and no claims against the BNPMIPL will be entertained for shortage in weight which may be discovered after the materials have left the premises wherefrom delivery is taken. If required the purchaser shall provide his own bags, cases or other receptacles for the removal of the scrap.

36.3.6 The BNPMIPL shall not be responsible for any accident that may occur to purchaser's labours /servants for any reasons whatsoever. The purchaser will himself have to ensure the safety of his workers and shall be liable to pay claims, whatsoever if any. BNPMIPL will not carry any responsibility of such payments. The purchaser will be responsible to supply personal protection equipment to his labour/servant and staff and no additional charges are admissible for the same.

36.3.7 The materials sold, shall be removed by the purchaser within the period specified in relevant clause of Special Condition of Sale.

36.3.8 If due to any default on the part of the BNPMIPL, the purchaser is unable to remove the materials sold within the specified period, the BNPMIPL may extend the period therefore and in such an event purchaser will be entitled to take delivery of the goods or the materials sold within such extended Delivery period.

36.3.9 If contractor fails to lift sold scrap within the specified period, penalty shall be levied at the rate of 0.5% per day of the value of un-removed Scrap. Moreover the material shall remain at the purchaser's risk until removal thereof. Further BNPMIPL will be entitled to charge the ground rent as stated in relevant Para of SCC, for the area in which the materials sold are kept or stored — which would be recovered by the BNPMIPL from the Purchaser before removal of the material and In the event of default in payment thereof, the BNPMIPL at may its discretion shall be entitled to order the re-sale of such materials and forfeit the Security deposit or sale amount or both, paid by the purchaser.

36.3.10 If the purchaser makes slow progress with his contract and the BNPMIPL is of opinion that he may fail to fulfil the contract within the time specified in the conditions of sale, it will be lawful for the BNPMIPL to cancel the whole contract or such portion thereof as may not have been completed and the BNPMIPL shall be at liberty to dispose off the goods in any manner at the risk and expense of the purchaser.

36.3.11 The purchaser will have to comply with the provisions of the Contract Labour (Regulations and Abolition Act 1970 and Central Rules 1971 and obtain license from the Assistant Labour Commissioner or the competent authorities empowered to issue such license. Any failure on the part of the purchaser in this regard will be at his risk and consequences. He shall comply with Workman's Compensation Act 1923, Payment of Wages Act 1936, and Minimum Wages Act 1948 and all the other related statutory and legal provisions and obligations, The purchaser shall also indemnify the BNPMIPL against any claim / liabilities that may occur to the contractor's labours and servants due to any reasons whatsoever.

36.3.12 If the purchaser makes default in complying with any of the condition of the contract, the sale of lot or lots in respect of which such default is made may be cancelled and such lot or lots may be put up again for sale and in such an event if a lower price is offered and accepted for such lot or lots then the purchaser shall be liable to pay the difference

in price thereof together with all expenses occasioned by such resale in default to the BNPMIPL provided further that the purchaser in default shall not be entitled to claim any profit which may arise from such resale.

37. Integrity Pact

37.1 If the tender value is above 10 crore, the Contractor shall sign the Integrity Pact as per the prescribed format (Section XX).

SECTION V – SPECIAL CONDITIONS OF CONTRACT

SCC:

The following Special Conditions of Contract (SCC) will apply for this purchase. The corresponding clauses of General Conditions of Contract (GCC) relating to the SCC stipulations have also been incorporated below. These Special Conditions will modify/substitute/supplement the corresponding (GCC) clauses.

Whenever there is any conflict between the provision in the GCC and that in the SCC, the provision contained in the SCC shall prevail.

(Clauses of GCC listed below include a possibility for variation in their provisions through SCC. There could be other clauses in SCC as deemed fit)

Sl. No.	GCC Clause No.	Topic	SCC Provision
1	1 to 5	Definitions; Interpretation and Abbreviations, Application, Use of contract documents and information, Patent Rights, Country of Origin	No Change
2	6	Performance Security	10% of contract value has to be submitted as bank guarantee within 21 days of issue of LOI/WO of equal amount with validity up to 02 years (from the date of acceptance of system as per contractual obligation) and also including installation and commissioning period . Two months claim period thereafter. If BNPM opts to avail services for successive years, party has to extend the same PBG or submit a new PBG with one-year validity of successive 03 years within 21 days of contract extension or before expiry of existing PBG whichever is earliest
3	7 to 15	Technical Specifications and Standards, Packing and Marking, Inspection and Quality Control, Terms of Delivery, Transportation of Goods, Insurance, Spare parts, Incidental Services, Distribution of Dispatch Documents for Clearance/ Receipt of Goods	No Change.
4	16	Warranty	As mentioned in Section VII
5	17 & 18	Assignment, Sub Contracts	No Change
6	19	Modification of contract	Clause 19.3 of GCC: option clause is applicable for this tender

SECTION V – SPECIAL CONDITIONS OF CONTRACT

7	20 & 21	Prices, Taxes and Duties	GST as applicable shall be quoted. Also, refer point 13.
8	22	Terms and Mode of Payment	<p>(A) Supply:</p> <p>i. 90% within 30 days from the date of receipt & acceptance of material at BNPM Plant, Mysuru and on production of all relevant documents.</p> <p>ii. 10% shall be released after final acceptance (FAT) by BNPM</p> <p>(B) Installation and commissioning:</p> <p>i. 90% will be released based upon successful commissioning and acceptance by BNPM and on production of all relevant documents</p> <p>ii. 10% shall be released after final acceptance (FAT) by BNPM</p> <p>AMC Payment during AMC period will be made on monthly basis after the end of the month and satisfactory performance and on submission of PBG</p> <p>Payment shall be done in INR only</p>
9	23	Delay in the supplier's performance,	No Change
10	24	Liquidated damages	As mentioned below as Point10a
11	25-32	Custody and Return of BNPM's Materials/ Equipment/ Documents loaned to Contractor, Termination for default, Termination for insolvency, Force Majeure, Termination for convenience, Governing language, Notices, Code of Ethics	No change
12	33	Resolution of disputes	Arbitration proceedings will be held at Mysuru and venue of arbitration will be Mysuru.
13	34-35	Applicable Law, Secrecy	No Change
14	36-37	Integrity Pact, Disposal / Sale of Scrap by Tender	Not applicable to this tender

SECTION V – SPECIAL CONDITIONS OF CONTRACT

SPECIFIC TERMS AND CONDITIONS OF CONTRACT:

10a. Liquidated Damage:

In case of any breakdown, it should be attended immediately & necessary action for the rectification / replacement must be taken at the earliest but not later than 24 hours of the breakdown, failing which penalty shall be imposed after suitable deduction from Bank Guarantee/bill in case of AMC. LD is subject to a maximum deduction of the 10% of the delayed good's/service's contract price.

- I. **Camera Downtime Penalty:** The penalty for the downtime of Cameras will be imposed as per the following structure;

Duration of Downtime	Penalty	Downtime Level
Up to 48 Hrs	No Penalty	D1
48 to 72 Hrs	Rs. 500/- per camera per day	D2
Beyond 72 Hrs	Rs. 1000/- per camera per day	D3
Beyond 96 Hrs	Will be counted for performance evaluation of bidder	D4

- II. **System Penalty:** Non availability of video stream at any of the monitoring stations/ user locations shall be treated as System breakdown. The following penalty shall be levied;

Duration of Downtime	Penalty	Downtime Level
Up to 48 Hrs	No Penalty	D1
48 to 72 Hrs	Rs. 1000/- per user location per day	D2
Beyond 72 Hrs	Rs. 2000/- per user location per day	D3
Beyond 96 Hrs	Will be counted for performance evaluation of bidder	D4

- III. **Storage penalty:** Failure to replace the faulty storage disk owing to interruption of the backup of the CCTV system shall be treated as breakdown. The following penalty shall be levied;

Duration of Downtime	Penalty	Downtime Level
Up to 48 Hrs	No Penalty	D1
48 to 72 Hrs	Rs. 1000/- per drive per day	D2
Beyond 72 Hrs	Rs. 2000/- per drive per day	D3
Beyond 96 Hrs	Will be counted for performance evaluation of bidder	D4

SECTION V – SPECIAL CONDITIONS OF CONTRACT

- IV. **Penalty related to non-deployment of Manpower:** In case any personnel is on leave or absent from duty or due to incompetency of the deputed staff in the specified area of work, suitable substitute should be provided by the Contractor within 5 days, failing which deductions will be made from contractor's bill as given below;
- V. "In addition to Non-payment of per day wages paid to the staff, Rs 500/- per day till 10 days and there after Rs. 1000/- per day till posting of substitute staff, will be recovered as penalty from the bill of contractor."
- VI. In case contractor fails to resolve the problem and lies in the level D4 – 5 times in a year, BNPM reserves right to get the problem resolved through any other agencies at the risk and cost of the contractor. In such case, the pending claims and security deposit / BG of the contractor shall be forfeited and the order may be cancelled, not limiting to any other right under the law.
- VII. BNPM reserves the right to waive off the penalty at its discretion if it is convinced that the downtime is not under the control of the service provider.

16. Clause related to payment of CGST, SGST, UTGST & IGST:

The suppliers are required to adhere the following procedure in order to honour the payment against CGST, SGST, IGST & UTGST in the invoice:

- i. An invoice issued by the supplier of goods or services or both should be in accordance with the provisions of section 31 of the CGST Act and should contain all the prescribed information's in accordance with Chapter VI of CGST Rules 2017;
- ii. A debit note issued if any, by a supplier should be in accordance with the provisions of section 34 of the CGST Act;
- iii. The supplier should mandatorily upload the aforementioned documents in GSTR-1, details of outward supplies of goods or services within the prescribed time under GST Act;
- iv. The supplier should provide the relevant documents to confirm the tax charged on the invoice has been paid to the credit of government after adjusting with ITC if any.

Notwithstanding above, the supplier should provide indemnification as follows: "In the event of non-compliances with respect to GST Act and Rules by the supplier, the purchaser is allowed to adjust the GST amount from retention amount (either in BG or in Cash) held by the company. If no amount is available for recovery, the supplier will refund the GST liability within 10 days from the date of GST reversal in GSTRN"

The above requirements are mandatory to claim any GST liability, failing which, the GST liability will not be paid/reimbursed/accepted.

17. **Rejection Replacement:** In case of supplies, materials not meeting our specification will be rejected outright and the rejected material shall be taken back within 7 days at the cost and risk of the supplier and replacement should be made within 15 days from the date of intimation. No payment shall be made for rejected item. If the material is not taken back within the stipulate period, BNPM reserves the right to dispose off the material at the risk and expense of the vendor as per provision under Section IV: General conditions of contract.
18. **Risk Purchase Clause:** If the supplier fails to abide by the terms and conditions of this agreement, or fails to supply the material/service as per the delivery schedule or any time repudiates the contract, the purchaser will have the right to
 - a) Appropriate the Security Deposit (by invoking the Performance bank guarantee) deposited by the supplier as per clause 6.0 of GCC and procure the tender item/render service from other agencies at the risk and cost of the supplier.

SECTION V – SPECIAL CONDITIONS OF CONTRACT

b) The cost difference between the alternative arrangement and existing contract value wherein default has been made will be recovered from the supplier along with the other incidental charges.

In case of procurement through alternative sources, if procurement price is lower than the existing contract value wherein default has been made, in such case no benefit on this account will be passed on to the supplier.

19. **Vendor Performance:** Vendor shall be evaluated for their performance. The performance shall be based on timeliness of deliveries, quality of the material supplied, technical support, quality of after-sales service if any, replacement of the defective material if any, responsiveness etc.

Based on the above criteria, the vendor shall be rated in category “A”, “B” & “C”. The vendor with rating “C” shall be disqualified/debarred from participating in the tender for certain period.

20. **Fore-Closure Clause:** If at any time during the continuation of this contract, the use of material ordered in this contract is completely banned or due to drastic change in Government policy its use as, raw material is discontinued or is declared hazardous to public health or cause rising to civil commotion, epidemics, wide-spread strikes and 21 days’ notice of such eventualities is given by purchaser to the seller, the seller without any right to enforce the contract, will agree to the fore-close the performance of balance portion of this contract and in that event no claim for damages or loss will be lodged against the purchaser.

21. **Recovery & Rectification of work:** In case contractor fails to attend the same as per defect liability period clause above within a week from the date of intimation, it shall be got rectified by the owner through another agency & money spent thus shall be recovered from the contractor. If the work is not completed in all respect or delayed beyond reasonable time or contractor discontinues the work abruptly, then BNPM reserves right to get the remaining work / uncompleted work done through any other agencies at the risk and cost of the contractor. In such case, the pending claims and security deposit of the contractor shall be forfeited.

22. **Security and Confidentiality:** BNPMIPL is a security organization and the premise is declared as ‘Prohibited Area’ by the Govt. of Karnataka. Hence the service provider has to abide by the security rules of the Company.

Non-disclosure agreement between BNPM and Party has to be signed within 10 days after releasing of LOI/WO/PO

23. Manpower

Compliance to workmen related statutory requirements: The bidder should ensure that manpower employed by them for carrying out AMC at the site should be covered under ESI, PF & Workmen compensation as per the prevailing norms & rules. (Documentary evidence to be submitted by the successful bidder before commencement of work at the site). The bidder will comply at its own cost with all statutory provisions as laid down under various labour laws in India as applicable from time to time. In case of violation of such statutory provisions under the labour law by the successful bidder, there will not be any liability on BNPM and the contract will be liable for termination.

Safety equipment’s: The bidder should ensure that workmen employed for carrying out AMC for at the site is equipped with all the necessary safety gears and equipment’s required for carrying out the work safely. (List of safety equipment’s provided to the workmen to be submitted by the successful bidder before commencement of work at the site).

BNPMIPL is a security organization. Hence the contractor has to abide by the security rules of the Company. The contractor has to ensure the character and antecedent of the persons deployed. The contractor must be in a position to produce such documents whenever he is asked to do so. Details shall be furnished as per format when called for. The contractor has to issue printed photo identity card to its workers duly authenticated by the designated security officer of the Company. Contractor

SECTION V – SPECIAL CONDITIONS OF CONTRACT

should apply for Gate Pass for labors and material entry pass etc. as per approved format only, well in advance to avoid any delay in issue of Gate passes.

BNPMIPL reserves the right to get the antecedents of the employees of the contractor verified through police. The charges for verification shall be borne by the contractor.

While applying for pass, contractor must enclose copy of address proof (Voters ID card or ration card or driving license or passport etc.,) for all the workers for which gate pass has been requested. The details shall be submitted in a prescribed format.

- 1) **Cleanliness:** Contractor is required to ensure complete cleanliness at the site. Debris generated during the day's work should be disposed off immediately.
- 2) **Construction Power & Water:** Necessary source of electricity & water required for civil works will be provided at one point near the work site. Further extension to wherever required will be in the scope of the bidder.
- 3) **Tools and tackles:** Contractor has to arrange all the required materials, tools and tackles, labour, transportation etc., at his own cost. Contractor shall supply the miscellaneous materials like junction box, anchor fasteners, screws, bolts and nuts, cable glands and lugs etc and carry out associated minor works for successful work completion.

Note: variation clause is enabled (Page 24, clause 19.3)

(To be signed & stamped and submitted along with Techno-commercial Bid Part -I)

SECTION VI – LIST OF REQUIREMENTS

LIST OF REQUIREMENTS

I. **Form B2:**

Supply, Installation, Testing & Commissioning of IP CCTV system			
Sl.No.	Description	UOM	Qty
1	IP Cameras		
(a)	IP Dome Outdoor IR Cameras minimum 3MP, Fixed (Varifocal), IR, POE, along with all required accessories such as mounting, housing, fixtures, Power supply, Patch cards etc	Nos.	136
(b)	IP Bullet Indoor IR Cameras, minimum 3MP, fixed (IR), Varifocal, POE, along with all required accessories such as mounting, housing, fixtures, Power supply, Patch cards etc	Nos.	66
(c)	IP Bullet Outdoor IR Cameras, minimum 3MP, fixed (IR), Varifocal, POE, along with all required accessories such as mounting, housing, fixtures, Power supply, Patch cards etc	Nos.	37
(d)	IP PTZ Outdoor Cameras minimum 3MP with IR along with all required accessories such as mounting, housing, fixtures, Power supply, Patch cards etc	Nos.	11
2	VMS and VAS Software - Enterprise edition & scalable		
(a)	Licenses required for the Video Management Server and Video Recording Servers & Storage Servers, Work station clients with bundled lifetime licenses for 300 cameras	Lumpsum	1
(b)	Analytic Licenses for 60 No. Cameras with 10% spare licenses	Lumpsum	1
3	Facial Recognition System		
(a)	Facial Recognition IP 4K camera with all required accessories such as mounting, housing fixtures, power supply, patch cords, etc	Nos.	2
(b)	Server for Facial Recognition System with all accessories	Nos.	1
(c)	Client work stations for FRS with all accessories	Nos.	2
(d)	Software & Licenses required	Lumpsum	1
4	Servers & Workstations		
(a)	Servers required for Video Management, Recording & Storage for handling 300 Nos. cameras including redundancy with minimum 5 days backup	Lumpsum	1
(b)	Servers required for Video Analytics for 60 Nos. cameras	Lumpsum	1
(c)	Upgradation of existing workstation client PCs for viewing VMS client application with H.265 compression and Full HD resolution	Lumpsum	1
5	Storage		
(a)	Backup SAN storage with dual controller for maintaining camera recording backup of 250 cameras for 90 days & 50 cameras for 365 days backup with full HD at minimum 25fps. Minimum 1500TB usable, capacity expandable upto 2000TB or 50 % more than the usable storage offered, whichever is higher along with all necessary accessories for configuring to the system. (usable storage is after Raid 6 configuration)	Lumpsum	1
(b)	Network Rack 42 U Indoor type for mounting SAN storage, additional servers/ workstations with all accessories (Monitor , KVM etc all)	Nos	1
6	New network infrastructure including upgradation		
(a)	Network Rack 9 U Outdoor type to be mounted on GI pole, with all accessories.	Nos	9

SECTION VI – LIST OF REQUIREMENTS

(b)	Supply of New Layer 3 core switches with minimum 24X10/100/1000 Mbps Base-T ports, 12 X 1/10G SFP + ports, 2 X 40G QSFP ports along with SFP+ modules and other accessories, whichever are required.	Nos	2
(c)	Upgradation of existing distribution switch for handling 10G Fiber network by providing minimum 2X10G SFP+ ports for upgrading existing network from 1G to 10G (or) Supply of New Layer 2 Distribution Switches with 24X10/100/1000 with POE+ supported ports, should have min 2X10G SFP+ ports and 2X1G SFP, along with SFP+ modules and other accessories, whichever are required.	Nos	16
(d)	Edge Switch - Industrial Grade - with minimum 8 pots of 10/100/1000 Mbps Base-T POE+ supported ports. Should have minimum 4 X 1G SFP ports fully loaded with accessories including LIU, SFU modules, patch cords, pig tails etc.	Nos	10
7	Cabling and associated works		
(a)	Supply and installation of all necessary cables required for completing the new CCTV network infrastructure work along the periphery wall (around 41 Nos of cameras) such as ethernet CAT-6A cable for outdoor, CAT-6A for indoor, 12C single mode OFC cable, earthing cables etc. including double compression nickel plated brass cable glands, cable ties and termination accessories.	Lumpsum	1
(b)	Supply and installation of Cat-6A(indoor) cable for 23 cameras	mts	2000
8	Power Distribution System		
(a)	Supply and Installation of 3Cx 4 sq.mm power cable for powering up the network racks installed along the periphery wall	Lumpsum	1
(b)	Supply and Installation of Online Single Phase 5kVA and above UPS- 2Nos in parallel redundant operation along with all necessary accessories and battery backup of 30 minutes	Nos	1
(c)	Earthing for UPS and & GI poles	Nos	18
(d)	Power Distribution including surge protection for outdoor Racks along the periphery wall.	Nos	10
(e)	Power Distribution in the CCTV server room for the new network rack (42U) and servers	Lumpsum	1
9	Civil Works		
(a)	Supply and Installation of GI Pole upto 18 feet along with required accessories and junction box, including foundation work etc	Nos	18
(b)	Supply and Installation of HDPE pipe of 40mm dia. including excavation & backfilling soil where ever required	Lumpsum	1
10	Cable Trays and associated material		
(a)	All necessary cables trays including standard cable trunking with casing, standard cable fasteners, GI conduits with necessary supports required for routing the cables wherever required	Lumpsum	1
11	Antivirus Software with Server- client architecture for the servers, storage, workstation etc (Existing Server to be used)	Lumpsum	1
12	Configuring new switches in existing NMS application for monitoring, troubleshooting, managing, traffic of existing and new network along with training	Lumpsum	1

SECTION VI – LIST OF REQUIREMENTS

13	Documentation, testing report, Tagging and Labelling works along with Training	Lumpsum	1
14	Special Tools & Tackles	Lumpsum	1
15	Comprehensive AMC of the entire CCTV system including the existing infrastructure & CCTV system including Onsite resource after the completion of the warranty period of two years.	years	3

Note: Any other items which are not mentioned above and required for the project such as side arms, customized mounting brackets as per site condition, software, servers, civil works, cables and all accessories etc) will be in the scope of supplier

II. Form B5: Buyback offer for Existing CCTV & Servers

S.No.	Description	UOM	Qty
1	CCTV Dome IP Camera - 1/3" progressive scan CMOS sensor with 2.8-10mm lens. Make: Panasonic, Model No: SW-352	Nos	121
2	CCTV Indoor HD Dome camera - 720p, CMOS sensor with 2.8-10mm lens. Make: Panasonic, Model No: SW-355	Nos	27
3	CCTV Outdoor Box Dome camera - 1/3" progressive scan CMOS sensor with 7.5 - 50mm lens. Make: Panasonic, Model No: SP-305	Nos	1
4	CCTV IR day Box Dome camera - 1/3" progressive scan CMOS sensor with 7.5 - 50mm lens. Make: Panasonic, Model No: SW-509	Nos	28

Note: The bidder may carry out the site visit before quoting the price.

Note:

1. No. of servers and specification of the servers to be used (BOQ table01 (line item 4(a) and (b)) to be provided along with unit price of each item.

2. One Resident Engineer (Highly Skilled) & One Technician (Skilled) for managing the day to day maintenance activity during warranty period also shall be provided and will be included in the scope of bidder..

3. Category wise total (Form B1) should match the total of item-wise price mentioned in (form B2, B3 and B4) in section IX

Place of Delivery:

Engineering Stores,
Bank Note Paper Mill India Private Limited,
Paper Mill Compound,
Note Mudran Nagar,
Mysuru - 570 003. Karnataka.

(To be signed & stamped and submitted along with Techno-commercial Bid Part -I).

SECTION VII – TECHNICAL SPECIFICATIONS

TECHINICAL SEPCIFICATION

Introduction:

BNPM intends to upgrade the existing CCTV system with the SAN based IP CCTV system with 90 days backup along Video Analytics and Facial Detection System.

The proposal includes replacing of the existing cameras with H.265 compression and above compatible IP camera of 3 MP and above, SAN based storage for 300 cameras, providing Video Management System Software with inbuilt Video analytics and Facial Recognition System.

Scope:

The Scope of Work, includes all design & engineering, procurement & supply of cameras, servers and associated network accessories with necessary software's, testing at manufacturers works, inspection, packing and forwarding, receipt, unloading and storage at site, associated civil works, services, installation, testing and commissioning of CCTV system including servers, storage, passive/active network components along with video analytics and face recognition system.

3 years Comprehensive AMC after the completion of the warranty period.

Any item which may not have been specifically mentioned herein but are needed to complete the equipment/ system shall also be included in scope of supply, unless otherwise specifically excluded as indicated.

Specific Requirements:

The broad scope of work shall consist but not limited to the following:

1. Replacement of existing H.264 cameras – 186 Nos. (approx.) cameras with H.265 and above compression compatible IP cameras of 3 MP and above at various locations of the plant.
2. Supply and Installation of the 66 Nos of new cameras with H.265 and above compression compatible IP camera of 3 MP and above along the Peripheral boundary wall, ETP and Utility areas of the plant.
3. Network Infrastructure such as OFC cable, power cable, poles, network racks, Edge switches, active/passive components etc required for the new 57 Nos of cameras along the periphery, parking area and other areas of plant.
4. Supply and Installation of servers required. Assessment needs to be carried out by the bidder.
5. Upgradation of the existing network from 1G to 10G by providing additional High-speed module 10G fiber in existing Allied Telesis Core Switch – 2 Nos (Switch Blade X908), replacement of 1G SFP module with 10G SFP modules in Allied Telesis Distribution Switch – 16 Nos (X510-28GPX) or by providing New Core Switches and distribution switches.
6. Supply and Installation of Video Management Software with inbuilt Video content Analytics.
7. Supply and Installation of Facial Recognition System with camera, server and workstation etc.
8. Supply and Installation of Storage Attached Network – 1500 TB and above expandable by minimum 50% of the offered usable storage, suitable for recording of 250 Nos cameras of 3MP and above for 90 days and 50 Nos cameras of 3MP and above for 365 days recording at a compression of H.265.

SECTION VII – TECHNICAL SPECIFICATIONS

9. Earthing and surge protection devices provision for the poles installed for mounting of CCTV cameras and accessories.
10. Design drawing / Datasheet approval.
11. Commissioning of the entire system as per the requirement.
12. Configuration of new switches supplied in the NMS server Application for monitoring, troubleshooting, managing, traffic of existing and new network along with training.
13. Interfacing of existing Access control System with the new CCTV system and providing alert in the VMS. (Approx. 20 Nos. access controllers)
14. Training of the company's officials on the entire CCTV system.
15. Supply of mandatory spares, Special Tools and tackles.
16. Comprehensive AMC for the equipment supplied under the current tender along with the existing CCTV system (cameras, servers, active and passive network) for 3 years after completion of warranty
17. Any other Item required for successful completion of the Project not Included above.
18. **One Resident Engineer (Highly Skilled) & One Technician (Skilled) for managing the day to day maintenance activity during warranty period.**

Existing Infrastructure of the CCTV System:

1. The existing CCTV infrastructure consists of 217 Nos. of Cameras, 5 Nos of Servers for Video Management and Recording and 4 Nos. of Servers for Analytics, 1 No. server for NMS. The details of the servers is attached as annexure.

Make of Camera	Model	Type of Camera	Qty	Remarks
Panasonic	SW352	Dome	121	Proposed for Replacement
	SW355	Dome	33	
	SP509	Bullet	29	
	SP305	Bullet	1	
	SPN531	Bullet	2	
Panasonic	SW559	Dome	2	Will be Retained
	SFV531	Dome	1	
	S1531LN	Bullet	3	
Honeywell	H4D3PRV2	Dome	25	

Existing Server / Workstation	Make & Model	Qty
Video Management Server	Hp Make, DL360p Gen 8	1
Video Recording cum Storage Server	Hp Make, DL380p Gen 8	3
Redundant Video Recording cum Storage Server	Hp Make, DL380p Gen 8	1
Analytics Workstation	Hp Make, Z620 workstation	3
Redundant Analytics Workstation	Hp Make, Z620 workstation	1
Network Management Server	Hp Make, DL380p Gen 8	1

2. The existing network architecture is Ring Network with fiber connectivity on 1G.

SECTION VII – TECHNICAL SPECIFICATIONS

Switch Specification	Make	Model	Qty
Core Switch	Allied Telesis	AT x908	2
Distribution Switch		AT x510 - 28 GPX	16
Access Switch		AT IFS802-SP POE	13

3. 11 Nos of CCTV client PCs were provided in the plant for Surveillance live & recording. The details of the work station and clients are:

Switch Specification	MODEL	Qty
32" Monitor	Samsung	10
60 "Monitor	LG / Panasonic	03
Workstation	HP proDesk 400 G2 MT	11

General Requirements of the system:

1. The bidder may carry out the site visit to assess the requirement of the project.
2. The system shall have a provision for PTZ cameras, fixed cameras and special purpose PTZ cameras. The camera of 3 MP and above needs to be positioned both indoor and outdoor locations with live monitoring at CCTV Control room and designated locations over the LAN using the latest technology (Tri-stream) enabling high quality video recording over network in SAN and lower resolution transmission to networked PCs without causing bandwidth congestion.
3. System shall use video signals from various types of indoor/outdoor colour HD IR cameras (IP based) installed at different locations, process them for viewing on Workstations/monitors /Video Wall at CCTV Control room local control rooms and simultaneously record all the cameras after compression using H.265 and above standard and streamed over the IP network, at full HD with minimum 25FPS. The picture quality of recorded replay should be as clear as live video without any loss of frame.
4. System shall provide sufficient storage for minimum 300 cameras, out of which 250 Nos of cameras require continuous recording for a period of 90 days and 50 Nos of cameras require continuous recording for a period of 365 days @ 25 FPS at full HD or better-quality using H.265 and above compression techniques. (The storage capacity should be minimum 1500 TB usable after Raid 6 configuration and scalable by minimum 50% of the usable storage offered).
5. Video Management Software should provide the facility of viewing, recording, replay, backup and remote access simultaneously.
6. Database server shall keep track of all configurations & events. This will help in proper system administration & management of redundancies etc.
7. 11 Nos of workstations were connected in LAN network. Client VMS software to be provided with restricted control to live and recording depending upon the privilege assigned to the user. The retrieval of recorded video from the Server/SAN should happen seamlessly.

SECTION VII – TECHNICAL SPECIFICATIONS

8. Licenses for 300 cameras and 11 No. of workstation for client VMS to be considered. Further analytic licenses for 60 no. cameras.
9. The system offer should provide 99.99% uptime and no data is lost. Suitable provision for disaster recovery mechanism should be available.
10. The equipment offered should have the capacity of functioning 24X7 – 365 days in Indian Climatic Conditions.
11. The camera shall be designed for commercial/industrial 24/7*365 use support for H.265 and above compression technology & IPv6 and POE/ POE+ as per IEEE 802.3af standard.
12. The cameras shall have capability of edge analytics, equipped with integrated event functionality which can be triggered by external input, video motion detection, camera tampering etc.
13. The live video, recording and replay should be smooth & continuous without any jerks/ interruptions.
14. The proposed solution shall provide seamless integration of existing / third party security infrastructure like computer, server, and network or storage hardware, wherever possible.
15. The network Video Management System shall be based on the latest programming technology. The software should be compatible with windows operating system (windows server 2012 and above) and should be user friendly.
16. The system shall allow operation with PC, keyboard, Mouse, Joystick etc.
17. The Network VMS shall be able to support all cameras at 25 fps and above, support 4K resolution and support all types of Dome, Bullet, PTZ cameras etc with H.264, H.265 and above compression techniques.
18. VMS shall preferably support Native Failover for both Management and Recording servers to avoid the single point of failure. Recording and client PC should not have the complete dependency on the directory for running operation. In the event of failure of directory as well as failover directory at least limited functions of recording and display should be continued.
19. The VMS system proposed should be capable of failover recording feature, so that in the event of VMS failure the recording and live viewing is continued.
20. The recording resolution, motion detection and frame rate for each camera shall be user programmable at camera through VMS.
21. All the cameras and VMS shall conform to Open Network Video Interface (ONVIF) standards.
22. The proposed system should have redundancy feature at server level and core switch level to maintain the maximum uptime and high availability.
23. The NVMS shall be able to support all types of IP cameras - HD/Megapixel (upto 8MP) resolution with a frame rate upto 60 frames per second, while maintaining less than 70% load on the Server.
24. The proposed solution should be able to generate various standard/ customized reports for event analysis / reporting purposes.
25. The proposed system should have high level of network security. Hacking of the video footages through VMS should not be happened at any cost. Suitable antivirus – Server Client Architecture for servers, storage, workstations etc needs to be installed with end point protection. Periodic security audit of the video management system to protect the system against hacking and all possible best practices must be adopted.

SECTION VII – TECHNICAL SPECIFICATIONS

26. The proposed antivirus software should be compatible with the VMS system offered. The antivirus system should be installed on the existing server provided by BNPM. Validity of the Server antivirus (original) should be licensed with free updation during the warranty period.
27. Forensic Study, Digitally Signed Export of Camera Videos should be integral feature of the VMS system.
28. VMS should facilitate temporary archival policy for the select cameras.

Note: The existing OFC network and LAN network is used for the CCTV system along with Access Control System, Public Addressal System and Fire Detection System. Some of the ports of distribution and access switches are used for the above said systems. Even after the CCTV network upgradation, there should not be any interruption in the data connectivity to the above said systems.

Detailed Scope of Work

- A) **Scope of work for CCTV system with IP cameras** which shall include but shall not restrict to the following:
- (i) Design, engineering, supply, installation, commissioning of IP cameras for surveillance and operational requirement within the plant areas with all required mounting and associated accessories for replacement of 186 Nos. existing cameras along with installation of new 66 Nos. cameras along the periphery wall and parking area.
 - (ii) 31 Nos of existing cameras of Honeywell, Panasonic make will be retained.
 - (iii) All the cameras offered shall have quality system compliance such as ISO/BIS and shall be either UL, EN or FCC certified.
 - (iv) There shall be following different type of cameras which shall be provided in the plant for monitoring personnel & equipment.
 - a) IP Dome Outdoor IR camera
 - b) IP Bullet Indoor IR camera
 - c) IP Bullet Outdoor IR camera
 - d) IP PTZ Outdoor IR camera
 - (v) Housing of cameras meant for indoor use shall be of IP 55 rating whereas outdoor camera housing shall be of IP 66 or better rating. These must be integrated by the camera manufacturer. The Camera Housing & Fixtures should be of Camera OEM.
 - (vi) All suitable accessories for mounting of cameras on Pole, Wall, Pendant, Corner, Parapet wherever applicable needs to be supplied by the bidder.
- B) **Scope of work related to Network Infrastructure** for Peripheral CCTV System:
- (i) OFC backed CCTV network is already available in the plant premises with 24C Single Mode OFC cable between the distribution switches and 12C Single Mode OFC cable connectivity to edge switches.
 - (ii) The new network Infrasture for 57 cameras is required for peripheral CCTV system along the boundary wall and parking area. The new network to be interfaced with the existing network.

SECTION VII – TECHNICAL SPECIFICATIONS

- (iii) 12 Core OFC shall be provided for creating the OFC network along the boundary wall/ periphery.
 - (iv) All the switches should be connected in a ring formation to maintain network redundancy.
 - (v) Upgradation of the existing network to have sufficient bandwidth (minimum 10G) for simultaneous viewing as well as recording of 300 cameras.
 - (vi) The existing core switches, distribution switches shall be upgraded for handling 10G bandwidth. If can't be upgraded, new core/ distribution switches to be provided for upgrading the existing 1G network to 10G network.
 - (vii) The OFC network should be tested and commissioned to the required IS standard with OTDR and test reports to be submitted.
 - (viii) OFC cables should be laid through HDPE pipe.
 - (ix) Network Infrastructure for peripheral security include poles, network racks, active and passive components, cables – Power, OFC, CAT6A cable.
 - (x) The tentative distance all along the peripheral wall (ETP, WTP, Utility, etc.) is approx. 1100 mtr. 41 nos. of cameras will be connected in this stretch to nearby switch (respectively among 10 new switches). Cabling includes ethernet CAT-6A cable for outdoor, CAT-6A for indoor, 12C single mode OFC cable, earthing cables etc. including double compression nickel plated brass cable glands, cable ties and termination accessories.
 - (xi) For remaining 23 new cameras, only laying of Cat-6A cable is required.
 - (xii) Networking between Servers, SAN, Core & Distribution Switch should be 10Gbps Fiber connectivity. Edge connectivity to the cameras and client can be 1Gbps.
- C) **Scope of work for Servers and Storage** shall include but shall not restrict to the following:
- (i) Design, supply, installation, testing and commissioning of servers required for managing live and recording of 300 cameras considering the hot redundancy of servers.
 - (ii) The configuration must be in such a way that at any point of time (with complete system up and running), server load/performance should not cross 70%.**
 - (iii) The camera servers should be the front-end recording of the cameras for 5 days minimum and then moved to SAN.
 - (iv) VMS / Database servers must be configured in a hot backup configuration.
 - (v) Supply and Installation of Video Management Software with inbuilt Video content Analytics and Facial Recognition System.
 - (vi) Supply and Installation of Storage Attached Network – 1500 TB and above (scalable by minimum 50% of the usable storage offered), suitable for recording of 250 Nos cameras of 3MP and above for 90 days and 50 Nos cameras of 3MP and above for 365 days recording at a compression of H.265 and above with Raid 6 configuration considering 25 FPS and 100% activity level for recording minimum 1920X1080 pixel Full HD resolution. Minimum 1500TB usable storage after Raid 6 configuration.
 - (vii) The bidder shall provide the storage capacity as per the above requirement for the various types of cameras and their recording duration. The bidder shall also furnish the calculations to establish that the offered storage capacity is adequate to meet the

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above requirement. If the offered storage capacity is found to be insufficient at any point of time, the bidder shall provide additional storage without any additional cost.

(viii) The bidder should provide details for the offered configuration: Drive type, Drive speed, Drive size, RAID group used to configure usable capacity (Data + parity + spares) along with total disks supported by the storage and balance disk space.

D) **Scope of work for Video Analytics, Facial Recognition** shall include but shall not restrict to the following technical details for:

(i) Server Based Video Analytics:

- 1) Supply, installation, testing and commissioning of required server and video Analytics software with license for 60 cameras with 10% spare licenses.
- 2) Implementing Video Analytics for Cameras along the boundary wall and watch towers covering the inner perimeter of plant, and at other notified places according to the requirement.
- 3) The video Analytic features should be capable of alarming the events at Control Room to alert the Security Personnel.
- 4) Video Analytics should be deployed on any of the cameras dynamically and should not be tagged to the MAC address of the camera. If any one of the cameras is replaced for maintenance, the replaced camera should automatically use the VA configuration without modifying any license.
- 5) Integration of video analytics with the VMS and SAN storage.

(ii) Facial Recognition System

- 1) Facial Recognition System will be introduced at 2 location i.e at Main gate entrance & Admin Building Entrance.
- 2) There should be provision for extending to other notified locations wherever required in future, incase required connectivity is available.
- 3) The face recognition software algorithm should have participated in the latest NIST (National Institute of Standards and Technology) Face Recognition Vendor Test. The vendor shall submit the latest NIST evaluation report for the algorithm.
- 4) The Face recognition software offered should be running on minimum 04 CCTV cameras or more in any surveillance project from OEM or bidder.
- 5) The system shall allow generation of reports based on detection and identification alarms with relevant filters like date and time / category etc. The system shall permit reports to be exported in PDF / XLS formats for storage and review.
- 6) The core FRS algorithm components should be upgraded without any additional cost to employ best in class Technology available at any given point of time during the contract.
- 7) The system should be flexible to be able to perform Face Recognition on any existing surveillance cameras without any change-over of licenses (based on the number of camera limit specified by the installed license).
- 8) The system should have client server architecture with support for multiple clients who can be simultaneously logged either locally or remotely. The server components should be implemented as Services so as to be able to run in an uninterrupted manner even in absence of the GUI

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- 9) The system should have 2 workstations- 1 in security office for enrolling of the employees and visitors and 1 in CCTV control room for monitoring and reporting.
- 10) One-time enrollment of employees (permanent, contract, CISF) needs to be carried out, or auto capture of the photo and enrolling thereafter should be possible. Further visitors should be enrolled based on their visitor pass number (generated from the existing visitor management software), enrollment should be possible from the client workstation in security office.

E) Scope of work for Comprehensive AMC

- (i) The contractor has to maintain the entire system under Comprehensive AMC for 3 years after successful completion of warranty period. The scope of AMC will be
 - a) To check and attend the daily maintenance/ periodical maintenance
 - b) Attending to breakdown calls, as and when reported.
 - c) Comprehensive AMC should be including all the items supplied against this tender such as cameras, servers, network infrastructure, storage devices, cables of all types, hardware and software including the existing infrastructure, active and passive components, Servers retained, cameras and associating equipment.
 - d) It will be the responsibility of successful bidder to replace the defective components during the warranty & AMC period to make the system serviceable.
 - e) The tenderer shall provide at no additional cost all software updates, releases, version upgraders, renewal of licenses etc during the entire period of warranty and AMC.
 - f) Note: The existing Infrastructure such as switches, servers, cables, racks workstations, passive and active components associated with the CCTV package should be maintained during the warranty period and AMC period. The entire CCTV system with new and existing infrastructure should be maintained as a single system during the warranty & AMC.**
 - g) The successful bidder is required to depute One Resident Engineer (Highly Skilled) and One Technician (Skilled) at BNPM, Mysuru in General shift to take care of the day-to-day maintenance requirement of the system during the warranty period and during Annual Maintenance Contract. The minimum professional qualification for the Resident Engineer shall be Graduate in Electronics/IT/CS/ B.sc (Electronics/IT) with 1-year post qualification experience (or) Diploma in Electronics / IT with 2-year post qualification experience in the IP based CCTV field, networking, servers and storage. Technician should be B.sc (Electronics/IT) or Diploma/ITI with 1-year post qualification experience in IP based CCTV field.
 - h) The Contractor should maintain the system 99.999% uptime. If the contractor fails to liquidate the complaints, failure of the system within a required time frame, a compensation penalty as mentioned in Service Level Agreement will be levied over and above the LD for delay which is capped at a maximum of 10% of total bill value for the particular period. Further such action shall be adversely remarked while evaluating performance for further renewal of Contract, forfeiting of BG as deemed fit at the discretion of BNPM.

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- i) The bidder should have AMC back to back with OEM during warranty and AMC period and proof for the same shall be submitted post commissioning of the system.
- j) The Service engineers deputed shall have to attend the complaint on holidays and beyond normal working hours also, if nature of the complaint is urgent.
- k) Contractor should mandatorily have EPF registration irrespective of no. of workers to be deployed / engaged by him. The contractor shall ensure PF coverage to the deployed service Engineer in BNPMIPL. ESI as applicable also to be bound with entity.
- l) The wages for the on-site support resource - High skilled and skilled manpower during the AMC period shall be in compliance with Minimum wages & VDA rate notifications issued by Office of the Chief Labour Commissioner, Ministry of Labour & Employment, Govt. of India.
- m) **Spares during the warranty and AMC period:**

The bidder shall ensure service and spare support for minimum 7 years for the new CCTV infrastructure offered by them. Further bidder should maintain required spares at site during warranty and AMC period. Non availability of spares/standby units/components will not be accepted as a reason for waiving of penalty towards delay in rendering prompt service. For ensuring prompt service, at least minimum required spares/standby units shall be maintained at site. After use of any such spare unit/cards etc, the same shall be replenished at the earliest.

The following minimum spares to be kept at site shall include but not restricted to the following:

- (i) All types of cameras – 2 each (Dome & Bullet)
- (ii) PTZ Camera – 1 No.
- (iii) Distribution Switch – 1 No.
- (iv) Edge Switch – 2 Nos
- (v) All type of storage and server disks – 2 Nos each
- (vi) 1G & 10 G SFP modules – 2 Nos each
- (vii) All types of tools and tackles
- (viii) Any other items required.

Temporary inventory will be maintained at BNPM on returnable basis to vendor.

F) Detailed requirements of Video Management System:

1. The video management system shall be client/ server based for IP video that provides seamless management of digital video across an IP network.
2. The system shall have following major features:
 - (a) Centralised, Enterprise Solution with scalable to support unlimited number of cameras
 - (b) Open architecture
 - (c) Integration with 3rd party software's for Access control System, Fire Detection System, intrusion detection system etc.
 - (d) Licenses required for cameras, Servers, storage and client PCs.
 - (e) Scheduled, event based & alarm-based recording configuration

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- (f) Site Maps
- (g) ONVIF compliant
- (h) PTZ control
- (i) Allow full virtual matrix switching & control
- (j) Alarm Management
- (k) Live, Recording & Playback
- (l) Accelerate investigation with replay controls, play/pause/shuttle
- (m) Snapshot video image as bitmap/ jpeg file.
- (n) Real time clock

Video Management Software

1. **The Software shall be an enterprise solution, without license restriction on number of cameras that can be connected.**
2. VMS should support 2016 Windows or above updated Server operating system on Server machine. It should support latest Windows OS on Client machine, independent of what operating system is there in the servers. VMS should support SQL/ MySQL/ Oracle DBMS.
3. The VMS shall support distributed video architecture which seamlessly integrates the video operations of numerous systems onto one virtual platform, allowing security operators to view and control all cameras, whether across a single facility or across the multiple locations.
4. The VMS shall support seamless integration with other security and safety equipment / systems like Fire Alarm System, Access Control system, Perimeter Protection System etc so as to monitor on the GUI, alert and automatically focus the nearby CCTV camera towards the area of alarm/incident. Necessary Software Development Kit (SDK) to allow integration to and integration from 3rd party software.
5. The VMS shall Manage and support Enterprise Database servers, Recording Servers, Analytics Server, Storage and Operator workstations. Systems shall be scalable by adding additional Servers in future.
6. The VMS shall support Analytics Servers dedicated to analyse video streams. The Analytics Servers shall process the live video using preconfigured rules and Intelligent Video Analytics algorithms to determine events of interest.
7. VMS should be compatible with video controller/video wall.
8. VMS shall preferably support Native Failover for both Management and Recording server.
9. Redundancy: The database server shall provide a central fault tolerant repository for all configurations and run time information for the complete system. The VMS must be capable of running a pair of similarly configured Database Servers in a hot backup configuration where at any point in time, one is the acting Primary and the other is acting as the Hot Backup. The backup Database Server shall be continuously synchronized with the Master Database Server to ensure that it is always up-to- date and ready for fail-over, when required.
10. Software updates to the VMS Client application and configuration software shall be automatically deployed from the management server.
11. The VMS shall ensure continues operation during management server down times and recording is not affected. When the failed system is back on-line, no special user or administrator action shall be required for the system to be back to a normal working mode.
12. The VMS offered shall comply with ONVIF Profile S and accept all the cameras of ONVIF profile and allow discovery of the same. All the setting of VMS shall be applicable on ONVIF cameras including PTZ.

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13. The software shall have the following functions as minimum:

- a) The software shall record video over TCP/IP networks, supporting H.265+, H.265, H.264 and above updated data streams for all the cameras simultaneously, with expansion capability of unlimited channels in future.
- b) The system shall support full-duplex operation with continuous alarm recording and having a full-featured record search capability based on camera number, event, time or date. The product shall also have integrated web server functionality.
- c) The software shall be capable of detecting & raising alarm messages for loss of any camera such as camera is offline/out of the network, the camera lens is covered (such as by cloth) or video is not available from any camera for a specified time.
- d) The software shall be directly installed in the server.
- e) Encode using the H.265+, H.265, H.264/ MPEG4 standard above updated compression technique. Compression technique shall be user selectable.
- f) Recording at the rate of 25 fps at the same resolution as the resolution of the cameras with video motion detection feature.
- g) Be capable of real-time motion detection.
- h) Multicast live video to server, monitors & client PCs from Camera.
- i) Receive camera control commands from Client PCs and send the commands to cameras.
- j) Be capable of reducing the frame rate when no motion is detected. When motion shall detect, the frame should be restored without any loss of relevant video.
- k) The software shall be have feature for viewing/controlling PTZ cameras through software by means of keyboard & mouse.
- l) The software shall provide a user-dependent bookmark tree. The bookmark tree shall allow saving a time period or a single point in time for later investigation and export. Bookmarks shall be available both for live mode and for playback mode.
- m) The system shall auto-discover IP devices with their default IP addresses.

14. The software shall also have the following features:

(a) Monitoring output from single camera

From the display, the user shall be able to carry out the following functions:

- i. View live output from the selected camera
- ii. Zoom and focus PTZ cameras using keyboard & mouse
- iii. Manually record live video. Recording shall continue for the configured period of time. Stop pushbutton shall be available on the screen for stopping/ pausing the recording.
- iv. The display shall indicate whether video motion detection is currently enabled for the selected camera.

(b) Single/Quad/9 View

- i. The software shall support up to 16 simultaneous views on single monitor. The views shall be upto 16 related cameras viewed simultaneously on a single display.
- ii. The screen shall be divided into 16 views. For each view the video pane shall have a camera view or shall be blank. Each view shall be configured to cycle between any of the cameras accessible to the user on a configurable time basis.
- iii. There shall be no limit to the number of cameras that can be assigned to a single view. There shall also be no limit to the number of available views across multiple displays.

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- iv. Quad view must be capable of supporting full frame rate on all windows.
- v. Dynamic Stream Selection - Automatically switches the stream, from a low resolution to a megapixel stream, based on the size of the video tile (Optional)

(c) Sequence View

The software shall support sequence views. A sequence view shall consist of a single camera view, which can be cycled on a time basis. Pan-tilt-zoom cameras, which support preset positions, can have these presets cycled on a time basis. In this way an operator can view a variety of presets on a series of PTZ cameras.

Fixed cameras shall also be included in the sequence and cycled accordingly.

There shall be no limit to the number of cameras that can be assigned to a single sequence view. There shall also be no limit to the number of available sequence views.

Viewing of sites shall be possible from single & numerous Client PCs simultaneously at any time.

(d) Recording Administration

The following methods of recording live video shall be supported:

i. User Activated Recording

The user shall be able to initiate recordings from a transmitter that is currently being viewed. The destination recording will be defined by the administrator only.

ii. Event Activated Recording

1. The software shall autonomously initiate a recording based on a transmitter binary I/O alarm event. Programming software to record an event shall be an administrative function only.
2. The retention period for recordings is global for the software. In the case of multiple alarms/events relating to the same camera, a video clip shall be created to include each alarm/event.
3. For cameras that support Pan/Tilt/Zoom presets, a specified preset location shall be offered to the user when the alarm/event occurs prior to the event activated recording commencing. For example, when an alarm is detected on a security door, the alarm shall give the user the option to move the fixed lens Box type camera to a preset position, which is pointing at the door subsequent to the software commencing recording.
4. In case of any unauthorised access or door break detected by the access control system, the image from the particular camera focused in that area shall automatically pop-up on the monitors.
5. In case of any trespass over the periphery wall detected using the analytics, the PTZ should automatically zoom and track the movement and the same to be pop-up on the monitors in Control Room.

iii. Scheduled Recording

The system shall support ability to schedule recordings for each individual camera for times in the future. For each scheduled recording the user shall be able to configure the:

- Start time

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- Stop time
- Bit rate for the recording
- Retention period before the recording will be deleted
- Recurrence (if this is to be a recurring schedule)
- Description (at least 255 characters)

There shall be no limit on the number of schedules that can be entered for the system. There shall be no limit to the number of schedules per camera.

The schedules may be programmed to provide different record frames rates for day, night & weekend periods as well as special days. Advanced task schedules may also be programmed that could specify allowed logon times for user groups, when events may trigger alarms and when data backups should occur.

iv. Video motion detection

The system must be able to activate recordings automatically when motion is detected on any camera that has video motion detection enabled. The receipt of video motion alarm events shall be either:

- On a continuous basis
- Scheduled for particular times, dates, days, months, etc.

The user shall be able to configure detection type i.e. continuous or scheduled for each camera.

(e) Recorded Video

The software shall allow camera output to be recorded for the following conditions:

- i. Activated by administrators, operators, alarms or events
- ii. Manually activated by a user viewing a live camera
- iii. Scheduled recording
- iv. Video motion detection

Recorded video shall be stored on the server/SAN. The Client PCs shall be able to query the video server to locate relevant recorded video and to then replay that video at the respective Client PC.

The following information as a minimum shall be displayed with the recordings:

- i. Type of recordings (operator activated, alarm/event activated, scheduled or live video viewing)
- ii. The operator or user that activated the recording (for alarm/ event activated recordings)
- iii. The sub-priority of recordings (for alarm/event activated recordings)
- iv. The frame rate that the recording was recorded at
- v. The resolution of the recording
- vi. The compression used
- vii. The recording start time and date (including pre-record)
- viii. The recording end time and date
- ix. The date and time that the recording will be deleted by default (which can be changed as required)

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Dual Recording: VMS may be capable with the ability to record streams from the cameras in 2 different recording servers at the same time for maintaining HA and to prevent data loss.

Review of Recordings

Review of recordings shall be a function available to both administrators and operators (where the administrator has given access to the operator).

(a) Playback

The operator must be able to perform the following playback functions:

- Fast Forward & rewind. Skip forward (i.e. between key frames) is not acceptable.
- Single frame forward/back. Key frame forward/back is not acceptable.
- Slow Speed Playback/review. The system should offer playback at slow speeds, including ½ speed and ¼ speed.
- Play, pause & stop buttons shall be available.
- Playback shall be possible on 1 or more cameras simultaneously for all cameras currently displayed.

(b) Snapshot

The software shall provide every operator the ability to record the current frame of video. The snapshot of video shall be stored as bitmap/ jpeg file. The file name shall be automatically generated by the software & include the camera name, date & time of recording.

(c) Alarm & Event Management

The VMS shall have integrated Alarm Module for video system and analytics alarms. The Alarm module shall have Alarm and Event summary with Video Clip attached. The Alarm module shall provide Audio Alert in different audio tones for Low, High and Urgent priority alarms The VMS shall have the feature to pop- up video from the camera on a dedicated alarm monitor in case of an alarm is generated in that camera.

The cameras will be queued in sequence in case of multiple alarms till they are acknowledged by the operator. The alarm support shall allow for continuous monitoring of the operational status and event triggered alarms from servers, cameras and other devices.

VMS should be capable to raise alarm for unavailability of Server, Storage, Camera video loss etc.

It shall be possible to search for alarms & events by following conditions: Date/Time, Users, Device type, Alarm & event type.

It shall be possible to export alarm/ event to xml, pdf, csv and excel file format.

(d) Backup Functions

The Video Management System shall be capable of backup functions for management server.

(e) Search for Recordings

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The system shall allow the operator to search for video on the basis of camera, time, motion and event.

- Search by Camera name/ location and Time

- The software shall provide a simple search for all video recorded on the PC. The user selects the camera of interest and the point on the time indicator.

- The user shall select from the list of available cameras. It shall also include any cameras that have been deleted from the video server but still have video stored on the video server or on archived media. If a camera has been deleted and all video associated with the camera has been deleted, the camera name will not appear in this list.

- The user should not need to select the appropriate recordings device in order to find video.

- Motion Search

The search shall be based on motion within a time region section. This motion search must include the option to mask certain areas of the image to ignore motion.

- Search by Recording Type

The search shall be based on type of recording i.e scheduled, event based, user initiated, live video viewing or all types of recordings.

- Search by Alarm or Event

The software shall allow the user to search for video from a selected camera, over a specified period of time, based on events generated by the transmitter. The events types should be Motion Detection event, Alarm event, Video Loss event etc.

(f) Edge Recording

The VMS shall support edge recording of video on SD card inside the camera in case of network connectivity between camera and VMS is down. The VMS shall support restoration of edge recorded video in the VMS storage once the network connectivity between camera and VMS is up.

(g) Exporting Recordings

It shall be possible to export video from the software to any other network storage devices including a network drive, CD and DVD

It shall be able to export any section of video from any recording.

(h) Merge & Export Recordings / Forensic Search:

VMS may have the provision to merge recorded video sequences from different or overlapping time intervals from different cameras to one and same the export. It will provide a consolidated video evidence for a complete overview of incidents

(i) Digitally Signed Export of Camera Videos

1. The VMS shall support export of video for evidentiary purposes. It shall be possible to select the portion of video required and export only that portion in Windows Media Format and Native Format.

2. The VMS must support all exported recordings and exported audit logs to be digitally signed to prove authentication (origin of the recording and audit log) and integrity (exported recording and audit log have not been altered or tampered with).

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3. The VMS system shall provide a default digital certificate for signing the exported recordings and audit logs. Customization shall also be provided to allow for the user to supply his/her own digital certificate.

15. Archiving of Camera Videos

The VMS should support multiple streaming and parallel recording of cameras. The bidder has to provide sufficient storage inside the recording servers to record all cameras for 7 days at 1080p, 25 fps, H.265, H.264 compression. After 7 days the video recordings shall be stored in the SAN storage also for 90 days for 250 cameras and 365 days back up of 50 cameras as specified in the rules configured. In case of loss of video to SAN storage due to any failure, there should be provision to copy/move data automatically or manually from camera server to SAN box for the failure duration. User can manually extend the retention period for important video recording by overriding normal video retention.

The VMS shall provide the ability to automatically archive all recordings. It shall be possible to automatically archive any type of recording at a preconfigured period after the recording has completed.

It shall be possible to modify the automatic archive setting for each recording individually, as required. The VMS shall support continuous background recording, scheduled recording, event activated recording and user activated recording for all connected cameras.

16. Digital Zoom

The VMS shall support the ability to digitally zoom into an area of the image as well as provide the ability to enhance the image viewed by adjusting the levels of brightness, contrast, noise levels and sharpness through camera Web page from live video.

VMS client should support Hardware Acceleration feature by using the GPU for video decoding to bring down the CPU utilisation and support more number of cameras on any given workstation.

17. Graphical Display of Devices

(a) The video management system shall graphically display device states on its icons in the logical tree structure and on sitemaps. For cameras, the states shown shall include the following:

- i. Loss of the video signal,
- ii. Network connection loss,
- iii. Video recording,
- iv. Video signal too noisy,
- v. Video signal too bright,
- vi. Video signal too dark,
- vii. Video de-adjusted,
- viii. For relays and contact inputs, if provided, the open or close state shall be indicated.

(b) Site maps

Built-in map function in the client viewer shall provide an intuitive overview of the system and shall offer integrated access to all system components.

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It shall be possible to use any number of layered maps, and it shall be possible to easily drag-and-drop and point-and-click definition of cameras, servers, microphones, speakers, I/O devices, hot-zones, and PTZ camera pre-sets.

Map function shall support central overview of the surveillance system via an alarm list containing alarm indicators of high, medium or low prioritized alarms.

The following features shall be available in the software:

- i. Accurately allocate event on the map with video verification
- ii. Navigate complex sites to get video live view wherever needed quickly
- iii. Support BMP, JPEG, Auto CAD
- iv. Support multi-layer Site map navigation

18. Administration Features in Software

Administration features shall cover the following:

- (a) User management
- (b) User Authentication
- (c) Rules management. The software shall provide rules programming for all the devices with graphical logic editing user interface.
- (d) License Management
- (e) Disaster recovery & backup configuration
- (f) Device organization, configuration & management. While adding a new device, a display with information such as device type, ID, name, tag, location, description, IP port, current date & time etc.
- (g) Camera type definition
Administrators shall be able to change camera settings, camera details and configure the video settings.

(h) Camera details

The administrator shall be able to configure the following parameters for each camera:

- Name
- Location
- Description
- Camera Number

(i) Camera connection

The user shall be able to configure the following parameters for each camera:

- Resolution: The available resolutions shall be 800 by 600 pixels, (depending on the functionality of the camera.)
- Video Quality: The supported frame rates (in frames per second) shall be 30, 25, 20, 15, 10, 5, 3, 2 and 1. Slower frame rates of 1 frame every 2, 3, 5, or 10 seconds shall also be available.
- Transmitter IP address
- Choice of frame rate or bandwidth limited streaming
- TCP, Unicast or multicast transmission of video
- PAL or NTSC camera format
- User configurable levels of video compression between 16Kbps and 4Mbps.
- Only users with the highest level of security are permitted to modify camera connection details.

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(j) Camera PTZ Control

The VMS shall support Area configuration to allow users to view specified cameras only. The VMS shall support Control Level determining if a user is allowed to operate the PTZ Controls for a camera.

Joystick control to be provided in the Control Room supporting Pan, Tilt, Zoom, Focus operations. The same has to be achieved using keyboard & mouse

It shall be possible for the operator to pick an object in a live stream and trigger a PTZ camera to focus and follow that particular object automatically.

(k) Camera deletion

Configuration changes in any part of the system shall not interrupt operational tasks.

The video management system shall support server stored user profile to store settings individual for each user. These settings shall include but are not limited to sequence dwell times, instant playback replay time and image pane ratio settings (16:9 or 4:3) individually per monitor. These settings shall be available independent of the physical Client PC assigned to the user.

19. Security Features

The following parameters shall be configurable for each camera:

- (a) Area: Allows the system to be configured to allow users to view only specified cameras. These areas shall be defined by the administration client or operator server.
- (b) Control Level: Used to allow higher-level users to take control of cameras. The administration server or operator server shall define these control levels.
- (c) IP access. It should be able to exclude/include access to devices on the basis of IP address.

The system shall allow the establishment of user groups that have access rights to specific cameras, priority for PTZ control, rights for exporting video and access rights to system event log files. Access to live, playback, audio, PTZ control, preset control, and auxiliary commands shall be programmable on an individual camera basis.

20. System Configuration, Maintenance & Diagnostics

System configuration & maintenance shall include the following:

- (a) Maintain database of system functions including devices error, alarms, and user actions which can be reported as per user's request.
- (b) Continuously monitor system health status of key system components such as database, servers, cameras, storage, clients and workstation with notification to users immediately when abnormal status is detected.
- (c) The Diagnostics applications shall provide a unified user interface for running tests, recording system activity, collecting diagnostic information and viewing system log files.
- (d) System monitoring feature shall make it possible to view system information and create reports on CPU and memory usage related to all servers, camera status, recording option, recording server for the selected camera and more related to cameras etc.

The VMS solution shall support a functionality to generate a PDF that shall document all parts of the system configuration, including preview of video

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21. Video Management System Client

- a) Video Management System Client shall have video client and the Site map client. Video Management System Video Client shall be used to view real-time video & play-back recordings. It shall also have functions to configure video devices & other additional video functions.
- b) The Site map Client shall enable managing alarms/ events/ status conveniently.
- c) Functions such as live window operation, digital zoom, cameras status display (online, disconnected, alarm), video storage while viewing, viewing & managing alarms and events, Site map management operation, log recording & management shall be available on the Clients.
- d) Clients shall receive alarm & event from the video management server. The alarm & event information shall be available to all users, which have necessary privileges. Each user shall be able to view live video/ recordings from cameras related to the alarm & event they have security access to view. A list shall be displayed for alarms, events, status & tasks. The information such as location, date/time, type, detailed information as a minimum shall be displayed in the list for alarm & events.
- e) The system shall support an indication for the Client regarding the connection state to the Video Management Server. This shall include connected, disconnected, and configuration out-of-sync between Server and Client.

22. Video Content Analytics

- (a) The software offered shall have built-in tamper monitoring to detect camera hooding/masking, blinding, defocusing and repositioning, which are edge based analytics. Image stabilization to remove jitter from shaking video sources such as cameras mounted on poles or simple vibrations.
- (b) The following tasks shall be supported by the software:
 - i. Video Motion Detection
 - ii. Perimeter Intrusion
 - iii. Auto Tracking / People Tracking
 - iv. Un attended object Detection
 - v. Camera Tampering
 - vi. People Counting
 - vii. Loitering
- (c) The VMS shall Support an integrated Intelligent Video Analytics system preferably from same OEM. Events from the Intelligent Video Analytics system shall be passed back to the VMS to start a recording and generate an alarm of configurable priority.
- (d) Forensic search for all the above analytics features specified.
- (e) The software shall have feature of smart search which detects motion in specified region
- (f) The VAS software shall be server based Enterprise version and upgradable to a new version or patches.

G) Warranty

- I. Two years warranty for complete system years after date of installation,

SECTION VII – TECHNICAL SPECIFICATIONS

commissioning and acceptance of system.

II. Two years OEM Onsite warranty for servers and backup storage system for two years after date of installation, commissioning and acceptance of system.

III. OEM onsite warranty for servers and backup storage system during comprehensive AMC period and same has to be reflecting OEM website/Certification from OEM directly

IV. Comprehensive AMC for complete system as mentioned in section VII

H) Other Requirements:

- a) All the bought out items used should be of reputed make and easily available in the Indian market and should have back to back support from the OEMs.
- b) Detailed Electrical and network drawings, technical manuals and software user licenses for all software used should be provided by the supplier including those purchased from OEMs.
- c) **Documentation:** All relevant product information such as 3 sets of user manual, technical specification sheet etc. should be submitted. Also, as built diagrams & operational & Maintenance Manual (Parts catalogue, spare list, Electrical Diagram, Electrical/Electronic components details, OEM manuals etc.). Installation guides, datasheets, all software (OS, Application software etc.), installation CD's with license copies to be handed over to BNPM, after commissioning.
- d) **Software License:** All Software Licenses for life time should be in the name of BNPM, Mysuru and shall be upgraded at free of cost as & when new versions are released.
- e) **Training to user:** Supplier shall impart proper training to the users and Technical team for trouble free operation and maintenance of the machine. User training material and detailed backend Training material for the Technical team should be provided with details of installation, configuration and roles assignment, licensing, updating and backend related etc.
- f) The contractor shall supply the miscellaneous materials like Cables, junction box, anchor fasteners, screws, bolts and nuts, clamps, suitable angles, cable ties etc. for cable laying and carry out associated minor works for successful completion of work. Contractor shall do any other related jobs that are not mentioned above, but found necessary at the time of execution to complete the job in all respect.
- g) The bidder must provide a valid certificate of authorization for providing after sales service for all the Third-Party Equipment's / Systems supplied from the OEM. The certificate should be in the letter head of OEM issued on the name of bidder and currently valid.
- h) **Modifications:** Supplier shall agree for any minor modifications in system upgradation (without having any additional financial implications) to match with specific requirements for successful completion of the project.
- i) **Final Acceptance Test (FAT):**
 - 1) Testing of redundancy of Management Servers, Recording servers.
 - 2) Testing of hard disc failure in Raid6 Configuration of storage
 - 3) Testing of Usable capacity of Storage
 - 4) Testing of uplink between Core, Distribution and Edge switches.
 - 5) Testing of video analytics, Facial recognition
 - 6) Checking of recording, playback & other various features randomly
 - 7) Checking of recording, replay video quality, Frame rate etc. to ensure smooth & continuous video without any jerks.

SECTION VII – TECHNICAL SPECIFICATIONS

- 8) Checking of all software server & client has been installed correctly & running without any bug/error, Testing of the functionality of the VMS features including Recording, retrieval of footages etc.
 - 9) Testing of OFC Network with standard testing procedure and submission of report. The OTDR testing report of the existing OFC network should also be submitted.
 - 10) Any other test necessary / relevant for full functioning of the system
- j) Note: The bidder must submit a “Proof of Concept” along with the Technical Bid and give a live demo on the “Proof of Concept” during the Technical Evaluation in order to prove efficiency of the system and to comply all the Tender requirements.
- k) For all BOQ items, from the list of approved makes, the bidders should quote any one make and model only for each item.

Documentation:

- 1) Documents to be provided after award of PO, before supply of CCTV system
 - Technical catalogues /Datasheets of components to be supplied.
 - Factory test reports with serial No.
 - Execution Schedule
 - Final BOM
 - Final drawing
 - QAP
 - Factory Acceptance Test procedure
 - Site Acceptance Test procedure
 - Installation layout of CCTV cameras, layout for poles, racks outdoor.
- 2) Documents to be provided after commissioning of CCTV System.
 - O&M manual
 - Final BOM with make and details of each components
 - OEM manuals of cameras, servers SAN etc.
 - Mandatory spare List
 - Class room and hands on training shall be given to owners personnel for operating and maintaining with training manual separate for operator and Technical team for trouble free operation and maintenance of the machine.
 - Configuration Documentation with SOPs for installation, commissioning, backup & restoration procedures including disaster recovery etc.
 - All License copies, Back to Back Support agreement from OEM.
 - Complete set of asbuilt drawings – 3 sets
 - After project completion all the final drawings in autocad & PDF drawing, network layout drawing , cable layout with tagging details, routing layout of cables & cable trays, SLD of power scheme, BOM etc.
 - Commissioning Test reports of existing and new OFC cable along with the CAT6 cable connectivity reports.

Completeness of the Solution

1. The Bidder shall quote for all the equipment’s required to complete the scope of work, network design and successful implementation of the project. Means it is the bidder

SECTION VII – TECHNICAL SPECIFICATIONS

- responsibility to see the completeness of the solution and if required bidder may quote for additional items/equipment's to complete the proposed solution design.
2. The solution, quoted by bidder, is turn-key and should include all components including cables, connectors, mounting structure, rack etc. irrespective of its presence in the tentative BOM. Any component other than those quoted in the priced BOQ will have to be supplied free of cost by the bidder to complete the solution.
 3. The complete Equipment's offered by the bidders should not be declared end-of-life on date or one year from the date of bid submission. A declaration to this effect must be submitted along with bid.
 4. Bidder must submit a letter/ undertaking from OEMs of all offered products stating a commitment to support its equipment / software for the complete duration of contract period without any extra cost to BNPM.
 5. The bidder should submit the complete migration plan in the bid. The successful bidder shall discuss and finalize the migration plan as BNPM directions and timelines. The existing CCTV system being a live infrastructure must be migrated to new system in close coordination with BNPM and by taking extreme care for smooth and minimum downtime during the migration.
 6. The Supplier shall arrange for required test equipment for measuring/ demonstration of the performance parameters/ complete features and functionalities of the CCTV system.
 - ~~7. If the switches are upgraded, the same should be vetted by the OEM for its suitability and integration feasibility with the existing infrastructure.~~
 8. The hardware specifications provided in the tender is the minimum required and bidder may quote for higher specifications to optimize as per their solution requirements.

(To be signed & stamped and submitted along with Techno-commercial Bid Part -I).

SECTION VIII - QUALITY CONTROL REQUIREMENTS

QUALITY CONTROL REQUIREMENTS

1. IP Dome Outdoor IR Camera

Sl No	Type Of Camera	IP Dome Outdoor IR Camera	Compliance (Yes/No)	Deviation (if any)
1	Image Sensor	1/2.8" - 1/3" Progressive CMOS or better		
2	Lens	3 - 10 mm, Vari-focal (Auto) lens or better		
3	Video Compression	H.265, H.264, Motion JPEG or better		
4	Video Resolution	Minimum 3MP and above		
5	Day/Night Operation	Automatic, Colour Monochrome		
6	Streaming	Multiple configurable streams in H.265, configurable frame rate and bandwidth		
7	Iris Exposure Control	Automatic		
8	Wide Dynamic Range	120dB or more		
9	Focus	Automatic Back Focus and Manual		
10	Frames Per Second	(a) 30 fps for viewing		
		(b) 25 fps for recording		
		At H.625 compression		
11	Min. Illumination / Light Sensitivity (Lux)	0.12 lux for colour		
		0.02 lux for B/W		
		0 Lux with IR illumination ON		
		(or) better		
12	IR Range	30 mtr or above		
13	IR Filter	Required, shall switch from colour to monochrome automatically by sensing illumination level, Removable IR cut filter		
14	Electronic Shutter	Automatic		
15	Image Settings	Time stamp, text overlay, flip & mirror; Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, fog compensation, privacy masks; Scheduled profile settings, video rotation, 3DNR.		
16	Signal to Noise Ratio	>50 dB		
17	Motion Detection	Built-in Required		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

18	Tampering Alarm	Required (tampering such as dis-focus/ move viewing direction/ masking)		
19	AGC	Required		
20	ONVIF Compatible	Supported profile S & G		
21	Edge Analytics	Essential video Analytics		
22	Audio	Required, duplex, 1 IN & 1 OUT, G.711 streaming		
23	Network Interface	10/ 100 Base-T, auto-sensing, half/ full duplex, RJ 45		
24	Network Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, CIFS/SMB, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, QoS, SNMP, 802.1X, UDP, ICMP, ARP		
25	Basic Security	Password protection, HTTPS encryption, 802.1x		
26	Advance Security	Trusted Platform / Cyber security measures to ensure the highest level of security with advanced encryption.		
	General:			
27	Operating Temperature	0°C to 50 °C or better		
28	Humidity	10 % to 90 % (without condensation) or better		
29	Housing	Vandal Proof, IP 66 or better, IK10, Rugged, Durable, Industrial Grade, dome shall be clear with UV blocking & antiscratch coating		
30	Power	PoE IEEE 802.3af / PoE+ IEEE 802.3at Max 12 W with IR.		
31	Certification	CE, FCC, UL must		
32	Mounting accessories	Vendor shall provide the appropriate mounting arrangement stanchions, brackets & all mounting accessories to suit the site requirement. Mounting accessories should be corrosion resistant and should be of camera offered make. Sunshield outdoor grade plastic to be used.		
31	Local Storage	128 GB SD card		

2. IP Bullet Indoor IP camera

Sl No	Type Of Camera	IP Bullet Indoor IR Camera	Compliance (Yes/No)	Deviation (if any)
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SECTION VIII – QUALITY CONTROL REQUIREMENTS

1	Image Sensor	1/2.8" - 1/3" Progressive CMOS or better		
2	Lens	3 - 10 mm, Vari-focal (Auto) lens or better		
3	Video Compression	H.265, H.264, Motion JPEG or better		
4	Video Resolution	Minimum 3MP and above		
5	Day/Night Operation	Automatic, Color Monochrome		
6	Streaming	Multiple configurable streams in H.265, configurable frame rate and bandwidth		
7	Iris Exposure Control	Automatic		
8	Wide Dynamic Range	120dB or more		
9	Focus	Automatic Back Focus and Manual		
10	Frames Per Second	(a) 30 fps for viewing		
		(b) 25 fps for recording		
		At H.625 compression		
11	Min. Illumination / Light Sensitivity (Lux)	0.36 lux for colour		
		0.03 lux for B/W		
		0 Lux with IR illumination ON		
		(or) better		
12	IR Range	40 mtr or above		
13	IR Filter	Required, shall switch from colour to monochrome automatically by sensing illumination level , Removable IR cut filter		
14	Electronic Shutter	Automatic		
15	Image Settings	Time stamp, text overlay, flip & mirror; Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, fog compensation, privacy masks; Scheduled profile settings, video rotation, 3DNR.		
16	Signal to Noise Ratio	>50 dB		
17	Motion Detection	Built-in Required		
18	Tampering Alarm	Required (tampering such as dis-focus/ move viewing direction/ masking)		
19	AGC	Required		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

20	ONVIF Compatible	Supported profile S & G		
21	Edge Analytics	Essential video Analytics		
22	Audio	Required, duplex, 1 IN & 1 OUT, G.711 streaming,		
23	Network Interface	10/ 100 Base-T, auto-sensing, half/ full duplex, RJ 45		
24	Network Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, CIFS/SMB, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, QoS, SNMP, 802.1X, UDP, ICMP, ARP		
25	Basic Security	Password protection, HTTPS encryption, 802.1x		
26	Advance Security	Trusted Platform / Cyber security measures to ensure the highest level of security with advanced encryption.		
	General:			
27	Operating Temperature	0°C to 50 °C or better		
28	Humidity	10 % to 90 % (without condensation) or better		
29	Housing	IP 66 or above, IK10, Clear sight coating		
30	Power	PoE IEEE 802.3af / PoE+ IEEE 802.3at Max 15.4 W with IR.		
31	Certification	CE, FCC, UL must		
32	Mounting accessories	Vendor shall provide the appropriate mounting arrangement stanchions, brackets & all mounting accessories to suit the site requirement. Mounting accessories should be corrosion resistant and should be of camera offered make.		
33	Local Storage	128 GB SD card		

3. IP Bullet Outdoor IR Camera

Sl No	Type Of Camera	IP Bullet Outdoor IR Camera	Compliance (Yes/No)	Deviation (if any)
1	Image Sensor	1/2.8" - 1/3" Progressive CMOS or better		
2	Lens	12 - 40 mm, Vari-focal (Auto) lens or better		
3	Video Compression	H.265, H.264, Motion JPEG or better		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

4	Video Resolution	Minimum 3MP and above		
5	Day/Night Operation	Automatic, Color Monochrome		
6	Streaming	Multiple configurable streams in H.265, configurable frame rate and bandwidth		
7	Iris Exposure Control	Automatic		
8	Wide Dynamic Range	120dB or more		
9	Focus	Automatic Back Focus and Manual		
10	Frames Per Second	(a) 30 fps for viewing		
		(b) 25 fps for recording		
		At H.625 compression		
11	Min. Illumination / Light Sensitivity (Lux	0.007 lux for colour		
		0.0008 lux for B/W		
		0 Lux with IR illumination ON		
		(or) better		
12	IR Range	50 mtr or above		
13	IR Filter	Required, shall switch from colour to monochrome automatically by sensing illumination level , Removable IR cut filter		
14	Electronic Shutter	Automatic		
15	Image Settings	Time stamp, text overlay, flip & mirror; Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, fog compensation, privacy masks; Scheduled profile settings, video rotation, 3DNR.		
16	Signal to Noise Ratio	>50 dB		
17	Motion Detection	Built-in Required		
18	Tampering Alarm	Required (tampering such as dis-focus/ move viewing direction/ masking)		
19	AGC	Required		
20	ONVIF Compatible	Supported profile S & G		
21	Edge Analytics	Essential video Analytics		
22	Audio	Required, duplex, 1 IN & 1 OUT, G.711 streaming,		
23	Network Interface	10/ 100 Base-T, auto-sensing, half/ full duplex, RJ 45		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

24	Network Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, CIFS/SMB, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, QoS, SNMP, 802.1X, UDP, ICMP, ARP		
25	Basic Security	Password protection, HTTPS encryption, 802.1x		
26	Advance Security	Trusted Platform / Cyber security measures to ensure the highest level of security with advanced encryption.		
	General:			
27	Operating Temperature	0°C to 50 °C or better		
28	Humidity	10 % to 90 % (without condensation) or better		
29	Housing	IP 66 or above, IK10		
30	Power	PoE IEEE 802.3af / PoE+ IEEE 802.3at Max 45 W with IR.		
31	Certification	CE, FCC, UL must		
32	Mounting accessories	Vendor shall provide the appropriate mounting arrangement stanchions, brackets & all mounting accessories to suit the site requirement. Mounting accessories should be corrosion resistant and should be of camera offered make.		
33	Local Storage	128 GB SD card		

4. IP PTZ Outdoor IR Camera

Sl No	Type Of Camera	IP PTZ Outdoor IR Camera	Compliance (Yes/No)	Deviation (if any)
1	Image Sensor	1/2.8" - 1/3" Progressive CMOS or better		
2	Lens	4.5 - 129 mm, Vari-focal motorized lens or better		
3	Video Compression	H.265, H.264, Motion JPEG or better		
4	Video Resolution	Minimum 3MP and above		
5	Day/Night Operation	Automatic, Color Monochrome		
6	Streaming	Multiple configurable streams in H.265, configurable frame rate and bandwidth		
7	Iris Exposure Control	Automatic		
8	Wide Dynamic Range	90dB (or) better		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

9	Focus	Automatic Back Focus and Manual		
10	Optical Zoom	30x (or) better		
11	Digital Zoom	12X (or) better		
12	Frames Per Second	(a) 30 fps for viewing		
		(b) 25 fps for recording		
		At H.625 compression		
13	Min. Illumination / Light Sensitivity (Lux)	0.05 lux for colour		
		0.01 lux for B/W		
		0 Lux with IR illumination ON		
		(or) better		
14	IR Range	Built in IR LEDs with min 150m illumination or better		
15	Pan Travel	360 Degree endless		
16	Tilt Travel	90 degree with auto flip 180 degrees		
17	Preset	250		
18	IR Filter	Required, shall switch from colour to monochrome automatically by sensing illumination level , Removable IR cut filter		
19	Electronic Shutter	Automatic		
20	Image Settings	Time stamp, text overlay, flip & mirror; Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, fog compensation, privacy masks; Scheduled profile settings, video rotation, 3DNR.		
21	Signal to Noise Ratio	>50 dB		
22	Noise Reduction	3D Noise reduction (3DNR)		
23	Motion Detection	Built-in Required		
24	Tampering Alarm	Required (tampering such as dis-focus/ move viewing direction/ masking)		
25	ONVIF Compatible	Supported profile S & G		
26	Edge Analytics	Essential video Analytics		
27	Audio	Required, duplex, 1 IN & 1 OUT, G.711 streaming,		
28	Network Interface	10/ 100 Base-T, auto-sensing, half/ full duplex, RJ 45		
29	Network Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP,		

SECTION VIII - QUALITY CONTROL REQUIREMENTS

		CIFS/SMB, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, QoS, SNMP, 802.1X, UDP, ICMP, ARP		
30	Basic Security	Password protection, HTTPS encryption, 802.1x		
32	Advance Security	Trusted Platform / Cyber security measures to ensure the highest level of security with advanced encryption.		
	General:			
33	Operating Temperature	-20°C to +55 °C or better		
34	Humidity	10 % to 90 % (without condensation) or better		
35	Housing	IP 66 or above, IK10,		
36	Power	PoE IEEE 802.3af / PoE+ IEEE 802.3 at, Max 95W with IR		
37	Certification	CE, FCC, UL must		
38	Mounting accessories	Vendor shall provide the appropriate mounting arrangement stanchions, brackets & all mounting accessories to suit the site requirement. Mounting accessories should be corrosion resistant and should be of camera offered make.		
39	Local Storage	128 GB SD card		

5. IP 4K Fixed Camera for Facial Recognition System

Sl No.	Features	Parameters	Compliance (Yes/No)	Deviation (if any)
1	Image Sensor	1/2" or better type CCD/CMOS/MOS Sensor		
2	Image Resolution	3,840 x 2,160 at 30/25 fps		
3	Scanning System	Progressive scan		
4	WDR	Min 80 dB-True WDR		
5	Lens	4- 13 mm		
6	Day & Night	True Day & Night with IR Cut Filter		
7	Min. Illumination	Day -0.2 lux		
		Night-0.3 lux		
8	White Balance	Automatic/ Manual		
9	Image setting	Brightness, Contrast, Saturation, Sharpness, Anti-flicker, Exposure, BLC, 3D NR		
10	AGC	ON/OFF		
11	Signal-to-Noise Ratio	>50 dB		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

12	Motion Detection	4-zone video motion detection		
13	Television System	PAL		
14	Frame Rate	25 Fps or better		
15	ONVIF S profile compliance	Required		
16	Bit Rate	4 Mbps or less		
17	On-board storage Support	optional		
18	Alarm Terminals	Minimum 1 input, 1 output		
19	Alarm Events	Alarm image transmission, FTP Periodic transmission		
20	Video Compression	H.264, Motion JPEG or better		
21	Video profile	min 3 streams		
22	Streaming	Simultaneously multi-profile streaming; Controllable frame rate and bandwidth; Constant and variable bit rate		
23	Network Interface	10/ 100 Base-T, RJ 45		
24	Network Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, CIFS/SMB, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, QoS, SNMP, 802.1X, UDP, ICMP, ARP		
25	View Material	Polycarbonate/Vandal-resistant		
26	Basic Security	Password protection, HTTPS encryption, 802.1x		
27	Advance Security	Trusted Platform / Cyber security measures to ensure the highest level of security with advanced encryption.		
	General:			
28	Operating Temperature	-20 °C to +50 °C		
29	Operating Humidity	Less than 90% RH		
30	Weather & Vandal protection	IP 66 & IK10 Rated		
31	Power supply	IEEE 802.3at Class4 PoE, AC 24V/DC 12V		
32	Power Consumption	30W or less		
33	Certification	CE, FCC, UL must		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

34	Mounting accessories	Vendor shall provide the appropriate mounting arrangement stanchions, brackets & all mounting accessories to suit the site requirement. Mounting accessories should be corrosion resistant and should be of camera offered make. suitable brackets including sun- shroud/canopy.		
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6. SAN Storage

Sl. No	Feature	Required Product Specifications	Compliance (Yes/No)	Deviation (if any)
1	High Availability and Storage Processors	The Proposed Solution should be a Hybrid Storage System with concurrent support for SAN, iSCSI and Fiber Channel protocols configured with redundant Active-Active Controllers		
		Each Controller must have Intel skylake or latest intel processor with minimum 16 CPU Cores per controller or better and 96 GB or Higher Memory.		
		The Proposed Solution should be based on real time optimized operating system. (It should not be a general-purpose OS).		
		Storage array shall be configured in No-Single-Point-of-Failure configuration with redundant components and offer Five 9's (99.999%) availability.		
2	Memory and HDD Support	The controllers should have 192 GB memory or more spread across dual controllers. SSD cache will not be considered as system memory.		
		The cache should be flexibly usable for read and write operations. All writes must be mirrored across controllers. Array should have capability to extend the system cache by adding high-performance solid-state disks.		
		The Proposed Solution should be scalable to more than 480		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		Drives in the same Storage Array without upgrading the controllers.		
		The Storage System should support the latest NVMe, SSD, SAS and NLSAS Drives.		
3	Host Connectivity and Storage Backend Disk Connectivity	The offered Storage System shall be supplied with at least 8nos of 10G Ethernet Ports (4 X Base- T and 4X SFP+ Ports) and 8nos x 16Gbps FC ports across dual Controllers for Host Connectivity.		
		Ethernet ports shall support both Block and File protocols simultaneously.		
		The array proposed should be supplied with 4x4 lane 12Gbps SAS ports across controllers for backend connectivity.		
4	Total Aggregate Storage Bandwidth	The Proposed Storage System should ensure a minimum total aggregate bandwidth of 5000Mbps on a 90% Write & 10% Read Video Management Application Workload.		
5	RAID Support	Storage System to be configured with RAID 6 protection and Global Hot Spares.		
6	Cache Protection	The array must keep write cache persistent during fault conditions.		
		In the event of unplanned power failure, data in the cache should be safely destaged to the disks to protect data from loss.		
7	VMS Validation on the Storage System	The Proposed Storage System should be tested and validated jointly by the VMS Application OEM & Storage OEM. The Validation white paper for the same to be submitted as a part for the Storage System Compliance documentation.		
8	Storage Capacity Requirements	The Proposed Storage System should be configured with Minimum 1500TB Usable Capacity using minimum 8/12/14 TB NL-SAS Drives. The usable capacity is defined as the Net storage capacity available for the application stack, after deducting the		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		penalties imposed by storage infrastructure requirements, disk and array formatting, RAID penalties, host OS and file system formatting including overheads or any other penalties which eat away usable disk space. Drives offered for the above capacity can be of the Highest Capacity offered by the Vendor.		
9	Hot Spare disk	Array should be supplied with one global hot spare disk for every 30 disks of same proposed capacity disks drives and speed.		
10	Tiering	The proposed storage should support tiering of the data across different RAID levels.		
		Required feature license if any to enable sub-lun data tiering across SSD, SAS and NL-SAS tiers must be provided.		
11	Statement of Compliance	This Information Technology Equipment is compliant with the electromagnetic compatibility (EMC) and product safety regulations/standards required by the countries in which the product is sold. EMC compliance is based on FCC part 15, CISPR22/CISPR24 and EN55022/EN55024 standards, including applicable international variations. EMC compliant Class A products are marketed for use in business, industrial, and commercial environments. Offered Storage should have compliance with EU RoHS Directive 2011/65/EU , and should have Safety compliances based on "IEC/EN 60950-1 and IEC/EN 62368-1 standards".		
12	Storage Software Licenses	All the standard Storage Software Licenses like Unified Storage Management software for File, Block & vVOLs, Snapshots, Remote Replication, Performance Optimization, Thin provisioning, QOS,		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		Proactive Remote Support to be included.		
13	Server Operating System Support	Windows Server 2008, Windows Server 2008 R2+, Windows Server 2012, Windows Server 2016 R2, Microsoft Hyper-V, Novell Suse Enterprise, Oracle, RedHat Enterprise, & x86 VMware® vSphere		
14	Online mobility across system	The storage system should support non-disruptive field replacement capabilities for components like Disk Drives, Disk connections, power supplies, controllers etc.		
15	Data Protection, Encryption & Security	The Storage array must provide end-to-end data protection using industry standard mechanism such as parity checking, checksum and background disk scrubbing etc.		
		The Storage array must provide multiple levels of access control including role-based security and auditing capability.		
		The proposed array must support storage controller based Data at Rest Encryption solution to encrypt data on all drives. Array should support embedded automated key management with no user intervention. The proposed array must support storage controller based Data at Rest Encryption solution/ self-encrypting drive (SED) technology to encrypt data on all drives. Array should support embedded automated key management with no user intervention		
16	Remote Application	The Storage array must support capability to replicate data to remote site array in synchronous and asynchronous modes. This license should be configured for entire supported capacity of the array and the proposed		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		storage should be configured to replicate with the DR storage.		
17	Data In place upgrade	The Storage array should be upgraded to higher model with Data-in-place protection in the offered array family to meet future data growth and lower TCO.		
18	Online RAID Group expansion	Must support online expansion of RAID Group. Must be able to add additional disks on the fly to expand the RAID group capacity.		
19	Additional features	The proposed array should support QoS feature to limit the amount of IO (IOPS) or bandwidth (MB/s) a particular application can drive on the array.		
		The storage array must be configured with required licenses to enable thin provisioning to allow physical allocation of just the storage that is needed or over provisioning of capacity. This license should be configured for entire supported capacity of the array.		
		The Storage array should support continuous system monitoring, call-home notification, advanced remote diagnostics and proactive hot sparing to enhance system robustness, availability and reliability.		
		Storage shall be configured with required feature license to snapshot and restore file and block data. The. This license should be configured for entire supported capacity of the array.		
		Storage shall support integration with LDAP and AD		
		The proposed array must support traditional (user data) and transactional (VMware, Oracle) NAS use cases. Proposed storage solution must support creating multiple		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		NAS servers for tenant isolation with each file system scalable upto 256TB. Entire supported capacity of the Storage should be allowed to configure for File services.		
20	Performance management and alerts	<p>The proposed array should be supplied with native Storage management software with Web based GUI capable of generating customized reports, real time monitoring, historical performance data for analysis and trending, capacity utilization monitoring. Proposed management software should support management of multiple storage system from single console</p> <p>Storage shall support CLI, Web and Rest API based management of storage array</p> <p>The storage should be configured with easy to manage, simple integrated user interface for distributed storage environments. A single sign-on centralized console should have dashboards for at-a-glance management and reporting and other functions like configuration monitor and manage. Performance monitoring should be provided to analyze the performance data.</p>		
21	Anti-virus	Storage should support Integration with third-party anti-virus software. It should support quota management. License if any for listed features should be configured for entire supported capacity of the array.		
22	Validation of the Storage System	The Proposed Storage System should be tested and validated jointly by the VMS Application OEM & Storage OEM to avoid compatibility issues. The Validation white paper for the same to be submitted for the Storage System Compliance documentation.		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

23	License	All licenses supplied should be perpetual so that there will be no additional software cost while replacing the storage within the same class.		
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7. Specifications of Antivirus Software

S.No.	Parameter Specifications	Compliance (Yes/No)	Deviation (if any)
1	The antivirus Solution should able to Detects and blocks malicious software in real time, including viruses, worms, Trojan horses, spyware, Adware, and RootKit.		
2	The Antivirus solution must automatically scan external devices (Compact disks, USB devices and Network shares in real-time when accessed) as soon as they are attached to Server, workstations etc		
3	The Antivirus Solution technology should include a Behaviouralbased technology apart from providing the signatures for vulnerability add heuristic based approach. It should be able to score both good and bad behaviours of unknown applications, enhancing detection and reducing false positives without the need to create rule-based configurations to provideprotection from unseen threats i.e. zero-day threats.		
4	The Antivirus solution should provide enhanced antivirus protection for workstations & servers of all the attacks originating from places inside/outside of the network due to virus and/or other malicious programming code and should give appropriate warning messages		
5	The Antivirus solution must scan compressed file formats like ZIP, ARJ GZIP, BZ2,JAR,RAR,LHZ,TAR Microsoft compressed tile etc.		
6	Anti-Virus Software must have the capability to clean, Quarantine or delete Viruses and should be able to detect new classes of viruses by normal virus definition update mechanisms		
7	The Antivirus solution Should Support Multi – Platform operating system(Windows , Mac, Linux) and the same should be managed from a single Centralised Management console		
8	Antivirus solution should support integration with Active directory for directory structure of computers for better management & Should have logical group based on IP addresses (Subnets),		
9	Solution should provide web antivirus features which should analyse site address and block access to dangerous sites & Scan the object downloaded over HTTP		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

10	Antivirus Solution should provide Application start up Control module with the ability to grant, block and audit application launch based on administrator-applied policies		
11	Antivirus Solution should provide Device-control module with ability to control usage of unknown or unwanted devices, reducing the risk of data loss , White list categories (based on serial numbers) & Temporary grant access to Access block device		
13	Vendor Should have 24x7 anti-malware laboratory analysis centers to provide proactive rapid protection against known and unknown threats		
14	Antivirus software for server. It should be able to scan all the workstations, servers, computer and laptops connected in the network. Number of users should be calculated by the vendor as per the requirement. the software should support the installation on a server/ workstation.		
15	Features of the software: Backup, IDS/IPS Protection, Firewall Protection, Phishing Protection, Browsing Protection, Vulnerability Scan, Roaming Platform, Asset Management, Spam Protection, Restrict Internet Browsing Access, Web Filtering etc.		
16	Free upgradation during warranty period		
17	Validity – 05 years from the date of activation and acceptance at BNPM		

8. VMS/Backup Application Server

Sl No	Parameter	Specs	Compliance (Yes/No)	Deviation (if any)
1	Processor	2 X Intel Xeon Silver 10C or higher		
2	RAM	Min 32 GB and extendable up to 128 GB		
3	Storage	2 x 600GB SAS (15k RPM) configured as RAID1 for OS & Application		
		4X 600GB SAS (15k RPM) on RAID 10 SQL DB and Transaction Logs.		
4	Network Interface	2 Nos 1 Gbps and 2 Nos 10Gbps Gigabit Ethernet ports 2 Nos of 10Gbps SFP+		
5	Graphics	NVIDIA GeForce 1GB or better Graphic Card		
6	HBA interface	Dual Port PCI-e FC HBA		
7	Operating System	Microsoft Windows Server 2016 and above / latest (64 bit) Standard Edition.		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		License Copy would be in the name of BNPM		
8	Licensed Software	VMS and database license should be in the name of BNPM		
9	Power Supply	Dual Redundant Power Supply		
10	Optical Drive	DVD +/-RW		
11	Keyboards and Mouse	USB type		
12	USB port	Minimum 4 Nos USB ports		
13	Form Factor	Rack Type		
14	Expandable	RAM & HDD upgradable		
15	Communication Ports	1 No. Serial port		

9. Video Recording Server Specification

Sl No	Parameter	Specification	Compliance (Yes/No)	Deviation (if any)
1	Processor	2 X Intel Xeon Silver 10C or higher		
2	RAM	Min 64 GB and extendable upto 128GB		
3	Storage	2 x 600GB SAS (15k RPM) configured as RAID1 for OS 6 X 4TB HDD or more configured as RAID 6		
4	Network Interface	2 Nos 1 Gbps and 2 Nos 10Gbps Gigabit Ethernet ports 2 Nos of 10Gbps SFP+		
5	Graphics	NVIDIA GeForce 1GB or better Graphic Card		
6	HBA interface	Dual Port PCI-e FC HBA		
7	Operating System	Microsoft Windows Server 2016 and above / latest (64 bit) Standard Edition/linux. License Copy would be in the name of BNPM		
8	Licensed Software	Video Rectording and associated application license should be in the name of BNPM		
9	Power Supply	Dual Redundant Power Supply		
10	Optical Drive	DVD +/-RW		
11	Keyboards and Mouse	USB type		
12	USB port	Minimum 4 Nos USB ports		
13	Form Factor	Rack type		
14	Expandable	RAM & HDD upgradable		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

15	Communication Ports	1 No. Serial port		
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10. Video Analytics Processing/Application Server

SI No	Particulars	Specification	Compliance (Yes/No)	Deviation (if any)
1	Processor	2 X Intel Xeon Gold 6240 or higher with 2.6Ghz or more , Minimum 18 Core per processor		
2	RAM	Min 96 GB RAM and extendable up to 128GB or more		
3	Storage	2 x 600GB SAS (15k RPM) configured as RAID1 for OS		
		4 X 4TB HDD or more configured as RAID 6		
4	Network Interface Card	2 Nos 1 Gbps and 2 Nos 10Gbps Gigabit Ethernet ports 2 Nos of 10Gbps SFP+		
5	Graphics	NVIDIA GeForce 1GB or better Graphic Card		
6	HBA interface	Dual Port PCI-e FC HBA		
7	Operating System	Microsoft Windows Server 2016 and above / latest (64 bit) Standard Edition/linux. License Copy would be in the name of BNPM		
8	Licensed Software	Video Analytic software and associated application license should be in the name of BNPM		
9	Power Supply	Dual Redundant Power Supply		
10	Optical Drive	DVD +/-RW		
11	Keyboards and Mouse	USB type		
12	USB port	Minimum 4 Nos USB ports		
13	Form Factor	Rack type		
14	Expandable	RAM & HDD upgradable		
15	Communication Ports	1 No. Serial port		

11. Facial Recognition System Server

SI No.	Parameter	Specs	Compliance (Yes/No)	Deviation (if any)
1	Processor	2 X Intel Xeon Gold 10C or higher		
2	RAM	Min 128 GB and extendable up to 196 GB		

SECTION VIII - QUALITY CONTROL REQUIREMENTS

3	Internal storage	2 x 600GB SAS (15k RPM) configured as RAID1 for OS & Application		
		4 X 2 TB SAS (10k RPM) on RAID 10 SQL DB and Face data Transaction Logs		
4	Network Interface	4 Nos 1 Gbps and 2 Nos 10Gbps Gigabit Ethernet ports		
5	Graphics card	NVIDIA Tesla P40 or better - 2 Nos.		
6	HBA interface	Dual Port PCI-e FC HBA		
7	Monitor	24" LED , Make :Dell/HP with IPS panel		
7	Operating System	Microsoft Windows Server 2016 and above / latest (64 bit) Standard Edition/linux. License Copy would be in the name of BNPM		
8	Licensed Software	Microsoft SQL 2016 standard edition and associated softwares. License Copy would be in the name of BNPM		
9	Power Supply	Dual Redundant Power Supply		
10	Optical Drive	DVD +/-RW		
11	Keyboards and Mouse	USB type		
12	USB port	Minimum 4 Nos USB ports		
13	Form Factor	Rack type		
14	Expandable	RAM & HDD upgradable		
15	Communication Ports	1 No. Serial port		

12. Facial Recognition System client workstation

Sl No.	Parameter	Specs	Compliance (Yes/No)	Deviation (if any)
1	Processor	Intel Core i7-4960X processor or higher		
2	RAM	32 GB or more		
3	Internal storage	500GB SATA		
4	Network Interface	2x10/100/1000 Mbps		
5	Graphics	2 GB Graphic Card NVIDEA or better		
6	Display	21" LED screen Full HD , IPS panel		
7	Operating System	Microsoft Windows 10 / latest (64 bit) License Copy would be in the name of BNPM		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

8	Licensed Software	FRS application and associated software. License Copy would be in the name of BNPM		
9	Optical Drive	DVD +/-RW		
10	Keyboards and Mouse	USB type		
11	USB port	Minimum 4 Nos USB ports		
12	Form Factor	Tower type		
13	Expandable	RAM & HDD upgradable		

13. Video Analytics Specifications

Sl No.	Parameters	Technical Specifications	Compliance (Yes/No)	Deviation (if any)
1	Video Motion Detection	It should detect & generate alarm when motion is occurred on a continuous basis or scheduled for particular times, dates, days, months etc.		
		Action to be perform when motion is Detected:		
		· Detects and track objects within the camera coverage area.		
		· Learn scene		
		· Pre-Record duration		
		· Post-Record duration		
		· Archive & Delete motion detection activated recordings after specified period.		
2	Perimeter Intrusion	It should detects & generate alarm when people, vehicles, and other objects approaching or entering into secured area.		
		Action to be performed when Perimeter Intrusion is Detected:		
		· Detects and track objects within the camera coverage area.		
		· Learn scene		
		· Pre-Record duration		
		· Post-Record duration		
		· Archive & Delete motion detection activated recordings after specified period.		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

3	Auto Tracking / People Tracking	Continuous tracking of particular /non- identified people. Alert the security person at control room Continuous Recording		
4	Unattended Object Detection	It should detect & generate alarm when objects that are left unattended for a specified period of time.		
5	Camera Tampering	It should automatically identify & generate alarm when a specific camera field view is altered, blurred image, Camera blinded or covered.		
6	Image Stabilization	It should obtain sharp, blur-free images associated with the motion of a camera during exposure.		
7	People Counting	Counting of people entered / exit from the main turnstile area, plant entrance.		
8	License type	Perpetual license		

14. Face Recognition System Features required

Sl No.	Technical Specifications	Compliance (Yes/No)	Deviation (if any)
1	Face Recognition System shall work on real time and offline mode.		
2	The system shall capture face images from live CCTV video feed and generate alerts, if blacklist match is found. FRS alerts should be pushed to the VMS / NVR client (seamlessly integrated with VMS/NVR client)		
3	The system shall have the best suited technology employed for 1:1 (one to one) and 1: N (one to many) matching applications, when they enter the field of view of CCTV cameras.		
4	The system shall have the provision to take multiple samples of same face belonging to same person		
5	System shall be able to detect the faces across the multiple CCTV video sources for online (real-time) and offline modes regardless of following conditions: a.Changes in Facial expression b. Changes in facial hair or hairstyle, beard etc. c. Partially hidden faces or occluded faces like wearing dark glasses,scarfs, mask etc. d. Changes in lighting conditions		
6	The system shall be able work on moderate face rotation either horizontal or vertical		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

7	The system shall be able for matching suspect faces from pre-recorded video feeds obtained for CCTV deployed various identified locations.		
8	The system shall be able to add photographs obtained from law enforcement agencies to the criminals' repositories tagged for sex, age, scars, tattoos etc. for future searches.		
9	The system shall support diverse graphic & video formats as well as live cameras.		
10	FRS must support a user management module that enables different user level groups to support various permission levels.		
11	The identification of faces should be contactless, at a distance and on the move and in the crowded area		
12	FRS system must have capability to enrol whatever images fed in the system with image enhancement and ability to verify the quality of the enrolled images with different colour indicator for low quality images enrolled in watchlist/database. The tool may be either a part of this software or may be provided as an add-on.		
13	The system shall be able to utilize any of the file formats like JPEG, PNG, BMP, TIFF etc. format for enrolment.		
14	The system shall be able to check if new enrolled face is already enrolled in the data base before registering the new enrolled face in the system.		
15	The system shall have option to automatically enroll face images from CCTV cameras		
16	The system shall have capacity to create different categories of people with option to customize the matching threshold for different categories.		
17	The system shall be able to work on Full HD, Ultra HD Cameras.		
18	The system shall be able to be implemented on IT hardware like Server or Workstation.		
19	The system shall be able to use CPU and GPU based processing for multiple camera streams in a single Server/Workstation.		
20	The system shall support minimum 4 nos. of camera streams on Servers intended for Face Recognition Software with NVIDIA GPU Card of Tesla/Quadro series or better considering the future requirement. Discontinued products should not be used.		
21	The system shall be able to work on windows / Linux operating system.		
22	The system shall employ database system like MS SQL or Oracle or Postgre SQL or any other data base system.		

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23	The system shall have the capability to have face image data base of 50000 or more for 1 : N matching. The system should be scalable to upgrade for higher data size as and when required with additional license for data base.		
24	The system shall be able to work on ONVIF – profile ‘S’ compliant cameras.		
25	FRS shall support day/night operation with ability to detect faces both in colour and in black/white mode without any special configurations required		
26	FRS shall support all common Video camera resolutions like HD/Full HD/Ultra HD etc. with H.264/H.265 Video codecs		
27	The FRS shall be support multicast video streams to use the same CCTV Camera for General Surveillance and FRS application without putting extra load on network infrastructure		
28	FRS shall have the UI with dashboard to monitor the health of the system, cameras, FR algorithm and number of events, Connected Cameras, Recorded Videos & Size of Watchlist/Suspect list Database		
29	FRS must support a user management module that enables different user level groups to support various permission levels.		
30	FRS client shall have ability to share recognition data like images & videos with multiple users and operators for better reference, alarm & incident management.		
31	FRS shall create multiple groups (no limit) within the watchlist based on different classifications of suspects/subjects, including blacklists/whitelists and can set colour for each watchlist for quick identification of alert. FRS can enrol multiple Persons of Interest simultaneously and manage & edit the watchlist by adding/deleting POIs and groups		
32	FRS alerts can be configurable as desired by the Operator – Silent Alert (Visual only), Pop-up alert, Loud/Audible alert depending on the client requirement.		
33	FRS should provide Quick and easy access to the collection of events recorded by the system. Search previous events by images from previous detections, images uploaded by operator, enrolled names, watch list group etc.		
34	FRS shall have the capability to process Forensic analyses to recognize partial faces with varying angles from multiple video feeds simultaneously from Video clips, Group Photographs and VMS Playback directly from FRS Client Interface.		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

35	FRS shall have ranking features to show next 5 closest & similar subjects in the Watchlist with nearest score to the detection. This option enables you to review POIs that are potential matches for this detection for efficient system performance.		
36	FRS shall be integrated with all the widely used Video Management Software (VMS) Platforms to reduce client dependencies on multiple vendors, from day one as comprehensive, seamless and advanced tactical surveillance solution.		
37	FRS shall provide an SDK/API for integration with any third-party software. All FRS function shall be fully accessible via API. Bidder to provide free API, SDK of the system.		
38	FRS shall be able to play a short video clip of the moment of face detection without dependency on VMS which can be downloaded/exported/saved for evidence proof		
39	Server/workstation to be supplied complete with required FRS Licenses, Genuine OS Licenses, DB License, HDD, RAM etc to fulfil the complete requirements		
40	FRS shall support Server Client architecture and the system shall be able to completely centralize/synchronise the events and galleries from each local station into a unique central station, devoted to management and supervision.		
41	The user interface of FRS should have a report management tool to be able to generate real time report such as Audit log report, Hit List Report, Daily Detection & Recognition Report - camera wise for online cameras and offline videos		
42	FRS shall have floating licenses which are not tied to a camera thereby allowing any camera to be added / substituted at any point of time as needed by the customer based on the upper limit of licenses supplied		
43	FRS shall be able to detect more than 20 faces in crowd with face size of at least 40x40 pixels and face rotation of Min ±90 degree (horizontal) and Min ±30 degree (vertical) without any cooperation from the subjects/person.		
44	The face recognition software algorithm should have participated in the latest NIST (National Institute of Standards and Technology) Face Recognition Vendor Test. The vendor shall submit the latest NIST evaluation report for the algorithm.		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

45	License type of software (if anything provided) - Perpetual license		
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15. Core Switch: Gigabit Layer 3 Modular Chassis Switch

Sl No	Parameter	Description	Compliance (Yes / No)	Deviation (if any)
1	Ports Density	6 Slot Chassis or more		
		Minimum 2*40G QSFP+ slots		
		Minimum 24*10/100/1000/10000-Base-T ports		
		Minimum 12*1G/10G SFP+ slots		
		8 Nos 10G SFP+ ports should be loaded with 10Gbps SFP+ Single Mode Modules based on design requirement		
		Should be equipped with dual internal redundant power supplies for higher availability		
2	Performance	Switching Capacity: Non-Blocking,		
		Forwarding Rate: Wire Speed Non-Blocking		
		Multicast: Wire Speed Non-Blocking		
		Energy efficient Ethernet IEEE 802.3az		
3	Resiliency	Should have the technology capability of Active-Active Clustering VSS/equivalent high availability technology for higher availability and resiliency.		
		The Active - Active Virtual chassis cluster should support technology functionality locally or over geographically diversified locations		
		The proposed VSS or equivalent technology should support high availability for Layer 3 (RIP, OSPF) Including for IP Multicasting (PIM-SM, PIM-DM),for video applications to ensure hitless failover		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		In case of any kind of failure in the VSS cluster the migration to secondary Active core should be seamless ensuring no real time traffic disruption		
		Should support sub 50ms ring resiliency as per REP/ERPS / IEEE 802.17/RRPP or equivalent to ensure no impact on video traffic during any failure across the network		
4	Layer 3 Features	Static Routing		
		Should support RIP v2, RIPng, OSPFv2, OSPFv3, PIM-SM, PIM-DM, PIMv6-SM		
		IEEE 802.1ad, IEEE 802.1Q, IEEE 802.1v, IEEE 802.3ac,		
		Voice VLAN, LLDP-MED,		
		IEEE 802.1D MAC bridges, IEEE 802.1s (MSTP), IEEE 802.1w (RSTP),		
		VRRP v3		
5	Multicast Features	Multicast Support: IGMP query solicitation, IGMP snooping v1, v2 and v3, MLDv1 and v2		
		Source-specific multicast for IP,		
		IGMP query solicitation		
6	IPv6 Features	IPv4 and IPv6 dual stack		
		Device management over IPv6 networks with SNMPv6, Telnetv6 and SSHv6		
		ICMPv6, NTPv6, DNSv6, DHCPv6 relay, tunnelling		
7	Security	SSH remote login, SSLv2 and SSLv3,		
		TACACS+		
		IEEE 802.1X authentication protocols (TLS, TTLS, PEAP and MD5)		
		IEEE 802.1x, MAC-based and Web-based can be enabled simultaneously on the same port.		
		IEEE 802.1X port-based network access control		
		RADIUS, RADIUS accounting, Secure Shell (SSHv2),		
		ACL, Dynamic VLAN assignment		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		DHCP (snooping, client, Server and relay)		
		Switch should provide the ability to monitor events and take corrective action proactively		
		Control plane denial-of-service (DoS) protection		
8	Management	Switch should be able to support management via CLI,		
		Web interface SNMP v1,v2,v3 support,		
		RMON (groups 1,2,3 and 9), SNMP traps, sflow,		
		Optical digital diagnostic monitoring as per SFF- 8472 or equivalent standards for 1G SFP and 10G SFP+ ports		
		Switch should be manageable through both IPv4 & IPv6		
		An External memory card / USB or equivalent, allowing switch firmware, configurations to be stored for backup and distribution to other switches		
9	Power input	Should be equipped with dual internal redundant AC power supplies for higher availability		
10	Certifications	UL-UL60950-1, EN 55024, CE, ROHS		
11	Operating Temperature	0-40C in continuous operation of 365 days 24 hrs		
12	Interoperability	For ease of integration all active components (switches, SFP's) should be of same OEM		
13	Mounting	3 RU		

16. Distribution Switch: Gigabit Layer 2

Sl No	Parameter	Description	Compliance (Yes / No)	Deviation (if any)
1	Ports Density	24*10/100/1000- Base-T ports POE+		
		2*10G SFP+ ports, 2*1G SFP port		
		The 1 G SFP ports should be loaded with 1Gbps Single Mode module based on design requirements		
		10G SFP+ ports should be loaded with 10Gbps SFP+		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		Single Mode Modules based on design requirement		
2	Performance	Switching Capacity: Non-Blocking,		
		Forwarding Rate: Wire Speed Non-Blocking		
		Multicast: Wire Speed Non-Blocking		
		Energy efficient Ethernet IEEE 802.3az		
		Should have the technology capability of Active-Active Clustering VSS/equivalent high availability technology for higher availability and resiliency.		
3	Resiliency	The Active - Active Virtual chassis cluster should support technology functionality locally or over geographically diversified locations		
		The proposed VSS or equivalent technology should support high availability for both Layer 2 and Layer 3 (RIP, OSPF) Including for IP Multicasting (PIM-SM, PIM-DM), for video applications to ensure hitless failover		
		In case of any kind of failure in the VSS cluster the migration to secondary Active core should be seamless ensuring no real-time traffic disruption		
		Should support sub 50ms ring resiliency as per REP/ERPS / IEEE 802.17/RRPP or equivalent to ensure no impact on video traffic during any failure across the network		
4	Layer2 Features	Static Routing		
		Should support RIP v2, RIPng, OSPFv2, OSPFv3, PIM-SM, PIM-DM, PIMv6-SM		
		IEEE 802.1ad, IEEE 802.1Q, IEEE 802.1v, IEEE 802.3ac,		
		Voice VLAN, LLDP-MED,		
		IEEE 802.1D MAC bridges, IEEE 802.1s (MSTP), IEEE 802.1w (RSTP),		

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		VRRP v3		
5	Multicast Features	Multicast Support: IGMP query solicitation, IGMP snooping v1, v2 and v3, MLDv1 and v2		
		Source-specific multicast for IP,		
		IGMP query solicitation		
6	IPv6 Features	IPv4 and IPv6 dual stack		
		Device management over IPv6 networks with SNMPv6, Telnetv6 and SSHv6		
		ICMPv6, NTPv6, DNSv6, DHCPv6 relay, tunnelling		
7	Security	SSH remote login, SSLv2 and SSLv3,		
		TACACS+		
		IEEE 802.1X authentication protocols (TLS, TTLS, PEAP and MD5)		
		IEEE 802.1x, MAC-based and Web-based can be enabled simultaneously on the same port.		
		IEEE 802.1X port-based network access control		
		RADIUS, RADIUS accounting, Secure Shell (SSHv2),		
		ACL, Dynamic VLAN assignment		
		DHCP (snooping, client, Server and relay)		
		Switch should provide the ability to monitor events and take corrective action proactively		
		Control plane denial-of-service (DoS) protection		
8	Management	Switch should be able to support management via CLI,		
		Web interface SNMP v1,v2,v3 support,		
		RMON (groups 1,2,3 and 9), SNMP traps, sflow,		
		Optical digital diagnostic monitoring as per SFF- 8472 or equivalent standards for 1G SFP and 10G SFP+ ports		
		Switch should be manageable through both IPv4 & IPv6		

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		An External memory card / USB or equivalent, allowing switch firmware, configurations to be stored for backup and distribution to other switches		
9	Power input	Should be equipped with dual internal redundant AC power supplies for higher availability		
10	Certifications	UL-UL60950-1, EN 55024, CE, ROHS		
11	Operating Temperature	0-40C in continuous operation of 365 days 24 hrs		
12	Interoperability	For ease of integration all active components (switches, SFP's) should be of same OEM		

17. Edge Switch (Outdoor-Industrial Grade)

Sl No	Parameter	Description	Compliance (Yes / No)	Deviation (if any)
1	Type	Outdoor Industrial grade layer 2 Ethernet switch		
2	Port Density	Minimum 8 nos. 10/100/1000- Base-T PoE+ ports with HPoE (60w) support with PoE budget of 240w		
		4 nos. 1000 Mbps fiber optic ports for distances up to 10km. Single mode fibre links		
		The 1 G SFP ports should be loaded with 1Gbps Single Mode module based on design requirements		
3	Performance	Switching Capacity: Non-Blocking,		
		Forwarding Rate: Wire Speed Non- Blocking		
		Multicast: Wire Speed Non-Blocking		
		Energy efficient Ethernet IEEE 802.3az		
4	Resiliency	The proposed VSS or equivalent technology should support high availability for both Layer 2 and Layer 3 (RIP, OSPF) Including for IP Multicasting (PIM- SM, PIM-DM),for video		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		applications to ensure hitless failover		
		In case of any kind of failure in the VSS cluster the migration to secondary Active core should be seamless ensuring no real-time traffic disruption		
		Should support sub 50ms ring resiliency as per REP/ERPS / IEEE 802.17/RRPP or equivalent to ensure no impact on video traffic during any failure across the network		
5	Layer2 Features	Static Routing		
		Should support RIP v2, RIPng, OSPFv2,OSPFv3, PIM-SM, PIM-DM,PIMv6-SM		
		IEEE 802.1ad, IEEE 802.1Q, IEEE 802.1v,IEEE 802.3ac,		
		Voice VLAN, LLDP-MED,		
		IEEE 802.1D MAC bridges, IEEE 802.1s (MSTP), IEEE 802.1w (RSTP),		
		VRRP v3		
6	Multicast Features	Multicast Support: IGMP query solicitation, IGMP snooping v1, v2 and v3, MLDv1 and v2		
		Source-specific multicast for IP,		
		IGMP query solicitation		
7	IPv6 Features	IPv4 and IPv6 dual stack		
		Device management over IPv6 networks with SNMPv6, Telnetv6 and SSHv6		
		ICMPv6, NTPv6, DNSv6, DHCPv6 relay, tunnelling		
8	Security	SSH remote login, SSLv2 and SSLv3,		
		TACACS+		
		IEEE 802.1X authentication protocols (TLS, TTLS, PEAP and MD5)		
		IEEE 802.1x, MAC-based and Web-based can be enabled simultaneously on the same port.		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		IEEE 802.1X port-based network access control		
		RADIUS, RADIUS accounting, Secure Shell (SSHv2),		
		ACL, Dynamic VLAN assignment		
		DHCP (snooping, client, Server and relay)		
		Switch should provide the ability to monitor events and take corrective action proactively		
		Control plane denial-of-service (DoS) protection		
9	Management	Switch should able to support management via CLI,		
		Web interface SNMP v1,v2,v3 support,		
		RMON (groups 1,2,3 and 9), SNMP traps, sflow,		
		Optical digital diagnostic monitoring as per SFF- 8472 or equivalent standards for 1G SFP and 10G SFP+ ports		
		Switch should be manageable through both IPv4 & IPv6		
10	Power input	Should be equipped with dual redundant AC power supplies for higher availability		
11	Surge & spike protection	Should support EN 61000-4-5 std for surge.		
12	Certifications	EN55022:2010, EN55024:2010 EN61000-6-4		
		EN61000-4-2 (ESD) EN61000-4-3 (RS) EN61000-4-4 (EFT)		
		UL-UL60950-1, EN 55024, EN61000-4-5 (Surge) CE, ROHS		
13	Operating Temperature	0 to 70°C in continuous operation of 365 days 24 hrs		
14	Ingress protection	IP30 protection minimum		
15	Interoperability	For ease of integration all active components (switches, SFP's) should be of same OEM		

18. EQUIPMENT RACK-42 U

Sl No.	Features	Description	Compliance (Yes/No)	Deviation (if any)
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SECTION VIII – QUALITY CONTROL REQUIREMENTS

1	Frame structure	Deep Powder coated (100 micron thickness) CRCA Steel Frame Rack 800(W) x 2000(H) x 1000(D), 1.5 mm thick sheet.		
		Bottom Gland plate cover with suitable no. of cutouts for cable entry with 3mm thick sheet		
		All cutouts blanked with Plastic caps.		
		2 pairs, 42 U height 19" L type angle, Front & rear side		
		Vertical Cable Trough (LH & RH) 2 Pair and Horizontal cable trough where ever required to manage cable along with metal shunting ring		
2	Doors	Perforated Doors with minimum 75% perforation. Front view with Glass (toughened)		
3	Side Panels	2000 mm Height x 1000mm Deep, with foamed-on seal, Screw fixed type		
4	Handle and Lock	Ergoform Handle with Lock Insert Key Lock Type		
5	Cooling Fans	230 Volt AC, 90 cfm, 4 Nos. on top/side cover		
6	Outer Filter	2 Nos. on side cover		
7	Base Plinth	8000W x 1000Dx 100H with anti-vibration pads		
8	Power supply	2 sets of 5/15 A, 230 V socket strip having 10 sockets/switch with 3 meter power chord with 16 Amp Top and MCB for strip		
9	Earthing	Earth Rail should be provided within the panel		
10	Rack Color	Gray (RAL 7035)		
11	Accessories	Lifting Eye Bolt should be provided on 4 corners. 2 Nos of LED batten with 10W to be provided. All other hardware and accessories required for housing the equipment such as keyboard and mouse tray, Monitor Shelf, Reducing Channel etc to be provided.		
12	IP Rating	IP 40		
13	Mounting	Structural Steel frame of ISMC 75 shall be provided		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

		for mounting the rack (False flooring height- 600mm)	
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19. 9U Rack - Outdoor Type

Sl No.	Features	Description	Compliance (Yes/No)	Deviation (if any)
1	Type	Outdoor Type		
2	Frame structure	Wall/ Pole Mounted enclosure Powder coated steel frame rack 460(H) X 600 (W) X 500(D). 1.5 mm thick sheet		
		Integrated side walls 1 pair of 19” angles with wall/pole mounting provision		
		Bottom Gland plate cover with suitable no. of cutouts for cable entry with 3mm thick sheet		
		All cutouts blanked with Plastic caps.		
3	Doors	Front view with Glass (toughened)		
4	Handle and Lock	Ergoform Handle with Lock Insert Key Lock Type		
5	Cooling Fans	230 Volt AC, 90 cfm fan with Inlet and Outlet Filter, 2 Nos. on top/side cover		
6	Accessories	1 Nos of LED batten to be provided. Patch panel with I/o ports, Wire/Cable manager, Jumper Ring, DIN rail suitable for mounting switch/ adaptor etc. All other hardware and accessories required for housing the switch, Air Filter for Inlet and outlet, cable manager, Glands		
7	Power supply	19 “Mountable 1 set of 5A, 230 V Universal socket strips having 6 sockets/switch with 2-meter power chord with 5 Amp Top,		
8	Canopy	Required with lifting hook		
9	Earthing	Earthing connection provision should be available at 2 points		
10	Rack Color	Gray (RAL 7035)		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

11	IP Rating	IP66 – Outdoor Rainproof type.		
12	Mounting Accessories	Wall/ Pole Mounted		

20. Armored Shielded Twisted Pair (STP) CAT 6a Cable

SI No.	Item Description	Specifications	Compliance (Yes/No)	Deviation (if any)
1	Construction	Four twisted pair, inner jacket, shield, ripcord and overall armored jacket. The cable shall have marking of length at each meter		
2	Conductors	23 AWG x 8 Solid Bare Copper conductors with HDPE insulation		
3	Inner Jacket	PVC Aluminum foil Shield (100% coverage)		
4	Outer Jacket	Armored, Low smoke zero halogen FR PVC		
5	Operating Temperature	0-70 Degree C		
6	General Specification	<p>Cable should give 1 Gbps end-to-end solution (up to 100 mtr)</p> <p>Should be UL/ETL tested and verified for 1 G component performance.</p> <p>Should support applications like Gigabit Ethernet 1000 Base-T, Fast Ethernet 100 base-T, Ethernet 10 base-T, Token ring, ATM 155 Mbps, ISDN, analog (broadband, baseband) and digital Video and analog and digital voice (VOIP).</p>		
7	Application	CCTV		

21. Armored Single Mode Fiber Optic Cable

The 12-core cable shall be 9/125micron core/cladding, single mode, Armoured Fiber Optic Cable. The cables shall have identification tags of connections at each end and such details shall be submitted along with documentation.

SI No.	Item	Specifications	Compliance (Yes/No)	Deviation (if any)
1.	Optical Fiber Cable Structure			
	Number of core	12 cores		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

	Core material:	Germanium doped Silica glass (12 core)		
	Cladding material:	Silica glass		
	Mold field diameter:	9±0.4µm		
	Cladding diameter:	125±0.7µm		
	Coating material:	UV curable material		
	Coating diameter:	250±10µm		
2	Optical Characteristic			
	Attenuation at 1310nm:	≤1.0dB/km		
	at 1550nm:	≤1.0dB/km		
	Temperature and Humidity	The cable shall retain the optical properties, detailed in the present specification over the following condition: Working/Storage Temp.: -30 to +70 degree C Humidity: 0--100%		

22. Armoured Power Cable

Sl No.	Specifications	Compliance (Yes/No)	Deviation (if any)
1	3 core, 6 sq mm copper conductor, PVC insulated, armoured, cable conforming to IS:1554 (Part-I) with FRLS PVC outer sheath . The cable shall have marking of length at each meter. The cables shall have identification tags of connections at each end and such details shall be submitted along with documentation.		

23. 6 Mtr Hexagonal GI Pole

S.No.	Specifications	Compliance (Yes/No)	Deviation (if any)
1	Length:6Mtr, Galvanization thickness: 90 Micron The Poles should be erected with proper civil works i.e., concrete foundation base of suitable depth below the ground level.		
2	The pole and its construction can withstand wind speeds up to 150 km/h. The projected pipe should withstand atleast 10 Kg of weight at top of the pole.		
3	Suitable nuts, bolts, clamps for camera fixing should be provided		
4	The Poles shall be in single section, there shall not be any circumferential weld joint.		
5	The poles shall be hot dip galvanized as per IS 2629		

SECTION VIII – QUALITY CONTROL REQUIREMENTS

6	The Poles shall be bolted on a foundation with a set of four foundation bolts for greater rigidity.		
7	The galvanized mounting bracket shall be supplied along with the Poles for installation of the surveillance cameras		
8	SMF Battery capacity shall be calculated by the tenderer depend upon the load requirement to cater 30 minutes back up		
9	The bracket shall have one coat of anticorrosion paint before dispatch to site and two coats of approved make and shade of enamel paint.		
10	Suitable openings for running the PoE Cable, earthing wire within the Pole should be available. No cables of camera should be projected outside after installation of cameras.		
11	Earthing should be provided.		

24. Online UPS - Single phase

S.No.	Feature	Specifications	Compliance (Yes/No)	Deviation (if any)
1	Type	Online UPS single phase		
2	AC input voltage	170 – 260 V or better		
3	Output	AC 230v (+/- 5%) , 50 Hz		
4	Capacity	5kVA and above with parallel redundant operation		
5	Output wave form	Pure sine wave output		
6	Output Isolation	MCB		
7	Backup time	30 minutes		
8	Battery Type and Capacity	SMF Battery capacity shall be calculated by the tenderer depend upon the load requirement to cater 30 minutes back up		
9	Protection	Over load, output short circuit, over/ under voltage etc.		
10	Audible alarm	required for EB supply ON/ OFF		
11	Visual Indicators	Mains on, low battery, over load		
12	Codes / Standards	Quality/ Environment : ISO 9001-2008 Inverter Basic Standard : IS/IEC		
13	Ambient Conditions	Temp : 0 degree to 50 degree celcius, RH: 95% non-condensing, Air Quality: Normal		
14	Mechanical Characteristics	IP : 20 (minimum) Cable Entry : Bottom		

SECTION VIII - QUALITY CONTROL REQUIREMENTS

15	Stand	suitable stand for UPS and battery		
16	Installation	As per site requirement.		

25. List of Approved makes

S.No.	Equipment	Approved makes	Compliance (Yes/No)	Deviation (if any)
1	Cameras	Axis, Bosch, Pelco, Panasonic, American Dynamics, Vivotek, Honeywell or *equivalent make		
1	Camera Lens	Axis, Bosch, Pelco, Panasonic, American Dynamics, Vivotek, Honeywell or *equivalent make		
2	Video Management Software	Axis, Bosch, Pelco, Milestone, Panasonic, Videonetics, Genetec, Godrej or *equivalent make		
3	Video Analytics Software	Axis, Bosch, Pelco, Milestone, Panasonic, Videonetics, Genetec, Allgovision or *equivalent make		
3	Facial Recognition Software	NEC, Cognitec Neurotechnology, 3M Cogent, Panasonic, Anyvision or *equivalent make		
4	Servers	HP, Dell, IBM, Cisco or *equivalent make		
5	Storage	HP, Dell, IBM, EMC, Netapp or *equivalent make		
7	Layer - 3 Network Switches	Allied Telesis, Cisco, HP, Juniper or *equivalent make		
6	Layer - 2 Network Switches	Allied Telesis, Cisco, HP, Juniper or *equivalent make		
8	Edge Layer-2 Industrial Outdoors switches	Allied Telesis, Cisco, HP, Juniper or *equivalent make		
9	Work stations	HP, Dell, IBM, Cisco, HCL or *equivalent make		
10	UPS	APC / Consul/ Fuji Electric or *equivalent make		
11	Armoured Cat 6A cable & 12 core OFC cable	Tyco/Crestron/Extron/Schneider/Finolex / Digilink or *equivalent make		
12	Power Cable	Polycab, Finolex, Havells, V Guard or *equivalent make		
13	Equipment Racks	Rittal, Dell, IBM, APW, Schneider, Netrack or equivalent*		
14	Power Distribution Box	Legrand, L&T, Havells, Schneider, Hager or *equivalent make		

SECTION VIII - QUALITY CONTROL REQUIREMENTS

15	Modular switch and sockets and I/O boxes	Anchor, Roma, Legrand or *equivalent make		
16	Rigid PVC conduit	Any brand with ISI mark or *equivalent make		
17	Antivirus	McAfee, Norton or *equivalent make		

***equivalent makes** are accepted subject to approval from BNPM after analysing specifications and relevant documents

26. Laying of Power, CAT and Fiber Optic cable:

S.No.	Work description	Compliance (Yes/No)	Deviation (if any)
1	The cable shall be laid on wall/ceiling or above false ceiling etc. The rate quoted for cable shall be for supply and fixing of GI saddles & spacers etc. & cable trays at required areas on wall/ceiling or above false ceiling and providing other accessories as required. Rate shall also include for making required holes, if any, in brick/RCC walls, RCC Ceiling etc. and making good the same complete in all respect as required to complete the job. The cables shall be properly dressed in a neat manner. The cable shall have marking of length at each meter. The Power cable shall be terminated with copper lugs, glands etc. In case of CAT Cable and Fiber optic Cables, the termination shall be done by providing suitable end connectors.		

27. Surge Suppressor for cameras and associated hardware / Earth Pit:

S.No.	Work description	Compliance (Yes/No)	Deviation (if any)
1	To protect the system from Lightning, it is the responsibility of the bidder to install required class of surge suppressor for signal, video and power cable and to provide suitable earth pits along with lightening arrestor at the watch towers and camera mounting pole for all the cameras and associated hardware like switches etc. In case of any failure of component due to lightening, it will be the responsibility of successful bidder to replace the defective components during warranty as well as AMC period to make the system serviceable.		

28. List of offered makes & Road Map of the offered makes and models

S.No	Equipment	Offered Make	Offered Model	End of Sale	End of Support
1	IP Dome Indoor IR Cameras 2MP and above				
2	IP Dome Outdoor IR Cameras 2MP and above				
3	IP Bullet Indoor IR Cameras 2MP and above				

SECTION VIII – QUALITY CONTROL REQUIREMENTS

4	IP Bullet Outdoor IR Cameras 2MP and above				
5	IP PTZ Outdoor Cameras 2 MP and above				
6	Video Management Software				
7	Video Analytics Software				
8	Video Management / Recording Servers				
9	Video Analytics Server				
10	Workstation Client PCs				
11	Facial Recognition System Software				
12	Facial Recognition System Camera				
13	Facial Recognition Server				
14	SAN Storage				
15	Layer-2 Network Switches				
16	Layer -3Network Switches				
17	Edge switches				
18	UPS				
19	Antivirus				

Note : Bidder shall quote for the make and model offered mentioned in this List only and the same has to be supplied.

29. Warranty

S.No	Description	Compliance (Yes/No)	Deviation (if any)
1	Two years warranty for complete system after date of installation, commissioning and acceptance of system.		
2	Two years OEM Onsite warranty for servers and backup storage system for two years after date of installation, commissioning and acceptance of system.		
3	OEM onsite warranty for servers and backup storage system during comprehensive AMC period and same has to be reflecting OEM website/Certification from OEM directly		
4	Comprehensive AMC for complete system as mentioned in section VII		

Note:

1. For all BOQ items, the bidders are advised to consider and submit the quote for any one make & model only from the above list of approved makes which are robust, reliable and equivalent in all respects to meet our requirement for operation of system on 24/7 basis.
2. Bidder has to mandatorily quote for single OEM make in each category (Cameras, Servers and Switches) and same model within each BOM line item. The bid with multiples OEM & Models for single item will be treated as noncompliance & that bid will be liable for rejection for further evaluation.
3. Category wise total (Form B1) should match the total of item-wise price mentioned in (form B2, B3 and B4)

COMMERCIAL COMPLIANCE STATEMENT:

Sl. no.	Features	Requirements of BNPMIPL, Terms & conditions	Whether Agreed by the firm	Deviation, if any
01	General Conditions and list of requirements	Supply shall be rendered exactly as per the given instructions / Scope of work mentioned in Section VII of the tender	Yes agreed	
02	Quantity	As per the list of requirements mentioned in Section VI of the tender.	Yes agreed	
03	Delivery	As per section -VI	Yes agreed	
04	Payment terms	Payment terms as mentioned in Sl No 8 (GCC Clause No 22) of SCC	Yes agreed	
05	Liquidated Damages	As per liquidated damages clause mentioned in Sl No 9 (GCC clause No 24) of SCC	Yes agreed	
06	Performance Security	As mentioned in Sl No 2 (GCC clause No 6) of SCC	Yes agreed	
07	Tender terms & conditions	We have gone through entire tender document thoroughly including GIT (Section II - General Instructions to Tenderer), SIT (Section III- Special Instruction to Tenderers), GCC (Section IV - GENERAL CONDITIONS OF CONTRACT), SCC (Section V- Special Conditions of Contract) <u>and confirm that we don't have any counter conditions.</u> We also understand that offer with counter conditions is liable for rejection	Yes agreed	
08	Compliance to SCC Clauses	As mentioned in Sl.no 13 to Sl.no 15	Yes agreed	
09	No. of pages	Total number of pages in Technical Bid		

Authorized signatory & stamp

(To be signed & stamped and submitted along with Techno-commercial Bid Part -I)

SECTION IX – QUALIFICATION/ELIGIBILITY CRITERIA

QUALIFICATION/ELIGIBILITY CRITERIA

Category	Eligibility Criteria	Documents required in support of eligibility criteria
General	<p>a) Bidder shall be Individual/ firm/ company/ corporate / LLP / HUF / limited company/consortium intending to bid should be Bonafide, experienced, technically competent, resourceful and financially sound to carry out the assigned order.</p> <p>*Any bidder from a country which shares a land border with India will be eligible to bid in the tender only if the bidder is registered with the Competent Authority (The Registered Committee constituted by the Department for Promotion of Industry and Internal Trade)</p>	<p>Company's registration / Certificate of incorporation/Partnership Deed/Any other registration certificate as applicable</p> <p>Sealed & Signed Annexure – B on company's letter head.</p>
	b) Bidder should have valid GST registration certificate	Copy of GST certificate
	c) Bidder should have valid PAN card.	Copy of PAN card
	d) Bidder should have not been blacklisted / debarred by BRBNMPL/ SPMCIL/ BNPMIPL/ Government of India.	Declaration as per Annexure –A on company's letter head duly Signed & with company seal to be submitted
	e) Storage OEM needs to be listed in the Leaders Quadrant position in "General Purpose Disk Arrays" for Past five Gartner Reports.	The copy of report needs to be submitted.
	<p>The Bidder should be a manufacturer / Authorized Distributor / Authorized Dealer / Authorized Representative of below.</p> <ul style="list-style-type: none"> Server Storage Network Devices CCTV cameras 	<p>i. Declaration by Manufacturer, in case bid is being submitted by Manufacturer. (OR)</p> <p>ii. Valid authorized dealership certificate issued by Manufacturer.</p>
Experience & Past Performance	<p>Bidder should have carried out similar project involving CCTV camera, Servers, storage and networking in last five years ending 30/09/2020 in either of below:</p> <p>a) 01 similar project completed at value of 6.4 crores (or)</p> <p>b) 02 similar projects at value of 4 crores (or)</p> <p>c) 03 similar projects at value of 3.2 crores.</p>	<p>Work completion certificate with satisfactory performance from client to be attached along with details of the project.</p>
Financial Standings	<p>a) Average annual turnover of the bidder firm during last three financial year's period ending 31.03.2019 should be more than Rs. 2,40,00,000/- (Rupees two crores forty lakhs only)</p> <p>b) Bidder firm should not have suffered any financial loss for more than one year during the last three financial year's period ending 31.03.2019.</p>	<p>Audited balance sheet and profit & loss statement for FY 2018-19, 2017-18 and 2016-17</p> <p>Chartered Accountants certificate for Turnover, Profit and Net worth may be accepted for the bidders, where tax audits has been exempted as per the existing</p>

SECTION IX – QUALIFICATION/ELIGIBILITY CRITERIA

	c) Net worth of the bidder firm should not be in negative as on 31.03.2019 and should have not eroded** by more than 30% in the last three financial year's period ending 31.03.2019.	Govt. orders issued before tender closing date. ** Erosion shall be considered only on account of reported loss in the statement of P&L account, which has led to reduction in capital.
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*** Any bidder from a country which shares a land border with India will be eligible to bid in the tender only if the bidder is registered with the Competent Authority (The Registered Committee constituted by the Department for Promotion of Industry and Internal Trade)**

- I) Bidder means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms, or companies), every artificial judicial person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person participating in a procurement process.
- II) "Bidder from a country which shares a land border with India" for the purpose of this order means: -
- a) An entity incorporated, established or registered in such a country; or
 - b) A subsidiary controlled through entities incorporated, established or registered in such a country, or
 - c) An entity substantially controlled through entities incorporated, established or registered in such a country, or
 - d) An entity whose beneficial owner is situated in such a country; or
 - e) An India (or other) agent of such an entity; or
 - f) A natural person who is a citizen of such a country; or
 - g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.
- III) The beneficial owner for the purpose of (iii) above will be as under: -
- 1) In case of a company or limited liability partnership, the beneficial owner is the natural person (s), who, whether acting alone or together, or through one or more judicial person, has a controlling ownership interest or who exercise control through other means.

Further explanation:

"Continuing ownership interest" means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company;

- a) "Control" shall include the right to appoint majority of the director or to control the management or policy decision including by virtue of their shareholding or management rights or shareholder agreements or voting agreements;
- 2) In case of partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more judicial person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- 3) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more judicial person,

SECTION IX – QUALIFICATION/ELIGIBILITY CRITERIA

has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

- 4) Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- 5) In case of a trust, the identification of beneficial owners(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership

IV) An agent is a person employed to do any act for any another, or to represent another in dealings with tired person.

V) The successful bidder shall not be allowed to sub contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

Bidder to furnish stipulated documents is support of fulfillment of qualifying criteria. Non-submission or incomplete submission of documents may lead to rejection of offer.

All experience, past performance and capacity/ capability related/ data should be certified by the authorised signatory of the bidder firm. The credentials regarding experience and past performance to the extent required as per eligibility criteria submitted by bidder may be verified from the parties for whom work has been done.

We confirm that, we are competent and legally authorized to submit the tender and / or to enter into legally binding contract.

We (Name of the company) have submitted the required documents in support of the eligibility criteria mentioned above.

Vendor to furnish stipulated documents in support of fulfillment of qualifying criteria. Non-submission or incomplete submission of documents may lead to rejection of offer.

All experience, past performance and capacity/capability related data should be certified by the authorized signatory of the Vendor firm. The credentials regarding experience and past performance to the extent required as per eligibility criteria submitted by Vendor may be verified from the parties for whom work has been done.

We confirm that, we are competent and legally authorized to submit the tender and/or to enter into legally binding contract.

We (Name of the company) have submitted the required documents in support of the eligibility criteria mentioned above.

Authorized Signature with stamp & date

(To be signed & stamped and submitted along with Techno-commercial Bid Part –I)

SECTION IX – QUALIFICATION/ELIGIBILITY CRITERIA

ANNEXURE -A

e-Tender No. BNPM/NCB/CCTV/0483/2020-21 Dated 23.10.2020

(To be submitted on the letterhead)

DECLARATION

We do hereby declare that,

1. We have not been blacklisted/ debarred by BNPMIPL/ BRBNMPL/ SPMCIL or any Govt. Departments for participation in tenders. The information provided above is correct and true to the best of my knowledge and belief.

2. The director/proprietor of the bidding firm are not closely related to BNPMIPL.

In case, at any time the information furnished is found to be false, you may disqualify/ debar me/ us as deemed fit.

II) We do hereby declare that we have read and understood all terms and conditions of tender document including GIT, SIT, GCC, SCC, Technical Specification, Quality Control Criteria and confirm to abide to those conditions without any counter conditions.

Signature _____

Name-----

Designation-----

Date-----

Stamp of the Organization-----

SECTION IX – QUALIFICATION/ELIGIBILITY CRITERIA

ANNEXURE -B

e-Tender No. BNPM/NCB/CCTV/0483/2020-21 Dated 23.10.2020

(To be submitted on the letterhead)

DECLARATION

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I hereby certify that M/s is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that M/s fulfills all requirements in this regard and is eligible to be considered.” (where applicable, evidence of valid registration by the Competent Authority shall be attached)

I, the undersigned, declare that the item originate in (Name of the country).

Signature _____

Name-----

Designation-----

Date-----

Stamp of the Organization-----

SECTION X – TENDER FORM

(Bidder shall use this covering letter while submitting the offer)

To

Date _____

Bank Note Paper Mill India Private Limited
Administrative Building,
Entry Gate No 1, Paper Mill Compound,
Note Mudran Nagar
Mysuru 570 003
Karnataka

Ref: Your Tender document No.....dated.....

We, the undersigned have examined the above mentioned tender enquiry document, including amendment No. -----, dated ----- (if any), the receipt of which is hereby confirmed. We now offer to supply and deliver..... (description of goods) in conformity with your above referred document for the sum as shown in the price schedule(s), attached herewith and made part of this tender.

If our tender is accepted, we undertake to supply the goods as mentioned above, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our tender is accepted, we shall provide you with a performance security of required amount in an acceptable form in terms of GCC clause 6, read with modification, if any, in Section V- "Special Conditions of Contract", for due performance of the contract.

We agree to keep our tender valid for acceptance for a period up to **120 days**, as required in the GIT clause 19, read with modification, if any in Section-III -"Special Instructions to Tenderers" or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.

(Signature with date)

(Name and designation)

Duly authorized to sign tender for and on behalf of

SECTION XI – PRICE SCHEDULE

(TO BE FILLED ONLINE ONLY THROUGH e-PORTAL)

(A copy of sealed & signed blank price schedule has to be submitted along with pre-qualification & techno-commercial offer)

Dear Sir,

Sub: Price bid for Upgradation of CCTV System at BNPM Plant, Mysuru

Ref: e-Tender No. BNPM/NCB/CCTV/0483/2020-21 Dated 23.10.2020

We have received and understood the above tender enquiry and are pleased to submit our price bid as under:

Form B1 (category-wise total of items in Form B2, B3, B4):

*Category wise total **should match** the total of item-wise price mentioned in form B2, B3 and B4*

Schedule No.	Description	Price for Supply (INR)					
		Basic unit Price (INR)	GST @ 18% (INR)	Total unit price (Incl. of GST) (INR)	Input Tax Credit for HSN/ SAC (INR)	Effective unit price (net of input tax credit) (INR)	Total Effective price (net of input tax credit) (INR)
1.	Supply, installation and commissioning of IP Cameras						
2.	Supply, installation and commissioning of VMS and VAS Software - Enterprise edition & scalable						

SECTION XI - PRICE SCHEDULE

3.	Supply, installation and commissioning of Facial Recognition System						
4.	Supply, installation and commissioning of Servers & Workstations						
5.	Supply, installation and commissioning of Storage						
6.	New network infrastructure including upgradation						
7.	Cabling and associated works						
8.	Power Distribution System						
9.	Civil works						
10	Cable Trays and associated material						
11	Antivirus Software with Server- client architecture for the servers, storage, workstation etc (Existing Server to be used)						

SECTION XI – PRICE SCHEDULE

12	Configuring new switches in existing NMS application for monitoring, troubleshooting, managing, traffic of existing and new network along with training						
13	Documentation, testing report, Tagging and Labelling works along with Training						
14	Special Tools & Tackles						
15	Comprehensive AMC of the entire CCTV system including the existing infrastructure & CCTV system after the completion of the 02 years warranty period.						
Total effective price (net of input tax credit) with GST and any other charges (D.A.P – Mysore site) in Figures (INR)							
Total effective price (net of input tax credit) incl. any other charges (D.A.P – Mysore site) in Words (INR)							
Total price incl. any other charges and GST (D.A.P – Mysore site) in Figures (INR)							
Total price incl. any other charges and GST (D.A.P – Mysore site) in Works (INR)							

SECTION XI - PRICE SCHEDULE

Form B2 : Supply, Installation, Testing & Commissioning of IP CCTV system

Schedule No.	Description	UOM	Quantity	HSN /SAC Code	Price for Supply (INR)					
					Basic unit Price (INR)	GST @ 18% (INR)	Total unit price (Incl. of GST) (INR)	Input Tax Credit for HSN/SAC (INR)	Effective unit price (net of input tax credit) (INR)	Total Effective price (net of input tax credit) (INR)
					(a)	(b)	(c)=(a)+(b)	(d)	(e)=(c)-(d)	(f)=(e)*(g)
1.	Supply, installation and commissioning of IP Cameras									
(a)	Supply of IP Dome Outdoor IR Cameras 3MP and above, Fixed (Varifocal), IR, POE, along with all required accessories such as mounting, housing, fixtures, Power supply, Patch cards etc	Nos.	136							
(b)	Installation and commission of line item 1(a)	Nos.	136							
(c)	Supply of IP Bullet Indoor IR Cameras 3MP and above, Fixed (IR), Varifocal, POE, along with all required accessories such as mounting, housing, fixtures, Power supply, Patch cards etc	Nos.	66							

SECTION XI – PRICE SCHEDULE

(d)	Installation and commission of line item 1(c)	Nos.	66							
(e)	Supply of IP Bullet Outdoor IR Cameras 3MP and above , Fixed (IR), Varifocal , POE, along with all required accessories such as mounting, housing, fixtures, Power supply, Patch cards etc	Nos.	37							
(f)	Installation and commission of line item 1(e)	Nos.	37							
(g)	Supply, installation and commissioning of IP PTZ Outdoor Cameras 3 MP and above with IR along with all required accessories such as mounting, housing, fixtures, Power supply, Patch cards etc	Nos.	11							
(h)	Installation and commission of line item 1(e)	Nos.	11							

SECTION XI - PRICE SCHEDULE

2.	Supply, installation and commissioning of VMS and VAS Software - Enterprise edition & scalable								
(a)	Supply of Licenses required for the Video Management Server and Video Recording Servers & Storage Servers, Work station clients with bundled lifetime licenses for 300 cameras	Lumps um	1						
(b)	Installation and commission of line item 2(b)	Lumps um	1						
(c)	Supply of Analytic Licenses for 60 No. Cameras with 10% spare licenses	Lumps um	1						
(d)	Installation and commission of line item 2(d)	Lumps um	1						
3.	Supply, installation and commissioning of Supply, installation and commissioning of Facial Recognition System								
(a)	Supply of Facial Recognition IP 4K camera with all required accessories such as mounting, housing fixtures, power supply, patch cords, etc	Nos.	2						

SECTION XI - PRICE SCHEDULE

(b)	Installation and commission of line item 3(a)	Nos.	2							
(c)	Supply of Server for Facial Recognition System with all accessories	Nos.	1							
(d)	Installation and commission of line item 3(c)	Nos	1							
(e)	Supply of Client work stations for FRS with all accessories	Nos.	2							
(f)	Installation and commission of line item 3 (e)	Nos	2							
(g)	Supply of `Software & Licenses required	Lumps um	1							
(h)	Installation and commission of line item 3(g)	Lumps um	1							

SECTION XI – PRICE SCHEDULE

4.	Supply, installation and commissioning of Servers & Workstations								
(a)	Supply of Servers required for Video Management, Recording & Storage for handling 300 Nos. cameras including redundancy with minimum 5 days backup	Lumps um	1						
(b)	Installation and commission of line item 4(a)	Lumps um	1						
(c)	Supply of Servers required for Video Analytics for 60 Nos. cameras	Lumps um	1						
(d)	Installation and commission of line item 4(c)	Lumps um	1						
(c)	Upgradation of existing workstation client PCs for viewing VMS client application with H.265 compression and Full HD resolution	Lumps um	1						

SECTION XI - PRICE SCHEDULE

5.	Supply, installation and commissioning of Storage								
(a)	Supply of Backup SAN storage with dual controller for maintaining camera recording backup of 250 cameras for 90 days & 50 cameras for 365 days backup with full HD /25fps. Minimum 1500TB usable, capacity expandable upto 2000TB or 50 % more than the usable storage offered, whichever is higher along with all necessary accessories for configuring to the system. (usable storage is after Raid 6 configuration)	Lumps um	1						
(b)	Installation and commission of line item 5(a)	Lumps um	1						
(c)	Supply of Network Rack 42 U Indoor type for mounting SAN storage, additional servers/ workstations with all accessories (Monitor, KVM etc all)	Nos.	1						

SECTION XI - PRICE SCHEDULE

(d)	Installation and commission of line item 5(c)	Nos.	1							
6.	New network infrastructure including upgradation									
(a)	Supply of Network Rack 9 U Outdoor type to be mounted on GI pole, with all accessories.	Nos.	9							
(b)	Installation and commission of line item 6(a)	Nos.	9							
(c)	Supply of New Layer 3 core switches with minimum 24X10/100/1000 Mbps Base-T ports, 12 X 1/10G SFP + ports, 2 X 40G QSFP ports along with SFP+ modules and other accessories, whichever are required.	Nos.	2							
(d)	Installation and commission of line item 6(c)	Nos.	2							

SECTION XI - PRICE SCHEDULE

(e)	<p>Upgradation of existing distribution switch for handling 10G Fiber network by providing minimum 2X10G SFP+ ports for upgrading existing network from 1G to 10G (or) New Layer 2 Distribution Switches with 24X10/100/1000 with POE+ supported ports, should have min 2X10G SFP+ ports and 2X1G SFP, along with SFP+ modules and other accessories, whichever are required.</p>	Nos.	16																
(f)	<p>Supply of Edge Switch - Industrial Grade - with minimum 8 ports of 10/100/1000 Mbps Base-T POE+ supported ports. Should have minimum 4 X 1G SFP ports fully loaded with accessories including LIU, SFU modules, patch cords, pig tails etc.</p>	Nos.	10																

SECTION XI - PRICE SCHEDULE

(g)	Installation and commission of line item 6(f)	Nos	10							
7.	Cabling and associated works									
(a)	Supply and installation of all necessary cables required for completing the new CCTV network infrastructure work along the periphery wall (around 41 Nos of cameras) such as ethernet CAT-6A cable for outdoor, CAT-6A for indoor, 12C single mode OFC cable, earthing cables etc. including double compression nickel plated brass cable glands, cable ties and termination accessories.	Lumps um	1							

SECTION XI - PRICE SCHEDULE

(b)	Supply and installation of Cat-6A(indoor) cable for 23 cameras	mts	2000							
8.	Power Distribution System									
(a)	Supply and Installation of 3Cx 4 sq.mm power cable for powering up the network racks installed along the periphery wall.	Lumps um	1							
(b)	Supply and Installation of Online Single Phase 5kVA and above UPS- 2Nos in parallel redundant operation along with all necessary accessories and battery backup of 30 minutes	Nos.	1							
(c)	Earthing for UPS and & GI poles	Nos.	18							

SECTION XI - PRICE SCHEDULE

(d)	Supply and installation Power Distribution including surge protection for outdoor Racks along the periphery wall.	Nos.	10							
(e)	Supply and installation of Power Distribution in the CCTV server room for the new network rack (42U) and servers	Lumps um	1							
9.	Civil Works									
(a)	Supply and Installation of GI Pole upto 18 feet along with required accessories and junction box, including foundation work etc	Nos.	18							
(b)	Supply and Installation of HDPE pipe of 40mm dia including excavatation & backfilling soil where ever required	Lumps um	1							

SECTION XI – PRICE SCHEDULE

10.	Cable Trays and associated material								
(a)	All necessary cables trays including standard cable trunking with casing, standard cable fasteners, GI conduits with necessary supports required for routing the cables wherever required	Lumps um	1						
11.	Antivirus Software with Server- client architecture for the servers, storage, workstation etc (Existing Server to be used)	Lumps um	1						
12.	Configuring new switches in existing NMS application for monitoring, troubleshooting, managing, traffic of existing and new network along with training	Lumps um	1						
13.	Documentation, testing report, Tagging and Labelling works along with Training	Lumps um	1						
14.	Special Tools & Tackles (W.r.t Form B3)	Lumps um	1						
Total effective price (net of input tax credit) for CCTV Infrastructure Upgradation with GST and any other charges (D.A.P - Mysore site) in Figures (INR)									

SECTION XI – PRICE SCHEDULE

Total effective price (net of input tax credit) for CCTV Infrastructure Upgradation incl. any other charges (D.A.P – Mysore site) in Words (INR)	
Total price for CCTV Infrastructure Upgradation incl. any other charges and GST (D.A.P – Mysore site) in Figures (INR)	
Total price for CCTV Infrastructure Upgradation incl. any other charges and GST (D.A.P – Mysore site) in Works (INR)	

Form B3: (Special tools and tackles to mentioned item-wise (if any))

Sch edu le No.	Description	UOM	Qty	HS N/ SA C Co de	Price for Supply (INR)									
					Basi c unit Price (INR)	Freight, P&F, Transit Insuranc e & any other charges (INR)	Unit price (Incl. of Freight, P&F, Transit Insurance & any other charges) (INR)	GST @ _%	GST Amount (INR)	Total unit price (Incl. of Freight, P&F, Transit Insurance, any other charges & GST) (INR)	Input Tax Credit for HSN (INR)	Effective unit price (Incl. of Freight, P&F, Transit Insurance, any other charges) (INR)	Total Effective price (Incl. of Freight, P&F, Transit Insurance, any other charges) (INR)	
					(a)	(b)	(c)	(d)=(b)+(c)	(%)	(e) = (d)*(%)	(f)=(d)+(e)	(g)	(h)=(f)-(g)	(i)=(h)*(a)
1.														
2.														
3.														

SECTION XI – PRICE SCHEDULE

Form B4: AMC of IP CCTV system

Sch edu le No.	Description	UOM	Qty	HS N/ SA C Co de	Price for Supply (INR)								
					Basic unit Price (INR)	Freight, P&F, Transit Insuranc & any other charges (INR)	Unit price (Incl. of Freight, P&F, Transit Insurance & any other charges) (INR)	GST @ _%	GST Amount (INR)	Total unit price (Incl. of Freight, P&F, Transit Insurance, any other charges & GST) (INR)	Input Tax Credit for HSN (INR)	Effective unit price (Incl. of Freight, P&F, Transit Insurance, any other charges) (INR)	Total Effective price (Incl. of Freight, P&F, Transit Insurance, any other charges) (INR)
					(b)	(c)	(d)=(b)+(c)	(%)	(e) = (d)*(%)	(f)=(d)+(e)	(g)	(h)=(f)-(g)	(i)=(h)*(a)
1.	First Year: Comprehensive AMC of the entire CCTV system including the existing infrastructure & CCTV system after the completion of the 02 years warranty period.	Years	01										
2.	Second Year: Comprehensive AMC of the entire CCTV system including the existing infrastructure & CCTV system after the completion of the First year AMC period.	Years	01										

SECTION XI – PRICE SCHEDULE

2.	CCTV Indoor HD Dome camera - 720p, CMOS sensor with 2.8-10mm lens. Make : Panasonic , Model No: SW-355	Nos.	27						
3.	CCTV Outdoor Box Dome camera - 1/3" progressive scan CMOS sensor with 7.5 - 50mm lens. Make : Panasonic , Model No: SP-305	Nos.	1						
4.	CCTV IR day Box Dome camera - 1/3" progressive scan CMOS sensor with 7.5 - 50mm lens. Make: Panasonic, Model No: SW-509	Nos.	28						
Total price for Buyback (incl. of freight, P&F, Transit Insurance, any other charges and GST) (F.O.R – BNPM, Mysuru site basis) in Figures (INR)									
Total price for Buyback (incl. of freight, P&F, Transit Insurance, any other charges and GST) (F.O.R – BNPM, Mysuru site basis) in Words (INR)									

1. The method of evaluation of bidder for awarding the Contract shall be based on **L1 price arrived after subtracting total price of Form B5 from total price of FormB1 (L1 price will be arrived from (total price of FormB1- total price of FormB5))** and will be decided taking into consideration of the offered price for delivery up to BNPM, Mysore. Evaluation shall be carried out inclusive of GST rates.
2. freight, P&F, Transit Insurance, any other charges shall be included while quoting for buyback price quoted for items in FormB5 as **the transfer of items in table03 will be in the scope of bidder only.**
3. Qty. of 7(b) is tentative and will be paid at actuals.

SECTION XI – PRICE SCHEDULE

()

Seal

Name

Signature with Date

Note:

- i) Price should be quoted exactly as per the format given above; Price bids with conditions / Counter conditions are liable for rejection.
- ii) Multiple / Variable rate for single item, would lead to rejection of offer.

SECTION XII – QUESTIONNAIRE

The tenderer should furnish specific answers to all the questions/concerns mentioned below. In case a question/concern does not apply to a tenderer, the same should be answered with the remark “not applicable”.

Wherever necessary and applicable, the tenderer shall enclose certified copy as documentary proof/ evidence to substantiate the corresponding statement.

In case a tenderer furnishes a wrong or evasive answer against any of the under mentioned question/ issues, its tender will be liable to be ignored.

S. No.	Description	To be filled by bidder
1	Brief description of goods and services offered	
2	Status of company's GST registration (tick mark which is applicable)	Regular / Composite / Unregistered
3	Offer is valid for acceptance up to	
4	Your permanent income tax A/c no. as allotted by the Income Tax Authority of Government of India (Please attach certified copy of your latest/ current Income Tax clearance certificate issued by the above authority)	
5	Are you currently registered with the Directorate General of Supplies & Disposals (DGS&D), New Delhi, and/ or the present BNPMIPL and/ or the Directorate of Industries of the concerned State Government/NSIC/SSI for the goods quoted? If so, indicate the date up to which you are registered and whether there is any monetary limit imposed on your registration.	Yes / No If Yes: Registration No..... Validity:
6	Are you currently registered under the Indian Companies Act, 1956 or any other similar Act? (Please attach certified copy (s) of your registration status etc. in case your answer (s) to above queries is in affirmative	
7	Bank account/NEFT/RTGS details	Name of bank: Branch: A/c No.: IFSC: MICR:

SECTION XII – QUESTIONNAIRE

8	Please state whether business dealings with you currently stand suspended/ banned by any Ministry/ Dept. of Government of India or by any State Govt.	
9	EMD details:	Online/Offline/Exempted/Not Applicable
	a) Online:	NEFT/RTGS Details:_____ Dtd:_____
	b) Exempted:	Whether NSIC/MSE/DGS&D Reg. no:
10	Tender Fee:	Online / Offline
	a) Online:	NEFT/RTGS Details:_____ Dtd:_____
11	We confirm that we possess the necessary technical competence and financial resources as mentioned in Section -IX of this tender document, to ensure supply of the tendered item , as per your specifications and delivery schedule. Necessary documents like copies of Purchase orders, P/L Accounts, Balance Sheets are enclosed	Yes / No
12	We confirm that we have quoted exactly for the tendered product as per your specifications given in Section VII	Yes / No
13	We confirm that the Price bid is quoted exactly as per your format in Section- XI	Yes / No
14	We confirm that there would not be any price escalation (Except Statutory Charges) during the supply / contract period	Yes / No
15	We confirm that we will abide by all the tender terms & conditions and we do not have any counter conditions. As required, we enclose herewith the complete set of copy of tender documents duly signed by us as a token of our acceptance	Yes / No
16	PAN Card	Yes/No (PAN to be submitted)

We also confirm that the undersigned is duly authorized and have the competence to submit the tender and / or to enter into legally binding contract for and on behalf of the firm.

.....

(Signature with date)

(Full name, Designation & address of the person duly authorized sign on behalf of the tenderer)

For and on behalf of

.....

.....

(Name, address and stamp of the tendering firm)

SECTION XIII- BANK GUARANTEE FORM FOR EMD

..... (Insert: Bank's Name, and Address of Issuing Branch or Office)

Beneficiary:

Bank Note Paper Mill India Private Limited
Administrative Building,
Paper Mill Compound, Note Mudran Nagar,
Mysuru- 570003, Karnataka, India
Date:.....

Bank Guarantee No:.....

Whereas.....(hereafter Called the "Tenderer") has submitted its quotation dated.....for the supply of..... (hereinafter called the "tender") against Bank Note Paper Mill India Private Limited's tender enquiry No.....Know all persons by these presents that we.....of (hereinafter called the "Bank") having our registered office at.....

Are bound unto Bank Note Paper Mill India Private Limited (hereinafter called the "BNPMIPL") in the sum of for which payment will and truly to be made to the said BNPMIPL, the Bank binds itself, its successors and assigns by these presents.

Sealed with the Seal of the said Bank this.....day of.....20.....

The conditions of this obligation are -

- 1) If the Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- 2) If the tenderer having been notified of the acceptance of his tender by BNPMIPL during the period of its validity:-
 - a) Fails or refuses to furnish the performance security for the due performance of the contract.
 - b) Fails or refuses to accept/ execute the contract.

We undertake to pay Bank Note Paper Mill India Private Limited up to the above amount upon receipt of its first written demand, without Bank Note Paper Mill India Private Limited having to substantiate its demand, provided that in its demand BNPMIPL will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition (s).

This guarantee will remain in force for a period of forty five days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

.....
Signature of the authorized officer of the Bank)

.....
Name, authorization/ signature no. and designation of the officer
Seal, Name & Address of the Bank and Address of the Branch

SECTION XIII- BANK GUARANTEE FORM FOR EMD

Checklist for Bank Guarantee:

EMD / Performance BG should be in line with / comply the following.

1. BG should be issued on not less than Rs.200 e stamp / non judicial stamp paper only
2. Non judicial stamp paper / e stamp paper should be purchased in the name of BG issuing bank only.
3. In case of e stamp paper first party should be BG issuing bank and second party should be BNPM.
4. Date of sale of non-judicial / e stamp paper shown on the BG and the stamp paper (BG) issued is not more than six months prior to the date of execution of BG.
5. Executing officer of BG should indicate his name, designation and power of attorney number / signing power no etc. on each page of BG.
6. Name and address of the bidding party, name and address of BNPM and value of the contract are to be mentioned clearly.
7. Overwriting / cutting if any in BG should be authenticated under signature and seal of authorized signatory of BG issuing Bank.
8. BG number and BG date should be mentioned in all pages of BG and all pages are endorsed / signed by authorized signatories of issuing bank.
9. Amount mentioned in figures and words are to be matched.
10. Validity of BG should be in line with the contract.
11. BG should be unconditional.

**NOT APPLICABLE TO THIS
TENDER DOCUMENT**

SECTION XV- BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

..... (Insert: Bank's Name, and Address of Issuing Branch or Office)

Beneficiary:

Bank Note Paper Mill India Private Limited
Administrative Building, Entry Gate 1,
Paper Mill Compound, Note Mudran Nagar,
Mysuru - 570003
Date:

Performance Guarantee No.:

WHEREAS.....(name and address of the supplier) (hereinafter called "the supplier") has undertaken, in pursuance of LOI (Letter of Intent) no..... dated to supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said LOI that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the LOI;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of..... (amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand. We further agree that no change or addition to or other modification of the terms of the contract to be performed thereunder or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

We undertake to pay Bank Note Paper Mill India Private Limited up to the above amount upon receipt of its first written demand, without Bank Note Paper Mill India Private Limited having to substantiate its demand.

This guarantee will remain in force for a period of sixty days after the currency of this contract and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorized officer of the Bank)

Name, Authorization/ Signature no. and Designation of the officer

Seal, Name & Address of the Bank and Address of the Branch

SECTION XV- BANK GUARANTEE FORM FOR PERFORMANCE SECURITY

Checklist for Bank Guarantee:

EMD / Performance BG should be in line with / comply the following.

12. BG should be issued on not less than Rs.200 e stamp / non judicial stamp paper only
13. Non judicial stamp paper / e stamp paper should be purchased in the name of BG issuing bank only.
14. In case of e stamp paper first party should be BG issuing bank and second party should be BNPM.
15. Date of sale of non-judicial / e stamp paper shown on the BG and the stamp paper (BG) issued is not more than six months prior to the date of execution of BG.
16. Executing officer of BG should indicate his name, designation and power of attorney number / signing power no etc. on each page of BG.
17. Name and address of the bidding party, name and address of BNPM and value of the contract are to be mentioned clearly.
18. Overwriting / cutting if any in BG should be authenticated under signature and seal of authorized signatory of BG issuing Bank.
19. BG number and BG date should be mentioned in all pages of BG and all pages are endorsed / signed by authorized signatories of issuing bank.
20. Amount mentioned in figures and words are to be matched.
21. Validity of BG should be in line with the contract.
22. BG should be unconditional.

**NOT APPLICABLE TO THIS
TENDER DOCUMENT**

**SECTION XVII- LETTER OF AUTHORITY FOR ATTENDING BID
OPENING**

**NOT APPLICABLE TO THIS
TENDER DOCUMENT**

**SECTION XVIII- SHIPPING ARRANGEMENTS FOR LINER
CARGO'S**

**NOT APPLICABLE TO THIS
TENDER DOCUMENT**

**NOT APPLICABLE TO THIS
TENDER DOCUMENT**

SECTION XX- PROFORMA FOR PRE-CONTRACT INTEGRITY
PACT

**NOT APPLICABLE TO THIS
TENDER DOCUMENT**