



RAILTEL CORPORATION OF INDIA LTD.

(A Govt. of India Enterprise)

Territory Office

Plot No. 17, 1st Floor, Raghunath Nagar,
Near Shahpura Police station,
Bhopal MP - 462039

Western Region Office

Western Railway Microwave Complex
Senapati Bapat Marg,
Near Railway Sports Ground,
Mahalaxmi, Mumbai – 400013

Corporate Office

Plate-A, 6th Floor, Office Tower-2,
NBCC Building, East Kidwai Nagar,
New Delhi - 110023

Tender

For

“Selection of System Integrator for Supply, Installation, testing & commissioning towards establishment of Integrated Command & Control Centre (ICCC) for CCTV surveillance system along with Artificial Intelligence (AI) based Video Analytics in CCTV cameras at SECL with 05 years of CAMC after completion of one year warranty along with necessary license and permissions”.

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NOTICE

Tender Ref:- RCIL WR-BPL/MKTG(EB)/Nov.- 1/13 dated: 23.11.2023

RailTel Corporation of India Ltd invites Tender's via E-Mail with password protected folder from reputed firms for work mentioned in the Scope of this Tender. The technical and commercial (price) bids shall be submitted through E-Mail at hpltooffice@railtelindia.com in password protected folder as separate PDF documents up to the end date & time mentioned below.

Sr. No.	Description	Estimated Cost	Last date & Time for Bid Submission	Date & Time for Bid Open	Completion Period
1	“Selection of System Integrator for Supply, Installation, testing & commissioning towards establishment of Integrated Command & Control Centre (ICCC) for CCTV surveillance system along with Artificial Intelligence (AI) based Video Analytics in CCTV cameras at SECL with 05 years of CAMC after completion of one year warranty along with necessary license and permissions”.	As per tender document attached As per Tender No: GEM/2023/B/4171930	28-11-2023 10:00 Hrs.	28-11-2023 10:30 Hrs.	As per Tender No: GEM/2023/B/4171930

Note: In case of any discrepancy or ambiguity in any clause/specification pertaining to scope of work area, Tender no. GEM/2023/B/4171930. “Selection of System Integrator for Supply, Installation, testing & commissioning towards establishment of Integrated Command & Control Centre (ICCC) for CCTV surveillance system along with Artificial Intelligence (AI) based Video Analytics in CCTV cameras at SECL with 05 years of CAMC after completion of one year warranty along with necessary license and permissions”. will be sacrosanct (**Copy at annexure–VIII**).

PRICE BID

Please Refer BoQ – Annexure -VIII

Bidder should quote price for end-to-end SOW wrt–Tender Ref: RCIL WR-BPL/MKTG(EB)/Nov.- 1/13 dated: 23.11.2023 and subsequent corrigenda. “Selection of System Integrator for Supply, Installation, testing & commissioning towards establishment of Integrated Command & Control Centre (ICCC) for CCTV surveillance system along with Artificial Intelligence (AI) based Video Analytics in CCTV cameras at SECL with 05 years of CAMC after completion of one year warranty along with necessary license and permissions”.

Note: In case of any discrepancy or ambiguity in any clause/specification pertaining to scope of work area, the Tender no. GEM/2023/B/4171930. “Selection of System Integrator for Supply, Installation, testing & commissioning towards establishment of Integrated Command & Control Centre (ICCC) for CCTV surveillance system along with Artificial Intelligence (AI) based Video Analytics in CCTV cameras at SECL with 05 years of CAMC after completion of one year warranty along with necessary license and permissions”. will be sacrosanct (**Copy at annexure–VIII**).

1. The details are as under:

1	Issue date of “Invitation for Tender document”	23-11-2023
2	Last date for submission of Tender by applicants	28-11-2023 10:00 Hrs.
3	Opening of Tenders	28-11-2023 10:30 Hrs.
4	Tenders Submission Mode	By email (with password protected)
5	Completion Period	As per tender ref. no. GEM/2023/B/4171930

Tender and all corrigenda will be made available at RailTel Corporation of India’s portal <https://www.railtelindia.com>. Tender fee- Rs. 10,000/- +GST & EMD of Rs. 34,03,100/- as per tender clause. **(For Bank detail Refer Annexure VII)**

Note: For bid submission, tenderer will have to submit signed and stamped printed copy of the tender document.

1. RailTel intends to look for an empanelled BIDDER who can help us with Bid Submission & have the ability to take up the work on turnkey basis and who has good connect with the customer and local environment. The bidder shall bear all costs associated with the preparation, submission / participation in the bid. RailTel in no way will be responsible or liable for these costs regardless of the conduct or outcome of the bidding process.
2. Bidders shall necessarily furnish the details of the valid SD/PBG/Tender fee/fee applicable submitted at time of empanelment for consideration of their offer.
3. Undertaking stating that bidder accept to execute SOW of Tender on fully Back-to-Back basis.
4. Copy of power of attorney issued in favor of signatory
5. The bidder responding to this Tender shall give an undertaking that, if they are successful, then they will not participate directly or with other direct bidder
6. A pre bid agreement will be signed with successful bidder on non-judicial stamp of adequate value as per final bid value. Format will be shared with successful bidder only
7. The Bidder should have average annual turnover from IT / ITES/ICT of ₹ 12 crores in the last 4 Years out of previous 5 years (i.e., for FY 2019-20 FY 2020-21, FY 2021-22, FY 2022-23)
8. The Bidder must provide acceptance (with documents) on the following:

All payments shall be paid on Bidder back-to-back basis. RailTel shall make payment to selected Business Associate after receiving payment from the end customer for the successful completion portion. In case of any penalty or deduction made by the end customer, the same shall be deducted from the selected BIDDER.

The BIDDER should have the pre-requisite experience for similar type of work.

Bidder will submit No deviation certificate. Bidder will submit non-blacklisted certificate.

Partner will be chosen as per the policy guidelines of RailTel Corporation of India Ltd. Further evaluation will be carried out.

Please submit your proposal latest by 28-11-2023 upto 10:00 Hrs.

“All Bidders are required to submit their bids (complete in all aspects) within the time and date as specified in Section 2 (Fact Sheet). The Bids received after the due date and the specified time (including the extended period if any) for any reason whatsoever, shall not be entertained”.

Prospective bidders are required to direct all communications related to this Invitation for

Tender document, through the following Help Desk:

Contact (1)	Ms. Aanchal I Raaj
Designation	AGM/Bhopal
Email	aanchal@railtelindia.com
Telephone	+917552428644
Mobile	+919717644122
Contact (2)	Shri. Anand Kumar
Designation	Deputy General Manager/Marketing
Email	anandnkn@railtelindia.com
Telephone	+917552428644
Mobile	+919004444107

	Check List	
Sl. No	Document	Remarks (Yes/ No)
1	Offer Letter	Annexure I
1	Proof of Submission of PBG/SD/Tender Empanelment Fee submitted against Empanelment with RailTel	
2	Copy of LoA/LOI issued by RailTel for confirmation of empanelment.	
3	Undertaking stating that bidder accept to execute SOW of Tender on fully Back-to-Back basis.	
4	The bidder responding to this Tender shall give an undertaking that, if they are successful, then they will not participate directly or with other direct bidder	
5	Compliance certificate format	Annexure II
6	Financial capacity Format	Annexure III
7	Format for Declaration for acceptance of all Terms & Conditions	Annexure IV
8	Non blacklisted	Annexure V
9	No deviation certificate	Annexure VI
10	RailTel's bank account detail to deposit EMD	Annexure VII
11	Tender Document – GEM/2023/B/4171930	Annexure VIII

ANNEXURE-I:

OFFERLETTER

(To be on company letter head)

Tender Ref:- RCIL WR-BPL/MKTG(EB)/Nov.- 1/13 dated: 23.11.2023

To,
Principal Executive Director
RailTel Corporation of India Limited
Western Railway
Microwave Complex
Senapati Bapat Marg,
Near Railway Sports Ground,
Mahalaxmi, Mumbai-400013

Dear Sir,
Sub: Participation in the Tender.

Having examined the Invitation Tender document bearing the reference number
Tender Ref:- RCIL WR-BPL/MKTG(EB)/Nov.- 1/13 dated: 23.11.2023 released by your
esteemed organization, we undersigned, hereby acknowledge the receipt of the same and offer
to participate in conformity with the said Invitation for Tender document.

I/We fully understand the terms and conditions as contained in the EOI document and
we agree that the same shall apply to our tender and I/We shall be bound by them.
EMD & Tender document cost details are as follows: -

Tender document cost: -
EMD :-

We hereby declare that all the information and supporting documents furnished as a part
of our response to the said Invitation for Tender document, are true to the best of our
knowledge. We understand that in case any discrepancy is found in the information
submitted by us, our Tender is liable to be rejected.

Date:

Signature with seal—

Name: _____

Designation: _____

Annexure II

Compliance Certificate

To,
Principal Executive Director
RailTel Corporation of India Limited
Western Railway Microwave Complex
Senapati Bapat Marg,
Near Railway Sports Ground,
Mahalaxmi, Mumbai-400013


Tender Ref:- RCIL WR-BPL/MKTG(EB)/Nov.- 1/13 dated: 23.11.2023

Dear Sir,

This is in response to the Invitation for Tender for the “Selection of System Integrator for Supply, Installation, testing & commissioning towards establishment of Integrated Command & Control Centre (ICCC) for CCTV surveillance system along with Artificial Intelligence (AI) based Video Analytics in CCTV cameras at SECL with 05 years of CAMC after completion of one year warranty along with necessary license and permissions” in Tender Ref:- RCIL WR-BPL/MKTG(EB)/Nov.- 1/13 dated: 23.11.2023 We have applied against Tender issued by RailTel Corporation of India Ltd. We hereby covenant, warrant and confirm. We hereby comply with all the terms and conditions/stipulations as contained in the Invitation for Tender document.

Date:
(in the box)

Signature with seal



Name:
Designation:

Annexure- III

Financial capacity Format
(to be issued by practicing Chartered Accountant on its letter head)

TO WHOM IT MAY CONCERN

Tender Ref:- RCIL WR-BPL/MKTG(EB)/Nov.- 1/13 dated: 23.11.2023

This is to certify that M/s having its office at are in the business of for Completed years (considered upto 31st March 2023) and the date of incorporation is Their annual financial Turnover during the preceding Four years or from date of incorporation (in case of date of incorporation is within Four years of March) are as given below:

Financial Year	Turnover (in Rs Cr)	Profit / Loss (in Rs Cr)
2019-2020		
2020-2021		
2021-2022		
2022-2023		

This is further certified that the above Turnover is in line with the Turnover declared by the Firm in their Income Tax Returns filed under PAN.....

Place.....

Signature.....

Name.....

Annexure-IV

Performa for Declaration of acceptance for all Terms & Conditions

Declaration for acceptance of all Terms & Conditions of the
Tender Ref:- RCIL WR-BPL/MKTG(EB)/Nov.- 1/13 dated: 23.11.2023

1. We M/s (_____) having registered office at
(Address) _____ agree to all the Terms &
Conditions of the Tender Ref:- RCIL WR-BPL/MKTG(EB)/Nov.- 1/13 dated: 23.11.2023
issued by RailTel.
2. Our offer will remain valid for 120 days from the date of opening of the
Tender.
3. We confirm that we have the necessary resources & capabilities to undertake
the work as specified in the schedule of work as per all terms and conditions
given in the above Tender. We have also understood the process of
submitting bid to RAILTEL and Instructions given in the above Tender.
Further, we confirm that we shall execute the work against this price
discovery for scope as specified in this Tender.
4. We also agree that RailTel has the right to reject all Tender, in part or in full
without assigning any reason whatsoever.
5. This Tender along with other documents as stipulated in Tender together with
your written acceptance thereof shall constitute a binding contract between
us.

Date:-

Name of the Company:-

Signature & Seal:-

Annexure-V

Non - Blacklisting Certificate Declaration

To,
Principal Executive Director
RailTel Corporation of India Limited
Western Railway
Microwave Complex
Senapati Bapat Marg,
Near Railway Sports Ground,
Mahalaxmi, Mumbai-400013

Sub: Undertaking of no deviation from Tender/ RFP terms and condition
Tender Ref:- RCIL WR-BPL/MKTG(EB)/Nov.- 1/13 dated: 23.11.2023

We hereby undertake and submit the declaration that our firm/company is not debarred/black listed for future business with any Central/State Government organization/CPSU/SPSU in India.

In case, at any stage if the above declaration is found false or incorrect, the Purchaser shall be free to take any punitive/legal action against us, as may be deemed fit, which shall be acceptable / binding on us and the consequences shall be to our account.

Date:

Name & Signature of
Authorized Representative:

Company Seal:

Name of Bidder:

Full Address:

Telephone No.:

Annexure-VI

Format for Statement of No Deviation from the RFP

To,
Principal Executive Director
RailTel Corporation of India Limited
Western Railway
Microwave Complex
Senapati Bapat Marg,
Near Railway Sports Ground,
Mahalaxmi, Mumbai – 400013

Date: _____

Sub: Undertaking of no deviation from Tender/RFP terms and condition

Tender Ref: - RCIL WR-BPL/MKTG(EB)/Nov.- 1/13 dated: 23.11.2023

Dear Sir,

This is to confirm that the proposal/bid submitted by <<_____>>, is in complete agreement with the RFP/Tender and any of the corrigendum(s) or amendment(s) issued thereon and there is no deviation whatsoever.

Date:

Name & Signature of
Authorized Representative:

Company
Seal:

Name of Bidder:

Full Address:

Telephone No.:

Annexure -VII



**Mahalaxmi Branch
Mahalaxmi Chambers
22, Bhulabhai Desai Road
MUMBAI: 400 026
Tel. No. No.23512895 / 23517234 Fax No.23516948**

LT No:MAH/RCIL/2010

Date: 21/10/2010

To,
The Sr. Manager (Finance)
Railtel Corporation Of India Limited
Mahalaxmi,Mumbai

Dear Sir,

Sub:- Bank Details For your collection account.

We are in receipt of your letter no. RCIL/WR/Fin/Bank Matters dated 20.10.2010
Requesting bank details for your collection account no. 317801010036605. Details are below:-

Account No.- 317801010036605

A/c Name- Railtel WR collection A/c

Bank Name- UNION BANK OF INDIA

Branch name- Mahalaxmi, branch

Branch address- 22, bhulabhai desai Road, Mahalaxmi chambers,
Mahalaxmi, Mumbai-400026

IFSC Code- UBIN0531782

Swift Code- UBININBBLOP

Thanking You

Your's faithfully

Pushpa Tiwari
Pushpa Tiwari
Manager



Annexure -VIII

GEM/2023/B/4171930

Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	29-11-2023 10:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	29-11-2023 10:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	120 (Days)
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Coal
Department Name/विभाग का नाम	Materials Management
Organisation Name/संगठन का नाम	South Eastern Coalfields Limited
Office Name/कार्यालय का नाम	Secl Bilaspur Cg
Total Quantity/कुल मात्रा	1
Item Category/मद केटेगरी	Integrated Command & Control Centre (ICCC) for CCTV surveillance system (Q3)
MSE Exemption for Years Of Experience/अनुभव के वर्षों से एमएसई छूट/ and Turnover/टर्नओवर के लिए एमएसई को छूट प्राप्त है	Yes
Startup Exemption for Years Of Experience/अनुभव के वर्षों से स्टार्टअप छूट/ and Turnover/ टर्नओवर के लिए स्टार्टअप को छूट प्राप्त है	Yes
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Experience Criteria,Certificate (Requested in ATC),OEM Authorization Certificate,Additional Doc 1 (Requested in ATC),Additional Doc 2 (Requested in ATC),Additional Doc 3 (Requested in ATC),Additional Doc 4 (Requested in ATC),Compliance of BoQ specification and supporting document *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया	Yes
RA Qualification Rule	H1-Highest Priced Bid Elimination
Comprehensive Maintenance Charges Required	Yes
Type of Bid/बिड का प्रकार	Two Packet Bid

Bid Details/बिड विवरण	
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	7 Days
Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation

EMD Detail/ईएमडी विवरण

Advisory Bank/एडवाइजरी बैंक	State Bank of India
EMD Amount/ईएमडी राशि	3403100

ePBG Detail/ईपीबीजी विवरण

Advisory Bank/एडवाइजरी बैंक	State Bank of India
ePBG Percentage(%) / ईपीबीजी प्रतिशत (%)	10.00
Duration of ePBG required (Months) / ईपीबीजी की अपेक्षित अवधि (महीने).	9

(a). EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy./जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित केटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज प्रस्तुत करने हैं। एमएसई केटेगरी के अंतर्गत केवल वस्तुओं के लिए विनिर्माता तथा सेवाओं के लिए सेवा प्रदाता ईएमडी से छूट के पात्र हैं। व्यापारियों को इस नीति के दायरे से बाहर रखा गया है।

(b). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable./ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए।

Beneficiary/लाभार्थी :

A Subsidiary of Coal India Limited
 Secl Bilaspur Cg, Materials Management, South Eastern Coalfields Limited, Ministry of Coal
 BANK NAME : State Bank of India
 BRANCH NAME - SME SBI Branch, Galaxy Height, Vyapar Vihar, Bilaspur – 495001,
 CG NAME OF BENEFICIARY- SOUTH EASTERN COALFIELDS LIMITED, SEEPAT ROAD BILASPUR
 ACCOUNT NO. 30285470636 IFSC CODE- SBIN0004177 All Bank Guarantees' may preferably be operative at Branch of the issuing bank Situated at Bilaspur (Chhattisgarh) – (Branch name , IFSC of Bilaspur branch of issuing bank to be mentioned)
 (South Eastern Coalfields Limited)

Splitting/विभाजन

Bid splitting not applied/बोली विभाजन लागू नहीं किया गया.

MII Purchase Preference/एमआईआई खरीद वरीयता

MII Purchase Preference/एमआईआई खरीद वरीयता	Yes
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MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes
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1. If the bidder is a Micro or Small Enterprise as per latest definitions under MSME rules, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.

2. If the bidder is a Startup, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to their meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.

3. Preference to Make In India products (For bids < 200 Crore): Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023.

[OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

4. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25%(selected by Buyer) percentage of total QUANTITY. The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023

[OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

5. Reverse Auction would be conducted amongst all the technically qualified bidders except the Highest quoting bidder. The technically qualified Highest Quoting bidder will not be allowed to participate in RA. However, H-1 will also be allowed to participate in RA in following cases:

- i. If number of technically qualified bidders are only 2 or 3.
- ii. If Buyer has chosen to split the bid amongst N sellers, and H1 bid is coming within N.
- iii. In case Primary product of only one OEM is left in contention for participation in RA on elimination of H-1.
- iv. If L-1 is non-MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE L-1
- v. If L-1 is non-MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MII L-1

Integrated Command & Control Centre (ICCC) For CCTV Surveillance System (1 set)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	Download
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Comprehensive Maintenance	
Warranty of required product	1 Year
Comprehensive Maintenance Duration (Post Warranty)	5 Year

*Warranty displayed under the AMC/CMC Details section will supersede the warranty displayed under the catalog specification

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	Samit Mukherjee	495006,ENT DEPARTMENT,SOUTH EASTERN COALFIELDS LIMITED, PO BOX NO. - 60, SEEPAT ROAD	1	180

Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

1. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

PART A- ADDITIONAL TERMS & CONDITIONS (TECHNICAL)

1) Details of required items:

Item SN	Description	Unit of Measure
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1	Supply, Installation, testing & commissioning towards establishment of Integrated Command & Control Centre (ICCC) for CCTV surveillance system along with Artificial Intelligence (AI) based Video Analytics in CCTV cameras at SECL with 05 years of CAMC after completion of one year warranty along with necessary license and permissions.	01 set
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2) Details of Make & Model along with technical document/OEM Datasheet of the following offered items should be submitted by the bidder :

SN.	Item description	Make & Model to be submitted by the bidder.	Offered Make & Model has actual specification or higher specification	If higher specification product is offered, then whether this product will be compatible & fulfill the requirement of complete CCTV Camera system solution by SECL
			(Actual or Higher)	(Yes or No)
1	Video wall display ,55 inch with controller, stands with complete accessories	Make:___ & Model: _ —		
2	Video analytical server	Make:___ & Model: _ —		
3	Video Management Server (VMS)	Make:___ & Model: _ —		
4	Video Management software	Make:___ & Model: _ —		
5	Video Analytical software	Make:___ & Model: _ —		
6	Control and Command Software	Make:___		
7	Client PC (Work station)	Make:___ & Model: _ —		
8	64 Channel Network video recorder with 80 TB surveillance HDD	Make:___ & Model: _ —		
9	24 Port layer-3 Managed switch	Make:___ & Model: _ —		
10	30 KVA UPS with SMF battery bank for 01 hour power backup on full load	Make:___ & Model: _ —		

11	ESE lightening protection system complete with all components including multi strand copper down conductor, 02 Nos. earth pits with earth electrode as well as chemical back filling compound, lightening strike counter meter and ESE air terminal and all pipes and fixtures for installation	Make: ____		
12	Air Conditioner	Make: __ & Model: _		
13	Furniture Set i. Executive Table ii. Revolving Chair iii. Almirah . iv. Visitor Chair	i. Make : ____ ii. Make : ____ iii. Make : ____ iv. Make : ____		

Note : (i) Failure to declare MAKE and MODEL of materials quoted and/or non-submission of technical document/OEM Datasheet may lead to rejection of the bid. Bidder should not offer Multiple make and Multiple models for the same item as the same may lead to rejection of the bid .

(ii) In order to participate in the bidding process, it is imperative for the bidder to provide a precise identification of the MAKE and MODEL for the items listed in above table. For instance, when bidding for an air conditioner, the bidder must specify a brand such as Voltas or Samsung or LG or Diakin and so on. Similarly, when bidding for furniture, the brands should be clearly mentioned, like Godrej or Cello or Nilkamal, etc. The use of vague terms like "Reputed" or "Branded," or any other non-specific descriptions, will not be accepted as a valid MAKE specification.

Furthermore, it is essential that bidders do not propose multiple brands and models for the same item, as doing so may result/lead in the rejection of their bid.

3) Details of consignee is updated and is mentioned below alongwith the list for location of installation and commissioning for the ICCS system:

SN	Name of Consignee	Name of location/Area
1	Shri Samit Mukherjee, G.M. (E&T), SECL HQ	SECL HQ

SN.	Item description	Required Qty	Unit of measure	Location of installation & Commissioning
1	Video wall display ,55 inch with controller, stands with complete accessories	8	Nos.	SECL HQ

2	Video analytical server	16	Nos.	SECL HQ
3	Video Management Server (VMS) alongwith Video Management software and Licenses	4	Nos.	SECL HQ
4	Client PC (Workstation)	10	Nos.	SECL HQ
5	Control and Command Software for SECL H Q	1	Set	SECL HQ
6	Video Analytics software/license for entire contract period and Alert generation for the following events:			SECL HQ
i)	Vehicle detection and classification	300	Nos.	SECL HQ
ii)	Loaded/Unloaded status of Vehicle	231	Nos.	SECL HQ
iii)	Number plate detection/Recognition	300	Nos.	SECL HQ
iv)	Vehicle counting	200	Nos.	SECL HQ
v)	Crowd and Miscellaneous event detection	300	Nos.	SECL HQ
vi)	Camera Non-functioning	232	Nos.	SECL HQ
vii)	Personal protective equipment (PPE) detection	75	Nos.	SECL HQ
viii)	Fire and smoke detection	75	Nos.	SECL HQ
ix)	Zone intrusion Alert	75	Nos.	SECL HQ
x)	Idle time Alert	150	Nos.	SECL HQ
7	64 Channel Network video recorder with 80 TB surveillance HDD	18	Nos.	05 Nos. at SECL HQ 13 Nos. in 13 Areas of SECL
8	24 Port layer-3 Managed switch	4	Nos.	SECL HQ
9	30 KVA UPS with SMF battery bank for 01 hour power backup on full load	3	sets	SECL HQ
10	ESE lightening protection system complete with all components including multi strand copper down conductor, 02 Nos. earth pits with earth electrode as well as chemical back filling compound, lightening strike counter meter and ESE air terminal and all pipes and fixtures for installation	2	set	SECL HQ
11	Chemical earthing	4	Nos.	SECL HQ
12	Furniture Set	1	set	SECL HQ
13	Air Conditioner	3	set	SECL HQ

14	Technical Manpower support at Control Room	03 Nos. of manpower for 6 years (01 year warranty + 05 year CAMC) { one manpower will be deployed in one shift. }	01 No. technical manpower per shift per year	SECL HQ
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Note : The supply of all the items will be done at consignee's location by the successful bidder , however, installation and commissioning within the stipulated time of the supplied items will be the responsibility of the successful bidder at the above indicated " Location of installation & Commissioning " . SECL will ensure that the supplied items will be made available to the successful bidder at the " Location of installation & Commissioning " .

4) Eligibility criteria : As per clause 18 (A) of Buyer Specification Document under the head "Technical Specifications".

5) Experience / Proveness Criteria : As per clause 18 (B) of Buyer Specification Document under the head "Technical Specifications".

6) Bank Guarantee during CAMC :

Apart from the Bank Guarantee during the warranty period (of 12 months from the date of commissioning) , entire period of CAMC (05 years from the date of expiry of warranty period) should be covered by a separate Bank Guarantee equivalent of 5% of the Equipment value (including installation & commissioning charges).The same shall stand forfeited in case of cancellation of the contract for any breach of contract or for any deficiency in the performance noticed during the currency of the contract.

7) Warranty period : Warranty period shall be of 01 year (or 12 Month) from the date of commissioning of the ICC system .

8) Clarification/ shortfall document shall be asked and considered only for the documents related to already submitted documents in the original offer or details /information already indicated in the original offer. Clarification/ shortfall document will be sought only for historical document which pre-existed at the time of bid opening. Further, to fulfil experience criteria, the bidder shall submit document (e.g. supply order/Purchase order/contract document) with the bid itself with other relevant document (e.g. proof of execution of order) as per bid requirement. Any new supply order submitted with clarification/shortfall round will not be considered against experience criteria.

9) Bidder has to agree/accept all the technical specifications / conditions mentioned in the "Buyer Specification Document" under the head "Technical Specifications" .

10) Delivery in GeM portal for complete scope shall be selected as 06 months (180 days). The actual Delivery Period as per clause 15 of technical specification document is as under:

Supply, Installation, testing and Commissioning (along with Civil Works) of supplied items with all accessories & assemblies must be completed as follows:

I. For Supply of material (including all accessories): Within 90 days from the date of contract.

II. For Installation, testing & commissioning period: Within 180 days from the date of contract.

PART B- ADDITIONAL TERMS & CONDITIONS (COMMERCIAL)

As per GeM GTC guidelines the participation by the Seller in e-bidding shall be construed as his/her acceptance for all the Terms and Conditions as outlined in the e-bidding including GTC, S TC and Commercial terms of ATC. Any other terms & conditions/deviations from the current bid document offered by the seller in any form will be considered void and

1. INSTRUCTION TO BIDDERS:

Scanned copies of following documents as per requirements of the bid may be submitted while submitting the offer online.

i. Declarations, certificates (wherever applicable) etc. required as per bid document.

ii. **EMD EXEMPTION:**

- a. The bidder seeking EMD exemption, must submit the valid supporting document as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. **Traders are excluded from the purview of this Policy.**
- b. For purpose of EMD exemption , by submission of valid Startup certificate, bidder undertakes that their turnover has not exceeded Rs.100 Cr. in any of the previous financial years since inception. The bidder shall specifically inform if the turnover has exceeded Rs.100 Cr in the any of the previous financial years since inception.
- c. For purpose of EMD exemption in case of BIS registered firm, in case of item wise evaluation the EMD is item wise and bidder shall submit the BIS addendum/correspondence documents showing validity and coverage of offered item in BIS, as it is essential information the same shall be required for decision for acceptance/rejection of EMD.

It is noted that above clauses of EMD exemption are in line with GeM GTC giving the detailed methodology of evaluation and shall remain final.

iii. Any Central/State Government Organization/PSU shall be exempted towards submission of EMD. O

EMs/OES or their authorized agents participating in Open/Limited tenders for procurement of spare parts of their equipment are exempted from submission of EMD in case of tenders for supply of spares only.

- iv. Scanned copy of EMD required to be submitted by bidders in the form of Bank Guarantee on GeM portal in the prescribed format shall be uploaded by seller in the online bid and hard copy of the same will have to be submitted directly to the Buyer within 5 days from bid opening date. (Copy of S FMS by issuing bank should also be submitted along with hard copy of the Bank Guarantee)
- v. **MSE PREFERENCE:** The bidder seeking MSE preference, must submit valid UDYAM certificate which shall remain valid for the entire period of finalization of tender. As per the latest directives of Govt. of India EM-Part II/ UAM/NSIC/DIC etc. registered bidders must mandatorily register on UDYAM portal and in line with the same, only UDYAM registration certificate valid on bid opening date is to be submitted for claiming MSE preference.
- vi. Integrity Pact duly signed and stamped indicating the name and designation /capacity of the signatory. (If applicable)
- vii. Copy of GST Registration certificate issued by appropriate authority of India, if applicable
- viii. Copy of exemption certificate towards GST (if claiming exemption) from practicing Chartered Accountant (CA) to the effect that bidder is fulfilling all conditions prescribed in notification to make him exempted from registration. If applicable.
- ix. Certificate for Local Content in line with ATC clause and reference format provided for purchase preference for Make in India.
- x. In case Banned/Delisted/Debarred/Put on Holiday by any organization, necessary details/documents to be submitted, if applicable.
- xi. Other documents required as per bid/to be submitted by the bidder, if any.

Ensuring submission of valid and authentic documents will be sole responsibility of the bidder. Further if at a later stage it is found that the above provided information is false/misleading/incomplete their offer may be treated as unresponsive and suitable penal action as per provisions of GeM Incident Management Policy may be taken against them.

CERTIFICATE TOWARDS LOCAL CONTENT FROM OEM

—

We do hereby certify that the item/s offered against the tender are manufactured at our factory situated at & that the items offered have a local content of% of the total value as prescribed by the competent Ministries/Departments in pursuance to the Public Procurement (Preference to Make in India) Order.

The items offered meets minimum local content criteria for Class- Local Supplier in pursuance to the Public Procurement (Preference to Make in India) Order.

Address of Location/Factory where local value is added _____

—

Authorized Signatory of OEM

Date:

Seal of the firm

I/We _____ (Name of the auditor) _____ are statutory/cost auditor of _____ (Name of the OEM) _____ and are authorized to submit the above certification as per MII Policy.

Signature & Stamp of statutory auditor or cost auditor of the firm

UDIN No. _____

NOTE:

If tender value is Rs. 10.00 Crores and above the above certificate needs to be issued through statutory auditor or cost auditor if the OEM is a company and from a practicing ~~Cost Accountant or practicing Chartered Accountant for OEMs other than company.~~

2. EVALUATION OF BID/ SHORT FALL DOCUMENTS:

- i. All the offers will first be scrutinized to see whether they meet the basic requirements as incorporated in the bid document.
- ii. Purchaser will determine the Techno-commercial acceptability of the bidders on the basis of the original offer and subsequent clarifications/ confirmation, if any.
- iii. After evaluation of the uploaded documents, shortfall/clarification documents, if required, shall be sought from all the bidders. **For shortfall/ clarification only 01 (ONE) chance will be given. The time period for reply to the clarification will be for 7(SEVEN) days only.** Non receipt of communication from GeM will not be accepted as a reason of non-submission of documents within prescribed time. The bidders will upload and submit the requested documents, if any, within the specified period.
- iv. Bidders are hereby informed that all correspondence with them during the pre-contract stage shall be without any commitment whatsoever. SECL reserves the right to verify any of the documents uploaded by the bidder at any stage.

NOTE: The submission of forged document, if any, by the bidder(s), shall be dealt as per extant guideline of GeM GTC and ATC.

3. VALIDITY OF OFFER: The offer should be valid as per provision of GeM, from the date of opening of tender as specified in the bid document. During the Tender evaluation process if the extension of the bid validity is required, the same can be obtained with the mutual consent of buyer and seller.

4. SUBMISSION OF BILLS: Upon dispatch of the Goods to the consignee, the supplier shall notify the Ultimate Consignee and deliver the following documents at the time of arrival of goods at consignee end:

- i. GeM invoice for each line item of the contract and corresponding Supplier's Tax invoice for the same showing Contract Number, Goods description, quantity, unit price, total amount.
- ii. Manufacturer's/Supplier's warranty/guarantee certificate.
- iii. Manufacturer's Test & Inspection certificate.
- iv. Lowest Price Certificate
- v. Any other certificate/document as mentioned in the contract.

In case of delay, the Supplier will be responsible for any consequent expenses.

NOTE: Each GeM invoice should have corresponding Tax Invoice. If GeM invoice is generated but not submitted in hard copy, same may be taken from the consignee login by the consignee.

5. PRICE/PAYMENT TERMS:

Payment terms as mentioned in technical specification document are as under:

Supply, installation, testing & commissioning of CCTV Camera System alongwith complete accessories as per complete scope of supply:

- a) 80% value of the equipment [except " Sr. No. 05 - Control and Command Software for SECL HQ " , " Sr. No. 06 { (i) to (x) } - Video Analytics software/license " , " Sr. No. 11 - ESE lightning protection system complete with all components" and "Sr. No. 12 - Chemical earthing " } accessories and 100% taxes and duties and other charges shall be made within 21 days after receipt and acceptance of system with all accessories by the consignee and also receipt and acceptance of Security Deposit / Performance Bank guarantee (as specified in the tender document) by SECL.
- b) Balance 20% payment and 100% installation & commissioning charges shall be made shall be released within 21 days after successful commissioning and acceptance of commissioned equipment at site by SECL HQ & respective Areas of SECL and subsequent submission of invoices alongwith jointly certified document indicated successful commissioning by the representative of Area & representative of the success

ssful bidder . For successful commissioning of equipment the supplier has to depute competent person at site and provide technical assistance required for commissioning and initial testing of the equipment.

- c) 100% value of item “ Sr. No. 05 - Control and Command Software for SECL HQ “ , “ Sr. No. 06 { (i) to (x) } - Video Analytics software/license “ , “ Sr. No. 11 - ESE lightening protection system complete with all components” and “Sr. No. 12 - Chemical earthing ” shall be made within 21 days after successful completion of testing, commissioning and final acceptance. After successful installation, a certificate shall immediately be submitted by SO (E&M) / SO (E&T) / E&T Incharge” of the respective Areas of SECL to the paying authority through GM(E&T).

NOTE: The L-1 bidder shall submit price break-up of their offered prices after reverse auction for supply of equipment, installation and commissioning other charges and applicable GST, at the request of buyer **only after opening of price bid** through their registered email id on GeM portal which shall be considered part of contract and communicated through Addendum.

Offered Price against this bid should not be disclosed in any manner in submission of techno-commercial documents. Disclosure of price before price bid opening may render the bid as non-responsive and shall be eligible for rejection of bid.

- 6. PAYING AUTHORITY:** General Manager (Fin), South Eastern Coalfields Limited, HQ, Bilaspur. However, regularization of payment on GeM portal shall be done as per provision of GeM by Paying authority.

7. PERFORMANCE SECURITY E-PBG as indicated in bid document shall be treated as SECURITY DEPOSIT:

The Performance Security/Security Deposit equivalent to 10% of total landed value of contract (including all taxes, duties and other costs and charges, without considering Input Tax Credit) shall remain valid for at least 3 months after the completion of supply and material acceptance at consignee end.

~~The Performance Security/Security Deposit equivalent to 10% of equipment landed value along with maximum annual landed value of Spares & Consumables/AMC/CMC (including all taxes, duties and other costs and charges, without considering Input Tax Credit) shall remain valid for at least 3 months after the completion of supply and material acceptance at consignee end.~~

Performance Security/Security Deposit will be released with the approval of HOD of MM Department within 30 days after completion of supplies and acceptance of material by the consignee and submission of Performance Bank Guarantee(s) in case of supply contract or after successful commissioning and on receipt of confirmation of Performance Bank Guarantee(s) for all the equipment covered in the contract in case of contracts for equipment and all those items/goods involving installation and commissioning and PBG.

Security Deposit may be converted into Performance Bank Guarantee (PBG) wherever PBG is required at the option of the supplier. At the time of conversion of security money into PBG, it should be ensured that the amount of PBG should not be less than 10% of equipment landed value along with maximum annual landed value of spares & consumables/AMC/CMC. Wherever Security Deposit is converted into PBG, the operation of such SDBG/Performance BG shall be guided by Performance Bank Guarantee Clause.

NOTE: The Bank Guarantee issued by a scheduled Bank shall preferably be operative at its branch situated at Bilaspur (Chhattisgarh State) or if the issuing bank does not have any branch at Bilaspur then Bank Guarantee may preferably be operative at any of its Kolkata Branch. Copy of SFMS by issuing bank should be submitted along with hard copy of the Bank Guarantee.

NOTE: All Central/State Government Organization/PSUs shall be exempted from submission of Security Deposit. OEM/OES shall also be exempted from submission of Security Deposit in case of procurement of Spare Parts for equipment against Single Tender Enquiry/Open/ Limited Tenders.

8. PERFORMANCE BANK GUARANTEE: (To be submitted directly to Buyer in Original) (This is in addition to the Security Deposit as mentioned above)

- i. The successful bidder shall be required to furnish a Performance Guarantee equivalent to 10% of the

- e equipment landed value including all taxes, duties and other costs and charges, without considering Input Tax Credit. (As per below format) (on a non-judicial stamp paper of value Rs.250.00 only)
- ii. ~~In case of contracts for procurement of capital goods along with warranty spares & consumables (if applicable) and additional spares & consumables/ AMC/CMC for more than 1 year the Performance Bank Guarantee shall be for 10% of equipment landed value along with maximum annual landed value of spares & consumables/AMC/CMC.~~
- iii. The Performance Guarantee shall be in the form of a Bank Guarantee issued by RBI scheduled bank in India in the prescribed format on a non-judicial stamp paper.
- iv. The Performance Bank Guarantee (PBG) shall be in the same currency(ies) in which contract has been signed. In case of multi-currency contract, separate PBG in respective currency for required value shall be submitted.
- v. If the contract is for procurement of equipment, the PBG (s) may be submitted equipment wise also. For this purpose, the value of each equipment will be worked out by dividing the total value of contract for a particular item of Bid by the number of equipment ordered for that particular item of the Bid.
- vi. The PBG(s) for equipment shall remain valid till 3 months after the completion of warranty period/contract period.
- vii. The PBG shall be submitted sufficiently in advance to enable its verification from the issuing bank before submission of the invoice for payment.
- viii. The release of the Performance Bank guarantee(s) after above indicated period, shall be subject to satisfactory performance of the equipment/items during the warranty period and fulfilment of contractual obligations failing which, action for further extension or encashment of PBG, as deemed suitable shall be taken. The Performance Bank Guarantee shall be released after expiry of validity period if no claim certificate is received from the concerned HOD/Area GM and the contractor indicating that there is no claim pending and that there is no dispute pending respectively with the approval of the concerned HOD (MM)/Area GM.
- ix. The PBG will be submitted through Structured Financial Management System (SFMS).

The original Bank Guarantee in paper form should be sent to the beneficiary. The **covering/forwarding letter of the bank** for the Bank Guarantee shall invariably contain the following details:

Issuing Bank, Branch and Address	i	Name of Bank	
	ii	Issuing Bank Branch IFSC	
	iii	Issuing Bank Address	
	iv	Contact No of Issuing bank	
	v	Email ID of issuing bank(For invocation/written claim)	
		MANDATORY FIELD	

FORMAT FOR BANK GUARANTEE

SOUTH EASTERN COALFIELDS LIMITED, BILASPUR

Re: Bank Guarantee in respect of Agreement / Contract / Purchase Order vide no.dated.....between.....(Name of Purchaser Company) and.....(Name of Supplier Company) {applicable for subsidiary contracts/Purchase Orders}

Messers.....a Company / Firm having its office at No.....(hereinafter called 'the Contractor') has entered into the Agreement / Contract / Purchase Order vide no.....dated.....(hereinafter called 'the said agreement') with Coal India Limited, Kolkata on behalf of...../ Purchaser Company (Name of the concerned subsidiary Company) (hereinafter called 'the Company') to supply..... stores/materials amounting to Rs..... on the terms and conditions contained in the said Agreement.

The..... (Name of the Bank) (hereinafter called 'the Bank') having its Office at.....

.....has at the request of the Contractor agreed to give the guarantee as hereinafter contained.

We(Name of the Bank) do hereby unconditionally agree with the Company that if the Contractor shall in any way fail to observe or perform the terms and condition of the said agreement or shall commit any breach of its obligations thereunder, the Bank shall on demand and without any objection or demur pay to the Company, the said sum of Rs..... or any portion thereof without requiring the company to have recourse to any legal remedy that may be available to it to compel the Bank to pay the same or calling on the company to compel such payment by the contractor.

Any such demand shall be conclusive as regards the liability of the Contractor to the company and as regards the amount payable by the Bank under this guarantee. The Bank shall not be entitled to withhold payment on the ground that the contractor has disputed its liability to pay or has disputed the quantum of the amount or that any arbitration proceeding or legal proceeding is pending between the Company and the contractor regarding the claim.

We, the Bank, further agree that the guarantee shall come into force from the date hereof and shall remain in full force and effect till the period that will be taken for the performance of the said agreement which is likely to be the day of..... but if the period of agreement is extended either pursuant to the provisions in the said agreement or by mutual agreement between the contractor and the Company, the Bank shall renew the period of the guarantee failing which it shall pay to the Company the said sum of Rs....., or such lesser amount out of the said sum of Rs.....as may be due to the Company and as the Company may demand. This guarantee shall remain in force until the dues of the Company in respect of the said sum of Rs..... are fully satisfied and the company certifies that the agreement has been fully carried out by the contractor and discharges the guarantee.

The Bank further agrees with the Company that the Company shall have the fullest liberty without the consent of the Bank and without affecting in any way the obligations hereunder to vary any of the terms and conditions of the said agreement or to extend the time for performance of the said agreement from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the contractor and to forbear to enforce any of the terms and conditions relating to the said agreement and the Bank shall not be relieved from its liability by reason of such failure or extension being granted to the contractor or through any forbearance, act or omission on the part of the Company or any indulgence by the Company to the contractor or any other matter or thing whatsoever which under the law relating to sureties would but for this provisions have the effect of relieving or discharging the Guarantor.

The Bank further agrees that in case this guarantee is required for a longer period and it is not extended by the Bank beyond the period specified above, the Bank shall pay to the Company the said sum of Rs..... or such lesser sum as may then be due to the Company as the Company may require.

Notwithstanding anything herein contained the liability of the Bank under this guarantee is restricted to Rs..... only. The guarantee shall remain in force till theday of20....and unless the guarantee is renewed or a claim is preferred against the Bank within the validity period and/or the claim period from the said date, all rights of the company under this guarantee shall cease and the Bank shall be released and discharged from all liability hereunder except as provided in the preceding clause.

The Bank has under its constitution power to give this guarantee and..... [(Name of the person(s)] who have signed it on behalf of the Bank has authority to do so.

Dated this.....Day of.....20.....

Place.....

Signature of the authorized person(s)

For and on behalf of the Bank

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NOTE: The Bank Guarantee issued by a scheduled Bank shall preferably be operative at its branch situated at Bilaspur (Chhattisgarh State) or if the issuing bank does not have any branch at Bilaspur, the Bank Guarantee shall be preferably operative at any of its Kolkata Branch.

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NOTE: Copy of SFMS (760COV) by issuing bank should be submitted along with hard copy of the Bank Guarantee as per format provided above and subsequent amendment/extension vide (SFMS 767COV), if any

In case of extension of delivery period, the firms should ensure that the validity of their submitted Security Deposit BG/PBG shall still be 03 months from the last date of the extended delivery/end of warranty period. The BG's shall be extended accordingly corresponding to the extension of delivery period.

9. **PERFORMANCE BANK GUARANTEE against CAMC:**

After completion of warranty period the contractor/ successful bidder shall further submit performance bank guarantee equivalent to 5% of landed cost of equipment (covering validity for remaining CAMC period + 03 months) which will be released after satisfactory execution of CAMC contract. Performance bank guarantee submitted by the bidder against the offered equipment shall be released after completion of warranty period and submission of PBG for CAMC. PBG may be submitted equipment wise.

10. **SUBMISSION OF BANK GUARANTEE's:**

I) The Bank Guarantee issued by the issuing Bank on behalf of contractor/supplier in favour of "South Eastern Coalfields Limited" shall be in paper form as well as issued under "Structured Financial Messaging System" (SFMS). As such the Guarantor (BG issuing bank) shall send information about issuance of this Guarantee through SFMS gateway either to the SBI, SME Branch, Bilaspur (IFSC - SBIN0004177) or to the ICICI Bank, Vyapar Vihar, Bilaspur (IFSC- ICIC0000282) as the case may be.

The details of Beneficiary, i.e. South Eastern Coalfields Limited for issue of BG under SFMS platform are furnished below:

a) State Bank of India as advising Bank of SECL :

1	Name of the Beneficiary and his Details	i	7034(Beneficiary Details)	South Eastern Coalfields Limited
		ii	Area	SECL HQ, Bilaspur
		iii	Name of Bank	State Bank of India
		iv	Bank Account No.	30285470636
		v	Department	Material Management
2	Beneficiary Bank, Branch and Address	i	Name of Bank	State Bank of India
		ii	Bank Branch Name	SME SBI Branch, Bilaspur
		iii	Branch Code	4177
		iv	Beneficiary Bank Branch IFSC	SBIN0004177

		v	Beneficiary Bank Address	SBI, Galaxy Height, Vyapar Vihar, Bilaspur – 495001,CG
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b) ICICI Bank as advising Bank of SECL:

1	Name of the Beneficiary and his Details	i	7034(Beneficiary Details)	South Eastern Coalfields Limited
		ii	Area	SECL HQ, Bilaspur
		iii	Name of Bank	ICICI Bank
		iv	Bank Account No.	028205003346
		v	Department	Material Management
2	Beneficiary Bank, Branch and Address	i	Name of Bank	ICICI Bank
		ii	Bank Branch Name	Vyapar Vihar, Bilaspur
		iii	Branch Code	0282
		iv	Beneficiary Bank Branch IFSC (SFMS Field No. 7035)	ICIC0000282
		v	Beneficiary Bank Address (SFMS Field No. 7036)	Surya Chambers, Plot No- A/09 Vyapar Vihar, Bilaspur – 495001, CG
		vi	(SFMS Field No. 7037)	SECL 14625

NOTE: Vendors are requested to specifically advise BG issuing bank that in case they opt for ICICI Bank as beneficiary bank, they have to mention the code 'SECL 14265' in SFMS field no 7037 of IFN760COV/IFN767COV so that the advised BGs could be sent to the email id tagged with the account.

11. BANNED OR DELISTED OR DEBARRED OR 'PUT ON HOLIDAY SUPPLIERS

Submission of offer shall be considered as acceptance by the bidder that they as well as their manufacturer (if bidder is not the manufacturer) has not been **BANNED OR DELISTED OR DEBARRED OR 'PUT ON HOLIDAY'** by any government or quasi-government or PSU's. Further the bidder also undertakes by submission of their offer that they have not being debarred/settled all dues/claims on account of being defaulter L1 bidder for the tendered item.

If the bidder and/or manufacturer has been **BANNED OR DELISTED OR DEBARRED OR 'PUT ON HOLIDAY'** by any government or quasi-government or PSU's., this fact must be clearly stated, and it may not necessarily be cause of disqualification. In this respect, the bidder/manufacturer shall upload the same as additional document. The declaration in case of been **BANNED OR DELISTED OR DEBARRED OR 'PUT ON HOLIDAY'** shall be submitted in following format:

Format for Banning /Delisting/Debarred/Put on Holiday Declaration

Bid Reference No..... Dt..... for supply of
.....

This is to certify that we have been banned or de-listed or debarred or 'Put on Holiday' by following government/quasi-Government agencies/PSUs:

Name of the Organization	Period of banning (Start date and end date)

We further undertake that if at a later stage it is found that the above provided information is found to be false/misleading/incomplete our offer may be treated as unresponsive and suitable penal action as per provisions of GeM Incident management policy may be taken against us.

Date

Signature of Bidder

Seal of the Firm

Further if at a later stage it is found that the above provided information is false/ misleading/ incomplete their offer may be treated as unresponsive and suitable penal action as per provisions of GeM Incident management policy may be taken against them.

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12. PRICE FALL CLAUSE:

If the contract holder reduces its price or sells or even offers to sell the contracted goods or services following conditions of sale similar to those of the contract, at a price lower than the contract price, to any person or organization during the currency of the contract, the contract price will be automatically reduced with effect from that date for all the subsequent supplies under the contract and the contract be amended accordingly.

In case of parallel Rate / Running Contracts, if the price of a product is reduced for any supplier due to invocation of 'Price Fall clause' or any other reason, the same lower price shall also be applicable for the other suppliers who are having parallel RCs against the same tender. If any parallel RC holder does not accept the lower price, CIL shall have the right to delete the item from the scope of RC of such firm and procure the same from other existing supplier / Reserve RC holders.

The provisions of price fall clause will however not apply to the following:

- i) Export/Deemed Export by the supplier;
- ii) Sale of goods or services as original equipment prices lower than the price charged for normal replacement;

- iii) Sale of goods such as drugs, which have expiry date;
- iv) Sale of goods or services at lower price on or after the date of completion of sale/placement of order of goods or services by the authority concerned, under the existing or previous Rate Contracts as also under any previous contracts entered into with the Central or State Government Departments including new undertakings (excluding joint sector companies and or private parties) and bodies.

NOTE:

- a.** The currency of contract will mean the period till completion of supply.
- b.** The bidder will be asked to submit a copy of the last (latest) purchase order for the tendered / similar item(s) received by them from any Organization/ Ministry / Department of the Govt, of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization, along with the offer.
- c.** It shall be responsibility of the supplier to inform the purchaser of offer to supply / supply of the ordered / similar item(s) at a lower rate to any Organization / Ministry / Department of the Govt, of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization during the currency of the contract.
- d.** The supplier shall submit a certificate along with the bill(s) that it has not offered to supply/supplied the ordered / similar item(s) at a lower rate to any Organization / Ministry / Department of the Govt, of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization.
- e.** The provisions of fall clause will however not apply for purchase value up to Rs . 2.00 lakh
- f.** Point (b) above is not applicable in the case of renewal of Depot Agreements

13. In compliance to Restriction under rule 144(xi) of the General Financial Rules (GFRs),2017 and Order No. F/7/10/2021-PPD(1) Dt 23.02.2023, Ministry of Finance, regarding restriction of Public Procurement from certain countries, Submission of offer shall be considered as acceptance by the bidder that:

a. Model Certificate for Tenders for country sharing land boundary with India:

The bidder (as defined in the above order) upon submission of their offer undertakes that they have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and that they are not from such a country. The bidder further undertakes that they fulfill all requirements in this regard and are eligible to be considered.

If the bidder (as defined in the above order) is from such a country which shares a land border with India as per above order, the bidder shall submit the following certificate along with the bid:

Certificate-1: Model Certificate for Tenders in case form a country sharing land boundary with India:

"We.....(name of the Firm) have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India;

We.....(name of the Firm) certify that(name of the Firm) **is from** such a country and has been registered with the competent Authority. We(name of the Firm) hereby certify that we fulfil all requirements in this regard and are eligible to be considered".

[where applicable, evidence of valid registration by the competent Authority shall be attached].

b. Certificate-2 Model additional certificate by Bidders in the cases of specified ToT:

The bidder (as defined in the above order) upon submission of their offer undertakes that they have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement and upon submission of their offer undertakes that they do not have any ToT arrangement requiring registration with the competent authority.

If the bidder (as defined in the above order) has any Transfer of Technology (ToT) arrangement requiring registration with the competent authority as per above order, the bidder shall submit the following certificate along with the bid

Certificate-2 Model additional certificate by Bidders in the cases of specified ToT:

"We.....(name of the Firm) have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (ToT) arrangement. We.....(name of the Firm) certify that(name of the Firm) have Transfer of Technology (ToT) arrangement and valid registration to participate in this procurement."

[where applicable, evidence of valid registration by the competent Authority shall be attached].

NOTE1 : EMD/SD/e-PBG/Performance Bank Guarantee shall be submitted in original at following address:
General Manager (MM)
Materials Management Dept.
Post Box No- 60
Seepat Road,
Bilaspur, Chhattisgarh- 495006

NOTE2 : The above terms & condition will supersede the GeM terms & condition in case of any conflict/contradiction between two.

NOTE3: In compliance to Gazette Notification issued vide 4414 Dt. 02/11/18, South Eastern Coalfields Limited (SECL) have onboarded on TReDS platform through Receivables Exchange of India Limited (RXIL) platform with Member ID SO0001771 to facilitate payment to MSME Vendors through TReDS platform of RXIL. In this regard, all MSE vendors of South Eastern Coalfields Limited (who haven't onboarded on TReDS till date) are once again requested to onboard on the TReDS platform by registering themselves on RXIL (<https://www.rxil.in>) for availing the benefits of TReDS platform.

NOTE4: As per GeM GTC guidelines the participation by the Seller in e-bidding shall be construed as his/her acceptance for all the Terms and Conditions as outlined in the e-bidding including GTC, STC and Commercial terms of ATC. Any other terms & conditions/deviations from the current bid document offered by the seller in any form will be considered void and submission of offer/participation by the seller will be treated as their unconditional acceptance to all terms & conditions outlined in the e-bidding including GTC/STC and commercial terms of ATC.

CHECK LIST OF DOCUMENTS TO BE SUBMITTED FOR ATC (COMMERCIAL EVALUATION)

Sr No	Description	Submitted (Yes/No)
1	EMD Exemption document (Valid Udyam, Valid BIS along with coverage document for offered item, Valid Startup certificate etc)	
2	EMD submission document (BG with SFMS form issuing bank, DD)	
3	Make in India Certificate for bids with estimated value less than 10 crores (Self certificate From the OEM of offered product	
4	Make in India Certificate for bids with estimated value more than 10 crores MII certificate signed by OEM of offered produce and certified by statutory auditor or cost auditor if the OEM is a company and from a practicing Cost Accountant or practicing Chartered Accountant for OEMs other than company.	
5	Integrity Pact (For bid above 2 cr estimated value) to be submitted with seal and sign of bidder.	
6	In case the bidder/OEM of offered product is Banned Or Delisted Or Debarred Or 'Put On Holiday' - bidder shall submit certificate as per format given in commercial ATC	
7	In case the bidder is from a country sharing land boundary with India - bidder shall submit certificate as per format given in commercial ATC for the same.	
8	In case the bidder is having Transfer of Technology (ToT) arrangement - bidder shall submit certificate as per format given in commercial ATC	
9	GST certificate for Vendor code creation	
10	PAN Card for Vendor code creation	

11	Bank mandate for Vendor code creation	
12	Cancelled Cheque for Vendor code creation	

2. **Buyer Added Bid Specific ATC**

Buyer uploaded ATC document [Click here to view the file.](#)

3. **Forms of EMD and PBG**

Bidders can also submit the EMD with Account Payee Demand Draft in favour of

SOUTH EASTERN COALFIELDS LIMITED, SEEPAT ROAD BILASPUR
payable at
Bilaspur Chhattisgarh

Bidder has to upload scanned copy / proof of the DD along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date / Bid Opening date.

4. **Certificates**

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

5. **Generic**

Buyer Organization specific Integrity Pact shall have to be complied by all bidders. Bidders shall have to upload scanned copy of signed integrity pact as per Buyer organizations policy along with bid. [Click here to view the file](#)

6. **Generic**

Bidder shall submit the following documents along with their bid for Vendor Code Creation:

- a. Copy of PAN Card.
- b. Copy of GSTIN.
- c. Copy of Cancelled Cheque.
- d. Copy of EFT Mandate duly certified by Bank.

7. **Generic**

IT equipment shall be IPv6 ready from day one.

8. **Generic**

Malicious Code Certificate:

The seller should upload following certificate in the bid:-

(a) This is to certify that the Hardware and the Software being offered, as part of the contract, does not contain Embedded Malicious code that would activate procedures to :-

- (i) Inhibit the desires and designed function of the equipment.
- (ii) Cause physical damage to the user or equipment during the exploitation.
- (iii) Tap information resident or transient in the equipment/network.

(b) The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyright and Intellectual Property Right (IPRs) are caused due to activation of any such malicious code in embedded software.

9. Forms of EMD and PBG

Successful Bidder can submit the Performance Security in the form of Account Payee Demand Draft also (besides PBG which is allowed as per GeM GTC). DD should be made in favour of

SOUTH EASTERN COALFIELDS LIMITED, SEEPAT ROAD BILASPUR
payable at
Bilaspur Chhattisgarh

. After award of contract, Successful Bidder can upload scanned copy of the DD in place of PBG and has to ensure delivery of hard copy to the original DD to the Buyer within 15 days of award of contract.

10. Generic

Supplier shall ensure that the Invoice is raised in the name of Consignee with GSTIN of Consignee only.

11. Generic

1. The Seller shall not assign the Contract in whole or part without obtaining the prior written consent of buyer.
2. The Seller shall not sub-contract the Contract in whole or part to any entity without obtaining the prior written consent of buyer.
3. The Seller shall, notwithstanding the consent and assignment/sub-contract, remain jointly and severally liable and responsible to buyer together with the assignee/ sub-contractor, for and in respect of the due performance of the Contract and the Sellers obligations there under.

12. Generic

Without prejudice to Buyer's right to price adjustment by way of discount or any other right or remedy available to Buyer, Buyer may terminate the Contract or any part thereof by a written notice to the Seller, if:

- i) The Seller fails to comply with any material term of the Contract.
- ii) The Seller informs Buyer of its inability to deliver the Material(s) or any part thereof within the stipulated Delivery Period or such inability otherwise becomes apparent.
- iii) The Seller fails to deliver the Material(s) or any part thereof within the stipulated Delivery Period and/or to replace/rectify any rejected or defective Material(s) promptly.
- iv) The Seller becomes bankrupt or goes into liquidation.
- v) The Seller makes a general assignment for the benefit of creditors.
- vi) A receiver is appointed for any substantial property owned by the Seller.
- vii) The Seller has misrepresented to Buyer, acting on which misrepresentation Buyer has placed the Purchase Order on the Seller.

Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. Any clause(s) incorporated by the Buyer regarding following shall be treated as null and void and would not be considered as part of bid:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.

8. Seeking sample with bid or approval of samples during bid evaluation process.
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

Additional Clause For Comprehensive Maintenance Charges

1.CMC shall include preventive maintenance including calibration as per technical/ service /operational manual of the manufacturer, service charges and spares, after satisfactory completion of Warranty. During the CMC period commencing from date of the successful completion of warranty period, Service personnel shall visit each consignee site as recommended in the manufacturer's technical/ service /operational manual, at least once in six months or as per user requirement. Cost of consumables shall not be included in CMC.Further there will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.

2.CMC charges to be indicated as percentage of cost of equipment quoted for each year after the warranty period.

3.GST shall be included in the CMC Charges quoted.

4.Cost of CMC will be added for Ranking/Evaluation purpose with depreciation formula.A 10% discounting rate per year shall be applied on CMC Charges for price evaluation on Net Present Value.

5.The payment of CMC will be made on quarterly basis after satisfactory completion of said period, duly certified by end user.

6.While creating a bid or RA, buyers shall indicate whether CMC is required against Yes/No" options. If CMC Charges are included, an option for number of years for CMC required after the warranty period shall be available.Under this option up to 10 years can be chosen for CMC charges beyond warranty period.

7.In case the bid has a provision for CMC, the warranty of the product will also be deemed to have been converted into Comprehensive warranty including preventive maintenance and calibration as per technical/ service /operational manual of the manufacturer, service charges and spares, during the Warranty Period also. Sellers are therefore advised to include the cost of Comprehensive Warranty including spares (excluding consumables) also in product Cost.

8.The CMC functionality shall be available in bid only and no direct RA shall be applicable.In case of bid to R/A decrement rules shall be applicable on total price inclusive of CMC charges. Bunching of products shall not be available while creating bids with CMC charges.

8.1.Buyer shall indicate number of years of warranty by selecting different options available in the field depending on warranty parameter applicable in category parameters for the equipment. No. of years of warranty indicated here shall supersede the warranty period indicated elsewhere in bid or product specifications. The Seller while participating in Bid/RA will get fields to indicate CMC charges as percentage depending on number of years of CMC selected by Buyer. The following shall be applicable, if 5 year CMC selected:

CMC charges for 1st year after warranty period- Percentage to be indicated- A1

CMC charges for 2nd year after warranty period- Percentage to be indicated- A2

CMC charges for 3rd year after warranty period - Percentage to be indicated- A3

CMC charges for 4th year after warranty period - Percentage to be indicated- A4

CMC charges for 5th year after warranty period - Percentage to be indicated- A5

Similarly, A6 to A10 are to be indicated for 6th to 10th year of CMC if applicable.

8.2.The calculation of CMC Charges shall take into account the number of years of warranty and duration of CMC as specified while creating bid.

8.3.In the price evaluation, the system shall provide function to calculate the cost of each equipment by

formula indicated below including CMC and then show the inter-se-ranking of the bidders. The following are the variables

(i) Number of years for which CMC required.

(ii) Number of years of product warranty

The formula for calculating total cost including CMC charges shall be as under:

Total Cost for evaluation=

$C + C * \{ (A1/100)/(1.10^n) + (A2/100)/(1.10^{n+1}) + (A3/100)/(1.10^{n+2}) + (A4/100)/(1.10^{n+3}) + (A5/100)/(1.10^{n+4}) \}$ and so on

C – Cost for equipment quoted and n shall be number of years of product warranty specified.

If 2 year warranty specified, n shall be 2 and if 5 year warranty specified, n shall be 5. A1, A2, A3, A4 & A5 shall depend on how many years CMC selected. For 3 year CMC, only A1, A2 and A3 factors are to be taken into account and A4 and A5 will not be applicable.

8.4. CMC charges offered for each subsequent year should be same or higher than preceding year.

8.5. The CMC charges shall be offered within range of 3 to 10% of cost of equipment.

9. Since CMC charges are to be paid only later for each year during CMC period, applicable performance guarantee amount after placement of contract shall be based on the cost of equipment excluding the cost of CMC Charges.

10. Performance bank guarantee applicable for CMC is to be submitted at start of the CMC and shall be applicable between 2.5% to 10% as specified in bid on total CMC Charges. The PBG submitted after award of contract shall be released only after new PBG for the CMC period is submitted and accepted by buyer/consignee after due verification. Bank guarantee for CMC is to remain valid till completion of CMC period plus one year. The bank guarantee for CMC shall be submitted to buyer directly. In case, seller fails to submit the PBG or does not provide services for the CMC contract after expiry of warranty period then PBG of equipment shall be forfeited.

11. In case of splitting of order quantity, equipment cost and CMC charges offered by L1 bidder shall be matched by higher quoting eligible bidders on one-to-one basis. The equipment cost and CMC charges (year to year) shall be matched individually.

12. The CMC Contract shall be an offline contract to be handled by buyer. The payment of CMC will be made on quarterly basis after satisfactory completion of said period, duly certified by end user and scope of CMC will be as per para 1 above.

13. CMC Charges are inclusive of all the charges for Transportation, Lodging, Boarding, all insurances including third party insurance and all other incidental charges. The same shall include GST. The prices also include cost of spares and damaged parts. Purchaser does not have any liability, whatsoever, over and above the cost of CMC. It also includes for arranging hand tools & tackles, special tools etc. required to carry out the work.

[This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है](#)

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action

in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्यवाई का आधार होगा।

---Thank You/धन्यवाद---

TECHNICAL SCOPE OF WORK

1.0 Schedule of requirement

Item	Description	Required Qty. with Unit of measure
Item 1	Supply, Installation, testing & commissioning towards establishment of Integrated Command & Control Centre (ICCC) for CCTV surveillance system along with Artificial Intelligence (AI) based Video Analytics in CCTV cameras at SECL with 05 years of CAMC after completion of one year warranty along with necessary license and permissions.	01 Set

01 Set of above “ Item 1 ” consists of the following :

SN.	Item description	Required Qty	Unit of measure
1	Video wall display ,55 inch with controller, stands with complete accessories	8	Nos.
2	Video analytical server	16	Nos.
3	Video Management Server (VMS) alongwith Video Management software and Licenses	4	Nos.
4	Client PC (Work station)	10	Nos.
5	Control and Command Software for SECL HQ	1	Set
6	Video Analytics software/license for entire contract period and Alert generation for the following events:		
i)	Vehicle detection and classification	300	Nos.
ii)	Loaded/Unloaded status of Vehicle	231	Nos.
iii)	Number plate detection/Recognition	300	Nos.
iv)	Vehicle counting	200	Nos.
v)	Crowd and Miscellaneous event detection	300	Nos.
vi)	Camera Non-functioning	232	Nos.
vii)	Personal protective equipment (PPE) detection	75	Nos.
viii)	Fire and smoke detection	75	Nos.
ix)	Zone intrusion Alert	75	Nos.
x)	Idle time Alert	150	Nos.
8	64 Channel Network video recorder with 80 TB surveillance HDD	18	Nos.
9	24 Port layer-3 Managed switch	4	Nos.
10	30 KVA UPS with SMF battery bank for 01 hour power backup on full load	3	sets
11	ESE lightening protection system complete with all components including multi strand copper down conductor, 02 Nos. earth pits with earth electrode as well as chemical back filling compound, lightening strike counter meter and ESE air terminal and all pipes and fixtures for installation	2	set
12	Chemical earthing	4	Nos.

13	Furniture Set	1	set
14	Air Conditioner	3	set
15	Installation, testing & commissioning of items (including racks, network cabling through OFC/Ethernet as per requirement, etc.)	1	LS
16	Comprehensive AMC (CAMC) for 1 st year after warranty period	1	LS
17	Comprehensive AMC (CAMC) for 2 nd year	1	LS
18	Comprehensive AMC (CAMC) for 3 rd year	1	LS
19	Comprehensive AMC (CAMC) for 4 th year	1	LS
20	Comprehensive AMC (CAMC) for 5 th year	1	LS
21	Technical Manpower support at Control Room	03 Nos. of manpower for 6 years (01 year warranty + 05 year CAMC) { one manpower will be deployed in one shift. }	01 No. technical manpower per shift per year (08 hours in one shift)

2.0 General Requirement:

Description of Procurement: Supply, Installation, testing & commissioning towards establishment of Integrated Command & Control Centre (ICCC) for CCTV surveillance system along with Artificial Intelligence (AI) based Video Analytics in CCTV cameras at SECL with 05 years of CAMC after completion of one year warranty along with necessary license and permissions.

A) OBJECTIVE OF THE SYSTEM:

1. Integrated Command & Control Centre (ICCC) is to be established in SECL HQ for effective monitoring of video feeds of various CCTV Cameras installed in multiple vulnerable locations of the mines and other establishments of SECL.
2. The ICCC is to be equipped with necessary processing, storage and video management software capacities for viewing and storage of 832 Nos. of CCTV Camera Footage at SECL HQ.
3. The ICCC is to be equipped with state of the art Video Analytics for minimum 832 Nos. of CCTV Cameras for detection and intimation of various types of specified events as defined later.
4. Technical assistance to SECL Personnel shall be provided continuously on 24x7 basis by one technical manpower (with qualified and experienced having sufficient skill to carry out the required tasks and assigned works . They should also possess required skill and proficiency to impart necessary training to SECL Personnel in the work of operation of ICCC including generation of reports) in each shift in a day for a period of six years (03 shift in a day) to be provided by the successful bidder.
5. The supplier shall provide adequate training to technical and monitoring manpower of SECL in respective domains of the ICCC.
6. The ICCC system should integrate existing RFID based Boom Barrier, GPS based Vehicle Tracking System, and other upcoming applications/systems related to Weighbridges and provide the monitoring of their live data and reports as per the requirement of the SECL. The successful bidder shall be responsible for such integration, by developing API/Software and provide multiple system summary and correlation data in a single unified dashboard. For this purpose, the successful bidder shall work in coordination with the

extant vendor(s) of SECL for integration of IVTS Data related to RFID, Despatch, Production and GPS with ICCC.

8. In the future, the successful bidder shall be responsible for API integration of various exceptions from Analytics of CCTV Feeds, Vehicle Tracking System and RFID based Boom Barriers with upcoming CIL Dashboard. Also, bidder must provide a comprehensive API (Application Program Interface) or SDK (Software Development's Kit) to allow interfacing and integration with existing systems and future application.

B) BRIEF DETAILS OF WORKING IP - CAMERA SYSTEM OF SECL:

1. Presently IP based CCTV cameras are installed at Weighbridges, Coal Stock, Mine viewpoints, Coal Sidings, Check post, Magazines, stores & other vulnerable locations at various Areas/Units of SECL.

- Suitable connectivity (Internet Lease Line / MPLS based on the feasibility) will be assigned to each 64-Ch. NVR to facilitate remote viewing of live video footage of IP-Cameras .

2. Initially this project will cover 832 Nos. of cameras (approx. 64 cameras x 13 Areas) which are installed at Weighbridges, Boom barriers, Coal Stock, Mine, Coal Sidings, Explosive Magazines, stores & other vulnerable locations at different areas of SECL. The proposed system should support and have provision for scalability/integration of additional CCTV Cameras as per requirement of SECL. The necessary hardware & Software required for integration of this additional requirement will be procured as per mutual consent of buyer and successful bidder.

3. The category of installed 832 Nos. IP Cameras are Bullet, Dome and PTZ Camera of different Makes i.e, Hikvision, Sparsh, Dahua, CP Plus, Bosch, Uniview, Secure-eye , Prama , etc.

4. The 64 Channel NVRs (with 80 TB surveillance HDD) are also included here in the scope of bidder to be installed at each of the 13 Area and SECL HQ. The same NVRs will be installed in each of the 13 Areas and the video feeds from the mines in each Area will be connected to and recorded by the NVR located at the corresponding Area HQ. It shall be the responsibility of the successful bidder to integrate the existing cameras of various MAKEs with the NVR subject to the cameras being ONVIF compliant. It shall be the responsibility of the successful bidder to ensure integration of the 64 Channel NVRs to be supplied against this bid and to be installed at areas of SECL with the ICCC at SECL HQ. Further the ICCC system has to be scalable in nature and should be able to integrate any additional NVRs which may be installed in future depending on requirements of SECL. The bidder in such conditions should communicate to SECL the required technical parameters of the NVRs to be procured to ensure compatibility.

5. The video footage from IP-Cameras installed at fields is received at recording/ storage devices of Areas through LAN/WAN network of SECL.

6. Suitable connectivity (Internet Lease Line / MPLS based on the feasibility) as required technically shall be provided by SECL to each of the 64 Channel NVRs to be supplied and installed by the bidder at various areas of SECL to facilitate remote viewing of live video footage of IP- Cameras.

C) SCOPE OF WORK: The scope of work of the successful bidder shall be as under:

1. To supply the tendered items at consignee locations with installation and commissioning of supplied items at SECL HQ as well as at respective Areas within the specified delivery period.
2. SECL shall arrange to provide a suitable room for establishment of monitoring centre at SECL HQ. Further SECL shall provide adequate room/ housing space for installation of the 64 Channel NVRs to be installed by the bidder at various areas of SECL.
3. The responsibility of successful bidder is to design, develop, supply, installation, testing and commissioning of the monitoring control centre (ICCC) for the purpose of centralised monitoring of live footage of IP-Cameras of SECL with one year warranty and five year CAMC of the system and deployment of manpower for a period of Six year(s) for operation at ICCC on 24x7 hour basis in a day .
4. The installed system shall access to the NVRs , to be installed at 13 Areas of SECL through Internet / MPLS (based on the feasibility) connectivity provided by SECL .
5. The offered 64-Ch.-NVRs (with 80 TB surveillance HDD) at all Area offices, should keep recording locally of all IP-Camera footage for 30 days (minimum) .

In the offered ICCC System at HQ, recording and storage of the video footage of all the cameras and also specified events based on analytics having licenses and as mentioned in the bid shall have to be done for a period of minimum 30 days in the storage specified in the bid.

- The specified events are as follows :

- (i) Vehicle detection and classification
- (ii) Loaded/Unloaded status of Vehicle
- (iii) Number plate detection/Recognition
- (iv) Vehicle counting
- (v) Crowd and Miscellaneous event detection
- (vi) Camera Non-functioning
- (vii) Personal protective equipment (PPE) detection
- (viii) Fire and smoke detection
- (ix) Zone intrusion Alert
- (x) Idle time Alert

Note : For the above mentioned analytics, the rules to be defined, wherever required, shall be done by SECL.

- The connectivity (internet / MPLS) at monitoring center in SECL HQ and at all the 64-Ch-NVRs of Areas shall be provided by SECL.
- The installation , commissioning and technical support of software for the supplied video analytic features for the entire period of the project shall be done by the successful bidder.
- The designed and offered solution shall have the capacity to cater approx. 1300 Nos. IP Cameras as and when required by SECL in future.
- The successful bidder shall deploy 01 operator (having technical expertise of the operation of offered system) round the clock in each shift in the control room at HQ , for a period of six (06) year. The responsibility of the operators shall be 24 hrs. monitoring of video footages of SECL, report the abnormal situations to the SECL authority and ensure generation of report/Alerts.

- The successful bidder has to ensure that continuous testing/ configurations for successful functioning of the ICCC system should be done on regular basis. The ICCC system should have a feature to show the logs of all such modifications in the software.

- The platform software for installation of VMS, VA software must be enterprise licensed. Home editions shall not be acceptable.

- All IT Components supplied against this bid should support IPv4 and IPv6.

6. During the period of the contract, the successful bidder shall be responsible for customization of the solution as per requirement of the company, SECL including additional AI based Video Analytics/ event flagging, on mutually agreed basis. For including additional AI Video Analytics in future, the offered rate will be considered for the same or any other similar type of Video Analytics.

7. The bidder shall provide the following license along with the software:

I) VMS Licences for the following :

(a) VMS License – 832 Nos. Cameras (Scalable upto the approx. 1300 Nos. cameras of SECL)

(b) Recording License – 832 Nos. Cameras

(c) Viewing License – 50 Nos.

II) License for the following Analytics :

i	Vehicle detection and classification	300 cameras
ii	Loaded/Unloaded status of Vehicle	231 cameras
iii	Number plate detection/Recognition	300 cameras
iv	Vehicle counting	200 cameras
v	Crowd and Miscellaneous event detection	300 cameras
vi	Camera Non-functioning	232 cameras
vii	Personal protective equipment (PPE) detection	75 cameras
viii	Fire and smoke detection	75 cameras
ix	Zone intrusion Alert	75 cameras
x	Idle time Alert	150 cameras

Note : (a) In future during the period of 6 years (1 yr. warranty + 5 years CAMC), SECL may increase the above licences of different camera events as required. The successful bidder shall provide the licences to SECL, at the same offered rates and terms and conditions.

(b) The system must be capable of simultaneously running at least five different analytics on a single camera.

III) Recordings :

The live video footage of 832 cameras shall be recorded including event / alert recording for a minimum period of 30 days .

8. It shall be the responsibility of the successful bidder to arrange for development and successful implementation of software for the supplied video analytic features.

9. The successful bidder shall deploy 3 operators for round the clock monitoring in the ICCC at HQ, for a period of SIX year(s). The responsibility of the operators shall be 24 hours monitoring of video footages and reporting of abnormal situations to the SECL authority, and ensure generation of report/Alerts.

10. The successful bidder has to ensure that continuous testing/ configurations for successful functioning of the ICCC system should be done on regular basis. The ICCC system should have a feature to show the logs of all such modifications in the software.

11. SECL has considered all equipment for fulfilment of objectives of the system. However, if any items/ equipment/ system are required in addition to the equipment mentioned in the bid Document for fulfilment of the aforementioned objectives, the same should be supplied, installed and maintained by the successful bidder without any additional cost to SECL. Hence all such items/services which are not included in the bill of materials, but may be required during installation & commissioning, shall be provided by successful bidder without any additional cost to SECL .

12. The supply of furniture for ICCC control room shall be as per following quantities :

- i. Executive Table – 06 Nos.
- ii. Revolving Chair – 12 Nos.
- iii. Almirah – 03 Nos.
- iv. Visitor Chair – 10 Nos.

13. The ICCC System should provide a dedicated portal with Area wise dashboard, to be accessed by Area authorities via Area-wise login credentials for viewing, report generation and filing ATR against specific events / exceptions under their respective Area

14. The ICCC System Dashboard should have provision for providing escalation matrix for automated sending of exceptions to designated authorities as per SOP defined by SECL.

15. In case of network issue between any particular Project/ Area and SECL HQ, the ICCC System should be able to sync with the Area level NVR for retrieval of last 30 days data at any point of time as soon as the connectivity is restored .

16. During the period of the contract, any facility/feature/ software upgradation of any supplied item which are offered by the respective OEM/ Developer will have to be made available to SECL without any additional cost, even if the same is not mentioned in the bid document.

17. Wiring/cabling standard: All wiring/cabling/ terminations/ patches must follow EIA/TIA standards wherever applicable. All Cabling should have proper non-perishable identification at the terminals for easy tracing. Proper documentation with diagram should be made for all wiring/cabling/terminations. All indoor wirings/Cablings should be properly secured, duly terminated, easily maintainable and aesthetically sound.

18. Placement/Fittings etc. : All Equipment installed should be properly placed which should be secure, aesthetic, convenient for maintenance, healthy from operational and fault liability point of view and follows standards (Industry and/or recognized authority) wherever applicable. It will include placement of all switches in suitable Racks, other hardware including Power Supplies in suitable racks/enclosures/stands

etc. Suitable enclosures, if any needed beyond list of equipment mentioned for the Area, as per site requirement will have to be provided by the bidder without any additional cost to SECL.

19. POWER SUPPLY:

- a. Unregulated Power Supply (nominal 220V AC), will be provided by SECL for installation of ICCS system. However, the successful bidder will arrange for any additional power wiring/ distribution, and also for regulation/stabilization of voltage required. All such works must be technically and aesthetically sound and standard based, wherever applicable.
- b. The successful bidder will ensure that protections provided in the equipment work properly in case of any abnormal electrical condition. SECL will make best efforts to ensure a healthy power supply, however in case of any damage to the equipment due to abnormal power supply or any other electrical disturbance, the damage has to be rectified by the successful bidder without any additional cost to SECL.
- c. The bidder will ensure to provide necessary protection system/module for the entire system from lightning, even if not mentioned in the list of equipment. In addition to the material as provided in the list of equipment, the vendor is free to add additional equipment or protection system to strengthen the protection system at his own cost.
- d. Any damage caused to the equipment/system due to lightning and/or abnormal power supply has to be rectified/repared by the bidder without any extra cost to SECL during installation, warranty and CAMC period.
- e. The successful bidder will ensure that the protections provided in the equipment work properly in case of any abnormal electrical condition. SECL will make best efforts to ensure a healthy power supply, however in case of any damage to the equipment due to abnormal power supply or any other electrical disturbance, the damage has to be rectified/replaced by the successful bidder without any additional cost to the company. The equipment so replaced against the damage should be of the “same make and model” or “higher specifications” without affecting the performance of the system.

f. POWER SUPPLY TO THE SYSTEM & DAMAGE DUE TO LIGHTNING, OVER-VOLTAGE, ETC:

- I. Unregulated Power Supply (nominal 230 +/- 10% V AC), will be provided by the company(SECL) at/ near Viewing Points, Server room, Switches and any other place required for the installation.
- II. However, the service provider will arrange for any additional power wiring/distribution, and also for regulation /stabilization of voltage required. All such works must be technically and aesthetically sound and standard based, wherever applicable (Applicable for contracts which include SITC and CAMC from same bidder
- III. The service provider will ensure that protections provided in the equipment work properly in case of any abnormal electrical condition. SECL will make best efforts to ensure a healthy power supply, however in case of any damage to the equipment due to abnormal power supply or any other electrical disturbance, the damage has to be rectified/replaced by the service provider without any additional cost to the SECL. The equipment so replaced against the damage should be of same make and model or higher.

The service provider will ensure to provide necessary protection system like Lightning Arresters, Earthing (The contractor shall strengthen the earthing and to bring it to the desired level i.e. $\leq 1 \text{ ohm}$) and Ethernet Surge Protectors for the entire ICCC system from Lightning, even if not mentioned in the bid document . In additional to the material as provided in the bid document, the service provider is free to add additional equipment or protection system to strengthen the protection system at their own cost.

Hence, any damage caused to the equipment/system/cables due to lightning and/or abnormal power supply has to rectified/repaired/corrected by the service provider without any extra cost to the SECL during warranty and CAMC period i.e. complete contract period of 06 years (01 year of warranty & 05 years of CAMC).

20. Earthing: Lightning Arresters, Chemical Earthing, including Earth Pit Digging have been provided in the list of equipment, wherever felt necessary. However, wherever felt necessary by the successful bidder, additional protections/earthing/arrestors may be provided, without any additional cost to SECL.

21. The successful bidder will arrange for all tools/tackles, testing instruments, software etc. required for installation, testing and maintenance of the system throughout the contract period.

22. The successful bidder will be fully responsible for safety of its personnel engaged in installation work. They will ensure that they and their personnel abide by the provisions of all relevant acts applicable, relating to the work. They will also ensure that he abides by all the rules and regulations of central and state governments and any local authority while executing the work. SECL will have the right to call for any documentation in this regard, instruct the successful bidder and take any action as deemed fit, in case of deficiency. The Successful bidder will be solely responsible for all liabilities in these regards. The successful bidder will indemnify SECL from any consequences caused due to their failure in this regard and will be solely responsible to bear them.

23. Bidder shall provide all patches and updates of Firmware for Active Components during the entire contract period (Warranty & CAMC period) as and when released by OEMs without any additional cost to SECL.

24. The Bidder should not bid / supply any equipment / item that is likely to be declared end-of- sale during the entire contract period. In case of such happening, such devices should be replaced with same or higher specification devices by the Bidder, without sacrificing the performance of the system free of cost.

25. During contract period, any spare parts to be replaced shall be of same make/model or higher version without degrading the performance of the system.

26. The firm shall make necessary arrangement at the ICCC for logging the complaints received. The Firm shall ensure a single point of contact with escalation matrix for all the complaints related to respective Project/Unit/HQ. It shall be the responsibility of the Firm to mobilize their technical team and back-end support for restoration of the break down. The Firm is required to provide 24 x7 help desk mentioning telephone number, E-Mail address.

27. Deployment of technical manpower to be provided by Successful bidder : 03 Nos. at ICCC, SECL HQ, (01 No. in each shift in a day).

a) The deployed manpower may work in shifts and manage the ICCC system on 24X7 basis and also have to comply the statutory rules and regulations.

b) The posting & shift duty of manpower may be changed during entire contract period as per the requirement of SECL. The deployed manpower shall report to the GM(E&T),SECL or his authorized representative

c) The successful bidder will maintain sufficient spares, tools and accessories required for repair / replacement / relocation / maintenance and configuration of active and passive components of the System to achieve guaranteed availability during the entire contract period.

d) In case of the deployed manpower is on leave, it is the responsibility of bidder to provide the substitute. Bidder will provide name & contact no. of manpower and documents regarding the same need to be submitted at the time of Installation & commissioning.

e) Arranging accommodation for manpower is the responsibility of the bidder at their own cost.

g) Role/Job of manpower: The deployed manpower will monitor all types of alerts on dashboard and they will identify the authenticity of the alerts and report to concerned person for further necessary action as per (Standard Operating Procedure) SOP of the SECL. The deployed manpower will also follow the instructions/orders related to ICCC given by GM(E&T)/HoD time to time during the contract.

A log book containing the details of the incidents of fault/problem reported, attended, rectified with time should be maintained by deployed manpower and made available to SECL. All the entries must be verified and counter signed by the Nodal officer of ICCC/GM (E&T)/HoD or his authorized representative at the site.

Note : The “ 03 Nos. of technical manpower to be provided by Successful bidder ”as mentioned here is different and additional to the Service Engineer/ technician to be provided by Successful bidder referred at the clause No. 33 below under the head “ AFTER SALES SERVICE AND MAINTENANCE) ”.

28. PATENT RIGHTS:

The Bidder shall indemnify all Projects / Units/HQ of SECL against all 3rd party claims of software piracy & infringement of intellectual propriety rights. In the event of any claim asserted by a third party of infringement of copyright, patent, trade mark or industrial design rights arising from the use of the Goods and services or any part thereof in India, the Bidder shall act expeditiously to extinguish such claim. If the Bidder fails to comply and SECL is compelled to pay compensation to a third party resulting from such infringement, Bidder shall be responsible for the compensation including all expenses, court costs and lawyer fees to SECL and as per the company norms further action may be taken against the bidder.

29. TRAINING:

The Successful bidder will provide onsite training to Operational/Technical Personnel of SECL and other users during installation and maintenance of the System. In addition, the bidder will also arrange training for up to 40 Technical personnel (in batches) of SECL on the Server, Switches & software at Developer/OEM/OEM authorized centre/ premises, free of cost.

The duration of such training will be for a minimum of 04 days, and the course content should cover operation/ configuration /maintenance of equipment and software.

However the same may be decided in consultation with HoD (E&T), SECL. The cost of training has to be borne by the bidder, however TA/DA cost and accommodation of SECL personnel will be borne by SECL.

30. WARRANTY PERIOD:

The system shall be under warranty for a period of One year from the date of Commissioning of the system. During the warranty period, the successful bidder shall maintain the system in all respects, including those mentioned in CAMC, at their own cost.

All types of breakdown calls are to be attended & rectified within four hours during warranty period. If the successful bidder fails to complete service/ rectification within defined time limit, the penalty will be applicable as per given Penalty clause.

31. Retrieval of data from Storage devices / Hard disk: Since it is imperative that no loss of stored CCTV data takes place due to faulty Hard disk etc. In case of any failure of storage devices HDD etc. the bidder shall have to make maximum efforts for retrieval of data stored in such storage devices and after retrieval , the data is to be returned back to SECL .

32. Transportation & Insurance :- All transportation, transit insurance required for supply and commissioning of the ICCC system are to be arranged by the bidder and no extra cost shall be paid. Any damage to the material and system supplied through this contract till the handover of the system shall be the responsibility of the vendor and insurance (if any) required to mitigate the risk shall be borne by the vendor.

33. AFTER SALES SERVICE AND MAINTENANCE:

The successful bidder shall also deploy service engineer/technician (wherever required) for early rectification of the issues /breakdowns , for cleaning of CCTV equipment to maintain the guaranteed availability of the system at point of time of the contract and post them at convenient place in consultation with SECL to ensure smooth maintenance of commissioned camera system during warranty period (01 year) and CAMC period (05 years). For this, bidders shall quote the total CAMC charges including the service engineer/technician cost.

SN	Name of location	Number of maintenance service personnel to be deputed by the bidder for the entire contract period
1	SECL HQ	01 service engineer for SECL HQ
2	13 Areas of SECL	02 service engineer will cover all the 13 Areas of SECL

It may be noted that bidders shall arrange for the verification of character and antecedents of the deployed Service Personnel by the local police authorities at their own cost, and give an undertaking to respective Area/Unit of SECL in this regard, along with relevant documents, if any. The details including Name, Address, Mobile No. and email Address of the Service representative should be intimated by the bidder .

Note : The 03 Nos. of Service engineers / technician mentioned here is different and additional to the technical manpower to be provided by Successful bidder referred at the clause No. 27 above under the head “ Deployment of technical manpower to be provided by Successful bidder : 03 Nos. at ICCC, SECL HQ, (01 No. in each shift in a day) ” .

34. SECL shall ensure proper positioning/ orientation of cameras and illumination of different cameras at mines/other sites for effective functioning of AI based Video Analytics at ICCC System of SECL HQ . In case of any shortcomings like lack of ambient lighting , connectivity or any other issue related to the maintenance of cameras or their surroundings affecting the recording quality directly or indirectly must be submitted in writing by the successful bidder during the installation process of ICCC before the system is commissioned. Further during the entire contract period a register is to be jointly maintained at the ICCC in SECL HQ by SECL and the successful bidder where instances of such shortcomings is to be entered and communication shall be made to the concerned Area by the Executive Incharge of ICCC regarding the shortcomings.

35. EMPLOYMENT OF WORKMEN/COMPETENT PERSONS:

It is the responsibility of successful bidder to employ engineers/technicians or competent-technical persons as may be required and to follow all the norms and practices set under statutory requirements and provisions made in the labour law as may be applicable at subject locations of SECL. You will be liable for implementation of the provision of Mines act 1952, contractor Labour regulation and Abolition Act and Rules thereof, payment of wages Act and payment of wages (Mines) rules, minimum wages act and rules thereof. Coal Mines Provident Fund Scheme and other Legislation which are obligatory on your part as contractor towards your employees.

(i) ACCIDENT OR INJURY TO WORKMAN :-

In no manner SECL shall be liable to you or any member of your staff or any person or to Govt or other bodies for injuries or death caused as a result of accidents either within or outside the installation site in the course of work. You shall be responsible for such contingencies and will make good all claims for compensations, claimed by your labour or staff or as decided by appropriate authority / tribunal or other competent agencies and discharge as the case may be, all liabilities under the workman's compensation Act and other relevant laws of the land. You shall also indemnify the company and disburse all the sum that may be awarded in respect of claims for compensations out of or consequent to any staff or labour working under you or any other involved persons pursuant to the provisions of workman's compensation Act (VIII of 1923 and IX of 1933) or any subsequent modification or amendment to the act thereof or any other enactment or law in force at relevant time.

(ii) All costs incurred in connection with any such claims should be made good by you and the company reserves the right to pay in the first instance such amount of compensation is payable under the said act and to recover the amount so paid from the contractor.

(iii) Safety Provisions:

The persons deployed during installation has to choose the route for reaching installation site only as per Engineer-in-charge / E&T Incharge to avoid any untoward incident.

Workers should be trained for the job before engaging by the contractor, if not trained.

Code of safe practice to be framed and circulated to all concerned workers for general safety awareness for the proposed job. No person should be allowed to work for more than 08 hours in a shift.

Bidder has to adopt proper safety aspect as per SECL & other industrial norms and ensure safety of their personnel and others during erection, installation, commissioning and maintenance of the system. The successful bidder shall be responsible for safety & security of the men & materials engaged in this work & all types of necessary safety precautions should be followed during execution of the work. The successful bidder will also have to arrange for all materials, safety tools like helmet, shoes, safety belt etc. In no matter SECL shall be liable to the successful bidder or any member of the contractor's staff or any other person

deputed by the successful bidder in case of injuries or death caused as a result of accidents either within or outside the working areas of SECL.

The successful bidder shall be responsible for such contingencies and will make good all claims for compensation by the contractor's labour or staff as decided by appropriate authorized tribunal or other competent agencies and discharge as the case may be, all liabilities under the work man compensation act.

The successful bidder shall provide for full medical treatment/compensation to the contractor's staff and labour in case of accident on duty and SECL shall have no responsibilities whatsoever towards the staff/labour deployed by the successful bidder. In the event of any injury and or accident that may occur to the workmen engaged by the successful bidder compensation shall be paid as per statutory norms by the successful bidder.

SECL will not be liable in respect of any damage or compensation payable to any workmen or any other person employed by the successful bidder. The bidder shall also ensure compliance of all guidelines, restrictions and directives by the manpower employed by the bidder regarding COVID-19 or any other in force at the time of commencement of work or issued at any time during the entire contract period.

It will be the sole responsibility of the successful bidder (to whom the contract will be awarded), to secure necessary permissions, clearances from whatever bodies/organizations necessary to complete the contractual task and this is to be done by the successful bidder at their own cost and responsibility. SECL will be responsible for any delay on this part.

(iv) Safety appliance like helmet, safety shoes, safety belt of approved type to be provided to all contractor workers wherever necessary.

Protective safety items where hazard due to noise, dust, falling of external material in eye etc to be provided. All workers, working near moving machines should wear fluorescent jackets.

(v) Proper fencing to be provided at the workplace to avoid un-authorized entry. Sand buckets / fire extinguisher to be provided in the workplace.

All the rules, regulations and by laws under mines act to be complied.

Traffic rule to be enforced strictly. In the open cast mine pedestrian should utilize road meant for them.

(vi) CMPF / EPF Clause:

EPF/CMPF (employer's contribution) and its administrative charges will be deemed to be included in the rates quoted by the tenderers. It will be deposited by the bidder through SECL. Proper record shall be maintained by the bidder for the worker wise CMPF/EPF deposited and monthly computerized statement shall be submitted to SECL. Deposit of CMPF/EPF statement shall be checked with reference to wages sheet by concerned officials of Personnel Department and duly signed by him.

Site visit :

□ The Bidder, at the Bidder's own responsibility, cost and risk, is encouraged to visit and examine the Site of Works and its surroundings/soil conditions details connected to the work, if / as available and obtain all information that may be necessary for preparing the Bid and entering into a contract for execution of the Works.

□ It shall be deemed that the Bidder has visited the site/area and got fully acquainted with the working conditions and other prevalent conditions and fluctuations thereto whether he actually visits the site/area or not and has taken all the factors into account while quoting his rates.

- It shall be deemed that the Bidder has got himself acquainted with the mining conditions and geological details available for the proposed work site.
- The bidder is advised to visit and examine the installation site and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid. The costs of visiting the site shall be borne by the bidder.
- The bidder representative shall be allowed entry upon consignee premises for such visits, only upon the express conditions that the bidder will release and indemnify the buyer and consignee against all liabilities arising out of such visit including death or injury, loss or damage to the property, and any other loss, damage, costs and expenses incurred as a result of such visit.
- The bidder shall not be entitled to hold any claim, against buyer for non-compliance due to lack of any kind of pre-requisite information as it is the sole responsibility of the bidder to obtain all necessary information with regard to the site, surrounding, working conditions, weather, etc. on its own before submission of the bid.

Warranty Period

- a) The Contractor shall warrant that the Goods supplied under the contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The contractor further warrants that all Goods supplied shall have no defect, arising from design, materials, or workmanship or from any act or omission of the Contractor, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.
- b) This warranty for the supplied Goods which have been accepted as a part of the commissioning certificate / acceptance certification, shall remain valid for (12) months from the date of signing of Commissioning Certificate. The contractor shall, in addition, comply with the performance guarantees specified under the contract. If, for reasons attributable to the contractor, these guarantees are not attained in whole or in part, the contractor shall, make such changes, modifications, and /or addition to the goods or any part specified in the contract at its own cost and expense and to carry out further performance tests at site , if the concerned Area/Mine of SECL allows.
- c) SECL shall promptly notify the contractor in writing of any claims arising under this warranty.
- d) SECL shall notify Contractor of any errors and malfunctions, which occur and noticed when equipment are in use, by fax/telephone/e-mail/special messenger directly or through his Service Engineer(s) at his office address during normal working hours .
- e) If the Contractor, having been notified, fails to remedy the defect(s) within the time specified , SECL may proceed to take such remedial action as may be necessary, at the contractor's risk and expense as specified and without prejudice to any other rights which the purchaser may have against the contractor under the contract.

f) Maintenance Service during warranty period

- f.1) Free maintenance services for the supplied Goods and other related accessories shall be provided by the contractor during the period of warranty.
- f.2) Contractor shall provide contact mobile number/e-mail/postal address to handle the complaints.

f.3) Contractor shall provide services of qualified personnel in resolving defects arising in the Goods supplied during the warranty period.

All Travel and other expenses for the persons/service engineer/technician deployed by the bidder are included in his/her bid. The bidder shall also undertake to train the persons deployed by employer for day to day operation.

Successful Bidder will submit name/names & contact details including Mobile Number/s of the Service Engineer/s posted in the Area. Service Engineers/technicians should carry authorization / Identity Card from the Comprehensive Annual Maintenance Contract (CAMC) Holder.

g) Data Handling and Retrieval Responsibility

The successful bidder shall be responsible for the proper handling and retention of all recorded data in the system procured under this tender, limited to the data stored in the Surveillance HDD (or Storage device) installed in the Server / NVR / Workstation.

In the event that the recorded data becomes corrupted, inaccessible, or lost due to any means, the bidder shall bear full responsibility for retrieving and recovering the data. The bidder shall take immediate action to rectify any issues that may lead to data loss or corruption to minimize the impact on the system's functionality. The retrieval process shall be carried out at no additional cost to the tendering entity, solely for the data stored in the HDD.

Furthermore, the bidder shall implement suitable backup and recovery mechanisms to safeguard the recorded data from potential data loss scenarios. The backup strategy should be robust and should not affect the continuous monitoring and recording capabilities of the offered system.

The procuring authority shall not be held liable for any data loss, corruption, or damages incurred by the bidder due to mishandling, negligence, or any other reasons related to the recorded data.

By submitting a bid in response to this tender, the bidder acknowledges and agrees to take full responsibility for the proper handling, security, and retrieval of recorded data as outlined in this clause.

This clause forms an integral part of the tender document and shall be binding upon the successful bidder upon acceptance of their bid.

h) Penalty Clause for Warranty Period :

h.1) Fault / Breakdown Attending Time: If any of the following components of the commissioned system (Video Wall system, VA Server, VA Software, VMS Server (with HDD) , VMS Software, Workstations, Control & Command Software, NVR (with HDD) , Switches & UPS system, Analytics or any other accessories like HDD, etc.) installed at SECL HQ are found defective or not working for any reason during the warranty period, the service provider must attend to the fault within 4 hours of receiving the report through communication channels like email, telephone, fax, etc.

Similarly, **at Area**, the maintenance personnel of the bidder should attend the breakdown/defective supplied & commissioned NVR (with HDD) within 24 hours.

h.2) Fault / Breakdown Rectification Time: The bidder should rectify the reported problem within the next 12 hours from the time of attending . Part of an hour shall be consider as 01 hour for penalty calculation.

h.3) Penalties: If the service provider fails to attend/rectify the fault within the stipulated time indicated above at Sr. No. “ h.2 and h.3 ”, a penalty of ₹ 1000 per day (or 24 hours) per complaint will be imposed. However, this penalty is subject to a maximum period equivalent to the 10% of the value of the submitted Performance Security Deposit (PSD) or Performance Bank Guarantee (PBG) that was deposited against the warranty period.

h.4) Deduction from Performance Security: Any penalties imposed during the warranty period, shall be deducted from the Performance Security Deposit (PSD) or Performance Bank Guarantee (PBG) submitted by the service provider.

h.5) Exception: The service provider will not be penalized if they make alternate arrangements by providing a spare system/component/equipment of the same or higher capacity until the repairs are completed.

h.6) Maximum Cumulative Penalties: The total penalties on account of the above clauses during the warranty period should not exceed the 10% value of the submitted PSD/PBG during the warranty period.

h.7) Exclusions: The successful bidder shall not be liable for penalties if the damage/ breakdown is caused by Force Majeure conditions such as natural disasters, acts of war, government actions (Such as changes in laws, regulations, embargoes, trade restrictions, expropriations, and government orders) , Vandalism / Theft , Pandemics and epidemics , Power outages, Fuel or energy shortages , Transportation disruptions , Acts of God, Acts of Nature, etc. or any circumstances beyond their reasonable control. However, in such cases, the bidder must provide a detailed report justifying the cause of the damage and the inability to meet the specified timelines for its restoration. Further, in such cases the successful bidder shall have to communicate in writing to SECL the nature of the Force Majeure conditions well before the expiry of stipulated restoration time as per the contract.

In case of failure under Force Majeure conditions the successful bidder shall undertake all efforts to restore all system back to operational status at the earliest. However, defects that take place under Force Majeure conditions will be repaired / replaced by the successful bidder on chargeable basis .

To facilitate early award of repair works on chargeable basis , the successful bidder shall submit work estimate with proper price justifications like previously awarded work order / OEM price certificate , etc.

36. Terms & Conditions of the CAMC

i) Bank Guarantee during CAMC

Apart from the Bank Guarantee during the warranty period (of 12 months from the date of commissioning) , entire period of CAMC (05 years from the date of expiry of warranty period) should be covered by a separate Bank Guarantee equivalent of 5% of the Equipment value (including installation & commissioning charges) . The same shall stand forfeited in case of cancellation of the contract for any breach of contract or for any deficiency in the performance noticed during the currency of the contract.

ii) All repairs/replacement/servicing/fixing of the entire commissioned system shall be carried out only by the contractor / successful tenderer and company SECL shall not permit or allow any other party other than the authorized contractor / successful tenderer to handle or deal with the equipment.

iii) Repair/replacement/servicing shall mean system testing, repair and maintenance of entire/total equipment for proper functioning of ICCC system. The CAMC includes repairing & maintenance of video wall system, VA Server, VMS Server, Client PC/ Workstation, switch , Air conditioner, UPS with batteries (Batteries will be replaced during warranty and CAMC period without any extra cost if required) , and other associated items as mentioned in SOR. The CAMC charges also include cabling works, the expenses for preventive maintenance and routine check-up and attending to breakdown calls as and when required.

iv) The contract is comprehensive and includes replacement, fitment, maintenance and repair of all type of spare parts (Components/printed circuit board /power supply units/connectors & Electronics sub systems etc.), for replacement of defective parts and repair of the commissioned system. No extra charges will be payable by SECL on account of these spares.

v) Cleaning of the commissioned system at SECL HQ & Area in every month, or as and when required, is an important maintenance task to ensure the proper functioning and longevity of the system.

vi) Spare at site:

The CAMC holder will keep stock of necessary spares with their service engineer for smooth functioning of the ICCC system. In case of major repairs (during warranty or CAMC) necessitating removal of the equipment to the contractors service centre, the system or its parts shall be reinstalled at the owner premises after repairing the set in working condition. Provision of installation of spares (same or higher specifications) breakdown/damaged/under repaired items will be ensured at all times.

vii) Penalty calculation :

1. **Availability of Major Equipment** { Video Wall system, VA Server, VA Software, VMS Server (with HDD) , VMS Software, Workstations, Control & Command Software, NVR (with HDD) , Switches & UPS system or any other accessories like HDD, etc.) }.

2. **Availability of Analytics.**

For calculating availability of Analytics, the successful bidder shall have to provide monthly validation of Analytics accuracy output as desired.)

A minimum 95% guaranteed availability should be maintained for Major equipment as well as analytics.

Penalty shall be deducted on pro-rata basis from annual recurring charges.

Month wise availability (Uptime) of the System will be evaluated during the entire contract in percentage as follows -

$$\frac{\{ (\text{Total no. of Hours in month}) - (\text{Total Downtime in hours during the Month}) \}}{100} \times (\text{Total no. of Hours in month})$$

Penalty (Manpower):

If bidder fails to provide manpower as mentioned in scope of work up to seven consecutive days, the manpower charges shall be paid on pro rata basis of absence. If period of absence exceeds consecutive seven days and no adequate substitute is provided, penalty shall be imposed at the ratedouble of manpower charges on pro rata basis for total period of absence.

The contractor will be subject to penalties, as deemed necessary by the Technical Department and the SECL management, in the event of any unexpected or inadequate performance. These penalties may include actions such as forfeiting the complete/partial Performance Bank Guarantee (PBG)/Security or any other measures deemed appropriate by the SECL management.

PLANNED DOWNTIME :

It means any time when the equipment's is unavailable because of maintenance, configuration/reconfiguration or other services with the prior approval of GM(E&T)/HoD(E&T) or his authorised representative. Such services may include but are not limited to restarting applications, rebooting servers, applying patches or fixes, reconfiguring storage allocation, reloading data and making DNS & firewall changes to close security holes. Planned downtime will not be added to total downtime hours for calculation of availability.

a) Fault / Breakdown Attending Time: If any of the following components of the commissioned system (Server, Workstation, Storage device or HDD, VMS Software, VA Software, Control & Command Software, UPS, Switches, or any other accessories) are found defective or not working for any reason during the CAMC period, the bidder must attend to the fault within 04 hours of receiving the report through communication channels like email, telephone, fax, etc.

Similarly, at Area, the maintenance personnel of the bidder should attend the faulty NVR (with HDD) within 24 hours.

b) Fault / Breakdown Rectification Time: The bidder should rectify the reported problem within the next 12 hours from the time of reporting. Part of an hour shall be considered as 01 hour for penalty calculation.

Note :

(1) In case of repeated and unresolved failures / breakdowns within a specific period, the company reserves the right to terminate the contract and seek compensation for any losses incurred due to the service disruptions.

(2) The penalty clause shall not absolve the successful bidder from their responsibility to perform regular maintenance and preventive measures to minimize the occurrence of breakdowns.

(3) In the event of any breakdown, it is important to note that if the breakdown is caused by Force Majeure conditions such as natural disasters, acts of war, government actions (Such as changes in laws, regulations, embargoes, trade restrictions, expropriations, and government orders), Vandalism / Theft, Pandemics and epidemics, Power outages, Fuel or energy shortages, Transportation disruptions, Acts of God, Acts of Nature, etc. or any circumstances beyond their reasonable control then the penalty shall not apply. However, in such cases, the bidder must provide a detailed report justifying the cause of the damage and the inability to meet the specified timelines.

viii)TIMELY RECTIFICATION OF DEFECTS :

In case of breakdown of any hardware/software (Servers, Workstation, Storage device or HDD, VA Software, VMS Software, Control & Command Software, UPS, Switches, or any other accessories like HDD, etc.) in the ICCS system, the successful bidder has to attend the breakdown and ensure the restoration of the breakdown equipment within the stipulated time to ensure the Guaranteed Availability of the system.

However, if the bidder fails to restore the said equipment within 05 days (60 hours) from the time of reporting, SECL shall have the right to get the equipment restored departmentally or through any other agency. The equipment so restored shall continue to be under CAMC of the existing service provider till the end of the contract period. In such a case of restoration of the equipment departmentally or through any other agency, the cost of such restoration along with 10% handling charges shall be recovered from the running bills, performance security or any other dues of the service provider. If such amount is not directly recoverable from any dues of the service provider, then the service provider shall reimburse SECL for the due amount by any means within 30 days of such claims made by SECL.

{ Note : Part which has been replaced shall be cleaned of any storage, if any or data before being taken out from the SECL premise while keeping the backup after consultation with representative from SECL (Officer incharge). No data/storage/device having data should be taken out without prior written permission from the Officer In-charge.

During CAMC period, if any equipment is declared end of sale/ end of support/ end of life by the OEM, or the equipment is not available for any other reason, the successful bidder shall be allowed to replace the said equipment with an equipment of higher specifications of the same make, and configure it to work in the network seamlessly. The said equipment shall be under CAMC by the service provider till the end of contract period at the same rates, terms, and conditions as the previous equipment.

ix) The day to day record for the breakdown time will be kept SECL HQ as well as Area by representatives of SECL for the assessing performance as well as for deducting penalty, if any, during quarterly payment CAMC charges of the ICCC system .

x) **Validity of Contract** - The contract for offered CCTV system will be valid for a period of 06 (Six) years from the date of commissioning of CCTV camera system.

xi) **CAMC Charges** - The Comprehensive Annual maintenance charges for the ICCC system shall be for 05 years. The CAMC charges shall be firm during the contract period.

xii) The **Goods & Service Tax** shall be paid at the prevailing rates on production of documentary proof.

xiii) All other taxes & levies as may be applicable due to or under the law from time to time shall be inclusive of CAMC charges.

xiv) **Payment of Maintenance Charges** - After the successful commissioning of the system and expiry of Warranty period , the CAMC charges will be paid quarterly after the end of each quarter. The contractor shall submit invoices at the end of each three-month period (quarter). Upon receipt of the bills along with the complete set of required documents (like monthly service reports & breakdown reports from SECL HQ as well as respective Areas) , the SECL will process payment within 21 days.

- Respective Areas of SECL will submit the Month-wise details (date and time) of breakdown/failure and restoration report after the completion of each month.
- The company reserve the right to recover/ enforce recovery of any over-payments detected after payment as result of post-payment audit or technical examination or any other means, notwithstanding the fact that amount of disputed claim, if any, of the contractor exceeds the amount of such overpayment and irrespective of the fact whether such disputed claims of the contractor are the subject matter of arbitration or not.

- The amount of such over-payment may be recovered from the subsequent bills under the contract, failing that from contractor's claim under any other contract with the company or from the contractor's security deposit or the contractor shall pay the amount of over-payment on demand.
- Amount payable/ repayable for any subsequent change in the Service-tax will be made to/ from the Contractors after departmental verification of such changes of tax law issued by statutory authority.

xv)Paying authority - The payment shall be made by the General Manager (Fin.), SECL HQ.

{ NOTE: (a) The payment made towards the item mentioned in SOR at “Sr. No. 21 - Technical Manpower support at Control Room ” shall be included in the supply of items for the warranty period of 01 year .

(b) Similarly , payment for the same item { i.e, “Sr. No. 21 - Technical Manpower support at Control Room”} during the CAMC period of 05 years shall be included in the CAMC charges for the entire ICCS system to be established in SECL .

Bidder has to quote their bid accordingly while keeping the points at Sr. No. “I” and “ii” under “NOTE” in mind. }

xvi)The contract will be operated by the authorized representative of GM (E&T)/HoD and authorized representative of Area General Manager or Staff Officer(E&M) at Areas or Area Manager (E&T) of respective Areas .

- **All the equipment supplied under this contract should bear manufacturer's name, equipment name, model no, part no. and serial no. different relevant rating and working ranges engraved in a non-corrosive material plate attached permanently to the equipment or engraved on the equipment itself. Wherever applicable, in critical equipment the brief operating instructions and drawings should be engraved /supplied along with equipment.**
- **The equipment offered must be highly reliable and field proven. The equipment supplied should operate without any deviation in quality or degradation of system performance and all the parameters mentioned should be guaranteed over as mentioned in the required technical specifications in the Buyer Specification Document.**

{ Note: In case of any ambiguity / conflict with the GeM standard Terms & Conditions, details mentioned in this document shall supersede. }

37. DETAILED TECHNICAL SPECIFICATIONS

1. Videowall - Qty. 8 Nos. (55 inch each)

1	Size (LxH) 16 feet x 4.5 feet (+/- 3 %) configuration with complete base stand as required . 24X7 Operational Full HD 55" each IPS Panel having HDMI and Display input ports with 4x2 (Rows x Columns) matrix or any suitable panel configuration as per requirement of SECL.
2	Native Resolution per Panel : In order to achieve acceptable image quality for both video and graphics, and to avoid pixel loss, the LCD panel must be of native resolution of 1920 x 1080.
3	Brightness: 500 Cd/m2 (nits)
4	Contrast Ratio: 1100 :1
5	Connectivity : 1 USB Port, 2 HDMI, 1 DP (In & Out), 1 Audio (In & Out), 1 LAN (In & Out) and 1 DVI Port
6	Viewing Angle: Each display shall utilize a high contrast screen (anti-glare) with sizes of 55" diagonal. The screen shall have a H 178°/V 178° viewing angle or greater.
7	Response Time: 10 millisecond or better
8	Detachable IR Sensor
9	Bezel Width- 0.44 mm or lower
10	Dynamic contrast ratio- 500000:1
11	Should support auto source switching and recovery
12	To be supplied with all front accessible Push/Pull wall mounting bracket/kit and accessories as per site requirement.
13	Certification : BIS , CB , UL/NRTL
Videowall Processor:	
1	Should be supplied with required qty. to support minimum of 24 Nos. Input (Servers, etc.) and Min. 10 Nos. of Output (Display Unit)
2	Should be fully compatible with supplied panels
3	Should be preferably get connected with the workstations directly with HDMI/DP ports without any Converter
4	Should be preferably get connected with the Panels directly with HDMI/DP ports without any Converter
5	Minimum Video Processing Data Rate : 4Gbps
6	Controller should be an Enterprise Grade Rack mountable with IP-55 certified (IP 55 Certificate must be enclosed)
7	To be supplied with compatible controller hardware and video cables, accessories as per requirement and GUI based wall management software and Remote management feature Videowall processor Should support HDMI Audio Input and output.
8	It should be able to make complete video wall display behave as one logical area. It should be possible to display any or all the inputs on the video wall in any desired configuration. Should be possible to increase the no. of inputs if desired at a later stage.

Note : The bidder offering the ICCC solution must provide all the necessary accessories needed to ensure the video wall system works seamlessly within the integrated solution. The bidder is expected to cover the cost of these accessories, and SECL should not incur any additional expenses for them.

2) Video Analytic Server - 16 Nos.

1	Processor	2x Intel Xeon processor with minimum 24 cores, 2.0Ghz or Better
2	Graphic Processing Unit	Min. 24 GB x 2 Nos. or 16GB x 3 Nos. GPU Cards

2	RAM	minimum 128 GB Memory DDR4 or better
3	HDD Capacity	OS & Application: 1 x TB SSD in RAID1 configuration and 4 TB SATA HDD
4	Network interface ports	Minimum: 4 x 10G ports
5	Power supply	Redundant hot plug Power supply
6	RAID support	With Provision of RAID 5 or RAID 6
7	Operating System	Microsoft Windows 2019 or Latest / Linux
8	Form Factor	2U Rack
9	Virtualization	Shall support Industry standard virtualization hypervisor like Hyper-V, VMWARE etc.
10	Security Features	a. Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks
11		b. Should protect against firmware which executes before the OS boots
12		c. Should provide effective protection, reliable detection & rapid recovery using Silicon-based Hardware Root of Trust or equivalent
13		d. Configuration upgrades should be only with cryptographically signed firmware and software or equivalent
14		e. Should provide system lockdown feature to prevent change (or “drift”) in system firmware image(s) & prevent malicious modification of server firmware or equivalent
15		f. Should maintain repository for firmware and should be able to rollback, if required
16	Pre-Failure Alerts	Should provide failure monitoring & alerts of actual or impending component failure for fan, power supply, memory, CPU, RAID, NIC and HDD
17	Server Management Software	The Systems Management software should provide Role-based security. Shall support Real-time out-of-band hardware performance monitoring & alerting, Agent-free monitoring, driver updates & configuration.

3) Video Management Server (including Video Management software) - 04 Nos.

1	Processor	1x Intel Xeon processor with minimum 16 cores, 2.0Ghz or Better
2	Graphic Processing Unit	Min. 16 GB GPU Card
2	RAM	minimum 128 GB Memory DDR4 or better
3	HDD Capacity	OS & Application: 1 x TB SSD and Data Storage: should be available with 350 TB HDD Capacity and should support expandability up to 1400 TB using external / 3 rd party NAS.
4	Network interface ports	Minimum: 4 x 10G ports
5	Power supply	Redundant hot plug Power supply
6	RAID support	With Provision of RAID 5 or RAID 6
7	Operating System	Microsoft Windows 2019 or Latest / Linux
8	Form Factor	2U Rack
9	Virtualization	Shall support Industry standard virtualization hypervisor like Hyper-V, VMWARE etc.
10	Security Features	a. Should have a cyber resilient architecture for a hardened server design for protection, detection & recovery from cyber attacks
11		b. Should protect against firmware which executes before the OS boots

12		c. Should provide effective protection, reliable detection & rapid recovery using Silicon-based Hardware Root of Trust or equivalent
13		d. Configuration upgrades should be only with cryptographically signed firmware and software or equivalent
14		e. Should provide system lockdown feature to prevent change (or “drift”) in system firmware image(s) & prevent malicious modification of server firmware or equivalent
15		f. Should maintain repository for firmware and should be able to rollback, if required
16	Pre-Failure Alerts	Should provide failure monitoring & alerts of actual or impending component failure for fan, power supply, memory, CPU, RAID, NIC and HDD
17	Server Management Software	The Systems Management software should provide Role-based security. Shall support Real-time out-of-band hardware performance monitoring & alerting, Agent-free monitoring, driver updates & configuration.

Video Management Software

Sl. No.	Features required
1	The proposed video management system software should be able to support 832 Nos. of IP Cameras for Management and Recording
2	The Application should integrate any make/ model of ONVIF compliant NVRs from SECL Different Locations
3	License required for following event detection :
	i. Vehicle Detection and Classification – 300 Cameras
	ii. Loaded / Unloaded Status of Vehicle – 231 Cameras
	iii. Number Plate Detection/ Recognition – 300 Cameras
	iv. Vehicle Counting – 200 Cameras
	v. Crowd and Miscellaneous Event Detection – 300 Cameras
	vi. Camera Non-Functioning – 232 Cameras
	vii. Personal Protective Equipment (PPE) Detection – 75 Cameras
	viii. Fire and Smoke Detection - 75 Cameras
	ix. Zone Intrusion Alert - 75 Cameras
	x). Idle Time Alert - 150 Cameras
	Note: In future during the period of 6 years (1 yr. warranty + 5 years CAMC), SECL may increase the above licenses of different camera events as required. The successful bidder shall provide the licenses to SECL, at the same offered rates and terms and conditions.
4	The Software shall be Scalable, Client Server based, Enterprise level capable to handle atleast 1300 camera in the same system by adding camera license and server. The VMSs must be of ONVIF Profile S,G,T & M Compliant . The Software shall be Conformant and independent of camera make .
5	The VMS shall be able to support cameras at up to 30 frames per second and any resolution supported by the camera and the camera driver. The VMS shall automatically offer only supported fps and resolution combinations for user convenience.
6	The system shall allow the recording, live monitoring, playback of recorded video, audio, and data simultaneously
7	The VMS Management software should allow load balancing feature for effective utilization of resources for Server and client. It can allow system to be load balancing as per remote or local usage.
8	The Software shall be able to control Bitrate/ Quality of camera, FPS, Resolution as per requirement. The same can be applied from VMS System manager itself not from the camera web browser.

9	The VMS shall allow bidirectional audio communication with the cameras Two-way Audio Communication can be in 3 different Modes, Recording shall be available with Audio & video Synced together:
(A)	Closed Mode: In the closed mode, the audio channels are not open
(B)	Listen Mode: In the listen mode, the user will hear audio from the camera and any potential audio going to the camera from any other VMS client. The audio channel from current user is not open.
(C)	Talk Mode: In the Talk mode, the user will speak from the Client Station to the camera.
10	The VMS shall be able to integrate with other systems using video, data or digital I/ O, Scheduled I/O as well as logical I/O.
11	The VMS shall support inbuilt Server based 3D calibrated or Artificial Intelligence Based Video Analytics. The license and software link should come as single package to make it easy for the user. Software should be able to handle Video Recording and Video Analytics a minimum of 100 cameras in one recorder. Recording to be done at 1080p, 20 fps.
12	The VMS shall be Windows based supporting native or virtualized Windows Server 2016/Windows Server 2019/Windows Server 2022 Standard Edition and Windows10/11 or any open platform or Linux based. The VMS shall allow operation with PC Keyboard, Mouse and Direct X / Equivalent compliant Keyboard (Joystick).
13	The VMS shall support unlimited storage and should be able to recording NAS, SAN and DAS
14	The VMS shall support H.264, H.265, MPEG-4 and MJPEG compression methods
15	The VMS shall support multi-live streaming, multi casting streaming methodology
16	The VMS shall support exporting video in a tamper proof format. The media player provided in the software shall automatically notify if the video or audio has been modified
17	The VMS shall provide file export tool for export of single frame of video in BMP, GIF, TIF, JPG and PNG formats and export of video file sin SEF/.TS, ASF, AVI and MKV/ .mp4 format
18	Archiving Support
19	Quick review of the recorded video
20	Support any video resolution like CIF, 2 CIF, 4 CIF & HD upto 20 MP.
21	Quick search of devices in the viewing application
22	Extended camera viewing on multiple monitors
23	Multi camera sequential tours
24	Digital zooming feature for live video and playback
25	Facility for exporting the video on a portable media such as pendrive/ DVD/ portable hard disk etc.
26	The software should comply that all client to server and server to server communications are compressed and encrypted and connection specific key should be 256-bit AES and data encryption should be 256-bit AES. The exported video should be saved in SEF (Secure Export Format) or Encrypted File for secure non tamper file system with Password protection. The Client application should support dual password mode for each user.
27	Video search on the basis of date, time, event, camera, location & alarm Post recording motion search analysis
28	The VMS shall have the following licensing policies:
28.1	The VMS shall not have base licenses and standard channel modules. The VMS shall be flexible to provide and support licenses for any number of cameras.
28.2	The VMS licensing shall allow changing any and all of the cameras at any time without extra cost or license key change
28.3	The VMS shall not require online licensing process
28.4	The VMS shall support instant device/ Camera replacement using original IP address. The IP of the new device/ camera shall not be needed in the software while replacing faulty camera / device
28.5	The VMS licensing shall require MAC Id of Server/ Recorder only, not of camera devices.
29	The VMS shall support software inbuilt Secure Data distribution methodology for fault tolerance
30	The VMS Management software should allow Password Protection Feature for Administrator.
31	Administrator Rights
31.1	Admin should have rights to give access, windows control, screen rights, device, stream, system setting and various plug-in access to the users
31.2	Admin can give access to the users to exist, Logoff, lock and unlock the VMS application and client GUI.

31.3	Admin can give right to the users to change the profile from VMS application and client GUI.
31.4	User can search devices in device tree
31.5	User can add comments to the alarms
31.6	Users can create, close, resize, minimize, maximize, restore the window
31.7	Users can open about windows and can take help from there.
31.8	User can open, close, rename and change the tab grid.
32.1	Screen Element:
32.2	User can view the below elements:
32.3	Can view alarm list
32.4	Can view activity panel
32.5	Can view playlist panel
32.6	Can view device tree:
32.7	Can view description panel
32.8	Can view administrative device description
32.9	Can view tab
32.1	Can view menu bar
32.11	Can view status messages
32.12	Can view master connection status
32.13	Can close component bar
32.14	Can change component modes & can create camera sequence
32.15	User can be able to create custom grids
32.16	User can be able to change device order in grid.
32.17	User can scale user interface
33	Layouts:
33.1	User can view other users shared layouts
33.2	User can view own layouts
33.3	User can manage, share and schedule the layouts
34	Bookmarks:
34.1	User can view other users shared bookmarks
34.2	User can view own bookmarks
34.3	User can share bookmarks
34.4	User can view shared tab content
34.5	User can view, save, share and remove tab content and password protected
35	Device access:
35.1	User can change camera settings, close the camera, change thrucastr (Direct Camera Streaming) settings, camera streaming settings, and display settings.
35.2	User can create & edit PTZ camera tours, presets, home position on supported cameras
35.3	User can close audio, change audio volume, mute audio, use two-way audio
35.4	User can close digital input device, digital output devices, control digital output device, close text data device
36	Access to Stream:
36.1	User can view live streams
36.2	Admin can restrict user to view playback stream limit from 1 minute to 24hrs.
36.3	Admin can authorize the user to use mixed mode and privacy masks.
36.4	User can export a video to clip in SEF or Encrypted format, Audio to clip, text data to clip, story board
36.5	User can export still image, print still image, view archive, create archives.
37	Settings:

37.1	User can change general settings, clip export settings, image export settings, plug-in settings, alarm settings, stream settings, display settings, advanced settings, story board export settings, data cache settings.
38	VMS should have the provision of Plugin support to connect with the third party software.
39.1	The offered VMS must be ONVIF compliant & should support ONVIF camera system. The Compliance/Conformance to the ONVIF Profile S, G, T and M should be available with the VMS OEM on or before the Bid Publishing Date.
39.2	The necessary documentary evidence for the above to be submitted along with the bid.
41	VMS software shall support server based analytics feature with full cameras calibration capability like camera field of view, camera heights, horizontal line, virtual mimics, virtual ruler etc. using software to calibrate the camera to reduce false alarm.
42	The platform software used for installation of VMS, VA software must be enterprise license. Home edition shall not be acceptable
43	It should be possible to configure video analytics on any of the cameras from the Video Management System desktop client Application
44	The VMS and VA must have tight integration so that there is no need to add cameras to VMS and VA servers separately.
Client & Recorder Application	
1	Software should be of enterprise level and able to handle the complete SECL Requirement and must be scalable using the additional servers, storages and software licenses.
2	The system management server shall run as a Windows / Linux service on one of the recorders. The system management server shall control the following:
	a) Overall system operation.
	b) Data communication between recorders and client programs.
	c) Maintain user and profile lists.
	d) Authenticate and authorize users and applications.
	e) Maintain system logs.
	f) Handle system diagnostics.
3	g) System health monitoring
	Software shall allow there cording, live monitoring, playback of archived video, audio and data, network transmission and changes to settings simultaneously.
	Server software shall enable the client to dynamically create connections between Cameras and workstations and view live or recorded video on the digital monitors (audio, video, serial ports and digital/Os)
	Server software shall provide the client seamless operation of all cameras and workstations available in the system regardless of the actual connection to different archive servers
	Offered software shall use standard servers for all the processing and shall not need any proprietary server hardware
	The alarms may be triggered by the following events:
	a. Motion (or lack of motion) in camera view
7	b. Change in sound level
	c. Text data string
	d. Digital input signal from an external device
	e. Missing camera signal(resulting for example from sabotage)
	f. Custom event from 3rd party application.
	G. Video Content Analytics (VCA) event from camera based / 3 rd party server-based VA
8	The alarm management shall support the following automatic responses:
	a. Pre-and post-recording up to 60 minutes of video and audio
	b. Opening an alarm camera window or audio window (real-time or playback) on the workstation screen
	c. Displaying the alarm on the alarm list
	d. Activating a digital output
	e. Turning a PTZ camera to a preset position

	f.	Starting a dome camera tour
	g.	Sending an alarm e-mail message
	h.	The alarm management shall be able to acknowledge alarm automatically or manually
	i.	Support for multiple Alarm popup monitors
	j.	The user can add comments to alarms.
	k.	The user can specify to show certain or all alarms on the time slider.
	l.	Alarms can have a custom stats
9	The alarm management shall support the following alarm viewing features:	
	a.	It should provide the facility to assign the priority level to different alarms.
	b.	It should allow pass the specifically arms to specified users rather than sending all alarms to every user.
	c.	Users in same user group should see and be able to manage received alarms assigned for the same user group. All users should see the alarm status in real time.
	d.	System should have single alarm stack even though there are multiple recording servers
10	Software should allow creation of multiple camera sequences. It should be possible to set the dwell time for the cameras within the sequence.	
11	Software should allow taking the backup of the recorder server configuration and restoring the same if required.	
12	Software should allow easy and user-friendly menus for camera configurations. It shall allow changing settings for multiple cameras of the same type simultaneously	
13	Software should provide totally configurable user privileges with independent user rights. The user privileges are saved in profiles which can be assigned for the required users	
14	Software shall allow the client applications to interact with multiple recorder servers simultaneously and allow the simultaneous display cameras from different recorders on the same monitor	
15	The client programs shall include end user client program, system management client program, browser-based client program and mobile client programs, atleast 50 concurrent client license to be provided which can later be expandable up to 100 User license without any charge.	
16	The end user client program shall support multiple profiles for each user	
17	Client applications shall provide an authentication mechanism, which verifies the validity of the user through the selected system management server	
18	Client shall perform the following applications simultaneously without interfering with any of the Archive Server operations (Recording, Alarms, etc.)	
	a.	Live display of cameras and audio
	b.	Live display of camera sequences
	c.	Playback of video and audio
	d.	Media search tools
	e.	PTZ control
	f.	Display and control of Maps
	g.	Alarm management
	h.	Digital I/O control
19	Client applications shall support any form of IP network connectivity including: AN, WAN, VPN, Internet and Wireless	
20	Client applications shall support IP Multicast (RTP) and Unicast (TCP or RTP) video and audio streaming as required depending on the network capabilities	
21	Client application should support both dynamic and predefined Video display layouts, for example Full screen, 2x1, 2x2, 3x2, 3x3, 3x3+1 large , 4x2, 4x2+1 large , 4x3, 4x3+1 large ,4x3+2large ,4x4,4x4+1 large , 5x5,6x5+1large, 7x5 ,10x10 .	
22	Client application shall enable playback of audio along with video. The monitor shall enable the user to work with multiple Audio layouts containing collections of audio clips	
23	Users shall be able to define and store their own layouts, which they will be able to re call later through a layout list. Each layout shall contain information about the dimensions and positions of all windows along with and data about the active	

	profile
24	Client application shall enable playback of audio from live and recorded audio sources, allowing the user to select source independently as well as mute them. Client application shall have the feature to show audio sources of current layout/view only.
25	Client application shall allow operators to save bookmarks with description of the recorded and live video, audio and text data
26	Client application shall provide drag and drop facility for selection of the devices to be viewed in the viewing layout
27	Client application shall support Graphical Site Representation (Maps) functionality, where digital maps are used to represent the physical location of cameras and other devices throughout facility. Maps should have the capability to add the hyperlinks to create interlinked maps. It should allow the selection of any camera for display from the map
28	Client application shall be able to control pan-tilt-zoom, iris, focus, presets and dome patterns of the PTZ camera
29	Software should provide the ability to play a minimum of 9 video channels in time sync with each other. Software shall support exporting a multi channel clip with video, audio and text channel data
30	Ability to view each camera.
31	Should support Virtual Matrix option to build video walls and video matrixes, the matrix can be created by having a separate display server for each four monitors in the matrix, as well as an operator console server to manage the display servers. Agile virtual matrix (AVM) operator console can be positioned in a fixed camera grid cell.
32	The device Station should have various symbol options to user to understand if the Camera is in below Conditions: Normal, Recording, No Signal, not in use, Connecting and No Connection.
33	The camera toolbar shall be displayed when the mouse is moved over a camera or if a camera is selected with other means (Right Clicking). If the mouse is not moved for some time, the camera toolbar disappears automatically.
	The camera toolbar shall contain atleast the following items.
	• Camera settings control
	• Export control
	• Image print control
	• Camera closing and duplication control
	• Two-way audio control
	• View or virtual zoom control
	• Highlight control
	• Image Control plug-in control
	• 360 camera de-warping control (In case of 360 Cameras)
	• Other toolbar plug-in
34	Alarm Indications: The Alarm shall be easily indicated in the Alarm Management tab, and in Profile Maps, the camera which is associated to an alarm shall be highlighted in yellow/ Red Color.
35	Alarm Filtering Option shall be there. It shall be possible to “silence” alarms for a desired time period Ranging from 5 Minutes till 24 Hours or more. This is useful if alarms are un intentionally active all the time, e.g., due to adverse environmental conditions such as heavy wind, rain or snowfall
36	Each camera view should have Image Control Plug-in and each camera view can be configured individually as per the condition. The Image Control plug-in has various options to adjust the camera image.
A	Option to turn the image to black and white image
B	Image flip (flips image along horizontal Axis)
C	Image mirror(mirrors image along vertical axis)
D	Brightness adjustment slider
E	Contrast adjustment slider
37	There should be Camera Audit facility inbuilt in VMS platform including below list
A	Camera order number
B	Camera Name

C	Camera Shortcut
D	Footage start and end time
E	Footage days/Hrs.
F	Current status like, no signal, working, not configured etc.
G	Cameras reference image, Current image
H	System should have feature to make the camera Audit summary and export the camera ports
I	System should have feature to select one camera or multiple cameras for the audit summary.
	Audit summary:
J	Audit summary should have below details:
K	camera name
L	Audit image
M	Audit status
N	Audit comment
O	Admin details
P	Export of Audit summary in.pdf file.
Q	Audit logs should tell from which workstation the record is being viewed
38	Advanced Activity Search- The software should have the capability to have intelligent and advanced activity /event search detection methods of last 25 such instances in a given period of time which will enable user to search a particular portion in the entire video where the incident / theft / bomb was kept within couple of minutes. The Video of such event can be directly exported from here itself for further process
	The Mobile Client Version shall be available in Android and IOS. The Mobile client shall have the below Minimum Feature list:- Grid of 4 cameras visible when a tablet device is used in a landscape mode.
39	-Swiping gestures can be used to switch between camera grids and also with individual cameras to get to full screen mode.
	-All system generated alarms.
40	-Easy date and time search for video footage, still images can be sent via e-mail as JPEG files by a single tap, its PTZ control includes manual control, pre-set positions and camera tours, I/O controls, such as doors and lights, can be controlled by the Mobile Client and sites can be easily configured on the road.
	Stream support: for multi-streaming cameras, Client will automatically choose a stream that matches best the grid cell resolution that the camera is displayed in.
41	Alarms
	Alarms can be displayed on the Alarm Management Tab
42	The setting can be controlled from Activity panel configuration (small arrow in the right of activity panel).
44	Camera settings change restarts only the particular camera. (Recording continues uninterrupted for other cameras.)
45	Support for new Nvidia H.264 decompression codec (requires Nvidia GPU)
46	Also, able to decrease CPU load significantly.
47	The VMS shall be able to support cameras at up to 60 frames per second and any resolution supported by the camera and the camera driver. The VMS shall automatically offer only supported fps and resolution combinations for user convenience.
48	We can also add Multilayer maps in the VMS
50	2-factor authentication (offline, cell phone based)
50.1	The software should have increasing the security of the system by requiring the user to have a second authentication step besides only the user name and the password to prevent hacker to login and audit logs are specified to special person not to the user group. The Software should have the following basis features:
50.2	When user in the group tries to login for the first time, the user is requested to use or install the 2-factor authentication client (e.g. Authy, Google authenticator, MS Authenticator or any other application authenticator) on user's mobile device.
51	User permissions for System Administrator
	Software should have possibility to set detailed permissions for the system manager for different user groups. This should allow for instance implementing functionality for allowing different user groups for hardware maintenance and user

	administration, which is useful for large scale systems.
53	Alarm popup monitor selection algorithms
	Software should support below under the alarm popup settings:
	i. New alarm first: new alarm pushes previous alarm to next monitor
54	Software should have feature to use Intel Media SDK based codec's for H.264 & H.265 (CPU & GPU)
53	Activity MAP
i	Heat map (activity) required in VMS software so that can be used to calculate heat map (activity) from camera view by using recorder meta data for real time and playback mode.
ii	Activity Map should visualize activity in the image in certain period of time. Each color should represent specific duration of activity. Activity map colors should scale so that most active area is reddest.
iii	Activity maps can be combined by opening multiple camera views. As a result, scaling of the colors are common for all camera views so that most active area is reddest. Areas can be masked out by left mouse button and mask can be cleared using right mouse button. Activity scaling should have color scale from Red on top, Orange, Yellow, Green and bottom to Blue with higher activity with time and percentage respectively
iv	Software should have following features:
v	Real-time mode: The system should have real time Activity Map mode. Start time should be the time when new camera view is opened in to the plug-in. Activity map generation can be reset.
v(i)	Last hour mode:
a	The system should have last hour mode option to check activity map which is queried.
v(ii)	Custom mode:
a	The system should have custom mode to check activity map which is queried.
b	Common behavior for both real time and playback mode:
vi	The software should show: If there is metadata but no activity map data in the metadata then no message should show. If there is no metadata in specified search time, then closest metadata is searched (forward from start time and backwards from end time)
54	i) User can take snapshot and allocated with alert created which can be utilized for future reference. ii) There should be snapshot functionality, when the operator accesses a live video camera. iii) Zoom in/out camera functionality should be provided. iv) Ability to perform below mentioned video controls (if applicable) from ICCV systems by Operator: v) Play, slide-forward, slide-backward, pause, and specify time to play recorded video. vi) Take a video still image (snapshot) from live or recorded video. vii) Move PTZ camera by clicking on camera controls to the chosen location. viii) Provide screen control in video pane to control pan, tilt and zoom PTZ camera. ix) Display in 2x2 and 3x3 window formats.

Note : (i) It should be possible to configure video analytics on any of the cameras from the Video Management System desktop client Application.

(ii) The VMS shall support scheduling so that VA alarms can be enabled or disabled for a certain period of time.

(iii) The VMS must Support Video Content Analytics (VCA) event from camera-based Edge Analytics as per requirement of SECL

4) Client PC (Workstation) – 10 Nos.

1	Intel i9 - 3.2 GHZ or better Processor
2	Minimum 2X32 GB DDR4 Memory. Slots should be free for future upgrade

3	4 GB GDDR5 AMD/NVIDIA Professional Graphics Card supporting 3 no. of 4K Monitor output
4	Dual Gigabit Teamed NIC from Day 1
5	4 x 1 TB SSD Drive
6	64 Bit Licensed Windows / Linux and Antivirus with license for 6 years pre-loaded.
7	SMPS: Power supply should be efficient for smooth functioning of the system.
8	To be supplied with Wireless Keyboard and Mouse
9	Each workstation to be supplied with 2 no. of 27" Full HD LED Monitor.

5) Command and Control Software – 01 No.

- i) The Central Video Management Software must have Command and Control type feature such that it shall help designated authorities to implement comprehensive solution to optimize incident planning, response to incident and reconstruction of incident for audit and training purposes and shall support client-server architecture.
- ii) The application shall have built-in capability to utilize / integrate 2D/3D maps based on GIS engine, maps available in open domain (Google Maps, etc.), plans/layout of plant and its building in the form of images, aerial photos, drawings (such as AutoCad, etc.)
- iii) Should provide configurable dashboard with an easy to navigate user interface.
- iv) The Dashboard should show the analytics of the Incidents assigned to the areas with respective to date, type and the incident status. It shows the day wise trend of the Incidents, display of the incidents on map based on status, Filed officer wise Incidents etc.
- v) **The Dashboard should display the analysis on status of all the project cameras with respective to jurisdiction. It contains statistics of the Cameras based on their status (Normal/ Minor/ Major/ Critical), display of the cameras on the map based on their status (Active/ Inactive), Camera details with their type and name.**
- vi) **User level privileges**
 - The ICCC Solution shall support multiple user roles with varying access privileges:- A system level Global Admin with all rights for the system, A site level Admin with all rights for a site (group), Operator who has the rights to perform configurations. Operators do not have access to information of other users, Users to access the information. Users do not have access to view information of other users.
 - Shall support a single user to have multiple roles and/or groups. The privileges assigned to the user will be based on least restrictive of the roles
- vii) The Centralized Software shall be deployed at ICCC, SECL HQ and integrate with the CCTV video analytics, and any other system of SECL as per their requirement such as Vehicle Tracking System, RFID based automatic Boom Barrier, Weigh bridge Centering system and other IoT devices/system in future during the contract period. However the API's for the Integration will be provided by the SECL or respective Vendor of the said system.
- viii) The platform must be able to integrate data from different sub-systems and provide a unified view of the sub-system data over visualization dashboards.
- ix) The platform must be compatible to work on web browsers.
- x) **The successful bidder must develop and provide a Mobile application (Android as well as iOS platforms) for accessing Camera Live view and alerts generated by ICCC system. Furthermore, the app must be designed to accommodate at least 100 users without incurring any additional expenses for SECL.**

6) Video Analytics software/license for entire contract period and Alert

generation – 01 No.

i	Vehicle detection and classification	300 cameras
ii	Loaded/Unloaded status of Vehicle	231 cameras
iii	Number plate detection/Recognition	300 cameras
iv	Vehicle counting	200 cameras
v	Crowd and Miscellaneous event detection	300 cameras
vi	Camera Non-functioning	232 cameras
vii	Personal protective equipment (PPE) detection	75 cameras
viii	Fire and smoke detection	75 cameras
ix	Zone intrusion Alert	75 cameras
x	Idle time Alert	150 cameras

1	The necessary license for running VMS & VA during the entire contract period is the responsibility of the successful bidder.
2	The Video Analytics (VA) shall be designed to provide Intelligent Video Analysis for 24/7 surveillance with support for 3rd party devices. The system must be able to detect any kind of violation mentioned within the use cases with an overall accuracy of more than 95%. This accuracy is applicable for video footages with 275 ppm (pixels per meter) or above.
3	The VA configuration shall work as an independent windows / Linux application.
4	The VA configuration shall have easy to use graphical user interface with live alarms list for easy parameter fine tuning and feedback.
5	The VMS shall store the VA alarm video and image files for export
6	The VA shall support video from any camera supported by the VMS.
7	The VA shall support cameras using any of the video compression formats H.264/ MPEG4/ MJPEG.
8	The VMS shall support scheduling so that VA alarms can be enabled or disabled for a certain period of time. The VA software shall be able to run at least 4 different types of analytics in one single camera.
9	Calibration
	The video analytics shall have an easy to use 3D calibration tool or the Video analytic platform based on Artificial Intelligence where 3D calibration objects are matched to the actual camera viewing scene. The calibration parameters include camera height, camera viewing angle and camera tilt angle.
	VA Configurator required to configure the analytic engine for best accuracy possible. The configuration of the camera can be done using the given parameters:
	The camera height and the tilt angle should be set using the camera setup fields. The camera field of view
	The pan angle is the rotation of the scene that is viewed by user.
10	Mimics can be used as a reference for the average human model.
	Vehicle Detection and Classification
	Calibrate the camera using 3D Calibration tool/ Video analytic platform based on AI
11	Must be able to detect and classify the vehicles like: Truck, Bus, 2-Wheeler, etc.
	Number Plate Detection / Recognition
	The ANPR Application shall automatically detect the Vehicle Registration Number affixed on the Windshield / license plate from the Live Video Stream feed in real-time.
12	The ANPR Application should have ONVIF Discovery Tool within the Application for detecting ONVIF Cameras. The Proposed ANPR/ITMS Application shall be based on an Open Platform & should support various 3rd Party ONVIF Cameras.
	Vehicle Counting
12	The same shall be capable to count the Vehicles / Objects using the real time video footage from CCTV / NVR System.

	Calibrate the camera using 3D Calibration tool/ Video analytic platform based on Artificial Intelligence Select and filter the object to be counted e.g. person, animal or vehicle. Direction wise counting should be required. E.g. the counter having person entered inside the gate and counter having person exited the gate. Option to add counter for the given line/ zone.
13	Crowd detection
	Crowd should be detected in defined zone using area, height and speed parameters of group of people covering following
	The AI Based Crowd Detection Module must detect crowd formations and triggers alarms when a specified number of people (capacity) or a specified percentage of people (occupancy) thresholds is reached in the selected area.
	Should have the Functionality to create multiple regions or Zones in a Field of view of Camera & should allow the user to Specify Crowd Thresholds Individually for each region. If within any region the Crowd Density Estimation exceeds the Threshold, then the system should raise an Alert.
	Calibrate the camera using 3D Calibration panel/ Video analytic platform based on Artificial Intelligence Object classification for the size of crowd. Alert preview in analytics configuration. Minimum 20 second video with the alarm or as per requirement of SECL.
14	Camera Non-Functioning
	The same shall confirm the Camera Connection / Disconnection/ Tampering status, etc..
15	Personal Protective Equipment (PPE) Detection
	<ul style="list-style-type: none"> i. The system should Classify a Person/Human in real time Live Video Stream & detect if the Person is wearing the Appropriate & Configured Personal Protective Equipment's ii. The System should be able the Following Personal Protective Equipment's <ul style="list-style-type: none"> a. Safety Helmet/Hard Hats b. Safety Jacket/High Visibility Reflective Jacket iii. The System should detect the respective Configured PPE on the Configured Live Stream and Send Alerts with proper markings / distinguished indications if a Person is found to be Violating the PPE Safety measures. iv. The System should support for Detection for Safety Gear or PPE's Violation in defined Area of Interest. v. The System must have Options for Configuration of Single or Multiple PPE Detection as per the Compliance Requirements in different Areas/Locations. vi. The PPE's Detection should be based on AI & Machine Learning based Algorithm, so that the Accuracy of the PPE Detection can be increase over a period of time.
16	Fire & Smoke Detection
	i. The system should Classify a fire/Flame in real-time Video Stream & should give an Alarm upon Detection of Fire
	ii. The System should Classify Smoke on real-time Video Stream & should give an alarm upon Detection of Smoke.
17	Zone Intrusion Alert
	i. The AI Based Intrusion Detection Must automatically detect Person/Human if intrude the defined zone within the camera field of view for a configurable period of time.
	ii. The Application must Support for Creation of Multiple Zones within the same Field of View of the Cameras.
18	Idle Time Alert
	Any Vehicle / Human found for more than the specified threshold limit of the Camera shall provide the alarm / alert for the same.
19	Intellectual Property Right (IPR)
	The Intellectual Property Rights of Offered VMS must not reside in Country sharing Land Border with India. The VMS Offered should not be Developed/manufactured by an entity in which the majority shareholding of the entity is from a Country sharing a Land Border with India. OEM shall provide a declaration about the intellectual property rights as a Documentary Evidence. The OEM with IPR Residing in India shall be Preferable.
	The VMS OEM should have valid ISO Certifications:
	ISO 9001
	ISO 27001
	ISO 27017
20	The VMS OEM should have Performed Benchmark Appraisal & Achieved CMMI V2.0 Maturity Level - 3. Appraisal Certificate of CMMI V2.0 Level - 3 to be Submitted as a Proof. The OEM should be in the Possession of the

	<p>Appraisal Certificate on or before the Bid Publishing Date.</p> <p>The Appraisal shall be Validated Online & should be Available on Public Portal on CMMI Institutes Website in the Published Appraisal Results (https://cmmiinstitute.com/learning/appraisals/results). Any False Declarations shall lead to Bid Rejection .</p>
21	<p>The Offered Video Management Software (VMS) Application should have valid STQC certificate or should have undergone Audit as per OWASP Top 10 Vulnerabilities & must Possess a Valid Application Audit Certificate a CERT-IN Empaneled Auditor for the VMS, Mobile & Web Applications, to Mitigate Cyber Security Attacks.</p> <p>The Application must have already undergone Audit Certification/Auditing on or before the Bid Publishing Date.</p> <p>The Audit Certificate must be Submitted as a Documentary Evidence/Proof.</p>
22	<p>Bidders should provide the support and upgradation of the offered software during the warranty and CAMC period free of cost.</p>
11	<p>Reporting</p> <ol style="list-style-type: none"> The software should provide reporting in PDF, JPG, Excel, Text file The software should schedule reports for Email & FTP The software shall be able to provide Zonal Reports with multiple cameras added in each zone The software shall support filtering report output based on roles It shall support auto generation of reports through scheduling and ability to send the report to a predefined list of recipients It must be possible to present information in various chart formats such as: Pie Charts, Columns, and Histograms so as to support trend analysis of alarms over a period of time and over the installed camera base It shall support the ability to create custom report
12	<p>Alarm management</p> <ol style="list-style-type: none"> The VA Software must provide real-time access to alert information such that alerts are displayed on screen once they occur It shall support audio alarms when a real time alert occurs The VA Software shall support playback of alert videos For all logged events, The VA Software must maintain a link to their particular video feed for immediate viewing The VA shall support unlimited number of alarm clients It shall support multiple languages: English, Arabic, Spanish The VA shall support the ability to set filters such that the set of alarms that can be sent to a user or a group of users is configurable The VA Software should allow System Administrator to define custom fields to be maintained per each event type The VA Software shall allow for defining notification templates per each alert type allowing the System Administrator to select the data to be passed in such notification messages It shall support setting different colour for icons representing different alert types The VA Software must allow for archiving select alerts such that their meta data are not affected by retention policy The VA Software must be able to send alert information to other systems through REST APIs

7) 64 Channel Network video recorder with 80 TB surveillance HDD

1	Network Camera	64 Channels
2	Supported Resolution	Upto 12 MP or better
3	Storage	Should support upto 144TB and must be equipped with 80 TB HDD from Day1 and eSATA/ External iscsi storage support required
4	ONVIF	ONVIF Profile S,G,T Compliant
5	Live Display	VGA/ DVI/ HDMI with Dual Display
6	Video Codec	H.264, H.265 or better
7	VMS	Pre Installed with Embedded Linux/ Windows
8	Live Monitoring and Playback	Upto 64 Channels or better
9	Calendar/ Event/ Bookmark/ Smart Search	Support required
10	Recording Bandwidth	400 Mbps or better
11	Playback	Fast/Slow Forward/Backward, Move one step up/down
12	Recording Mode	Normal, Schedule (Continuous / Event), Event (Pre / Post), Event profile
13	Event	Alarm input, Video loss, Camera event (Sensor, MD, Video analytics) (Built-in/ external)
14	Event Trigger	E-mail, PTZ preset, Alarm out, Buzzer, Monitor out
15	Backup	AVI, SEC, Manual backup, Onetime schedule backup
16	Audio	G.711 u-law (PCM), G723, G726 (ADPCM), AAC, Bidirectional for all channels
17	Camera Setup	Auto/ Manual
18	Camera Features	Automatic device IP scan, Profile edit, Resolution, Fisheye de-worming, Hallway/ Corridor view, Brightness / Contrast, Device setup page, Exporting / Importing devices settings, Device firmware update
19	Date & Time Sync	NTP server
20	PTZ	Control Device Via GUI, Controller, Preset
22	Protocols	TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), PPPoE/ LLDP, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, IPv4, IPv6, ONVIF,, API (Server, Client)
23	Security	IP address filtering, User access log, 802.1x authentication
24	Network	RJ-45 (1000 Base-T) x2 or more
25	Certification	BIS

8) 24 Port Layer-3 Managed Switch Qty. – 04 Nos.

S. No	Parameters	Specifications
1	Port Density	Switch should have minimum 24x 1G SFP & 4x1G/10G SFP+
2	Switching Capacity	Should support switching fabric of 128 Gbps or more
	Forwarding rate	Should support min forwarding rate of 95Mpps
3	Hardware redundancy & Resiliency	Two or more Switches in stack/equivalent technology should be capable to operate as one logical L3 Virtual switch with synchronization of L3 & L2 protocols for higher availability Switch should be supplied with required stacking cables

		Switch should have Power Supply Redundancy Option
		Should support Unidirectional Link Detection (UDLD) or equivalent to detect unidirectional links caused by incorrect fibre optic wiring or port faults and disable on fibre optics interfaces. Switch should have inbuilt mechanism to trigger alert immediately to administrator upon any connected fiber tampering.
		Should support ITU-T G.8032 for sub 50ms ring protection/Equivalent
4	Layer 2 Features	Support 802.1D, 802.1S, 802.1w, Rate limiting Support 802.1X Security standards Support 802.1Q VLAN encapsulation, IGMP v1,v2 and v3 snooping, MLD snooping Support up to 4096 VLANs Support IGMP Snooping and IGMP Querying Should support STP, RSTP, MSTP
5	Layer 3 Features	Should support Static routing, shall be scalable to support following features: Support RIP for IPv4 and RIPng for IPv6 Support OSPFv2 for IPv4 & OSPFv3 for IPv6 Support PIM for IPv4 SM, DM and SSM, PIMv6-SM, IEEE 802.3az Support VRRP for IPv4 & VRRPv3 for IPv6 Support IPV4 & IPV6 dual stack
6	VLAN	Should Support 802.1Q Tagged VLAN, port based VLANs and Private VLAN Should Support IEEE 802.1v VLAN classification by protocol and port Should Support IEEE 802.1ad Provider bridges (VLAN stacking, Q-in-Q) Should Support dynamic VLAN Registration or equivalent Should Support VLAN trunking or equivalent
7	Management	Switch needs to have a console port for management via a console terminal or PC , SNMP V1, V2 and V3 Should support 4 groups of RMON Should have accessibility using Telnet, SSH, Console access, easier software upgrade through network using TFTP etc. Configuration management through CLI, GUI using web interface, USB interface Support SNMPv6, Telnetv6 and SSHv6, DHCPv6 relay, DHCPv6 client, NTPv6 client and server, Option to Support Modbus Support NTP/SNTP Support SDN openflow v1.3 from day-1
8	Security	Should support ACLs, VLAN ACL's Support DHCP snooping, IP source guard and Dynamic ARP Inspection (DAI), Support MAC address filtering and MAC address lock-down, Support Tri-authentication: MAC-based, web-based and IEEE 802.1x, Support DHCPv4 (server, relay and client Support sflow, Port mirroring
9	Operating Temperature	-10° to 75°C
10	Certification	EN55032, EN61000-3-3, EN61000-3-2, UL/EN60950, IPV6 Logo Ready

9) 30 KVA Online UPS with SMF battery bank of atleast 01 hour backup time - 03 Nos.

SN	SPECIFICATION	PARAMETERS
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1	Rating in KVA	30 KVA
2	Switching Technology	IGBT-PWM (Online UPS)
3	Input Voltage	AC single Phase 230V 50Hz /AC three phase 300V-450V 50Hz
5	Output Voltage	AC single Phase 230V +/-1% 50Hz
6	Overall efficiency	>= 90%
7	Battery /Backup bank	With Battery
8	Type of Battery	SMF-VRLA Lead Acid Battery
9	Back up time	60 minutes or higher
10	Battery Capacity (Ah)	150 or higher
11	Protection	For under voltage at battery terminal, protection of over voltage, short circuit, over load at UPS o/p terminal, over temperature protection
12	Digital display for metering	Input & Output voltage, Input & output frequency, I etc.
13	Alarms Indication	Indicator for battery charging, over temperature, overloading & low battery voltage , etc.,
14	Degree of Protection	IP20 or better
15	UPS should be configurable to single phase input single phase output, Three output, three phase input Three phase output phase input single phase	
16	Accessories	Rack fitted with wheels/castos for batteries, cables and connectors as per requirement

10) ESE lightening protection system complete with all components including multi strand copper down conductor, 02 Nos. earth pits with earth electrode as well as chemical back filling compound, lightening strike counter meter and ESE air terminal and all pipes and fixtures for installation - 02 Nos.

- i) The Arrestor should be minimum: 20 mm in Diameter
- ii) The ESE Arrestor must be minimum 450 mm in Length.
- iii) The same shall to be installed at a Pipe of Minimum 03 Meters and the same should be connected using Copper Multi Strand Cable to Earthing Electrode. (Cable Size: Min.: 2.5 Sq. mm)
- iv) The Complete Chemical Earthing with Electrode is also in scope of the bidder.
- v) Minimum 02 Nos. of Earthing electrode (Min. 9 Feet Deep) at distance of 1 Meter should be interconnected with each other for each ESE Lighting Unit. The earthing rod must be of min. 10mm in diameter and should be backfilled using earthing chemicals (BFC Bags 25 KG x 8 Nos. for each earthing).
- vi) The Complete Pipe & Fixture is in the scope of Bidder.

11) Chemical earthing – 04 Nos.

The Earthing Electrode should be:

- a). Minimum Diameter: 15mm
- b). Minimum Height: 2.5 Meter

The Earthing Pit should be to the depth of 9 Feet from the ground and BFC / Chemical Bags of 25 KG x 03 Nos. must be used while refilling back the of earth pit. The earthing should be terminated using GI Strips at UPS End using the contactors/ connectors properly to avoid any damage to system from lighting / thundering.

12) Furniture Set – 01 set

i) Executive Table – 06 Nos.

Parameter	Specifications
Type	Executive Table
Frame Type	Free Standing
Material	MDF/ Pre-Laminated Particle Board
Thickness of Table Top (+/-2 mm)	12mm
Length of Table (+/- 15 mm)	1500 mm
Depth of Table (+/- 10 mm)	750 mm
Height of Table (+/- 10 mm)	750 mm
Number of Keyboard Tray	01 No.
Number of Drawers	01 No.
Storage	01 No. Workstation in Lock and Key with 02 Nos. Front & Back Ventilation using suitable DC/USB Powered Fan
Cable In / Out	Must have suitable provision for Cable In & Out
Certification/ Testing	Quoted Model must have test report from any Govt./ NABL Accredited LAB for Anti – Termite.

ii) Revolving Chair – 12 Nos.

Parameter	Specifications
Chair Mechanism	Center Pivot / Synchronic Tilt Mechanism
Armrest	Yes
Back Type	Push Back
Head Rest	Yes
Backrest upholstered with	Mesh Type Fabric/ Polyester
Backrest Height ± 15 mm	650 mm
Seat Height ± 10 mm	440 mm
Seat Width ± 10 mm	500 mm
Seat Depth ± 10 mm	480 mm
Back Locking	Yes - Upright Position

iii) Almira – 03 Nos.

Parameter	Specifications
Type	Almira
Frame Type	Free Standing
Material	MDF/ Pre-Laminated Particle Board
Thickness of Top (+/-2 mm)	16 mm
Height of Almira (+/- 10 mm)	1750 mm
Depth of Almira (+/- 10 mm)	450 mm
Width of Almira (+/- 10 mm)	800 mm

Number of Drawers	02 Nos.
Number of Doors	02 Set
Certification/ Testing	Quoted Model must have test report from any Govt./ NABL Accredited LAB for Anti – Termite.

iv) Visitor Chair – 10 Nos.

Dimension WxHxD (cm) – 76.1 x 98-108 x 76.1
Primary material - Glass Filled Nylon
Knitted fabric
Seat Height (cm) – 45.5 – 55.5
With wheels

13) Air conditioner - 03 Set.

SN	SPECIFICATION	PARAMETERS
1	Type	Split
2	Capacity in tons	2 Ton
3	Star rating	5
3	Compressor	Inverter type Compressor
4	Remote Control	yes
5	Operating mode	Auto Mode, Fast Cool, Fan Mode, Quiet etc.
6	Condenser coil	copper
7	Other features	Filter Cleaning Indicator, Indoor Temperature Display, Display On/Off, Beep On/Off, 24-hour Timer and Auto Restart , Auto Air Swing, Auto Air Direction Control (Up/Down), Manual Air Direction Control (Left/Right), Air Flow Dust filter, Anti-bacteria Filter Auto Clean (Self Cleaning) Auto Restart
8	Voltage stabilizer	A compatible Voltage stabilizer of suitable capacity shall be provided by the bidder for each set of AC.

14) Installation, testing & commissioning of items (including server racks, network cabling through OFC/Ethernet as per requirement.)

- i. Racks of sufficient dimension and capacity will be provided by the bidder to mount and house all network devices, servers, etc. The rack has to be designed to meet the safety requirements. Both the front and rear door should have got a comfort handle with different locking options. Cable should be entered via the roof/top plate inside the rack. Door should have ergo form handle with lock insert key with Sufficient No. of cooling fan. Also, it should have vertical sheet steel cable duct at front side on LH and RH with cover for managing the cable properly.
- ii. SECL has considered all equipment for fulfilment of objectives of the system. However, if any accessories are required in addition to the equipment mentioned in the bid Document for fulfilment of the aforementioned objectives, the same should be supplied, installed and maintained by the successful bidder without any additional cost to SECL.
- iii. The ICCS System should provide a dedicated portal with Area wise dashboard, to be accessed by

Area authorities via Area-wise login credentials for viewing, report generation and filing ATR against specific events / exceptions under their respective Area.

- iv. The ICCC System Dashboard should have provision for providing escalation matrix for automated sending of exceptions to designated authorities as per SOP defined by SECL.
- v. Wiring/cabling standard: All wiring/cabling/ terminations/ patches must follow EIA/TIA standards wherever applicable. All Cabling should have proper non-perishable identification at the terminals for easy tracing. Proper documentation with diagram should be made for all wiring/cabling/terminations. All indoor wirings/Cablings should be properly secured, duly terminated, easily maintainable and aesthetically sound.
- vi. Placement/Fittings etc.: All Equipment installed should be properly placed which should be secure, aesthetic, convenient for maintenance, healthy from operational and fault liability point of view and follows standards (Industry and/or recognized authority) wherever applicable. It will include placement of all switches in suitable Racks, other hardware including Power Supplies in suitable racks/enclosures/stands etc. Suitable enclosures, if any needed beyond list of equipment mentioned for the Area, as per site requirement will have to be provided by the bidder without any additional cost to SECL.

vii. PRE-COMMISSIONING INSPECTION AND TEST (PART OF INSTALLATION PROGRAM):

On installation, the System and its Components will be jointly (in presence of both the successful bidder and SECL representatives) tested as follows:

- a. All equipment and installations will be individually inspected physically.
- b. Individual active equipment will be tested with Power. Passive items also will be tested wherever feasible.
- c. Different Sub-Systems will be tested wherever feasible.
- d. Then, the system will be tested in integrated manner.
- e. The parameters of testing will be jointly decided keeping in view the technical specifications, scope of work and Special Terms & Conditions of the bid document.
- f. For testing the video analytic features of the system, SECL shall ensure that there is proper connectivity between the recording/ storage devices (installed in the Project/ Area) to SECL HQ. If connectivity has been established for the recording/ storage device(s) of a particular Area, then the testing shall be undertaken with the camera feeds of that particular Area.

- g. The following video analytic features shall be tested during inspection:

S. No	Analytic Feature	Number of cameras on which analytics will be tested for inspection purpose	Results to be clearly reflected on minimum number of cameras { 90% of column "c" }
a	b	c	d
i	Vehicle detection and classification	100	90
ii	Loaded/Unloaded status of Vehicle	100	90
iii	Number plate detection/Recognition	100	90
iv	Vehicle counting	100	90
v	Crowd and Miscellaneous event detection	100	90
vi	Camera Non-functioning	400	360
vii	Personal protective equipment (PPE) detection	50	45
viii	Fire and smoke detection	50	45

ix	Zone intrusion Alert	75	67
x	Idle time Alert	100	90

"Under this clause , during inspection/testing The system must deliver a minimum of 90% accuracy at 300 PPM (Pixels Per Meter) as tabulated above. The specified number of cameras in Column "C" should be regarded as the minimum requirement for testing. However, during inspections or testing, the actual number of cameras may increase, but the results from testing 90% of those actual cameras will be used to determine the 90% accuracy threshold ".

- h. On acceptance of the test results by GM(E&T)/HOD,SECL or his respective authorized representatives, as satisfactory, trial run will start.

vii) TRIAL RUN, SYSTEM ACCEPTANCE & COMMISSIONING:

- a. On acceptance of testing of the system, the system will be put under trial run. Trial run of the system will be for a minimum period of 07) days or 168 hours.
 - b. The duration of trial operation of the complete equipment shall be seven (07) days or 168 hours , out of which at least seventy two (72) hours shall be continuous operation on full load or any other duration as may be agreed to, between the G.M.(E&T)-HoD and the successful bidder.
 - c. The trial operation shall be considered successful, provided that each item of the equipment can operate continuously at the specified operating characteristics, for the period of trial operation.
 - d. The bidder should be able to continuously demonstrate the video analytics as mentioned under clause "Pre-Commissioning Inspection and Test" at the desired accuracy.
 - e. For the period of trial operation, the time of operation with any load shall be counted. Minor interruptions not exceeding four (4) hours at a time, caused during the continuous operation shall not affect the total duration of trial operation. However, if in the opinion of the HoD (E&T), the interruption is long, the trial operation shall be prolonged for the period of interruption.
 - f. On successful trial run and acceptance of the same by GM(E&T)/HOD,SECL , the system will be taken as commissioned and the GM(E&T)/HOD, will issue an Installation and Commissioning Certificate for the system installed at SECL HQ.
 - g. Warranty of the system will be considered from the date of Commissioning of ICCS at SECL HQ.
 - h. During the period between the date of physical installation of equipment and commissioning of the system, the system will be maintained in all respects, including those detailed in the CAMC, by the successful bidder at their own cost.
- viii) The successful bidder shall have to provide all desired analytics as detailed in Scope of Work with an accuracy of more than 95% during trial period and that needs to be consistent before commissioning of the system.
- ix) Acceptance of the System by SECL will not absolve the Successful bidder from all of his liabilities. In addition to whatever has been stated in Bid document, the Successful bidder will be liable for any deficiency in the System traceable to be due to deficiency on the part of the Successful bidder in Supply/Execution or any other aspect, during the warranty and CAMC Period.

x) HANDOVER OF DOCUMENTATION:

On commissioning of the system, the successful bidder will hand-over the following documents, in hard copies (02 Sets) and soft copy (in .pdf or any other acceptable format), to the HoD (E&T), SECL or his authorized representative:

- a. Detailed schematic Network diagram of the complete installation.
- b. Escalation matrix for service support.

- c. Detailed diagram of all sub-systems of the Network.
- d. Detailed Cable/Wire Network as installed.
- e. All configuration details including different related lists.
- f. Any license/permission or related documents.
- g. Test results.
- h. Any operation and/or maintenance procedures etc. (along with soft copy in pdf format).
- i. List of Equipment supplied/installed and other items used (e.g. Wires/Cables), Software, Portable Equipment and Spares. The list must include Make, Model, Brand, Version, Sl. No. etc., as applicable.
- j. Relevant Manuals, CDs etc.
- k. Any other relevant document/Information as required as per the Bid document, or, as may be required for operation/maintenance of the system or, otherwise, relating to individual Item/the System.

All the Documents should bear the reference Bid number and Supply Order/ Contract Number of **SECL** have a Heading, and signed with seal by the authorized representative of the Successful bidder. However any Original Document like License may be submitted with forwarding letter only from the Successful bidder. All the documents to be submitted to SECL within 30 days of Commissioning of the System.

SECL will have the right to call for any further documents/clarification from the Successful bidder on Products supplied at any stage. The Successful bidder has to submit such documents within required time of receipt of such communication.

15) Delivery Period (with Installation , testing & Commissioning including civil works) : Supply, Installation, testing and Commissioning (along with Civil Works) of supplied items with all accessories & assemblies must be completed as follows:

- I. For Supply of material (including all accessories): Within 90 days from the date of contract.
- II. For Installation, testing & commissioning period: Within 180 days from the date of contract.

Note :

A **HINDRANCE REGISTER** shall be maintained by both department and the contractor at site to record the various hindrances, encountered during the course of execution (Supply, Installation and Commissioning).

Hindrance register will be signed by both the parties. The contractor may also record his observations in the Hindrance Register. In case the contractor has a different opinion for hindrance and a dispute arises then the matter would be referred to the Engineer-in-Charge { GM (E&T)/HoD (E&T) , SECL } and or the next higher authority whose decision would be final & binding on the contractor .

16) Payment terms for Supply, installation , testing & commissioning of CCTV Camera System alongwith complete accessories as per complete scope of supply:

- a) 80% value of the equipment [except “ Sr. No. 05 - Control and Command Software for SECL HQ “ , “ Sr. No. 06 { (i) to (x) } - Video Analytics software/license “ , “ Sr. No. 11 - ESE lightening protection system complete with all components” and “Sr. No. 12 - Chemical earthing ” } accessories and 100% taxes and duties and other charges shall be made within 21 days after receipt and acceptance of system with all accessories by the consignee and also receipt and acceptance of Security Deposit / Performance Bank guarantee (as specified in the tender document) by SECL.

- b) Balance 20% payment and 100% installation & commissioning charges shall be made shall be released within 21 days after successful commissioning and acceptance of commissioned equipment at site by SECL HQ & respective Areas of SECL and subsequent submission of invoices alongwith jointly certified document indicated successful commissioning by the representative of Area & representative of the successful bidder . For successful commissioning of equipment the supplier has to depute competent person at site and provide technical assistance required for commissioning and initial testing of the equipment.
- c) 100% value of item “ Sr. No. 05 - Control and Command Software for SECL HQ “ , “ Sr. No. 06 { (i) to (x) } - Video Analytics software/license “ , “ Sr. No. 11 - ESE lightening protection system complete with all components” and “Sr. No. 12 - Chemical earthing ” shall be made within 21 days after successful completion of testing, commissioning and final acceptance.

After successful installation, a certificate shall immediately be submitted by SO (E&M) / SO (E&T) / E&T Incharge of the respective Areas of SECL to the paying authority through GM(E&T).

c) Paying Authority : G.M (Finance) , SECL HQ, Bilaspur.

NOTE: (i) The payment made towards the item mentioned in SOR at “Sr. No. 21 - Technical Manpower support at Control Room ” shall be included in the supply of items for the warranty period of 01 year .

(ii) Similarly , payment for the same item { i.e, “Sr. No. 21 - Technical Manpower support at Control Room ” } during the CAMC period of 05 years shall be included in the CAMC charges for the entire ICCC system to be established in SECL .

Bidder has to quote their bid accordingly while keeping the points at Sr. No. “I” and “ii” under “NOTE” in mind.

17)The consignee of the offered ICCC system shall be SECL HQ, Bilaspur , however location of installation and commissioning of the items to be supplied is mentioned below :

SN.	Item description	Required Qty	Unit of measure	Location of installation & Commissioning
1	Video wall display ,55 inch with controller, stands with complete accessories	8	Nos.	SECL HQ
2	Video analytical server	16	Nos.	SECL HQ
3	Video Management Server (VMS) alongwith Video Management software and Licenses	4	Nos.	SECL HQ
4	Client PC (Workstation)	10	Nos.	SECL HQ
5	Control and Command Software for SECL HQ	1	Set	SECL HQ
6	Video Analytics software/license for entire contract period and Alert generation for the following events:			SECL HQ
i)	Vehicle detection and classification	300	Nos.	SECL HQ
ii)	Loaded/Unloaded status of Vehicle	231	Nos.	SECL HQ
iii)	Number plate detection/Recognition	300	Nos.	SECL HQ
iv)	Vehicle counting	200	Nos.	SECL HQ
v)	Crowd and Miscellaneous event detection	300	Nos.	SECL HQ
vi)	Camera Non-functioning	232	Nos.	SECL HQ

vii)	Personal protective equipment (PPE) detection	75	Nos.	SECL HQ
viii)	Fire and smoke detection	75	Nos.	SECL HQ
ix)	Zone intrusion Alert	75	Nos.	SECL HQ
x)	Idle time Alert	150	Nos.	SECL HQ
7	64 Channel Network video recorder with 80 TB surveillance HDD	18	Nos.	05 Nos. at SECL HQ 13 Nos. in 13 Areas of SECL
8	24 Port layer-3 Managed switch	4	Nos.	SECL HQ
9	30 KVA UPS with SMF battery bank for 01 hour power backup on full load	3	sets	SECL HQ
10	ESE lightening protection system complete with all components including multi strand copper down conductor, 02 Nos. earth pits with earth electrode as well as chemical back filling compound, lightening strike counter meter and ESE air terminal and all pipes and fixtures for installation	2	set	SECL HQ
11	Chemical earthing	4	Nos.	SECL HQ
12	Furniture Set	1	set	SECL HQ
13	Air Conditioner	3	set	SECL HQ
14	Technical Manpower support at Control Room	03 Nos. of manpower for 6 years (01 year warranty + 05 year CAMC) { one manpower will be deployed in one shift. }	01 No. technical manpower per shift per year	SECL HQ

Note : The supply of all the items will be done at consignee's location by the successful bidder , however, installation and commissioning within the stipulated time of the supplied items will be the responsibility of the successful bidder at the above indicated “ Location of installation & Commissioning ” . SECL will ensure that the supplied items will be made available to the successful bidder at the “ Location of installation & Commissioning ” .

18) Scope of supply : Eligibility and Proveness Criteria –

VA Software and VMS Software are to be treated as primary product (or tendered item), hence anywhere in the bid document relating to ELIGIBILITY, PROVENNESS, or Preference/Exemption to Start up / MSE / MII etc. ,the “ VA Software and VMS Software ” to be treated as primary product (or tendered item) . Bidder has to furnish the relevant documents with respect to Primary product (VA Software and VMS Software) for this bid to full fill the relevant criteria.

A) Eligibility Criteria

The bidder should be either of the following:

a. Manufacturer / OEM of the primary product (tendered item),

OR

b. Indian Selling Agent / Dealer / Reseller / Distributor authorized by the Manufacturer/ OEM

B) PROVENNESS / EXPERIENCE CRITERIA :

The Bidder or its OEM themselves or through its reseller(s)), should have carried out the work of establishment of an ICCC/ Integrated CCTV control Room equipped with Video Management Software (VMS), AI based Video Analytics (VA) Software catering to at least 208 Nos. (25% of 832 Nos. of cameras) of CCTV cameras installed at different locations The said work must have been done in the last three years from the date of opening of bid by the bidder / OEM in India to any Govt. industries / PSUs or Private and performed satisfactory for a minimum period of one year from the date of commissioning.

The said work carried out by the Bidder or its OEM themselves or through its reseller(s)], should have been comprehensive in nature i.e, all required hardware and software should have been supplied and installed by the bidder.

The work/supply should have been done to any Private or Govt. industries / PSUs and performed satisfactory for a minimum period of one year from the date of commissioning.

For fulfilling the experience criteria , the bidder is required to submit the following documents :

- (a) Copy of relevant Supply order(s)/ Purchase Order(s)/ Work Order(s), etc. confirming the supply of offered Make of Video Management Software (VMS) and Video Analytics (VA) software, which has been commissioned within the window period of 03 years from the date of opening of tender.
- (b) Copy of Satisfactory Performance Certificate at least for a period of 1 year from the date of commissioning issued by the Purchaser/Employer against the furnished Supply order/ Purchase Order/ Work Order, etc.
- (c) The bidder must submit a single supply order or multiple supply orders covering the following 03 Nos. of analytics :
 - I) Number plate detection/Recognition
 - II) Any 02 Nos of video analytics out of remaining 09 Nos. of proposed video analytics (i.e., excluding Number plate detection/Recognition)

Also, the bidder has to submit a satisfactory performance certificate for minimum 01 year regarding working of above 03 Nos. of analytics in reference to the above said supply orders . However, it may be noted that the performance of only those item / product would be considered for assessing provenness which have been commissioned 1 year prior to the date of opening of tender but not prior to 3 years from the date of opening of tender.

C) List of Other mandatory documents to be submitted duly self-attested alongwith the offer (in addition to other bid related documents) :

- 1) Only proven manufacturers of “ (i) **VA Software** and (ii) **VMS Software** ” are eligible to quote/participate in this Tender. Manufacturers will have to submit documents to substantiate their status as manufacturer of “ (i) **VA Software** and (ii) **VMS Software** ” .
- 2) In case the Manufacturer is not quoting directly as a matter of policy, their Sole Selling Agent/Authorized Dealer/Distributor/Reseller may also quote, provided they submit **Tender specific signed authorization (giving tender No. in authorization letter) from the OEMs firm** , of the manufacturer of “ (i) **VA Software** and (ii) **VMS Software** (iii) **Video wall System** (iv) **24 Port layer-3 Managed switch** and (v) **30 KVA UPS** ” along with copy of principal's manufacturing documents to substantiate their status as manufacturer of “ (i) **VA Software** and (ii) **VMS Software** (iii) **Video wall System** (iv) **24 Port layer-3 Managed switch** and (v) **30 KVA UPS** ” .
- 3) Documents in support of Eligibility and Experience / Provenness criteria .
- 4) Bidder must submit following on OEM letter head :
 - a) Technical Compliance of all parameters of (i) **VMS Server**, (ii) **VA Server**, (iii) **VMS Software** , (iv) **VA Software** , (v) **Workstation** , (vi) **Video Wall system** (vii) **64 Channel NVR** (viii) **30 KVA UPS** and (ix) **24 Port layer-3 Managed switch** on OEM letter head.

- b) Declared that our firm " M/s. _____ is the OEM for **VMS Software / VA Software** having Registered Office in India and ready to provide service support during the entire contract period.
- c) The Intellectual Property Rights & Source Code of Offered **VMS Software / VA Software** must not reside in a Country that is sharing Land Border with India.
- d) The **VMS Software / VA Software** Offered was not Developed/Manufactured by an entity in which the majority shareholding of the entity is from a Country sharing a Land Border with India.
- e) **VMS Software / VA Software** should be complied with any MAKE of Camera / NVR .
- f) OEM of VMS Software & VA Software should have Direct Service Centre Support in India or should establish within 30 days of order in case if the work is awarded to them.

5) Declaration / Undertaking on bidder's letter head :

- i) It is confirmed that bidder has fully understood the scope of work and all other requirements for Supply, installation, testing and commissioning of tendered ICCC system in SECL as per the given details in the Tender/ bid document . "M/s. _____ is hereby agree/accept all the technical specifications / clauses mentioned in this tender document/GeM Bid with reference No._dtd. _____ " . We undertake that the documents enclosed herewith are genuine and no material/facts have been concealed or suppressed. We are not debarred / blacklisted by any Government organization in the field subject tender . We also understand that the contract is liable to be cancelled if found to be obtained through fraudulent means or by concealment of information/facts.
- ii) End-of sale declaration for the whole contract period for all the quoted products and in case any product is discontinued during the contract period, declaration for replacement of the product with product of the equivalent or higher specification without affecting the performance of the system without any extra cost to SECL.
- iii) All Software should be an open platform Application & should be complied with any camera OEM.
- iv) The OEM of VMS, VA and ICCC application Software shall have a Registered Office in India. The Software OEM shall also have a Dedicated Support in India.
- v) **The successful bidder/Service Provider shall arrange all the subscription/Licenses required for all software (which are covered or not covered in BOQ) for smooth working of the offered ICCC solution. Bidder is liable to be rejected if there is/ are any deviation(s) from the bid requirement.**
- vi) Bidder will configure the entire set-up for remote access through internet. Internet service is provided by SECL.
- vii) The bidder will maintain stock of spare parts of the items / system for the entire contract period from the date of commissioning of work. The Bidder will undertake that supplies of necessary maintenance equipment and spare parts will be made available for all the equipment and the complete System for the entire contract period on continuing basis.
- viii) A log book shall be maintained at SECL HQ and the working status report of the entire system shall be

recorded on a daily basis in the register. The daily status report shall be jointly signed by the authorized representative of SECL as well as bidder.

- ix) **"The bidder is responsible for providing proper maintenance of the ICCC system, repair/replacement of each and every item damaged/ malfunctioned due to technical glitch, power supply, lightning/thundering during the entire contract period from the date of successful commissioning without any extra cost to SECL".**
- x) Bidder shall provide all patches and updates of firmware, during the entire contract period as and when released by OEMs without any additional cost to SECL.
- xi) The offered equipment like Servers, Softwares, Workstations, NVR, etc. must be fully IPv6 compliant. The equipment should be dual-stack compatible, capable of supporting both IPv4 and IPv6 protocols concurrently.
- xii) The successful bidder shall be responsible for the proper handling and retention of all recorded data generated by the CCTV camera system procured under this tender, limited to the data stored in the HDD installed in the NVR.

In the event that the recorded data becomes corrupt, inaccessible, or lost due to any means, the bidder shall bear full responsibility for retrieving and recovering the data. The bidder shall take immediate action to rectify any issues that may lead to data loss or corruption to minimize the impact on the system's functionality. The retrieval process shall be carried out at no additional cost to the tendering entity, solely for the data stored in the HDD.

Furthermore, the bidder shall implement suitable backup and recovery mechanisms to safeguard the recorded data from potential data loss scenarios. The backup strategy should be robust and should not affect the continuous monitoring and recording capabilities of the CCTV camera system.

The procuring authority shall not be held liable for any data loss, corruption, or damages incurred by the bidder due to mishandling, negligence, or any other reasons related to the recorded data.

- xiii) **We acknowledge and accept the clause regarding "Bank Guarantee during CAMC" as specified in the tender document,**

Apart from the Bank Guarantee during the warranty period (of 12 months from the date of commissioning) , entire period of CAMC (05 years from the date of expiry of warranty period) should be covered by a separate Bank Guarantee equivalent of 5% of the total contract value. The same shall stand forfeited in case of cancellation of the contract for any breach of contract or for any deficiency in the performance noticed during the currency of the contract.

- xiv) With reference to this GeM Bid No . _____, we M/s. [Name of the Bidder/Firm] , hereby submit this undertaking to confirm our adherence to the terms and conditions stated in the tender document. We undertake that we have not quoted "free of cost" or included CAMC charges in the supply items or warranty of the equipment in our bid submission. We acknowledge and accept that any offer we submit, which mentions CAMC for a period of less than 05 years or includes CAMC charges as part of the equipment supply or warranty, shall be liable to be rejected without any further consideration. As per the Schedule Of Requirement (SOR), we commit to quoting the cost of the equipment (including accessories if any) separately from the CAMC charges. We understand that failure to quote the CAMC charges separately in accordance with the SOR sheet will result in the rejection of our tender offer.

- xv) **Malicious Code Certificate:** The bidder should upload following certificate in the bid that we M/s. ____: -

- i. This is to certify that the Hardware and the Software being offered, as part of the contract, does not contain Embedded Malicious code that would activate procedures to: -
 - a. Inhibit the desires and designed function of the equipment.
 - b. Cause physical damage to the user or equipment during the exploitation.
 - c. Tap information resident or transient in the equipment/network.
- ii. The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyright and Intellectual Property Right (IPRs) are caused due to activation of any such malicious code in embedded software.

xvi) Technical specifications listed in the bid document are the minimum required specifications. Items of higher specifications will also be acceptable Bidders have the option to propose a product with higher specifications for evaluation. However, it's crucial that any such higher specification product fully meets the criteria set out in this tender document and is both compatible with and meets the requirements of SECL. Any suggested deviations from the specified product must be thoroughly explained, along with reasons for its suitability and alignment with the objectives of the tendered solution. Non-compliance with these requirements could result in the rejection of the bid. Furthermore, if the documents submitted by the bidder create any ambiguity that is not adequately clarified by the bidder, the bid shall be promptly rejected. Also, the decision to accept any offered higher specification product falls under the authority of SECL. Failure to declare Make and Model of materials offered/quoted and/or non- submission of required details/ technical document/OEM Datasheet may lead to rejection of the bid.

xvii) The successful bidder/Service Provider shall arrange all the subscription/Licenses required for all software (which are covered or not covered in BOQ) for smooth working of the offered ICCC solution as applicable.

6) Details of Make & Model alongwith *technical document/OEM Datasheet* of the following offered items should be submitted by the bidder :

SN.	Item description	Make & Model to be submitted by the bidder.	Offered Make & Model has actual specification or higher specification	If higher specification product is offered, then whether this product will be compatible & fulfill the requirement of complete CCTV Camera system solution by SECL
			(Actual or Higher)	(Yes or No)
1	Video wall display ,55 inch with controller, stands with complete accessories	Make:___ & Model: ___		
2	Video analytical server	Make:___ & Model: ___		
3	Video Management Server (VMS)	Make:___ & Model: ___		
4	Video Management software	Make:___ & Model: ___		
5	Video Analytical software	Make:___ & Model: ___		
6	Control and Command Software	Make:___		
7	Client PC (Work station)	Make:___ & Model: ___		
8	64 Channel Network video recorder with 80 TB surveillance HDD	Make:___ & Model: ___		
9	24 Port layer-3 Managed switch	Make:___ & Model: ___		
10	30 KVA UPS with SMF battery bank for 01 hour power backup on full load	Make:___ & Model: ___		
11	ESE lightning protection system complete with all components including multi strand copper down conductor, 02 Nos. earth pits with earth electrode as well as chemical back filling compound, lightning strike counter	Make:___		

	meter and ESE air terminal and all pipes and fixtures for installation			
12	Air Conditioner	Make: __ & Model: __		
13	Furniture Set i) Executive Table ii) Revolving Chair iii) Almira . iv) Visitor Chair	i) Make : ____ ii) Make : ____ iii) Make : ____ iv) Make : ____		

Note : (i) Failure to declare MAKE and MODEL of materials quoted and/or non-submission of technical document/OEM Datasheet may lead to rejection of the bid. Bidder should not offer Multiple make and Multiple models for the same item as the same may lead to rejection of the bid .

(ii) In order to participate in the bidding process, it is imperative for the bidder to provide a precise identification of the MAKE and MODEL for the items listed in above table.

For instance, when bidding for an air conditioner, the bidder must specify a brand such as Voltas or Samsung or LG or Diakin and so on. Similarly, when bidding for furniture, the brands should be clearly mentioned, like Godrej or Cello or Nilkamal, etc.

The use of vague terms like "Reputed" or "Branded," or any other non-specific descriptions, will not be accepted as a valid MAKE specification.

Furthermore, it is essential that bidders do not propose multiple brands and models for the same item, as doing so may result/lead in the rejection of their bid.

7) Bidder has to submit the self attested copy of Technical parameter sheet (TPS) with required details during submission of documents { Refer Annexure – I }.

8) The bidder have to quote for total CAMC charges for ICC system spelt out in Price Breakup Format (Annexure – II) .
NOTE: The bidder should not declare/submit the breakup of the price quoted in above Price Breakup Format along with their bid. Only the successful bidder shall have to provide complete breakup of the quoted price in above Price Breakup Format within two days (2X24 hrs.) of opening of price bid.

9) Documents to be submitted with the supply:

- (i) Details of person to be contacted in case of after sales requirement , during installation & commissioning and warranty period.
- (ii) Technical literature (if any) of the offered supplied items may be submitted.

{ Note: In case of any ambiguity / conflict with the GeM standard Terms & Conditions, details mentioned in this document shall supersede. }

Annexure-I**Technical parameter sheet (TPS)**

SN	Technical details / information required alongwith the bid	Required confirmation Values (Yes/No) / Relevant details input required from bidder
1	Details of bidder	Name : Email id for official correspondence : Contact Nos. : Address :
1.1	Name of Manufacturer / OEM of tendered item (i.e, VA Software and VMS Software)	i.. For VA Server, Name of Manufacturer / OEM is _____ ii.. For VMS Server, Name of Manufacturer / OEM is _____
1.2	Name of the participating bidder	
1.3	Status of participating bidder for the tendered item (VA Software and VMS Software) as: OEM or Authorized dealer or Start-up/MSE Manufacturer or Non start-up & Non MSE Manufacturer	
1.4	Name of documents attached by the bidder to substantiate the above Sr. No. 1.1 and 1.2	1. 2. . .

ANNEXURE-II

PRICE BREAKUP FORMAT FOR 05 YEARS OF CAMC PERIOD

Name of the Work -- “ Supply, Installation, testing & commissioning towards establishment of Integrated Command & Control Centre(ICCC) for CCTV surveillance system along with Artificial Intelligence (AI) based Video Analytics in CCTV cameras at SECL with 05 years of CAMC after completion of one year warranty along with necessary license and permissions ”.

SN.	Item Description	Total CAMC Value in ₹
a	b	c
1	Value of first year of CAMC (without GST @18%)	
2	Value of second year of CAMC (without GST @18%)	
3	Value of third year of CAMC (without GST @18%)	
4	Value of fourth year of CAMC (without GST @18%)	
5	Value of fifth year of CAMC (without GST @18%)	
GST @ 18%		

Grand Total (With GST@ 18%)	
--------------------------------------	--

NOTE: The bidder should not declare/submit the breakup of the price quoted in above Price Breakup Format format along with their bid. Only the successful bidder shall have to provide complete breakup of the quoted price in above Price Breakup Format format within two days (2X24 hrs) of opening of price bid.