



Government of India
Department of Atomic Energy
Bhabha Atomic Research Centre Facilities
Nuclear Recycle Board
Kalpakkam

NIT FOR WEB SITE



NOTICE INVITING E-TENDER

NIT NO. BARCF/NDDP/EI/TR/32/2025

On line item rate tender in two parts i.e. Part A – Technical Bid and Part B – Financial Bid are hereby invited through e-Tendering mode on behalf of the President of India by Facility Director, BARCF for the following work from eligible bidders on approved list of CPWD, MES Railways, State PWDs, Public Sector Undertakings of Central or State Governments/ Central Autonomous bodies or those having adequate experience and capabilities to execute similar works of such magnitude for the work **‘Supply, Installation, Testing and Commissioning (SITC) of Safety and Surveillance Systems (Network, CCTV, Fire Alarm & PA) for 2 MGD SWRO Plant at NDDP, Kalpakkam ’**The details are as mentioned below.

PART-A: INSTRUCTIONS AND INFORMATION

I	General Information
1.	The intending bidders must read the terms and conditions of the tender documents. He should only submit bids if he considers himself eligible and he is in possession of all documents required.
2.	The information and instruction for bidders along with technical bid and financial bids etc. are posted on website shall form part of the bid document.
3.	It is mandatory for all the applicants / Bidders to have class-III digital signature certificate from any of the licensed Certifying Agency to participate in e-tendering.
II	Registration in CPP Portal (For new bidders)
1.	Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link “Online bidder Enrolment” on the CPP Portal which is free of charge.
2.	As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3.	Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
4.	Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
5.	Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC’s to others which may lead to misuse
6.	Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.
7.	The applicants, who have already obtained such valid user ID and password from https://eprocure.gov.in , for any other project of BARCF / DAE/ Any Govt project, need not obtain fresh user ID and password for the purpose of participation in the present tender.

III	Searching For Tender Documents (For new bidders)
1.	There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
2.	Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
3.	The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.
IV	Preparation & Submission of Bids
1.	Bids shall be submitted online only at CPPP website : https://eprocure.gov.in/eprocure/app
2.	Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
3.	The NIT & tender document consisting of drawings, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website https://eprocure.gov.in/eprocure/app . Also NIT can be viewed from www.igcar.gov.in .
4.	The bid can only be submitted after uploading the mandatory scanned documents such as Demand Draft or Pay order of any Scheduled Bank towards cost of tender document and EMD in favor of "PAY AND ACCOUNTS OFFICER, BARCF" , payable at KALPAKKAM and other documents as specified.
5.	The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
6.	Bidder has to select the payment option as "offline" to pay the EMD as applicable and enter details of the instrument (where ever applicable).
7.	Bidder should prepare the Earnest Money Deposit (EMD) as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of EMD, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected
8.	The tenderers are advised to submit the hard copies of original EMD and other documents etc if any, well in advance to the Tender Inviting Authority, so that it should reach on or before the due date and time. Delay in receipt of hard copies due to security restriction, postal delay or delay due to any other reasons etc. shall not be accepted and tender shall be rejected forthwith. If the bids are withdrawn or modified during the period of validity, in the terms and conditions of the Tender, which are not acceptable to the Department, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of EMD absolutely.

9.	The agency shall download the pre bid clarification if any for the work and upload the same (scanned copy) duly signed and sealed. The revised documents (if any) shall be uploaded in CPP portal.
10.	Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard Bill of Quantities (BOQ) format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the SKY BLUE colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should not be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
11.	Bid documents may be scanned with 100 dpi with color option which helps in reducing size of the scanned document.
12.	The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
13.	Submission of the tender documents after the due date and time (including extended period) shall not be permitted. Time being displayed on e-tendering portal shall be final and binding on bidders.
14.	All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
15.	The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
16.	Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
17.	The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.
18.	Intending Bidders are advised to visit this website regularly till closing date of submission to keep themselves updated as any change/ modification in the tender will be intimated through this website only by corrigendum / addendum/ amendment.
19.	After submission of the bid / document the bidder can re-submit revised bid/document "N" number of times but before last date and time of submission of bid/document as notified.
20.	In the case of bids in two / three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.

21	Tenderers are advised to upload their documents well in advance, to avoid last minutes' rush on the server or complications in uploading. BARCF/ INRPK, in any case, shall not be held responsible for any type of difficulties during uploading the documents including server and technical problems whatsoever.
V	Assistance To Bidders
1.	<p>Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link “Online bidder Enrolment” on the CPP Portal which is free of charge. In order to participate in online e-tendering process, it is mandatory for the applicants to have user ID & password to get access to the website https://eprocure.gov.in/eprocure/app.</p> <p>The applicants have to get registered their firm / company with the service provider, https://eprocure.gov.in for user ID & password. The registration shall be done on free of cost and completing other formalities as mentioned in website. For assistance/clarifications, please contact</p> <p>a) 24x7 CPP Portal Helpdesk - 0120-4001 002, 0120-4001 005, 0120-6277 787 b) Local Helpdesk for DAE - Shri. Bhushan / Shri. Mayur at 022 25487480 c) email at support-eproc@nic.in</p>

PART-B: NIT DETAILS

1	NIT No.	BARCF/NDDP/EI/TR/32/2025
2	Name of work	Supply, Installation, Testing and Commissioning (SITC) of Safety and Surveillance Systems (Network, CCTV, Fire Alarm & PA) for 2 MGD SWRO Plant at NDDP, Kalpakkam
3	Estimated cost	₹ 2,34,70,757 /-
4	EMD (2% of estimated cost)	<p>Earnest Money Deposit (EMD) of ₹ 4,69,415 /- in original to be submitted preferably in the form of Fixed Deposit Receipt issued by Scheduled Bank / Demand Draft / Banker's Cheque of a Scheduled Bank listed by RBI, issued in favour of Pay and Accounts Officer, BARCF, Kalpakkam, payable at Kalpakkam, Tamil Nadu.</p> <p>A part of Earnest Money is acceptable in the form of Bank Guarantee also. In such case minimum 50% of the Earnest Money or 20.00 Lakhs, whichever is less, shall be in the form prescribed above and balance can be accepted in the form of Bank Guarantee issued by a Scheduled Bank as per Appendix 'A' of Tender Part 'A'. The bank guarantee submitted as a part of Earnest Money Deposit shall be valid for a period of six months or more from the date of submission of the tender. The Earnest Money deposited along with the bid shall be returned after receiving the Performance guarantee (after confirmation).</p> <p>EMD in the form of cheque / cash will not be accepted.</p> <p><i>(The tracking details of the courier / speed post containing the EMD should be sent through email to the EIC for those EMDs which will be submitted via postal service.)</i></p>
5	Completion period	9 Months
6	Tender Processing Fee	Nil
7.	Security Deposit	2.5 % of tendered value.

8	Performance Guarantee	3 %of tendered value.
9	Tender Publishing Date	03.03.2026 (10:00 hrs.)
10	Document Download / Sale Start Date	From 04.03.2026 (9.00hrs) website on https://eprocure.gov.in/eprocure/app
11	Seek Clarification Start Date	Queries (if any) to be uploaded on website https://eprocure.gov.in/eprocure/app 04.03.2026 (10:00hrs)
12	Seek Clarification End Date	10.03.2026 (15.00hrs)
13	Bid Submission Start Date	11.03.2026 (11.00hrs)
14	Bid Submission & sale Closing Date	18.03.2026 (15.00hrs)
15	Last date for submission of EMD original	On or before 23.03.2026 (14:00) at Office of NDDP, MPDD (Ph.No.-044-/27480500-Extn: 40102 or 40110.
16	Date and time of online opening of Technical Bid.	24.03.2026 (15.30 hrs.) in the Office of Accounts, Room NO: 208, NSB, BARCF, Kalpakkam.
17	Date of opening of Financial Bids	Will be notified at a later date
18	For any clarification regarding tender may contact	V.Sivalingam/EIC/MPDD/BARCF- sivalingam@igcar.gov.in . Head, MPDD/BARCF - rnagaraj@igcar.gov.in 044-27480500 ext : 40110/40123/40105/40204/40102

PART-C: REQUIREMENTS AND ELIGIBILITY CRITERIA

1.	Contractors who fulfill the following requirements shall ONLY be eligible to apply. (The firm shall be registered in India. Joint ventures are not accepted).
2.	<p>Should have satisfactorily completed works in India during the last seven years ending previous day of last date of submission of tenders. For this purpose, cost of work shall mean gross value of the completed work excluding those supplied free of cost. This should be certified by Engineer In-charge of the work or an officer not below the rank of Executive Engineer / Project Manager/Manager or equivalent.</p> <p>Completed three similar works each costing not less than 40% of estimated cost or Completed two similar works each costing not less than 60% of estimated cost, or Completed one similar work costing not less than 80% of estimated cost.</p> <p>Important Notes:</p> <p><u>Similar work shall mean:</u></p> <p><i>1. Supply and/or Installation of LAN NETWORK and/or CCTV and/or FIRE ALARM SYSTEM and/or PA SYSTEM</i></p>

	<p>2.The firm/company/contractor shall submit the OEM Authorization Certificate and OEM Compliance Certificates for the 10 items listed in Annex-III</p> <ul style="list-style-type: none"> i. Cost of works shall mean gross value of the completed work excluding those supplied free of cost. The value of executed works shall be brought to the current costing level by enhancing the actual value of work at a simple rate of 7% per annum; calculated from the date of completion to the last date of receipt of applications for tender. ii. Similar work carried out either by works contract or purchase contract will be considered. iii. TDS Certificate for proof of value of work executed for various clients. iv. In case of Integrator, Authorization certificate from OEM to be uploaded for Supreme Face reader system along with the bid otherwise the offer will be outright rejected without further notice.
3.	Should have average annual financial turn over (gross) of 50% of estimated cost during the immediate last 3 consecutive financial year ending 31st March, 2025. (Scanned copy of Certificate from CA to be uploaded). Year in which no turnover is shown would also be considered for working out the average.
4.	Should not have incurred any loss in more than two years during the last five years ending 31st March, 2025. Duly certified by the licensed CA.
5.	Bank Solvency Certificate of a Scheduled Bank for a minimum of 40% of estimated cost and should not be older than one year from the date of closing of tender.
6.	The bidder should be “Class-I / II Local Supplier” as defined in Public Procurement (Preference to Make in India), Order-2017, Order No.”P-45021/2/2017-B.E.-II, Revision, dated 16/09/2020 and as amended from time to time. An undertaking to this effect should be provided.
7.	Compliance of Eligible source Countries notification issued by Govt. of India vide F.o 6/18/2019-PPD dtd 23.07.2020 regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries. Form of certificate on bidder letter head to this effect shall be submitted.
8.	<p>The bidding capacity of the contractor should be equal to or more than the estimated cost of the work put to tender. The bidding capacity shall be worked out by the following formula:</p> <p>Bidding Capacity = {[A x N x 2] – B}</p> <p>Where,</p> <p>A= Maximum turn over in construction works executed in any one year during the last five years taking into account the completed as well as works in progress. The value of completed works shall be brought to current costing level by enhancing at a simple rate of 7% per annum.</p> <p>N= Number of years prescribed for completion of work for which bids has been invited.</p> <p>B = Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited</p>

9.	<p>i) Contractor shall furnish declaration that he has not been debarred from tendering by any authority / agency. (Scanned copy of the declaration duly signed & sealed on letter head of the bidder to be uploaded at the time of submission of bid). If any such case known to the department at later stage, the contractor will be disqualified / Rejected / Terminated. In case if a bidder is debarred by any Government agency for bidding as on closing date of submission of this tender , then the bid is liable to be rejected.</p> <p>ii) Bidders who are GST defaulters as per the GST authorities at the time of submission of the bid are not eligible for this tender. Bidders shall submit an undertaking in the format provided in this document. Any subsequent defaulting in payment of GST by the bidder, will also be scrutinized by the department, and may lead to rejection on the bid/cancellation of contract.</p>
10.	<p>The intending bidder must read the terms and conditions as per “CPWD General Conditions of Contract - 2014” carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.</p> <p>Department reserves the right of Non-consideration of Tender documents of the agencies who are not fulfilling the NIT stipulations and / or having adverse report on the works carried out by them in the past.</p>
11.	<p>UNDERTAKING:-I/We undertake and confirm that eligible similar works(s) has/have not been executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in BARCF/ INRPK in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit / Performance Guarantee.</p> <p>(Scanned copy to be uploaded at the time of submission of tender.)</p>
12.	<p>Tender will be kept valid for 120 days from the Last date of closing of online submission of tenders.</p>
13.	<p>Proof of registration if any with Government / Semi Government organizations like CPWD, MES, BSNL, Railways, State PWDs, Private Firms etc. in appropriate class OR having experience in execution of similar nature of works as additional information.</p> <p>The applicant may furnish any additional information which they think necessary to establish their capabilities to successfully complete the envisaged work. No information shall be entertained after last date of online submission of tenders unless it is called by the competent authority.</p>
14.	<p>Short listing of the agencies shall be subject to thorough verification of their credentials and inspection of works carried out by them (if required), through a Technical Evaluation Committee, constituted by INRPK/BARCF.</p> <p>If any information furnished by the applicant is found incorrect at a later stage, they shall be liable to be debarred from tendering /taking up of work in BARCF/INRPK.INRPK/BARCF reserves the right to verify the particulars furnished by the applicant independently and reject any application without assigning any reason and to restrict the list of pre-qualified agencies to any number deemed suitable in case too many applications are received satisfying the laid down Pre-qualification criteria.</p>

Information on compliance after awarding the contract

15.	<p>Successful Tenderer will be issued Letter of Intent/Letter of Acceptance (LOI/LOA) to deposit an amount equal to 3% of the tendered value of the contract as irrevocable performance guarantee in the form of Bank Guarantee from any of the schedule bank or by Demand Draft / Fixed Deposit Receipt (DD/FDR) from SBI/Canara Bank drawn in favour of Pay & Accounts Officer, BARC Facilities, Kalpakkam and payable at Kalpakkam within a period of 15 days from the date of issue of Letter of Intent.</p> <p>If the successful tenderer, fails to furnish the prescribed performance guarantee on or before stipulated date, BARCF/INRPK shall without prejudice to any other right or remedy, forfeit the Earnest Money Deposit absolutely to the President automatically without any notice.</p>
16.	<p>In addition to the above, the successful tenderer is required to remit Security Deposit amounting to 2.5% of the tendered value which shall be deducted @ 2.5% of the gross amount of bill from each running bill as well as final bill till total security deposit is recovered.</p>
17.	<p>Deduction: Income Tax, TDS on GST as applicable from time to time, shall be deducted from each bill and deducted value will be remitted to the concern tax authorities. Any other taxes /cess as per Government directives shall be deducted from each bill paid to the contractor, from time to time. GST Invoice is to be submitted for bill payment.</p>
18.	<p>The contractor shall comply with provisions of Contract labour act -1970, Workmen's compensation act 1923, Minimum wages Act 1948, EPF Act, Gratuity Act and other labour laws as applicable. The contractor should intimate the maximum number of workmen//manpower/staff employed / likely to be employed by him to the Engineer in Charge, before commencement of the work. In case the Contract labour act does not apply to the firm, it shall be intimated the Engineer in Charge before commencing the work. All the workers are to be paid applicable minimum wages and payment is to be made through Bank. Wherever applicable, EPFO & ESIC contributions for all the workers on the part of employer in respect of this contract as applicable shall be borne by the contractor. Records with respect to wages, PF, insurance, etc. of the workers shall be maintained & produced on demand for verification. In case of non-coverage by ESIC, other mode of insurance for workmen shall be adopted and informed to Engineer in Charge before commencing the work. In case of any failure to comply with these above provisions, Department shall be entitled to recover the same from the bills.</p>
19.	<p>The contractor shall be responsible for the strict observance and implementation of all the safety precautions & procedures and house-keeping practices. The contractor shall comply with all the instructions given by the Engineer from time to time on these aspects in this regard.</p>

Note: Department reserves the right to accept or reject any application(s), without assigning any reason thereof. The applications with any condition shall be rejected forthwith.

PART-D

1. Evaluation Criteria

The detail submitted by the bidders will be evaluated in the following manner:

- 1.1 The initial criteria prescribed in respect of experience of similar works completed, bidding capacity and financial turnover etc. will first be scrutinized in detail and the bidder's eligibility for the work be determined based on the following.
- 1.2 The bidders qualifying the eligibility criteria will be evaluated for following criteria by scoring method on the basis of details furnished by them.

Sl. No.	Criteria	Maximum Marks
a)	Financial Strength (Form 'A' and 'B')	20
b)	Experience in Similar nature of work during last seven years (Form 'C')	20
c)	Performance on works (Form 'E') Time Over run	20
d)	Performance on works (Form 'E') Quality	15
e)	Personnel and Establishment (Form 'F' & 'G')	10
f)	Facility & Equipment (Form 'H')	15
Total		100

To become eligible for short listing the bidder must secure at least **Fifty percent** marks in each criteria (a) to (f) above and **Sixty percent** marks in aggregate.

INRPK, NRB however, reserves the right to restrict the list of such qualified bidders to any number deemed suitable by it.

The breakup of above scoring method is indicated in the table be

CRITERIA FOR EVALUATION OF THE PERFORMANCE OF CONTRACTORS

Sl. No.	Attributes	Marks	Evaluation
(a)	Financial Strength	20	
	(i) Average Annual Turnover	16	(i) 60% marks for minimum eligibility criteria
	(ii) Solvency Certificate	4	(ii) 100% marks for twice the minimum eligibility criteria or more
			In between (i) & (ii) – on pro-rata basis

(b)	Experience in Similar Class of Works	20	(i) 60% marks for minimum eligibility criteria (ii) 100% marks for twice the minimum eligibility criteria or more In between (i) & (ii) – on pro-rata basis				
(c)	Performance on works (time over run)	20					
	Parameter	Calculation of point	Score				Max Marks
		If TOR =	1.00	2.00	3.00	>3.50	20
	(i) Without levy of compensation		20	15	10	10	
	(ii) With levy of compensation		20	5	0	-5	
	(iii) Levy of compensation not decided		20	10	0	0	
TOR = AT/ST, where AT=Actual Time; ST= Stipulated Time							
Note: Marks for value in between the stages indicated above is to be determined by straight line variation basis.							
(d)	Performance on works (Quality)	(15 marks)					
	(i) Very Good		15 marks				
	(ii) Good		10 marks				
	(iii) Fair		5 marks				
	(iv) Poor		0 mark				
(e)	Personnel & Establishment	(Max. 10 Marks)	Marks will be given based on proposal submitted in Form G				
	(i) Graduate Engineer		4 marks for each				
	(ii) Diploma holder Engineer		1 mark for each upto maximum 5 marks				
	(iii) Supervisory /Foreman		1 mark for each upto maximum 3 Marks				
(f)	Plant and Equipment	(Max. 15 Marks)					

1.3 Even though any bidder may satisfy the above requirements, he would be liable to disqualification, if he has:

- Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the eligibility criteria document,
- Record of poor performance such as abandoning work, not properly completing the contract, or financial failures / weaknesses etc.

2. List of documents to be submitted

(Scanned self-attested copy of original certificates / documents for the following to be uploaded or otherwise bid will be summarily rejected)

(Scanned self-attested copy of original certificates / documents for the following to be uploaded or otherwise bid will be summarily rejected)

1	Summary of Financial Turn Over and Profit & Loss statement certified by licensed CA for last 5 financial years (Original color scanned copy).(Form A)
2	Latest Bank Solvency Certificate (Original color scanned copy) (Form B)
3	List of similar works completed in last 7 years indicating (Form C) & List of work in hand (Form D) 1. Agency for whom executed 2. Value of Work 3. Stipulated time of completion
4	Certificates of Work Experience / Performance Certificates / Completion certificates.(Form E)
5	List of Staff, Structure & Organization (Form F)
6	Bidding Capacity
7	Certificates:
	i. Registration certificate/License, if any
	ii. Certificate of Registration for GST / TIN Registration certificate
	iii. PAN (Permanent Account Number) Registration
	iv. Registration with EPFO and ESIC
8	Undertaking that the eligible similar work(s) have not been executed through another contractor on back to back basis. (Undertaking A to D of Annexure I)
9	Undertaking for (a) having gone through the documents as per Technical Bid. and (b) downloaded the Pre-bid clarifications (Annexure-II)
10	Form of Tender (Section-II)
11	Local supplier undertaking
12	Form of certificate for Eligible source countries
13	Minimum wages declaration signed by the contractor on their letter head
14	GST certificate verified copy from website.
15	Tender specific authorization letter from OEM (Annexure-III)

Handwritten signature
18/11/26

Handwritten signature
Facility Director, BARCF

For & On behalf of President of India.

डॉ. टी.वी. कृष्ण मोहन / Dr. T.V. KRISHNA MOHAN
सुविधा निदेशक / Facility Director
भारत सरकार / Government of India
परमाणु ऊर्जा विभाग / Dept. of Atomic Energy

FORM OF CERTIFICATE FOR ELIGIBLE SOURCE COUNTRIES

(To be submitted on Bidder's Letter head)

I/We, -----(Name of the Bidder)-----have read the NIT clauses regarding restrictions on procurement from a Bidder of a country which shares a land border with India, and I/We am/are not from such a country” or, from such a country (indicate country-----), have been registered with Competent Authority and submit a certificate herewith as an evidence of valid registration by the Competent Authority”.

I/We hereby certify that I/We am /are fulfilling all requirements in this regard and eligible to be considered, in accordance to NIT Clauses.

I/We acknowledge the right of the Employer that absence of such a certificate in the bid, if the Bidder belongs to such country stated above, shall disqualify the Bidder.

I/We acknowledge the right of the Employer to terminate the Bidder for false declaration or certificate, along with such other actions as may be permissible under law.

Signature of the Bidder

To
Facility Director ,BARCF, Kalpakkam

Format for Self-Certification under Preference to “MAKE IN INDIA” Policy
(Refer Clause No. 2.8 & 3.4.4 of ITT)

CERTIFICATE

In line with Government Public Procurement Order No. P-45021/2/2017-BE-II dt. 15.06.2017& No.A-1/2021-FSC-Part(5) dated 16.11.2021, as amended from time to time and as applicable on the date of submission of tender, we hereby certify that we M/s_____ (supplier name) are local supplier meeting the requirement of minimum Local content as defined in above orders for the material against Tender No(NIT)_____ Dated _____ .

Details of location at which local value addition will be made is as follows:

1. -----2. ----- 3. ----- and so on.

We have also read the clarification issued vide Circular No.: P-45021/102/2019-BE-II-Part (1) (E-50310), Dtd: 04.03.2021 and any other subsequent circular/amendment/order as issued by competent authority. Total Value of local content addition/manufacturing for offered material/item(s)/service is as per below declaration.

Accordingly, we declare to be (Tick One)

<input type="checkbox"/>	Class-I Supplier (50% or more local content)	<input type="checkbox"/>	Class-II Supplier (20% to 50% local content)	<input type="checkbox"/>	Non Local Supplier (less than 20% local content)
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We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rule for which for which a bidder or its successors can be debarred for up two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

Seal and Signature of Authorized Signatory

UNDERTAKINGS TO BE FURNISHED BY THE TENDERER

1. Undertaking – A

“I Son of
Residing at
.....hereby give an undertaking that I have read and I am aware of all the clauses and sub clauses of tender forms and I confirm that I will abide by all the terms and conditions available in this tender document. My Income tax Permanent Account Number (PAN) is

(Seal of the Firm)

(Dated Signature of Contractor or his authorized Power of Attorney)

2. Undertaking – B

“I Son of
Residing at
..... hereby give an undertaking that I have give an undertaking that none of my relative(s) as defined below is/are employed in DAE as per details given in tender document. In case at any stage, it is found that the information given by me is false / incorrect, NRB, BARCF shall have the absolute right to take any action as deemed fit without any prior intimation to me”

The near relatives for this purpose are defined as;

1. Members of a Hindu undivided family
2. They are husband and wife
3. The one is related to the other in the manner as father, mother, son(s) son’s wife (daughter-in-law), daughter(s) daughter’s husband (son-in-law), brother(s) and brother’s wife, sister(s) and sister’s husband (brother-in-law)

(Seal of the Firm)

(Dated Signature of Contractor or his authorized Power of Attorney)

UNDERTAKING – C

I / We have read and examined the Notice Inviting Tender, General Rules & Directions, Form of Tender, Special conditions, Safety code for works contract, General condition of Contract, Schedule F, Specifications, Schedule of Construction, drawings & all other contents in the tender documents for the work AND ACCORDINGLY I / We, hereby tender for execution of the work specified for the President of India within the time specified in Schedule “F”, viz., Schedule of Quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule 1 of General Rules & Directions and in Clause - 11 of the General Clauses of Contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

(Seal of the Firm)

*(Dated Signature of Contractor or his
authorized Power of Attorney)*

UNDERTAKING – D

I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in DAE in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

(Seal of the Firm)

*(Dated Signature of Contractor or his
authorized Power of Attorney)*

Declaration by Contractor

This is to certify that;

- 1) I / We have submitted the tenders in the proforma as downloaded directly from the websites which are same as available in the website and there is no change in the format, number of pages, etc.
- 2) I / We have not made any modifications / corrections / additions etc., in the tender documents downloaded from web by me / us.
- 3) I / We have checked that no page is missing and all pages as per the index are available and that all pages of tender document submitted by us are clear and legible.
- 4) I / We have submitted the cost of the tender & tender processing fee.
- 5) I / We have submitted requisite EMD in the prescribed form.
- 6) In case at later stage, it is noticed that there is any difference in my / our tender documents with the original documents, NRB, BARCF shall have the right to cancel the tender / work, forfeit the Earnest Money, Performance Guarantee & Security Deposit, take appropriate action as per the prevailing rules in force and NRB, BARCF shall not be bound to pay any damages to me / us on this account.
- 7) I/We am/are not GST defaulter(s). I/We also give undertaking that I/We will pay GST in time during the complete period of the contract.

Dated

(Contractor)
(Signature with seal)

FORM 'A' : FINANCIAL INFORMATION

I. Financial Analysis - Details to be furnished duly supported by figures in balance sheet/ profit and loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (copies to be attached).

Particulars	Financial Year				
	2020-21	2021-22	2022-23	2023-24	2024-25
i) Gross Annual turnover on construction work Rupees (In Lakhs)					
ii) Profit/Loss Rupees (In Lakhs)					
iii) Certified by					

Name and address of Chartered Accountant	
--	--

II. Financial arrangements for carrying out the proposed work.

Viz. line of credit, Working Capital, Liquid Capital, Fixed Deposits etc. - Upload scanned copy of statement

III. The scanned copies of following certificates are to be uploaded.

- Profit & Loss account certified by CA & as submitted to Income Tax Department.
- Solvency Certificate from banker's of applicant. Banker's certificates should be on letterhead of the Bank. In case of partnership firm, certificate should include names of all partners as recorded with the Bank as said in the Form 'B'.
- GST Registration Certificate.
- UDIN number verified certificate from website.
- Permanent Account Number (PAN).

Name of authorized signatory

Note: Further details if required may be asked from the contractor after opening of the bids. There is no need to upload the entire voluminous balance sheet.

Scanned copy on Banker's letter head to be uploaded

FORM – B: FORM OF BANKER'S CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s./Shri _____ (with address) a customer of our bank are / is respectable and can be treated as good for any engagement upto a limit of Rs _____ (Rupees _____).

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature)
For the Bank

Note:

- (1) Bankers certificates should be on letter head of the Bank.
- (2) In case of partnership firm, certificate should include names of all partners as recorded with the Bank.

Scanned copy of certificates containing following information from the clients to be uploaded

FORM-E: PERFORMANCE REPORT OF WORKS REFERRED TO IN FORM "C"

(Separate certificate for each work/ Project)

1. Name of work/Project & Location
2. Agreement No.
3. Name of the contractor
4. Estimated Cost
5. Tendered Cost
6. Executed Cost
7. Date of start
8. Date of completion
 - (i) Stipulated date of completion
 - (ii) Actual date of completion
 - (iii) Present position of work, if in progress.
9. Amount of compensation levied for delayed completion, if any.
10. Amount of reduced rate items, if any.
11. Performance Report.
 - a) Quality of work Very Good/Good/Fair/Poor
 - b) Financial soundness Very Good/Good/Fair/Poor
 - c) Technical Proficiency Very Good/Good/Fair/Poor
 - d) Resourcefulness Very Good/Good/Fair/Poor
 - e) General behavior Very Good/Good/Fair/Poor
 - f) Time Consciousness Very Good/Good/Fair/Poor

Dated:

**Executive Engineer or equivalent
Signature with Seal**

FORM 'F' : STRUCTURE & ORGANISATION

1 Name & Postal Address of the applicant:

2 Telephone No./Telex No./Fax No.

3 Legal status of the applicant (Please tick and attach attested copies of original document defining the legal status)

- (a) An individual; (b) A proprietary firm; (c) A firm in partnership
(d) A limited company or Corporation

4 Particulars of registration with various Government bodies (attach attested photocopy)

Dept./Organization& Place of registration	Registration No.

5 Names and Titles of Director & Officers with designation proposed to be concerned with this work

6 Designation of individuals authorized to act for the organization

7 Was the applicant ever required to suspend construction for a period of more than six months continuously after you commenced the construction? If so, give the name of the project and reasons of suspension of work.

8 Has the applicant or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment.

9 Has the applicant, or any constituent partner in case of partnership firm, ever been debarred / black listed for tendering in any organization at any time? If so give details.

- 10 Has the applicant, or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so, give details.

- 11 In which fields of Engineering construction the applicant has specialization and interest?

- 12 Any other information considered necessary but not included above.

Name and address of the authorized signatory

Performa for Original Equipment Manufacturer (OEM) Declaration for each system and OEM Compliance

To,
Facility Director
BARCF
Kalpakkam

Subject: Declaration/Undertaking regarding Original Equipment Manufacturer

Name of the work: Supply, Installation, Testing and Commissioning (SITC) of Safety and Surveillance Systems (Network, CCTV, Fire Alarm & PA) for 2 MGD SWRO Plant at NDDP, Kalpakkam

NIT: BARCF/NDDP/EI/TR/32/2025

Sir,

We -----(OEM Name) who are established and reputed manufacturer of LAN NETWORK/CCTV SYSTEM/FIRE ALARM SYSTEM/PA SYTEM having factory at -----

1. I/We are participating in the tender as OEM.

OR

2. I/We do hereby authorize ----- (Bidder name) to participate in this tender on behalf of -----(OEM)

I/We confirm that the quoted equipment have not been declared end of life as of date of this tender, and we shall supply our products as per published tender specifications and bid offer.

I/We also confirm to provide as per Specified Warranty and Post Warranty support for offered products, availability of product spares, sales, service and software as per this tender.

Note: Our Authorised bidder will provide product warranty / Post AMC support.

Thanking you,

Yours faithfully,

Signature of the authorised signatory (OEM)

Name:

Telephone:

E-mail:

Stamp:

ITEM: Network Video Recorder (NVR) [Pertaining to S.No 47 of BoQ]

MAKE:

MODEL:

S. No.	Technical Specification	Compliance (Yes/No)
1	Type of Device : 64 Channel Capable Server along with Built-in Hot swappable Dual Power supply Note: Built-in Dual Power supply with Hot swappable should be Mandatory before Bid submission; if required respective Authority may call POC (Proof of concept) as part of technical evaluation.	
2	Operating system : Windows or Linux;	
3	Processor: Quad core processor or Better	
4	Video channels Support : Minimum 64 channels IP Cameras or Better	
5	Type of cameras support: Fixed lens, Motorized lens with zoom control ,PTZ cameras with Pan/Tilt/Zoom control, Fisheye cameras with De-warping features	
6	Storage: NVR should support 16 SATA Hot swappable hard disk slot and each should support 64 TB HDD as Max ; Bidder to consider 125 TB Usable Storage (RAID5 Space to be considered by Bidder addition to usable space) NVR Hard Disk slot should be Hot swappable	
7	RAID Support : Should support JBOD & RAID 0, 1, 5, 6, 10	
8	Video compression support:H.265+, H.265, H.264+, H.264 compression	
9	No of Channels support : Video Input – 80 IP camera minimum or Better	
10	Video Resolution support: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF [All specified resolution should be supported by NVR]	
11	Live View user interface: Snapshot, Record, Talkback, Volume adjustment, Full screen, Digital zoom,Screen matrix, Stream type,System alarm	
12	Playback user interface: Snapshot, Clip management, Screen matrix, Stream type,Sync playback, Play, Pause, Stop, Fast play, Slow play, Full Screen, Backup selection	
13	menus and configurations: Image enhancement settings, VBR and CBR support,multi-level on detection,OSD Display	
14	Display matrix (Layout): 1/2/3/4/5/6/7/8/9/10/12/13/16/20/25/32/36/40/64/80 [All specified layout matrix should be supported by NVR]	
15	Physical Interface ports: Video Output: 1ch VGA and 1ch HDMI (4K) ; Audio Interface: 1ch In & 1ch Out ; Serial Interfaces: 1# RS232, 1# RS485 Network: 2 RJ45, 10M/100M/1000M LAN port; Alarm Interface: 16ch In & 4ch Out; USB Port: 1# USB3.0, 2# USB2.0 ports; e-SATA: 01 Port	
16	Recording mode : Should support schedule, motion and alarm-based recording	
17	Bandwidth support : Incoming Bandwidth should be 600 Mbps or better; Outgoing Bandwidth should be 280 Mbps or better	
18	Playback: Synchronous Playback	
19	Playback search mode : Time/Date based search mode & Alarm based search	
20	Alarm :Video content Analysis (VCA) detection alarm should be supported	
21	Alarm management: Abnormal recording, Abnormal temperature, Hot spare error & Array error, Motion detection, Tampering (Masking), Smart detection, Video loss, IP Conflict, MAC Conflict, Network Interrupt, Hard disk full, No hard disk, Hard disk R/W error, Hard disk overload, HDD SMART check error, Input &	

	Output event, Alarm I/O error, Illegal access	
22	Network Protocols : IPv4, IPv6, ICMP, TCP, UDP, DHCP, PPPoE, RTP/RTSP/RTCP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, SNMP, Telnet, ARP, ANR (Auto network replenishment) , SSL/TLS1.2, ONVIF Profile S, G & T	
23	Backup transfer :Should Supports data transfer via USB , Network & e-SATA for easy and fast backup of data.	
24	User Interface: Internet Explorer 6.0 or later;Multiple Language GUI	
25	Input Power: AC 110-240V	
26	Redundant Power supply: Unit Should have Hot swappable Built-in Redundant Power supply as Mandatory	
27	Operating conditions: Operating temperature : -10° to +50° C; Operating Humidity: 10% to 90% (non-condensing)	
28	Certifications & Approvals: UL 62368-1, CE, FCC, RoHS & BIS Note: In case of Make in India Product UL certification is not required, however, MII product should have a certification from a NABL approved lab with equivalent IEC standard (IEC 62368-1) before the date of publishing of the RFP.	
29	Compatibility: All the cameras and recorder should be from Same OEM	
30	General Security: 1) OEM of the camera should not be blacklisted in India or anywhere globally for security reasons from any organization including ONVIF. 2) OEM Should submit Country of Origin (including their parent company) must be submitted as Mandatory.	
31	OEM Verified compliance: Bidder to submit OEM Verified compliance for above technical specifications requirements	
32	Manufacturer's Authorization: Tender specific OEM Authorization Must be attached	

Signature & Seal of the authorised signatory (OEM)

Signature & Seal of Bidder

ITEM: Network Switch [Pertaining to S.No 4 of BoQ]

MAKE:

MODEL:

S.No	Technical Specification	Compliance Yes / No
1	The Switch should have 24 10/100/1000Base-T ports with Support on all Ethernet Ports IEC61000-4-5 6 kV surge protection and Min 4 x 10G SFP+ ports for uplinks. Switch should have Redundant power supply (RPS) Support.	
2	Switch / OEM Should have Certificate for Industrial Cyber Security Capability (Like - IEC-62443-4-1:2018 or Equivalent Indian Certificate).	
3	The Switch should have USB Port and RJ-45 console port for configuration, management, and monitoring.	
4	Switch should be Forwarding mode: store and forward, Switching Capacity: 128Gbps, Packet forwarding rate: 95 Mpps, Min 10K Jumbo Frames and 16K MAC address table with MAC address learning and aging automatically, Static, Dynamic, filter address table Support.	
5	The Switch should Certifications for EMI & Safety: BSML, CE, FCC, VCCI, CB, cUL, LVD or Equievelent Indian Certificate for EMI/Safety and MTCTE Certified.	
6	The Switch should have Operation Temperature • -5 to 50 °C (23 to 122 °F) and Operating Humidity 0% to 95% non-condensing.	
7	The Switch should support for High-Bandwidth Stacking with Physical stack of up to 9 units and Supports long-distance stacking over fiber and Min 80 Gbps per device physical stacking bandwidth.	
8	L2 Features: Flow Control, 802.3x Flow Control, Flow Mirroring, 802.1AX and 802.3ad (Max. 32 groups per device, 8 ports per group).	
9	The Switch Should Support ERPS, STP: 802.1D, 802.1w, 802.1s, BPDU filtering, Root Restriction, Loopback Detection	
10	The Switch Should Support Port Mirroring, VLAN Mirroring, RSPAN and Flex Link, 802.1AB LLDP & LLDP-MED,	
11	The Switch Should Support L2 Protocol Tunneling (L2PT), HOL Blocking Prevention, PPPoE circuit-ID tag insertion, Network Load Balancing Support and sFlow.	
12	The Switch Should Support L2 Multicasting: IGMP v1/v2 /v3, MLD v1, MLD v2, MLD/IGMP Snooping, Host-based IGMP/MLD Snooping Fast Leave, Report suppression and Support Min 1K+ Groups.	
13	The Switch Should Support L3 Features: Default & Static route, L3 control packet filtering, 60+ IP interfaces, 60+ IPv4 static routes and 30+ IPv6 static routes.	
14	The Switch Should Support 4K VLAN, 255 dynamic VLANs, VLAN translation, 802.1Q tagged VLAN, 802.1v Protocol, MAC Based, Port-based VLAN, GVRP, Multicast VLAN, Double VLAN (Q-in-Q): Port-based Q-in-Q and Selective Q-in-Q, Voice VLAN, Guest VLAN and Private VLAN	
15	The Switch Should Support Quality of Service (QoS), Bandwidth control: Port-based & Flow-based (64 Kbps), Strict Priority, WRR, Strict + WRR, Deficit Round Robin (DDR) and WDRR, 802.1p and Min 8 queues per port. DHCP server screening, ARP spoofing prevention, BPDU attack protection, Traffic segmentation.	
16	The Switch Should Support Security Features, SSH v2, TLS 1.2, AAA, 802.1X, NAC/NAP Support, Port Security (Min 6K MAC addresses per port) ACL: Ingress & Egress 2K (Shared) (H/W Entries), ACL based on User-defined packet content, Protocol type, TCP/UDP port, 802.1p priority. MAC-based Access Control, Web-based Access Control, Identity Driven WAC policy assignment, ARP inspection, IP inspection, DHCP snooping, RADIUS, RADIUS accounting, TACACS+, Trusted	

	host and Compound authentication	
17	The Switch Should Support OAM Features, CPU & Memory utilization monitoring, Cable diagnostics, 802.3ah, Dying Gasp, 802.1ag, Y.1731 OAM, Debug command, Password recovery, Password encryption, Ping, Traceroute,	
18	The Switch Should Support Management features, Multiple image, Telnet server/client, TFTP client, FTP client, ZModem, Command logging, SNMP v1/v2c/v3 (supports IPv4), SNMP Traps, System log, RMON v1 & RMON v2, DNS client.	
19	The Switch Should Support DHCP Auto-configuration, Supports Option 6, 66, 67, 150, Auto-Image, Relay Option 60, 61, 82, Client Option 12.	
20	Switch should be supplied with the all necessary components like Power supply, Power cord, All Fan Module, Rack-mount kit, Installation Guide, etc. and necessary software image file to fulfil all above mention feature set from day 1.	
21	All the specified features/parameters/certifications must be available on the Technical Bid opening date. Features /parameters /certifications proposed to be available in near future / on roadmap shall not be considered.	
22	Process for Technical Evaluation: OEM & Bidder must conduct a Proof of Concept (PoC) for the Switches, with only the quoted products as specified in the tender. Substitution of equivalent or other products is not acceptable and will result in rejection of the bid. The PoC must demonstrate adherence to all defined protocols in tender and performance criteria.	
23	The OEM should have its own call center for configuration and troubleshooting support, and a fully functional Call Center / Helpdesk / TAC / Support Center in India. The process for complaint booking, call logging, and the domain mail ID & Support numbers should be clearly explained. The OEM must provide an escalation matrix for service support.	
24	Product quoted under this project are latest and after successful installation, testing and commission, Bidder should provide 3Yrs. Warranty with site certification.	
25	OEM Should be ISO 45001, ISO 27001 and ISO 14001 Certified or Equivelent Indian Certificates. All Active components from Single OEM.	
26	Bidder should upload the OEM product with tender specification datasheets, OEM vetted compliance and authorization documents should be submitted along with the bid	

Signature & Seal of the authorised signatory (OEM)

Signature & Seal of Bidder

ITEM: PoE Network Switch [Pertaining to S.No 5 of BoQ]

MAKE:

MODEL:

S.No	Technical Specification	Compliance (Yes/No)
1	Switch with 24-PoE Port 10/100/1000Mbps with 4 Combo SFP Smart Switch	
2	Network Media SFP's 1000BaseSX,1000BaseLX,1000BaseTX	
3	Performance	
(a)	The Switch shall have Non-blocking wire speed switch fabric	
(b)	The Switch shall have Min. 56 Gbps Back plane or higher	
(c)	The Switch shall have Min. 41.7 million pps or higher	
(d)	The Switch shall support Min. 8K Mac address or higher	
(e)	The Switch shall support Min. 256 VLANs or higher	
(f)	The L2 Switch should have MTBF for 205,249 hours or higher	
(g)	The Switch Should support Jumbo Frame (Min. 9,216 Bytes) or higher	
4	Layer 2 Features	
(a)	The Switch should have IGMP Snooping v1,v2	
(b)	The Switch should have Spanning tree 802.1d	
(c)	The Switch should have 802.3ad Link Aggregation Min. 10 groups per device	
(d)	The Switch should have Port Mirroring One to one/Many to One	
(e)	The L2 Switch shall have power saving feature which can automatically powers down ports that have no link or link partner.	
(f)	The L2 Switch shall not consume more than 239 Watts of Power.	
(g)	The Switch should support PoE Standards IEEE 802.3af and IEEE 802.3at	
(h)	The Switch should support Power Budget Min.185 W. or higher	
5	VLAN	
(a)	The LAN switch shall have IEEE 802.1Q VLAN encapsulation. Up to 255 VLANs per switch.	
(b)	It shall have Management Vlan	
(c)	It shall have Asymmetric Vlan	
(d)	It shall have Auto Voice Vlan	
6	Quality of Service	
(a)	It shall support 802.1p Priority Queues (4 Queues)	
(b)	Queue Handling mode: WRR & Strict Mode	
(c)	Class of service shall be based on DSCP,802.1p queues	
7	Network Security	
(a)	The LAN switch shall support IEEE 802.1x to allow dynamic, port-based security up to 64 MAC Addresses per port, providing user authentication.	
(b)	It shall support DHCP Server Screening	
(c)	It shall have built in mechanism to protect the switch against traffic flooding caused by virus attack	
8	Management	
(a)	It shall support Firmware upgrade through Web Management or through software must come along with Switch to reduce the cost of administering software upgrades by downloading from a centralized location.	
(b)	It shall support Network Timing Protocol (NTP/SNTP) to provide an accurate and consistent timestamp to all intranet switches.	

S.No	Technical Specification	Compliance (Yes/No)
(c)	It shall support SNMPv1 to deliver comprehensive in-band management	
(d)	It shall support LLDP, LLDP-MED & Time based POE.	
9	Certification	
(a)	Switch should be CE,FCC,UL,VCCI, ERTL certified	
(b)	Switch should be functionally test and verified from ERTL and vendor need to present complete functional test report from ERTL.	
10	Bidder should upload the OEM product with tender specification datasheets, OEM vetted compliance and authorization documents should be submitted along with the bid	

Signature & Seal of the authorised signatory (OEM)

Signature & Seal of Bidder

ITEM: SFP Transceiver [Pertaining to S.No 6 of BoQ]

MAKE:

MODEL:

S.No	Technical Specification	Compliance Yes / No
1	DATA RANGE 10 Gbps (SFP+ LR)	
2	Reach: Min 10Km or Higher	
3	Fiber Type : Single	
4	Connector: Duplex LC, Hot Pluggable	
5	1000Base-LX	
6	Metal	
7	RoHS	
6	- 0°C to 70°C	
8	OEM should have direct & own service/repair centre in Tamilnadu and should have tech support in India	
9	All Switches & Transceiver should be from same OEM All Active components from Single OEM.	
10	Bidder should upload the OEM product with tender specification datasheets, OEM vetted compliance and authorization documents should be submitted along with the bid	

Signature & Seal of the authorised signatory (OEM)

Signature & Seal of Bidder

ITEM: UPS (uninterruptible power supply) [Pertaining to S.No 19 of BoQ]

MAKE:

MODEL:

S.No.	Parameter		Specifications	Compliance (Yes / No)
1		Rating	10KVA/10kw (3in-1out)/1In-1out	
2	System parameter	Technology	IGBT based Double conversion PWM based online UPS	
		Parallel mode	4 (N+1)	
		Installation mode	Rack/Tower	
3	Input	Rated voltage	400VAC 3-phase,4-wire	
		Voltage Range	176VAC -287VAC at full load, 100VAC to 287VAC at half load	
		Rated Frequency	50Hz/60Hz	
		Frequency Range	40Hz ~ 70Hz	
		Power factor	0.95 for Three Phase	
4	OUTPUT	Rated power	10KVA/10kw	
		Voltage	Single phase, 230VAC	
		Frequency synchronization range	Rated frequency±3Hz. Configurable range: ±0.5Hz ~ ±5Hz	
		Rated Power Factor	Unity	
		Crest Factor	3:1'	
		Voltage harmonic distortion	< 2% (linear load)	
		Voltage Regulation	1%	
		Dynamic response recovery time	60ms	
		Inverter Overload Capability on utility mode	At 25°C: 105% ~ 125%- 10min; 125% ~ 150%- 1min; 150%- more than 200ms	
		Programmable Outlet	Available	
5	Bypass	Split bypass	Yes	
		Static bypass	Inbuilt	
6	Efficiency	ECO Mode	99%	
		Online mode (AC-AC)	95.80%	
		Inverter Efficiency(DC-AC)	94%	
7	BATTERY	Type	LI-ION	
		Number of batteries	RACK type battery (48V/100Ah or 51.2V/100Ah)	
		Battery charging capacity	As required	
8	Transfer	Mains - Battery	0ms	

	Time	Inverter-Bypass	Synchronous transfer: ≤0ms Asynchronous transfer (default): ≤20ms	
9	Noise		<65db	
10	Panel display mode	Display type	Graphical LCD display	
		No of events stored	Max 256	
		Orientation	Gravity sense	
		Operating temperature	0°C ~ 50°C	
		Storage temperature	-40°C ~ +70°C (battery excluded); -25°C ~ +55°C (battery included)	

12	Mechanical parameter	Ventilation	Forced -air cooled	
		Ingress protection level	IP20	
		Color	Powder coated Black Texture finish	
		Cable entry	Rear	
13	Network Management	Smart RS232/USB	Supports Windows 2000/2003/XP/Vista/2008, Windows 7, Linux, unix and MAC	
		Webpage monitoring	Inbuilt for web monitoring	
		Remote alarm	Inbuilt	
11	Environmental parameter	Dry contacts	Inbuilt	
		Optional SNMP	Power management from SNMP manager and web browser	
		Management software	Site monitor	
		Modbus	Inbuilt via multifunction port	
14	Certifications	Safety (CE)	IEC/EN62040-1	
		Electromagnetic Compatibility(EMC)	IEC/EN62040-2, IEC/EN61000-3-11, IEC/EN61000-3-12	
		Surge Protection	IEC/EN62040-2, meeting IEC/EN61000-4-5	
		ROHS	Yes	
		Quality standard	IS 9001-2015	
		Environment standard	ISO 14001	
		OSHAS	ISO 45001	
		IT security management	ISO 27001	
15	Test report	NABL Approved Government lab test report	Should be submitted	
16	OEM Authorization		Bidder should upload the OEM product with tender specification datasheets, OEM vetted compliance and authorization documents should be submitted along with the bid	
		Relative humidity	5%RH ~ 95%RH, non-condensing	

Signature & Seal of the authorised signatory (OEM)

Signature & Seal of Bidder

ITEM: FIRE ALARM CONTROL PANEL (FACP) [Pertaining to S.No 27 of BoQ]

MAKE:

MODEL:

Parameter	Specifications	Compliance (Yes / No)
Description	Analogue Addressable Fire Detection & Alarm ControlPanel	
Minimum loop capacity ofpanel in case of future expansion.	4 loops monitoring capacity of 1000 Devices (The Enquiry BOQ indicates 290 Devices).	
Device capacity per loop	250 Device (Equivalent to Detectors) per Loop; Loop Length 3000 to 3500 m based on the core area of 0.5 sq.mm to 1 sq mm selected.	
Additional features	<ul style="list-style-type: none"> • Each loop card have minimum 2 loops • Each Loop Card to have Hot-Redundant duplicated Loop Circuitry. • Inbuilt-short circuit isolator. 	
Display	Panel with 240-character, Hot redundant Duplicated with DISPLAY CIRCUTRY LCD display with 2 programmable keys and LED notifications.	
Event logging memory capacity	Upto 65000 events storage capacity in Non-Volatile Memory.	
Networking Capability	<p>THE FACP HAS PROVISION TO ADD FUTURE NETWORK CARD HAVING PORT FOR DIRECTLY CONNECTING THE SINGLE / MULTIMODE OFC, AVOIDING ANY INTERMEDIARY LIKE LIU, MEDIA CONVERTER etc. This Provision Eliminates All Potential Fault Points Like Connections from OFC to LIU to Pigtail to Ethernet Switch etc. affecting the Seamless instant Transmission of Fire Detection Signal from Detector to the Panel and hence operationally Most Effective.</p>	
CPU card specifications	<ul style="list-style-type: none"> • CPU card shall be fixed component of supplied panel. • The module shall have full redundant constructionwith 100% hot standby CPU to ensure uninterrupted system availability. • All logical functional groups shall be present in duplicate. During any fault condition in the CPU alternate (Duplicate) Circuit in the same Unit shall continue to function in order to ensure uninterrupted Fire Occurrence Surveillance by the Panel. • Shall have USB interface for loading software andconfiguration data. • Shall have SD card slot for saving customer text andconfiguration parameters. 	<ul style="list-style-type: none"> •

Loop card specifications	<ul style="list-style-type: none"> • Modular type • Each panel shall have necessary number of loop cards to accommodate the Total Devices. + 20% Extra for Future Addition. • All loops shall have 100% hot redundant loop circuitry with duplicated functions. The module shall have 100% hot redundant functional blocks in duplicated construction. During any fault condition in the Loop Card alternate (Duplicate) Circuit in the same Unit shall continue to function in order to ensure uninterrupted Fire Occurrence Surveillance by the Panel • Loop wiring termination: Screw type terminals • Loop range: upto 3500 mtrs • In-built short circuit isolator • Each loop card will drive 250 devices (Equivalent to Detectors). 	
Confirming standards for all the above.	EN 54; Approval Test by Vds. Vds Certificate shall be submitted as Authentication.	
Approvals	VDS.	
Protection category	IP 30 (acc. to DIN 40050)	
Power supply	AC input: 110 to 230 VAC, 50 Hz	
Battery backup	<ul style="list-style-type: none"> • Shall have battery backup up to 72h during normal operation. 	
Wiring	2 core cable with minimum core size of 0.5mm ² .	
Cable entries	<ul style="list-style-type: none"> • Necessary cable entry provisions at Top, Bottom and Back side of panel. • The gland plate shall be of removable type 	
Operating condition	<p>Temperature: -5 to +50oC</p> <p>Humidity: 5% to 95% RH (non-condensing)</p>	

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ITEM: FIRE ALARM REPEATER PANEL (FARP) [Pertaining to S.No 28 of BoQ]

MAKE:

MODEL:

<i>Specifications</i>	<i>Compliance (Yes/No)</i>
Networking Capability: Either Panel Powered or operated with a Designated IP Address in the existing LAN IP Based	
Two Built-in Relays (1.5 amps) for any third Party Actuation like Gas Suppression System, Damper Closing etc. as required in future.	
Microprocessor-controlled and monitored system topology	
Software redundancy	
Continuous automatic test routines for all system components and software	
Confirming standards for all the above: EN 54; Approval Test by Vds. Vds Certificate shall be submitted as Authentication	
Approvals : VDS.	

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ITEM: FIRE ALARM DETECTORS [Pertaining to S.No 29 of BoQ]

MAKE:

MODEL:

<i>Specifications</i>	<i>Compliance (Yes/No)</i>
Detection type: Smoke & Heat (RoR+Fixed)	
Detection principle: Tyndall effect, NTC sensor Additional	
• features:	
❖ Temperature based evaluation of smoke	
❖ In-built isolator	
❖ Un-authorized detector removal detection	
❖ Adaptability with surrounding temperature fluctuations	
❖ Un-authorized detector removal detection	
❖ Alarm event recording with time stamp	
❖ Critical environment reporting	
❖ Independent alarm output provision	
❖ Built-in False Alarm Filtering provision as per EN54 based on 24 hour environment scanning.	
❖ Alarm indication: Red LED	
❖ Current consumption: Max. 120uA in idle, max. 10mA in operation.	
○ Approval: VDS approved detectors shall be provided	
❖ Operating condition:	
○ Temperature: -25 to +60oC	
○ Humidity: 10% to 95% RH (non- condensing	

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ITEM: IP Based PA Control Management Server & Intercom Server Software

[Pertaining to S.No 61 of BoQ]

MAKE:**MODEL:**

S.No.	Parameter	Compliance (Yes/ No)
1	Management Server should Rack-type & equipped with Min 15" to Max 22" 1920x1080 industrial-grade reinforced with 4-Wire touch screen	
2	CPU should : I5, Generation 6, Main Frequency: 3.2GHz, Four Cores and Four Threads	
3	RAM: 8GB (Expandable upto 32GB)	
4	Hard Disk: 240GB SSD	
5	Network Protocol : TCP/IP, UDP, HTTP/HTTPS, ARP, FTP	
6	Interface: 10/100Mbps RJ 45, HDMI, VGA, USB 2.0, Line Input, Line Output, MIC In, Trigger Input, DVI-D.	
7	Power Input: AC 200~240V/47-63 Hz/3.5A	
8	Operating Temperature & Humidity : -10°C ~ +55°C , ≤90% RH non-condensing	
9	It should Full control over broadcast system signals, areas, and terminal configuration	
10	It Should Equipped with emergency button and handheld microphone for urgent announcements	
11	It Should Supportive of controlling all IP based PA systems	
12	Creation and scheduling of timed events, alarm events, and customizable event combinations	
13	Management of broadcasting system through mobile app and user account management, including operation authority settings	
14	It Should Supports multiple real-time broadcast tasks using server sound card, files, terminals, and speech synthesis	
15	User-defined call transfer, answer, and call priority settings	
16	Upload functionality for audio files and pre-recorded messages to the media library	
17	Integration with third-party VOIP phones using SIP trunk for seamless VOIP system connection	
18	Call-log and event-log recording and inquiry features for efficient monitoring	
19	Standard HTTP API documentation to facilitate integration with other systems and third-party development	
20	Management Software should control minimum 1000 End points and can be expandable upto 3000 End points	
21	Software should support unlimited Zones.	
22	Software should need to have Web GUI for monitoring and configuration	
23	Software should support scheduled message & music playback option	
24	Software should support both public address system and intercom	
25	Software should support Table view, Grid View , Map view and Scene view for easy identification of end devices	
26	Software should support Scheduled tasks according to the event and timer	
27	Software should support multiparty conferencing	
28	Software should support SIP broadcasting	
29	Software should have the facility to integrate with server soundcard	
30	Software should also need the capability of monitoring the IP devices	

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ITEM: IP Based POE Horn Speaker-Outdoor [Pertaining to S.No 64 of BoQ]

MAKE:

MODEL:

S. No.	Specification	Compliance (Yes/ No)
1	The speaker should support a minimum of 1 Nos x 10/100 Base-T network port and should supporting IEEE 802.3af or 802.3at Power over Ethernet (PoE/PoE+)	
2	The speaker should support Ambient Noise detection	
3	It should have Automatic volume control based on ambient noise level	
4	The speaker should be IP66 rated	
5	The speaker should support Session Initiation Protocol (SIP) for audio announcement from any IP phone/VoIP system	
6	The speaker should be able to manage through Web GUI	
7	The speaker should have Maximum SPL 120dB	
8	The speaker should support Trigger functions to play message	
9	The speaker should have a minimum Sensitivity (1M,1W) - 109dB±3dB	
10	The speaker should support Audio compression - G.711a, G.711u, G.722	
11	The speaker should have Audio Transmission Sampling rate between 8KHz~44.1KHz	
12	The speaker should have Audio Transmission bit rate between 8kbps~320kbps	
13	The speaker should support Frequency Response between 280Hz~12.5kHz	
14	The speaker should support - HTTP, TCP/IP, UDP, IGMP,ICMP, ARP, SIP, ONVIF, IPv4, RTP	
15	The speaker should have Signal to Noise Ratio ≥85dB	
16	The speaker should support remote volume adjustment from a server software	
17	The mounting kit should come up with the speaker from day 1	
18	The speaker should have a maximum output power of 10W	
19	The speaker should have minimum Operating temperature between -30°C - +70°C (-4°F - +122°F)	
20	The speaker should have minimum Operating humidity <90% RH (no condensing)	
21	The speaker should be able to manage through Web GUI and Devconfig tool	
17	MAC Address of the OEM must be registered in the name of OEM;MAC Address Block registration certificate should be submitted	
18	OEM Should have Minimum 5 years direct presence in India proof for the same shall be submitted	
19	OEM Verified compliance and Tender specific OEM Authorization must be submitted as Mandatory	

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