TENDER FORM

प्लाज्मा अनुसंधान संस्थान

(भारत सरकार के परमाणु ऊर्जा विभाग का सहायता प्राप्त संस्थान) इंदीरा ब्रिज के पास, भाट, गांधीनगर - 382428, भारत द्रभाष: 079-23962020/23962021, फैक्स: 079-23962277

निमंत्रण निविदा और निविदाकारों को निर्देश करने के लिए Invitation to Tender and Instructions to Tenderers

The Purchase Officer, Institute for Plasma Research invites, online tenders IN **SINGLE PART** (INR QUOTE ONLY) for supply of stores as detailed in the Purchaser's Tender documents. The conditions of contract and instructions to tenderers which will govern the contract pursuant to tender are given below.

If you are in a position to quote for the supply in accordance with the requirements stated in the attached Tender Form please submit your quotation **online.** The quote should be in INR only.

Tender submitted by fax/cable/telegram or any mode other than online will NOT be considered at all and all such tenders will be rejected without any notice to the tenderer.

Yours faithfully,

Purchase Officer-II

For and on behalf of Director, IPR Institute for Plasma Research

Encl: as above.

INSTRUCTIONS FOR ONLINE SUBMISSION

- 1) It is mandatory for all the applicants to have **class-III digital signature certificate** from any of the licensed Certifying Applicant to participate in e-tendering.
- In order to participate in online e-tendering process, it is 2) mandatory for the applicants to have user ID & password to get access to the website www.tenderwizard.com/DAE. The applicants have to get registered their firm / company with the service provider, M/s ITI Limited for user ID & password. The registration shall be done by paying an annual registration fees to M/s ITI Limited and completing other formalities as mentioned in the www.tenderwizard.com/DAE. Validity of online registration is for one year from the date of its issuance and may be renewed by paying the applicable amount. assistance/clarifications please contact Mr. Sunil K Patel at mobile twhelpdesk426@gmail.com 09624981992, e-mail: nodalofficer.et@ipr.res.in or All India Help line No: 91-80-40482000/18004255048, e-mail: daehelpdesk@tenderwizard.co.in.
- 3) The applicants, who have already obtained such valid user ID and password from M/s ITI Limited, for any other tender of DAE, need not obtain fresh user ID and password for the purpose of participation in the present tender.
- The services for e-tendering in IPR/DAE is provided by M/s ITI 4) Ltd., Tender wizard Help Desk Centre, # 24, 1st Floor, Sudha Complex, Circle, Havanoor 3rd Stage, 4th Near Block, Basaveshwaranagar, Bangalore 560079, Ph:91-80-40482000/18004255048, 91-80-40482114, Telefax: Email: daehelpdesk@tenderwizard.co.in.
- 5) The quotations shall be submitted online in the prescribed format before the date and time as mentioned in tender document. No other mode of submission is acceptable.
- 6) On successful e-payment of tender processing fees, the applicants can download the tender documents (including Excel sheets, if any) from the e-tendering portal.
- 7) Submission of the offer document after the due date and time shall not be permitted. Time being displayed on e-Tendering portal shall be final and binding on the applicant.
- 8) Applicants are advised to submit their documents well before the due date. IPR shall not be responsible for any delay in submission of documents for any reason including server and technical problems.
- 9) Applicants are advised to fill all the mandatory fields (coloured cells) of the excel files of the Tender. If applicant keeps any mandatory cell blank, System will not allow to close/save the file.
- 10) In case of any problem with the submission of the offer documents, the applicant may have the assistance of helpdesk or use the help manual given on the said website or mobile and e-mail mentioned elsewhere.

प्लाज़मा अनुसंधान संस्थान

इंदीरा ब्रिज के पास, भाट, गांधीनगर - 382428

गुजरात राज्य

दूरभाष: 079 23962020, 23962021

फैक्स: 079 23962277

INSTITUTE FOR PLASMA RESEARCH

NEAR INDIRA BRIDGE, BHAT, GANDHINAGAR 382 428 GUJARAT STATE

Phone: 079 23962020, 23962021

Fax: 079 23962277

निविदा सूचना TENDER NOTICE NO: IPR/TN/PUR/ET/18-19/41 दिनांकित DATED 8-12-2018

निम्नलिखित के लिए प्रतिष्ठित और योग्य पार्टियों से ई-टेंडरिंग मोड के माध्यम से सिंगल पार्ट में ऑनलाइन निविदा आमंत्रित की जाती है।

Online tender is invited in **SIGNLE PART** through e-tendering mode from reputed and eligible parties for the following.

मद का विवरण Item Description	Supply, installation, commissioning and testing of integrated fiber optic based SST-1 Local Area Network (LAN) System as per the specification mentioned in the tender document.
निविदा प्रक्रिया शुल्क Tender Processing Fee	Tender Processing Fee of Rs.2,950.00 should be paid through electronic mode to M/s ITI Limited.
बयाना राशि जमा EMD	Rs.1,10,000.00 (Copy of Demand Draft to be uploaded with the quotation, Original DD should be sent to IPR on or before the specified closing date and time)
निविदा दस्तावेज वेबसाइट पर देखने और	09.00 hrs. on 9-12-2018 to 12.55 hrs. on 16-1-2019
डाउनलोड करने के लिए उपलब्ध है	
Tender document available for view and downloading on website	
निविदा दस्तावेज़ के संबंध में स्पष्टीकरण	09.00 hrs. on 9-12-2018 to 16.00 hrs. on 28-12-2018
Clarifications regarding Tender document	
निविदा ऑनलाइन जमा करने की अंतिम	16-1-2019 at 13.00 hrs.
तिथि	
Closing of online submission of tenders	
निविदा के ऑनलाइन खोलने का समय और	16-1-2019 at 15.30 hrs.
तिथि	
Time and Date of online Opening of Tender	

आवेदक <u>www.tenderwizard.com/DAE</u> वेबसाइट पर <u>28-12-2018</u> (16:00 बजे तक) तारीख तक अपने संदेह अपलोड करके निविदा दस्तावेज के संबंध में स्पष्टीकरण (बोली से पहले) प्राप्त कर सकता है। स्पष्टीकरण उसी वेब पोर्टल www.tenderwizard.com/DAE पर **3-1-2019** (17:30 बजे) तक अपलोड किए जाएंगे।

The applicant can seek clarifications (pre-bid) regarding the tender document up to 28-12-2019 (16:00 Hrs) by uploading their queries on website www.tenderwizard.com/DAE . The clarifications will be uploaded on the same web portal www.tenderwizard.com/DAE by 3-1-2019 (17:30 Hrs).

विस्तृत निविदा सूचना,योग्यता मानदंड और निविदा दस्तावेज के साथ वेबसाइट www.tenderwizard.com/DAE पर नि:शुल्क देखने और डाउनलोड करने के लिए उपलब्ध है। ई-निविदा प्रक्रिया में भाग लेने के लिए, उपर्युक्त ई-निविदा पोर्टल पर रजिस्टर करना अनिवार्य है और डिजिटल हस्ताक्षर प्रमाणपत्र (श्रेणी-III) होना आवश्यक है। बोलीदाता नए रजिस्टरेशन/टेन्डिरंग में सहायता के लिए पऊवि हेल्पडेस्क से daehelpdesk@tenderwizard.co.in पर संपर्क कर सकते हैं, फोन नंबर:(80)-40482000/ 9624981992/18004255048

Detailed tender notice along with Eligibility criteria and Tender Document is available on website **www.tenderwizard.com/DAE** for free view and downloading. For participating in the e-tendering process, it is mandatory to get registered on the above e-tender portal and required to have Digital Signature Certificate (Class -III). For new registration/tendering help, bidders may contact DAE Helpdesk at daehelpdesk@tenderwizard.co.in Phone No: (80)-40482000/9624981992/18004255048

इस निविदा सूचना की एक प्रति संस्थान की वेबसाइट www.ipr.res.in//purchasetenders.html पर भी उपलब्ध है। अधिक जानकारी के लिए, कृपया संपर्क करें: 079 23962020/2021, फ़ैक्स: 079 23962277।

A copy of this tender notice is also available on the Institute's website **www.ipr.res.in//purchasetenders.html**. For further information, please contact: 079 23962020/2021, Fax: 079 23962277.

Form No: IPR-LP-ET-03.V2

SINGLE-PART TENDER SECTION – A

Invitation to Tender and Tendering Conditions

1.0 INVITATION TO TENDER

1.1 Institute for Plasma Research (IPR) invites online tenders for supply of Plant, Machinery, Equipment/Components to the specifications detailed in Section "C" to this tender document. The conditions of contract/purchase order which will govern the contract pursuant to the tender are as contained in Section "B" of this tender document. If you are in a position to quote for supply in accordance with the technical specifications indicated in Section "C" to this tender document and as per the conditions stipulated in this Section and Section B, please upload your offer in a manner and method specified below.

2.0 MANNER AND METHOD FOR SUBMISSION OF TENDERS

- 2.1 All tenderers in response to this invitation shall be submitted through online mode only. Tender submitted by fax/cable/telegram or any mode other than online will NOT be considered at all and all such tenders will be rejected without any notice to the tenderer.
- 2.2 Proof for fulfillment of eligibility criteria mentioned in Annexure-A should be uploaded along with the tender. If the tender is submitted without valid documents, we shall not consider your offer. Tenders received without proof of eligibility criteria will be rejected. The offers which meets the eligibility criteria will only be considered for evaluation.

3.0 EARNEST MONEY DEPOSIT (EMD)

- 3.1 The Tenderer shall submit, as part of its bid, interest free Earnest Money Deposit (EMD) for an amount as specified in the Tender Notice. In the case of foreign bidders, the EMD shall be submitted either by the principal or by the Indian agent and in the case of indigenous bidders; the EMD shall be submitted by the manufacturer or their specifically authorized dealer/bidder. EMD shall be submitted by way of Demand Draft from SBI/nationalized banks or any one of the scheduled banks mentioned in the bracket (Axis Bank, HDFC Bank, ICICI Bank and IDBI Bank) issued in favour of "Institute for Plasma Research" and payable at Ahmedabad. Tender received without EMD will be rejected at the discretion of IPR.
 - (Copy of Demand Draft to be uploaded with the quotation, Original DD should be sent to IPR on or before the specified closing date and time)
- 3.2 The EMD of unsuccessful Tenderer will be discharged/returned after finalizing award of the Contract/placement of Purchase order.
- 3.3 The successful Tenderers EMD shall be discharged upon the Bidder submitting the Security Deposit as specified in the contract/purchase order, without any interest.
- 3.4 **Exemption from payment of EMD:** The firms registered with NSIC, DPS or Micro & Small Enterprises (MSEs) which are actual

producers/manufacturers of tendered items are exempted from payment of EMD provided valid registration certificate is uploaded along with the offer. In the case of foreign bidders, payment of EMD is exempted if they submit their bid directly or through their Indian agent in **foreign currency** against the tender document bought by them, so that the order can be placed directly on their Principals.

3.5 The EMD may be forfeited:

- 3.5.1 If a Tenderer withdraws or amends or modifies or impairs or derogates its bid during the period of bid validity specified by the Bidder on the Bid Form; or
- 3.5.2 In case of a successful tenderer, if the tenderer fails to furnish order acceptance within 15 days of the order or fails to submit the Security Deposit within 21 days from the date of contract/order.

4.0 LATE/DELAYED TENDERS

4.1 Uploading of the offer document after the due date and time shall not be permitted. Time being displayed on e-Tendering portal shall be final and binding on the applicant.

5.0 OPENING OF TENDERS

- 5.1 Unless otherwise pre-opened or postponed with advance intimation to the tenderers, tender will be opened on the date and time indicated on e-Tendering portal.
- 5.2 While all the tenderers who uploaded tenders within the due date and time will be permitted to participate in the opening of the tender on the due date and time indicated on e-Tendering portal.

6.0 AUTHORITY LETTER

- 6.1 The tenderers who wish to participate in the opening of the tenders may depute their representatives to IPR on the respective due date and time as indicated in the tender notice with an authority letter addressed to the Purchase Officer which should be produced to the officers who are opening the tenders, on demand to prove the bonafides of the representative who participates in the opening of the tender. In case the representative of the tenderer fails to produce such an authority letter on behalf of the tenderer, he will be debarred from participating in the opening of the tenders.
- 6.2 The tenderers representative, who reaches the venue of the tender opening late, i.e. after the starting time specified for opening of the tenders, may not be allowed to take part in the tender opening. It should be noted that only one representative of each tenderer will be permitted to participate in the tender opening.

7.0 EVALUATION OF TENDER

7.1 Evaluation of tender shall be based on all inclusive landed cost.

8.0 PURCHASER'S RIGHTS TO REJECT QUOTATION

8.1 The Purchaser reserves the right to reject any quotation without assigning any reason thereof.

9.0 TECHNICAL CLARIFICATIONS

9.1 After opening the tender, if it becomes necessary for IPR to seek

clarifications from the tenderers, the same will be sought for from the tenderers.

10.0 HOLIDAYS

If the date (s) specified for receipt and opening of the tenders is/are declared as holidays abruptly by the competent authority due to any administrative reasons, then the date(s) for opening of tenders will get postponed automatically to the next working day. As for instance, if the due date for receipt of tender and its opening falls on 3rd of a particular month and if the 3rd day of the month is declared as a holiday, then the opening date of tender will stand automatically postponed to 4th day of the month at the same time. However, due date for submission of tender online will remain same as mentioned in the tender notice.

11.0 VALIDITY OF OFFERS

Offers shall be kept valid for acceptance for a period of 120 (One hundred twenty) days from the date of opening of the tender. Offers with shorter validity period will be liable for rejection.

12.0 CATALOGUES/TECHNICAL LITERATURE

Vendor shall upload all necessary catalogues/drawings technical literature data as are considered essential for full and correct evaluation of the offers shall invariably accompany the tender. The quotations are liable to be ignored if this condition is not complied with.

13.0 TERMS AND CONDITIONS OF THE CONTRACT

It must be clearly understood that any contract concluded pursuant to this invitation to tender shall be governed by the General Conditions of the Contract as contained in Section "B" of this tender document. Tenderers must therefore, take special care to go through these general conditions of contract and in exceptional cases if any deviations are proposed, these must be clearly indicated in the tender as a separate annexure instead of merely enclosing their printed conditions of Sale. Tenders made subject to counter conditions or far too many deviations from the general conditions of contract, i.e. Section "B" of this tender document are liable to be ignored. It should also be realised that failure to bring out deviations from the General Conditions of Contract contained in Section "B" of this tender document will imply that the tenderer is willing to execute the contract as per the Purchaser's terms and conditions of contract.

14.0 TENDERING CONDITIONS FOR BIDS

- 14.1 The prices quoted must be FIRM and preference will be given to such tenders. In exceptional cases (e.g. items involving substantial use of raw materials susceptible to sharp fluctuations in prices) if prices quoted subject to variation it shall be on the basis of a standard 'Price Variation Formula'. The basis for calculation shall be very clearly stated. The responsibility for furnishing the documentary evidence for price variation lies with the vendor. Here again preference will be given to the tenders with a specific ceiling on escalation.
- 14.2 Prices quoted by the tenderer should include all charges involved for direct and safe-delivery of the stores to the consignee/place of delivery indicated in the tender document. If a tenderer so desires, separate lump sum charges for safe-delivery of the stores to the

- consignee/purchaser's site, could be furnished. However, the purchaser reserves the right to call for break-up. The purchaser will neither undertake responsibility for transit insurance nor pay for it separately.
- 14.3 In respect of tenders on Ex-works basis, in case the tenderer has not mentioned in the offer packing, forwarding and transportation charges for safe delivery up to Purchaser's site, 2% of the price quoted towards packing (in respect of both local and outstation firms), 1% of the basic price quoted towards safe delivery charges in respect of local tenderer and 3% of the basic price quoted towards safe delivery charges in respect of outstation firm will be added for comparison of offers on safe door delivery at Purchaser's site.
- 14.4 The stores shall neither be despatched under 'owner's risk' nor consigned to 'self', but only to the consignee's name and address indicated in the Purchase order. Non-adherence to this condition shall make the contractor liable to bear all consequential penalties/expenses such as demurrage, wharf age, etc. which the Purchaser may incur.
- 14.5 The consignee will, as soon as possible, but not later than 45 days from the date of arrival of stores at destination notify the contractor of any loss or damage to the stores that may have occurred during transit to enable the contractor to repair/rectify the defects/damages or replace the goods as is appropriate, free of all charges. In case it is desired by the contractor for returning of the material to them all expenses towards transportation etc. will be borne by the supplier and also will furnish bank guarantee towards the cost of material.
- 15.6 In case an Indian supplier/Agent furnishes an offer for supply of outrightly imported stores, the price of such stores shall be quoted in Indian Rupees for delivery to the consignee's premises exclusive of import duties and on firm price basis.
- 14.6 **Conditional Discount:** In case the tenderer offers any conditional discount with regard to acceptance of their offer within a specific payment terms, delivery, quantity etc. the purchaser will not take into consideration such conditional discount while evaluating their offer.

15.0 SPARES AND ACCESSORIES

- 15.1 Tenders for plant/machinery/equipment/component shall also indicate prices for essential accessories, optional accessories and spares necessary for satisfactory operation of the plant/machinery/equipment.
- 15.1.1 for a period of two years and
- 15.1.2 for a period of five years
- 15.2 Prices for accessories and spares shall be itemized. Tenders where only lumpsum prices are indicated are liable to be ignored. Particular care must be taken to list out each item of spare and quantity recommended and also the individual price for these items.

16.0 QUANTITY

The purchaser reserves the right to accept tenders for any quantity of his choice and the tenderer shall be bound to accept a contract for any quantity. The Purchaser also reserves the right to accept or reject lowest or any tender in full or in part without assigning any reasons.

17.0 STATUTORY LEVIES SUCH AS CUSTOMS DUTY, GOODS AND SERVICE TAX

17.1 **CUSTOMS DUTY**

- 17.1.1 The Purchaser is entitled for assessment of customs duty at the concessional rate as per Customs Notification No. 51/96-Custom dated 23.7.1996 issued by the Department of Revenue, Ministry of Finance, as amended from time to time, in respect of purchases made for the Research Institutions under the Department of Atomic Energy and the Purchaser will obtain the requisite certificate from the appropriate authority.
- 17.1.2 In case an Indian vendor/agent submits an offer for supply of outrightly imported stores in Indian Rupees, they should quote price for free and safe delivery of stores at destination.
- 17.1.3 Wherever, against a requirement, both indigenous as well as imported offers are received, the offers for imported stores will be evaluated on the basis of the total landed cost after loading the custom duty and other levies as may be applicable from time to time for taking purchase decision.
- 17.1.4 High Seas sale will not be considered.

17.2 FLUCTUATION IN CUSTOMS DUTY

- 18.2.1 Unless otherwise specifically agreed to in terms of the Contract, the purchaser shall not be liable for any claim on account of fresh imposition and /or increase in Customs Duty on raw materials and/or components used directly in the manufacture of the contracted stores, taking place during the pendency of the contract.
- 17.3 Offers from Indian Agents on behalf of foreign suppliers: In case the tender is submitted by an Indian supplier/Indian agent on behalf of their foreign supplier/ principals, following documents should be submitted with the tender, failing which, their offer is liable to be ignored.
- 17.3.1 Photocopy of the Agency Agreement between the Principals and the Indian Agent showing the percentage or the quantum of agency commission payable and a Letter of Authority from the Principals authorizing the Indian Agents to submit the tender on their behalf.
- 17.3.2 The type and nature of after sales services to be rendered by the Indian Agent.
- 17.3.3 Both Indian Agent and Principal/OEM cannot bid simultaneously for the same item/product in the same tender.
- 17.3.4 The Indian Agents are allowed to quote on behalf of only one foreign Principal/ Supplier against this tender.

17.4 **GOODS AND SERVICE TAX**

- 17.4.1 GOODS AND SERVICE TAX where legally leviable as per relevant HSN code will be admitted and reimbursed at the rate applicable during original delivery date.
- 17.4.2 GOODS AND SERVICE TAX intended to be claimed should be distinctly shown separately along with the price quoted. Where this is not done, no claim for GOODS AND SERVICE TAX will be admitted at any later stage and on any ground whatsoever.
- 17.4.3 The Purchaser is entitled for assessment of GST at the Concessional rate as per Notifications issued by the Government, as amended from time to time, in respect of purchases made for the Research and Development applications under the Department of Atomic Energy and other R&D units.
- 17.4.4 **GST for R&D Unit:** Goods and Service Tax (GST) wherever

applicable will be paid extra at actual during the delivery period stipulated in the Purchase order. In terms of notifications issued by the Central Government and Statement Governments, R&D units of Department of Atomic Energy are entitled for IGST @ 5% or CGST @ 2.5% and SGST @ 2.5% as applicable for stores covered under the Purchase Order.

- 17.4.5 **GST for Services:** As applicable. Specify the SAC codes wherever services are involved.
- 17.4.6 It would be the responsibility of the contractor to ensure that relevant certificate is obtained from the Purchaser before effecting the delivery of goods ordered failing which the excess tax paid by the contractor shall not be reimbursed by the Purchaser.
- 17.4.7 When GOODS AND SERVICE TAX is claimed as extra by the vendor in general and on packing charges in particular, the following certificates should be submitted by the vendor to the Paying Authority on the bills itself.
- 17.4.8 Certified that the goods and packing charges on which GOODS AND SERVICE TAX has been charged have not been exempted under the Central Sales Tax or the State Sales Tax Act or the rules made there-under and the amount charged on account of GST on these goods and packing charges are not more than what is payable under the provision of relevant Act or the rules there-under.
- 17.4.9 Certified further that we have actually paid GOODS AND SERVICE TAX and are being assessed to GST on packing charges and also that where there are statutory exemption under the Relevant Act/Law of the State Government concerned, we have availed ourselves of it and certified non-availability of such a provision for GST on packing charges wherever claimed.
- 17.4.10 Certified further in respect of amount claimed into the bill no claim is pending for refund/or admissible. Certified that in the event of our getting refund in whole or in part of the element of GOODS AND SERVICE TAX on packing charges claimed from Government, we shall pass on the benefit to the Purchaser by remitting to Government the amount equivalent to the amount of refund obtained by us.
- 17.4.11 Further certififed that we abide by the all the provisions of Acts of Government and rules made thereunder especially regarding antiprofiteering provisions.
- 17.4.12 Certified further that we (our Branch or agent)

(address) are registered as dealers in the	State	of			
under Local Regn. No			the	State	of
under Central Regn. No				for 1	the
purpose of State/Central Tax.					

(Stamp & Signature of the Vendor)

- 17.4.13 The vendor shall solely be responsible for declaration of Goods and Service Tax made in his invoice and shall indemnify the purchaser from any claim or its liability from concerned authorities at any stage.
- 17.4.14 Certificate with each bill to the effect that no refund has been obtained in respect of the reimbursement of GST made to vendor during three months immediately preceding the date of the claim covered by the relevant bill.

- 17.4.15 AN UNDERTAKING to the effect that in case any refund of GST is granted to the vendor by concerned authorities in respect of stores supplied under the contract, they shall pass on the credit to the purchaser immediately alongwith a certificate from their Director/Manager/Proprietor/ Accountant to the effect that the credit so passed on relates to the GST originally paid for the stores supplied under the contract. In case of their failure to do so within 10 days of the issue of the refund orders to them by the Authorites, the purchaser would be empowered to deduct a sum equivalent to the amount refunded by the authorities without any further reference to the vendor, from any of their outstanding bills against this or any other pending Government Contracts and that no dispute on this account would be raised by the vendor.
- 17.4.16 Statutory Deductions, as applicable shall be made from the supplier's bill.

17.5 **DEDUCTION OF TAX AT SOURCE (TDS)**

As per Government of India rules, it is mandatory that income tax shall be deducted at source at applicable rates as per relevant act, rules and notifications issued by the government from time to time.

- 17.5.1 **In case of Indigenous Vendors** (Indian Suppliers who provide indigenous products and services, Indian subsidiaries with permanent establishment in India who supply imported goods and services and paid in Indian currency only): Tax deducted at source will be applicable under Section 194-C for carrying out any work (including supply of labour for carrying out any work) in pursuance of contract as per Income Tax Act 1961. In case of technical or professional services, TDS will be applicable as per under Section 194-J of Income Tax Act 1961.
- 17.5.2 **In case of Foreign Vendors** (Foreign Suppliers who provide goods from abroad paid in foreign currency and providing technical services by Indian subsidiary paid in Indian currency): The TDS is applicable where services are rendered in India directly or through their Indian counter part against foreign Purchase order / Contract as per the provision of under Section 195 of Income Tax act of India. Wherever DTAA (Double Taxation Avoidance Agreement) agreement exists between India and the supplier country the provisions of the agreement shall be applicable. For getting benefit of DTAA (Double Taxation Avoidance Agreement), the following documents must be submitted, otherwise full TDS will be deducted.
 - a) No Permanent Establishment in India certificate
 - b) Tax Residency Certificate (TRC) issued by Tax authorities of their country
 - c) Form 10F if TRC does not contain required details
 - d) PAN (Permanent Account Number) details issued by Indian Income Tax Authority

Important Note:

- a) Where bifurcation is inappropriate and unacceptable for supply of material and providing services the purchase order / contract will be treated as *Composite Contract* and TDS will be deducted on whole contract / purchase order value as per applicable rate.
- b) TDS or any other leviable taxes or duties, if applicable, shall be deducted recovered from the Supplier's bill and necessary certificate will be issued to the supplier.
- c) Details on relevant sections of Income Tax Act and DTAA treaties can be obtained from https://www.incometaxindia.gov.in/ Pages/acts/ income-tax-act.aspx.

18.0 FLUCTUATION IN STATUTORY LEVIES

Unless otherwise specifically agreed to in terms of the Contract, the purchaser shall not be liable for any claim on account of fresh imposition and/or increase in statutory levies on raw materials and/or components used directly in the manufacture of the contracted stores, taking place during the pendency of the contract. However, any reduction in statutory levies on these raw materials and/or components must be passed on to the Purchaser.

19.0 **SAMPLES/PROTOTYPES**

If any called for shall be submitted free of all charges by the Tenderer and the Purchaser shall not be responsible for any loss or damage thereof for any reason whatsoever. In the event of non-acceptance of the tender, the tenderer will have to make arrangements to remove/collect the sample/prototypes at his own expenses.

20.0 **OUANTITIES**

Quantities indicated are approximate only and one or more of the items of the stores tendered, or a portion of any one or more of the items of such stores may be accepted and the tenderer notwithstanding that his Tender has not been accepted in whole shall be bound to supply contracted quantity to the Purchaser.

21.0 SUBMISSION OF DRAWINGS

The tenderer shall furnish all drawings pertaining to the plant/machinery/ equipment/component to the Purchaser along with the tender for correct understanding and appreciation of the tender in quadruplicate. Besides, tenderers should also furnish general arrangement, schematic and such other drawings prescribed by the Purchaser within 4 weeks from the date of receipt of LOI/Purchase Order for approval. Such drawings should be furnished along with the tender. Tenderer's drawing will form part of the purchase order/contract only after these are approved by the Purchaser.

22.0 INSTALLATION AND COMMISSIONING

22.1 Wherever, the purchaser's invitation to tender calls for installation and commissioning or supervision of installation and commissioning of the instrument/equipment by the tenderer, the tenderer must clearly and separately quote the prices for the supply of the stores and the charges and the terms for installation and commissioning or supervision of installation and commissioning, as the case may be. The charges

- towards installation and commissioning should not be included in the price of the stores.
- 22.2 In respect of contracts involving installation and commissioning by vendors including overseas vendors where identifiable charges for the same has been quoted by the vendor, he shall bear the Income-tax liability as per the rates prevailing at the time of undertaking the job in accordance with the Income-tax Act in force in India.
- 22.3 Wherever, the scope of the contract includes installation and commissioning, it shall be the sole responsibility of the contractor to undertake the installation and commissioning as and when called for, by the Purchaser.

23.0 **INSPECTION**

- 23.1 The Contractor shall be responsible for and perform all inspection and testing required in accordance with the contract/purchase order and specifications included therewith.
- 23.2 The Purchaser may at his option depute his representative for inspection of the stores to be supplied under the contract or authorize and nominate a Quality Surveillance Agency of his choice for the purpose hereinafter called, in either case, the inspection.
- 23.3 The supplier shall give notice of readiness for inspection to the Purchaser so that the Inspector can be present at the requisite time. In such an event delivery shall not be effected until an authorization or shipping release is obtained from the Purchaser.
- 23.4 The contractor shall allow reasonable facility and free access to his work/factory and records to the inspector for the purpose of inspection or for ascertaining the progress of delivery under the contract.

24.0 FACTORY REGISTRATION/SHOP & ESTABLISHMENT CERTIFICATE

The tenderers shall upload the copy of the Factory Registration/License or Shop & Establishment Certificate as applicable, along with the tender, failing which the tenders are liable for rejection.

25.0 **PRODUCTS WITH ISI MARK**

- 25.1 Products with ISI mark will be preferred.
- 25.2 In respect of following categories of item, Purchaser will consider offers for products with ISI mark only:
 - Fire Extinguisher
 - Building Material
 - PVC Pipes & fittings
 - Agricultural Implements & sprayers
 - Medical instruments such as syringes, needles, BP apparatus etc.

26.0 SHOP/FACTORY EVALUATION, QUALITY SURVEILLANCE /INSPECTION AND SUBMISSION OF PROGRESS REPORTS

26.1 The Purchaser or his technical authorities may at his option and prior to evaluation of the tender depute his Inspector or any quality surveillance Agency of his choice to the factory/workshop of the tenderer to assess and establish the manufacturing capability etc. of the tenderer. Similarly, the Purchaser may also depute his inspector/Quality Surveillance agency of his choice for inspection of the plant/machinery/equipment/component

during the various stages of manufacture in such an event the tenderer/contractor shall:-

- 26.1.1 Allow reasonable facility and free access to his factory/work/ records to the Inspector for the purpose of inspection or for ascertaining the progress of manufacture and delivery.
- 26.1.2 Provide the drawings, toolings, gauges, instruments etc. required for carrying out the inspection work.
- 26.1.3 Produce an inspection plan to the Purchaser's satisfaction notifying him when check points on the plan are imminent.
- 26.1.4 Not supply or deliver the plant/machinery/equipment/component unless and until a Shipping Release or an authorisation for despatch is obtained in a format provided by the Purchaser. Failure to comply with this instruction will not only result in with holding of the payment to the contractor/supplier, but also hold the tenderer/contractor liable for payment of compensation to the Purchaser due to delay in clearance of the Equipment/plant/machinery/component from the carriers.

27.0 INSTRUCTION MANUAL

In respect of plant/ machinery/ equipment/ instrument/ apparatus, where instruction/ operation manual is normally necessary to enable the user to put the plant/machinery/equipment/instrument/ apparatus to proper use, the Contractor shall furnish such an instruction/operation manual specific to the stores being supplied along with the plant/machinery/equipment/instrument/apparatus. The Contractor shall clearly specify in the offer about his readiness to supply instruction/operation manual

28.0 **PACKING**

- 28.1 Tenderers shall note that packing for shipment shall be in accordance with the instructions outlined in this tender document, each package shall be limited to the size and weights that are permissible under the existing Air and Sea limitations. Even when no packing specification is included in the invitation to tender, it will be Supplier's responsibility to provide appropriate packing depending upon the nature of the supply and the transportation and handling hazards.
- 28.2 The equipment shall be so packed and protected as not to suffer deterioration, damage or breakage during shipment and storage in a tropical climate.
- 28.3 Each package shall be properly labeled to indicate the type and quantity of material it contains, the purchase order number, its dimensions and weight and any other necessary data to identify the equipment and relate it to contract.

29.0 DEVIATIONS TO PURCHASER'S SPECIFICATIONS AND CONDITIONS OF CONTRACT

29.1 If any deviation or substitution from the technical specifications contained in Section "C" to this tender document is involved, such details should be clearly indicated and should be added as an annexure to the tender as otherwise it shall be an admission on the part of the tenderer that he will supply the equipment as specified by the Purchaser. Similarly, deviations to the

Purchaser's General Conditions of Contract/Special Conditions of Contract contained in Section "B" of this tender document shall be indicated by the tenderer in another annexure to the tenderer.

29.2 Price should be furnished in accordance with the format provided by the Purchaser at Section "D" of this tender document.

30.0 **DELIVERY**

Tenderer should note that no tender will be considered by the Purchaser unless the Tenderer can meet the delivery schedule specified by the Purchaser. All equipments/machinery/plant/ component covered by this tender document should be supplied on or before _____ or ___ month from the date of approval of drawings or ____ month from the date of receipt of free issue materials. The prices quoted by the tenderer should include all charges involved for direct and safe delivery of the items by Road to the project site of the Purchaser. If a tenderer so desires/separate lumpsum charges for transportation and safe delivery to Purchaser's site could be furnished. Purchaser will neither undertake responsibility for transit insurance nor pay for it separately. No other, delivery term will be accepted by the Purchaser.

31.0 ACCEPTANCE OF TENDERS

- 31.1 The purchaser shall be under no obligation to accept the lowest or any other tender and shall be entitled to accept or reject any tender in part or full without assigning any reasons whatsoever.
- 31.2 Acceptance of tenders by the Purchaser will be sent by fax, E-mail, letter etc. within the validity date of the tender and such a fax, letter etc. would then be followed by a formal purchase order/contract. The tenderer whose offer is accepted will proceed with the execution of the contract on the basis of such advance acceptance of tenders without waiting for a formal purchase order/contract, and will be responsible to seek and obtain whatever clarifications that are necessary from the Purchaser to proceed with the manufacture without waiting for a formal purchase order/contract and delivery period will be reckoned from the date of the Letter of Intent.

32.0 SETTLEMENT OF COMMERCIAL TERMS AND CONDITIONS OF CONTRACT

In case the commercial terms and conditions of sale/contract stipulated in the tender submitted by the tenderer are at variance with the Purchaser's General Conditions of all Contracts/Special Conditions of Contract stipulated in Section "B" of this tender document, the Purchase Officer will settle the commercial terms and conditions of contract with the tenderers chosen for award of the contract by holding discussions with them OR by sending Fax/Letter/E-mail etc. In case the concerned tenderer to whom an intimation thereof is given does not respond/fail to respond to communication sent by the Purchaser within the date specified, his tender is liable for rejection at the discretion of Director, IPR and no complaints whatsoever will be entertained from the tenderer for rejection of this tender. The tenderers should not discuss with the technical authorities/user department any of the commercial terms and conditions of contract and any agreement/understanding

reached between the tenderer and the technical authorities will not be valid and binding.

33.0 COMPLIANCE WITH THE SECURITY REQUIREMENTS OF THE PURCHASER

The Contractor shall strictly comply with the Security Rules and Regulations of the Purchaser in force and shall complete the required formalities including verification from Police and any other authority and obtain necessary prior permission for entry into the Purchasers premises, wherever authorized by the Purchaser.

34.0 PAST PERFORMANCE

In case the past performance of the tenderer is not found to be satisfactory with regard to quality, delivery, warranty obligation and non-fulfillment of terms and conditions of the contract, their offer is liable to be rejected by the purchaser.

35.0 CAPACITY & FINANCIAL STANDING

In case it is found that the tenderer does not possess the requisite infrastructure, capacity, capability and their financial standing is not satisfactory, such tender is liable to be rejected by the Purchaser.

36.0 **CONFIDENTIALITY**

Drawings, specifications, prototypes, samples or any other correspondence/details/information provided by the Purchaser relating to the tender or the contract shall be kept confidential by the contractor, and should not be disclosed or passed on to any other person/firm without the prior written consent of the purchaser. This clause shall apply to the sub-contractors, consultants, advisers or the employees engaged by the Contractor.

37.0 RESTRICTED INFORMATION CATEGORIES UNDER SECTION 18 OF THE ATOMIC ENERGY ACT, 1962 AND OFFICIAL SECRETS UNDER SECTION 5 OF THE OFFICIAL SECRETS ACT, 1923

Any contravention of the above mentioned provisions by the contractor, sub-contractor, consultant, adviser or the employees of the contractor will invite penal consequences under the aforesaid legislation.

38.0 PROHIBITION AGAINST USE OF THE NAME OF ANY INSTITUTION OF DEPARTMENT OF ATOMIC ENERGY WITHOUT PERMISSION FOR PUBLICITY PURPOSES

The Contractor or sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use the name of any Institution of Department of Atomic Energy for any publicity purpose through any public media like Press, Radio, TV or Internet without the prior written approval of the Purchaser.

- 39.0 **FREE ISSUE MATERIAL** (This clause shall apply only to contracts for supply of fabricated equipment with purchaser's Free Issue Materials (FIM).
 - 39.1 Wherever contracts envisage supply of Free Issue Material (FIM) by the Purchaser to the contractor, such Free Issue Material shall be safeguarded by an insurance policy to be provided by the Contractor at his own cost for the full value of such materials

and the insurance policy shall cover, the following risks specifically and shall be valid for six months beyond the contractual delivery date.

- Risk to be covered: Any loss or damage to the Purchaser's material due to fire, theft, riot, burglary, strike, civil commotion, terrorist act, natural calamities etc. and any loss or damage arising out of any other causes such as other materials falling on purchaser's materials.
- o **Insured by:** (Name of the Contractor)
- Beneficiary: Institute for Plasma Research, Near Indira Bridge, Bhat, Gandhinagar-382428.
- o **Amount for which insurance policy to be furnished:** The amount will be indicated in the respective contract.

Free Issue Material (FIM) will be issued to the Contractor only after receipt of the Insurance Policy from the Contractor. The contractor shall arrange collection of the FIM from the Purchaser's premises and safe transportation of the same to his premises at his risk and cost.

Notwithstanding the insurance cover taken out by the Contractor as above, the contractor shall indemnify the purchaser and keep the Purchaser indemnified to the extent of the value of free issue materials to be issued till such time the entire contract is executed and proper account for the FIM is rendered and the left over/surplus and scrap items are returned to the Purchaser. The contractor shall not utilize the Purchaser's free issue materials for any job other than the one contracted out in this case and also not indulge in any act, commission or negligence which will cause/result in any loss/damage to the Purchaser and in which case, the Contractor shall be liable to the Purchaser to pay compensation to the full extent of damage/loss. The Contractor shall be responsible for the safety of the free issue materials after these are received by them and all through the period during which the materials remain in their possession/control/ custody. The free issue materials on receipt at the Contractor's works shall be inspected by them for ensuring safe and correct receipt of the material. The Contractor shall report the discrepancies, if any, to the Purchaser within 5 days from the date of receipt of the material. The Contractor shall take all necessary precautions against any loss, deterioration, damage or destruction of the FIM from whatever cause arising whilst the said materials remain in their possession/custody or control. The FIM shall be inspected periodically at regular intervals by the Purchaser for ensuring safe preservation and storage. The contractor shall also not mix up the FIM with any other goods and shall render true and proper account of the materials actually used and return balance remaining unused material on hand and scrap along with final product and if it is not possible within a period of one month from the date of delivery of the final product covered by this purchase order. The Contractor shall also indemnify the Purchaser to compensate the difference in cost between the actual cost of the FIM lost/damaged and the claim settled to the Purchaser by the insurance company. The

decision of the Director, Institute for Plasma Research, as to whether the Contractor has caused any loss, destruction, damage or deterioration of the FIM while in his possession, custody or control from whatever cause arising and also on the quantum of damage suffered by the government, shall be final and binding upon the Contractor.

40.0 EXPORT LICENCE/EXPORT PERMISSION

- 40.1 It is entirely the responsibility of the vendors who are quoting for materials of foreign origin to ensure obtaining export permission/licence/authorisation as required from the respective Government before arranging shipment. This Department would not accept post supply inspection by any agency/authority of any foreign country. It is, therefore, necessary that the vendors offering materials from foreign countries shall have thorough knowledge of export contract regulations in vogue in those countries.
- 40.2 The vendors shall indemnify the purchaser against any consequences in respect of any end-use declaration they/their overseas Principals may furnish to the government/government agencies of the country of origin of the materials, while seeking export permission/licence. Post supply inspection, contrary to the terms and conditions of purchaser's contract shall be deemed to be null and void.

41.0 END USE CERTIFICATE

41.1 Whenever an End-use Certificate is desired by the vendor, the same shall be clearly mentioned in the quotation and the purchaser shall provide an Enduser Certificate as per the format given below. The Purchaser will not provide any other document/declaration in this regard.

END USER STATEMENT:

"We hereby certify that the item/s i.e			, being procured from			
<i>M</i> /s		against	our	Purcho	ise	Order
No	_ dated		will	be	used	for
	We also c	ertify that th	ne item/s	s will no	ot be u	sed in
designing, develop	oing, fabricati	ing or testing	g of any	chemico	al, biol	ogical,
nuclear, or weapo	ns of mass d	destruction o	or activiti	es relat	ed to i	t. It is
further certified th	at we will n	ot re-export	the Item,	's prior	to obt	aining
permission from th	e concerned	authorities a	is may b	e requir	ed".	

42.0 **COUNTRY OF ORIGIN**

42.1 Wherever the tenders are for imported stores, the Country of Origin of the stores must be clearly specified in the quotation.

43.0 LIABILITY

44.1 Vendors shall be liable for any damage to the purchaser or any third party out of any patent or latent defect in the goods supplied by him or sub-standard services rendered by him.

44.0 RIGHT TO REJECT QUOTATION

- 44.1 The Purchaser reserves the right to reject any quotation, which is not in conformity with the above instructions.
- 44.2 The Purchaser also reserve the right to reject any quotation without assigning any reason whatsoever.

45.0 PRICE / PURCHASE PREFERENCE

Purchase/Price preference to industries will be given as per the policy of the Government of India in force at the time of evaluation provided their offer is in compliance with the conditions of the policy.

46.0 PERMANENT ACCOUNT NUMBER (PAN

- 46.1 Vendors are required to upload a true copy of the PAN Card/Letter issued by the Income-tax Department, failing which the tenders are liable to be rejected.
- 47.0 MSE bidders should declare their UAM (Udyog Aadhar Memorandum) number on CPPP portal to avail benefits as per Public Procurement Policy for MSE's order 2012.
- 48.0 The bidder shall not be under a declaration of ineligibility for corrupt or fraudulent practices or blacklisted with any of the Government Agencies.

Any additional conditions attached to this Invitation to Tender shall also form part of the contract conditions.

SECTION 'B' GENERAL CONDITIONS OF CONTRACT

INSTITUTE FOR PLASMA RESESARCH PURCHASE SECTION

GENERAL CONDITIONS OF ALL CONTRACT

&

SPECIAL CONDITIONS OF CONTRACT GOVERNING SUPPLIES OF PLANT AND MACNHINERY

GENERAL CONDITIONS OF CONTRACT

1. **DEFINITIONS**

- 1.1 The term 'PURCHASER" means the Institute for Plasma Research or its successors or assigns.
- 1.2 The term 'PARTICULARS' means the following:
 - 1.2.1 Specification
 - 1.2.2 Drawing
 - 1.2.3 Sealed pattern denoting a pattern sealed and signed by the Inspector
 - 1.2.4 Proprietary make denoting the produce of an individual firm
 - 1.2.5 Any other details governing the construction manufacture and/or supply as existing for the contract.
- 1.3 The term 'CONTRACTOR' or 'SUPPLIER' means, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractors/Successors (approved by the Purchaser), representatives, heirs, executors and administrators unless excluded by the contract.
- 1.4 The term 'CONTRACT' or 'PURCHASE ORDER' means and comprises of a Letter or Email or ink signed or digitally signed document conveying acceptance of Contractor's offer and invitation to tender, tender containing offer, advance acceptance of offer, general and special conditions of contract specified in the acceptance of offer and any subsequent amendments/alterations thereto made on the basis of mutual agreement.
- 1.5 The term 'STORES' or 'MATERIAL' means, the goods specified in the contract/purchase order which the contractor has agreed to supply under the contract.
- 1.6 The term 'SUB-CONTRACTOR' or 'SUB-SUPPLIER' means any contractor or supplier engaged by the contractor or the supplier with the prior approval of the Purchaser in relation to the contract/purchase order.
- 1.7 The term 'INSPECTOR' or 'QUALITY SURVEYOR' means any person nominated and deputed by the purchaser or their appointed Consultants or Quality Surveillance Agency or any other person from time to time authorized by the Purchaser to act as his representative for the purpose of inspection of stores under the contract/purchase order.

2. AUTHORITY OF PERSON SIGNING THE CONTRACT ON BEHALF OF THE CONTRACTOR

The person signing the contract or the purchase order or any other document in respect of the contract or purchase order on behalf of the contractor shall deemed to warrant that he has the authority to bind the contractor.

3. SUBLETTING OF CONTRACT OR BILLS OR ANY BENEFIT ACCRUING THEREFROM

- 3.1 The Contractor shall not sublet, transfer or assign the Contract or any part thereof or bills or any other benefits, accruing therefrom or under the contract without the prior written consent of the Purchaser (All Sub-contractors are required to be appraised and approved by the Purchaser before placement of orders by the Contractor/Supplier). However, such consent shall not be unreasonably withheld by the Purchaser, if such stores are not normally manufactured by the Contractor, such assignment or subletting shall not relieve the Contractor from any contractual obligation or responsibility under the Contract.
- 3.2 Any breach of this condition shall entitle the Purchaser to cancel the Contract or any part thereof and to purchase from other sources at the risk and cost of the Contractor and shall recover from the Contractor damages arising from such cancellations.
- 3.3 In case the Contractor sublets, transfers or assigns any part of the Contract with the prior written consent of the Purchaser, all payments to the Sub-Contractor shall be the responsibility of the Contractor and any requests from such sub-Contractor shall not be entertained by the Purchaser.

4. SECURITY DEPOSIT

- 4.1 On acceptance of tender, the Contractor shall at the option of the Purchaser and within the period specified by him, submit a Bank Guarantee from SBI or any one of the nationalized banks or reputed private banks, viz. AXIS Bank, ICICI Bank, IDBI Bank and HDFC Bank towards Security Deposit not exceeding 10% (ten percent) of the tendered value of the contract/purchase order valid till at least 2 months beyond the acceptance date of the material, as the Purchaser shall specify.
- 4.2 If the Contractor is called upon by the Purchaser to submit Security Deposit and the contractor fails to provide the same within the period specified such failure shall constitute a breach of the Contract and the Purchaser shall be entitled to make other arrangements for the repurchase of the stores contracted for at the risk and expenses of the Contractor in terms of clause 9.2.4 hereof and/or recover from the Contractor damages arising from such cancellation. No claim shall lie against the purchaser either in respect of interest if any due on Security Deposit or depreciation in value.
- 4.3 Offers wherein contractors declined to submit Security Deposit are liable to be rejected.

5. DRAWINGS & SPECIFICATIONS

5.1 The drawings and specifications are intended to be complementary and to provide for an comprise everything necessary for the completion of supply. Any material shown on the drawing even if not particularly described in specifications or vice versa is to be supplied by the Contractor as if it were both shown and specified.

- 5.2 Should any discrepancy be noted in the drawings and/or specifications and should any interpretation of the same be required, the matter shall be referred to the Purchaser for clarification which shall be binding upon the contractor. Otherwise, the contractor shall assume responsibility for the interpretation of the drawings and specifications including interpretation by his sib-contractors.
- 5.3 Should any difference or dispute arise with regard to the true intent and meaning of drawings or specification or should any portion of the same be obscure or capable of more than one interpretation, the same shall be decided by the Purchaser whose decision shall be final.
- 5.4 All lettering on the drawings is t be considered as part of the specification and contract. In all cases figured dimensions are to be followed rather than those indicated by scale. Large scale drawings will take precedence over small scale drawings.
- 5.5 The contractors drawings shall, when approved by the Purchaser, be deemed to be included in the list of drawings which form part of the contract. The Contractor shall not proceed with fabrication until all drawings associated therewith have been duly approved by the Purchaser.
- 5.6 The Contractor shall be responsible for and shall pay for any alterations of the stores and shall indemnify the Purchaser for any consequential expenditure incurred by the Purchaser due to any discrepancies, errors, omissions in the drawings or other particulars supplied by him whether such drawings or specifications have been approved by the Purchaser or not, provided that such discrepancies, errors or omissions be not due to inaccurate information or specifications furnished to the contractor on behalf of the Purchaser.

5.7 General Warranty

- 5.7.1 The stores supplied by the contractor under the contract shall be of best quality and workmanship. The contractor shall supply the stores in accordance with the contract specifications unless any deviation has been expressly specified in the contract and any amendments agreed thereto.
- 5.7.2 The contractor's offer to supply stores in accordance with the tender specifications shall be deemed to be in admission on his part that he has fully acquainted himself with the details thereof and no claim shall lie against the Purchaser on the ground that the contractor did not examine or acquaint himself fully with the tender specifications.

5.8 Contractor's Liability for Defective Stores

5.8.1 For a period of twelve months after the stores have been accepted by Purchaser the Contractor shall be responsible for any defects that may be discovered therein notwithstanding that such defects could have been discovered at the time of inspection or any defects therein are found to have developed under proper use, arising from faulty materials, design or workmanship and the Contractor shall remedy all such defects as aforesaid at his own cost provided he is called upon within a period of 14 months from the date of acceptance thereof to do

so, by the Purchaser who shall state in writing in what respect the goods are faulty and further if in the opinion of the Purchaser the defects are of such a nature that it is necessary to replace or renew any defective stores, such replacement or renewal shall be made by the Contractor without any extra costs to the Purchaser, provided notice informing the Contractor of the defect is given by the Purchaser within the said period of 14 months. The decision of the Purchaser notwithstanding any prior approval or acceptance of the Inspector as to whether or not the stores delivered are defective or any defect has developed within the said period of twelve months or as to whether the nature of defects renewal or replacement shall be final conclusive and binding on the Contractor.

6. ALTERATIONS

- 6.1 The Purchaser may, from time to time, make changes in the drawings specifications and issue additional instructions without altering the purchase order in any manner provided that no changes shall have been ordered which materially alter the character and scope of the supply under the contract.
- 6.2 It shall be lawful for the parties to the contract to alter by mutual consent at any time and from time to time the drawings and specifications and as from the dates specified by him stores to be supplied shall be in accordance with such altered drawings and specifications provided that if any such alterations involve increase or decrease in the cost of or in the period required for production, a revision of the contract price and/or the period prescribed for delivery shall be made by mutual agreement in respect of the stores to which the alteration applies. In all other respects, the contract shall remain unaltered.

7. SAMPLES

7.1 Samples submitted for any reason shall be supplied without charge and freight paid without any obligation of the Purchaser as regards safe custody or safe-return thereof. All samples submitted must be clearly labelled with the Contractor's name and address and tender number. If the Contractor submits the sample with his tender the same shall not govern the standard of supply except when it has been specifically stated in the Purchase Order that it is accepted instead of any sealed pattern. Should certified samples be lent to the Contractor by the Purchaser, the Contractor is responsible for the return in perfect order of all certified samples with the labels intact.

8. PACKING

8.1 The contractor shall be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air so as to ensure their being free from any loss or damages on arrival at their destination. The packing and marking of packages shall be done by and at the expenses of the Contractor. Each package shall contain a Packing

- Note quoting Purchase Order number and date and showing its contents in detail.
- 8.2 Unless otherwise provided in the contract all containers (including packing cases, boxes, tins, drums and wrappings) in which the stores are supplied by the contractor shall be considered as property of the Purchaser and their cost as having been included in the contract price.

9. DELIVERY:

9.1 TIME FOR AND DATE OF DELIVERY, THE ESSENCE OF THE CONTRACT:

The time for and the date of delivery of the stores stipulated in the purchase order/contract shall be deemed to be of the essence of the contract and delivery must be completed not later than the date/dates stipulated.

9.2 **EXTENSION OF DELIVERY SCHEDULE**

- 9.2.1 If any delay in delivery shall have arisen from any cause such as strike, Lock-outs, fire, accidents, riot or the like which the purchaser may admit as reasonable ground for grant of extension of delivery schedule, the purchaser will allow such additional period for the purpose as he may consider necessary taking the circumstances into consideration.
- 9.2.2 If the contractor fails to deliver the stores or any instalment or part thereof within the period fixed for such delivery or such additional period allowed by the purchaser in accordance with foregoing paragraphs or any time before the expiry of such period repudiates the contract, the Purchaser may without prejudice to the rights of the purchaser.
- 9.2.3 Recover from the contractor as Liquidated Damages and not by way of penalty as detailed under clause No.02 given herein below for any stores which the contractor has failed to deliver within the period fixed for delivery in the contract or such additional period as mentioned in paragraph 9.2.1. during which the delivery of such stores, may be in arrears where delivery thereof is accepted after expiry of the aforesaid period. (For the purpose of computing the damages for delayed supplies under the clause, the cost of the entire plant/machinery/equipment/instrument will be taken into consideration if the plant/machinery/equipment/instrument cannot be put to the intended use for want of delayed portion of supply).
- 9.2.4 Purchase or authorise the purchase elsewhere without notice to the contractor, on account and at the risk of the contractor of the stores not so delivered or others of a similar description (where stores exactly complying with the contract specification are not in the opinion of the Purchaser, which opinion shall be final, readily procurable) without cancelling the contract in respect of the portion instrument not yet due of delivery, OR

- 9.2.5 Cancel the contract or portion thereof and if so desired purchase or authorise purchase of the stores not so delivered or others of a similar description (where stores exactly complying with the contract specification are not in the opinion of the Purchaser, which opinion shall be final, readily procurable) at the risk and cost of the contractor, if the contractor had defaulted in the performance of the original contract, the purchaser shall have the right to ignore his offer in response to risk purchase enquiry even though the lowest.
- 9.2.6 Where action is taken under sub-clause 9.2.4 or sub-clause 9.2.5 above the contractor shall be liable for any loss which the purchaser may sustain on that account provided that the repurchase, or if there is an agreement to repurchase then such agreement, is made within a reasonable period from the date of such failure, depending upon the nature / merit of the purchase and in case of repudiation of the contract before the expiry of the aforesaid period of delivery, shall not be entitled to any gain on such purchase and the manner and method of such purchase shall be in the entire discretion of the Purchaser. It shall not be necessary for the purchaser to serve a notice of such purchase on the contractor.

10. INSPECTION

- 10.1 The contractor shall be responsible for and perform all inspection and testing required in accordance with the contract/purchase order and specifications included herewith.
- 10.2 The Purchaser may at his option depute his representative for Inspection of the stores to be supplied under the contract or authorize and nominate a Quality Surveillance Agency of his choice for the purpose hereinafter called, in either case, the inspection.
- 10.3 The contractor shall give notice of readiness for inspection to the Inspector (deputed under clause 10.2 above) so that the Inspector can be present at the requisite time. In such an event delivery shall not be effected until an authorization or shipping release is obtained from the Purchaser's Inspector.
- 10.4 The contractor hall allow reasonable facility and free access to his work/factory and records to the inspector for the purpose of inspection or for ascertaining the progress of delivery under the contract.

11. RECTIFICATION AND REPLACEMENT OF DEFECTIVE STORES

11.1 If the inspector find that the contractor has executed any unsound or imperfect work, the inspector shall notify such defects to the contractor and the contractor on receiving the details of such defects or deficiency, shall at his own expenses, within seven days or otherwise within such time as may be mutually agreed upon as reasonably necessary, proceed to alter, reconstruct or remanufacture the stores to the requisite standard and specifications as called for by the tender specification.

12. INSPECTION AND REJECTION

12.1 **Inspection and Rejection**: The stores shall be tendered by the Contractor for inspection at such places as may be specified by the Inspector, at the Contractor's own risk, expenses and costs and shall lie at such places of inspection at the risk of the Contractor and the stores will be subject to inspection and test as may be considered necessary by the inspector and his decision as regards rejection of goods shall be final and binding on the Contractor. If any goods are rejected

as aforesaid, then without prejudice to the foregoing provision, the Purchaser shall be at liberty to

- 12.1.1 Allow the Contractor to re submit without prejudice to the Purchaser's right to claim and recover Liquidated damages as provided in clause 9.2.3 hereof, stores in replacement of those rejected within a time specified by the Purchaser (which time shall be essence of the contract), the contractor bearing the cost of freight for such replacement without being entitled to any extra payment, or
- 12.1.2 Buy the quantity of stores rejected or others of a similar nature elsewhere at the risk and cost of the Contractor in accordance with the provisions contained in second paragraph of clause 9.2.4 thereof without effecting the Contractor's liability as regards the supply of any further consignments due under the Contract, or
- 12.1.3 Terminate the Contract and recover from the Contractor the loss Purchaser thereby incurred
- 12.2 **Removal of rejection**: Any stores submitted for inspection and rejected by the Inspector must be removed by the Contractor within fourteen days from the date of receipt of intimation of rejection, provided that in the case of dangerous infected or perishable stores, the Inspector (whose decision shall be final) shall notify the Contractor to remove such stores within 48 hours of receipt of intimation of rejection and it shall be the duty of the Contractor to remove them accordingly. Such rejected stores shall lie at the Contractor's risk from the time of such rejection and if not removed within the aforementioned time, the Purchaser shall have the right either to return the rejected stores to the Contractor at the Contractor's risk by such mode of transport as Purchaser may select or to dispose off or segregate such stores as he thinks fit at the Contractor's risk and on his accounts and to appropriate such portion of the proceeds as may be necessary to cover any loss or expenses incurred by the Purchaser in connection with the said sale. Freight to destination of stores rejected after examination at destination shall be recoverable from the Contractor at the Tariff Rate.
- 12.3 **Test Certificate and Guarantees:** Test Certificate Guarantees, if required by the Inspector shall be obtained and furnished by the Contractor free of costs.

13. RECOVERY OF SUMS DUE

Whenever any claim for payment of, whether liquidated or not, moneys 13.1 arises out of or under this contract against the Contractor the Purchaser shall be entitled to recover sum by appropriating, in part or whole, by encashing the Bank Guarantee submitted towards Security deposit by the Contractor, if a Security Deposit is taken against the Contract. In the event of the security being insufficient or no Security Deposit has been taken from the Contractor then the balance or the total sum or which at any time hereafter may become due to the Contractor under this or any other contract with the Purchaser, should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the Purchaser on demand the remaining balance due. Similarly, if the Purchaser has or makes any claim, 'whether liquidated or not against the Contractor under any other contract with the Purchaser the payment of all moneys payable under the contract to the contractor including the security deposit shall be withheld till such

- claims of the Purchaser are finally adjudicated upon and paid by the Contractor.
- 13.2 All demurrage, wharfage and allied expenses incurred by the Purchaser, if any, due to delayed clearance of Stores in view of non receipt, incomplete or delayed receipt of documents by the Purchaser, shall be recovered from the payment due to the Contractor.

14. BAR/PERT CHART

14.1 The contractor at the discretion of the Purchaser shall submit the BAR/PERT chart indicating various activities from the date of purchase order to handing over of the stores.

15. PERFORMANCE BANK GUARANTEE

- 15.1 In the event of acceptance of the offer in respect of plant, machinery, equipment, instrument, etc. the tenderer will be required to submit a performance bank guarantee for 10% of the total value of the stores inclusive of all statutory levies and other charges admitted in the contract, from SBI/any nationalized bank or private sector banks, namely, ICICI Bank, IDBI Bank, HDFC Bank and AXIS Bank, on a non-judicial stamp paper of appropriate value valid till 2 months beyond the expiry date of warranty period as per the Purchaser's format towards satisfactory performance of the plant, machinery, equipment, instrument, etc. during the warranty period. In case of bids in currency other than INR performance bank guarantee shall be furnished from any bank of international repute.
- 15.2 In case of non-submission of performance bank guarantee by the Contractor, an amount equivalent to 10% of the total value of the stores and other charges admitted in the contract will be retained by the purchaser till the expiry of the warranty period of the stores.
- 15.3 Offers of the tenders who are not agreeable to furnish performance bank guarantee or retaining of an equivalent amount by the purchaser as per clause No.15.1 and 15.2 above, are likely to be rejected.

16. PERMIT AND LICENCES

16.1 The contractor shall secure and pay all licenses and permit at his end which he may be required to comply with all laws ordinances and regulations of the public authorities in connection with the performance of his obligations under the contract. The contractor shall be responsible for all damages and shall indemnity and save the purchaser harmless from against all claims for damages and liability which may arise out of the failure of the contractors to secure and pay for any such licenses and permits or to comply fully which any and all applicable laws ordinances and regulations.

17. PATENTS & PATENT RIGHTS INDEMNIFICATION

- 17.1 The Contractor shall indemnify and keep indemnified the Purchaser from and against any and all claims, actions, costs, charges and expenses arising from or for infringement of patent rights, copy right or other protected rights, of any design plans, diagrams, drawings in respect of the stores supplied by the contractors or any of the manufacturing methods or process adopted by contractor for the stores supplied under the contract.
- 17.2 In the event of any claim being made or action being taken against the purchaser in respect of the matter referred to clause 17.1 above, the

- contractor shall promptly be notified thereof and he shall at his own expense, conduct all negotiations for the settlement of the same and any litigation that may arise therefrom.
- In the event of any designs, drawing, plans or diagrams or any manufacturing methods or process furnished by the contractor constituting infringement of patent or any other protected rights and use thereof is restrained, the contractor shall procure for Purchaser, at to the latter, the rights to continue the same or to the extend it is possible to replace the same so as to avoid such infringement and subject to approval by the Purchaser or modify them so that they become non-infringing, but such modifications shall otherwise be to the entire satisfaction of the Purchaser.
- 17.4 The provision of the clause remains effective and binding upon the Contractor even after the completion, expiration or termination of the contract.

18. LAW GOVERNING THE CONTRACT

18.1 This Contract shall be governed by the laws of India for the time being in force. The marking of all stores supplied must comply with the requirements of India Acts relating to Merchandise Marks and all the rules made under such Acts.

19. JURISDICTION

19.1 The Courts within the local limits (i.e. Gandhinagar) of whose jurisdiction the place from which the purchase order is issued is situation only shall, subject to Arbitration Clause, have jurisdiction to deal with and decide any matter out of this Purchase Order/Contract.

20. SETTLEMENT OF DISPUTES

- 20.1 The Purchaser and the Contractor shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
- 20.2 If the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.

21. ARBITRATION

21.1.1 In the event of any dispute or difference arising out or of in connection with any of the terms and conditions of the Purchase Order/Contract, the matter shall be referred to the Director, IPR for settlement. In case the parties to the Purchase Order are not in a position to settle the dispute mutually, the matter shall be referred to a Sole Arbitrator to be appointed in accordance with the Arbitration & Reconciliation Act, 1996 & Arbitration and Conciliation (Amendment) Act, 2015 as amended time to time.

22. LIQUIDATED DAMAGES

- 22.1 As per Standard Terms & conditions, the Purchaser reserves the right to levy the Liquidated Damages, for delay in supply beyond the contractual delivery date at the rate of half percent (0.5 percent) of the total Contract price (Basic price) for each calendar week of delay. The total liquidated damages shall not exceed five percent (5%) of the contract price (Basic price). Stores/Goods will be deemed to have been delivered only when all its component parts are also delivered. If certain components are not delivered in time, the Stores/Goods will be considered as delayed until such time as the missing parts are delivered.
- 22.2 Where the Contract entered into is a composite one with supply cum erection and installation/commissioning activities and the completion of erection and installation/commissioning is delayed irrespective of the fact that whether supply of material has been made within the original delivery period, the contract is to be considered as a whole and Liquidated Damages will be recovered on the total contract value.

23. EXERCISING THE RIGHTS AND POWERS OF THE PURCHASER

23.1 All the rights, discretions and powers of the Purchase under the contract shall be exercisable by and all notices on behalf of the Purchaser shall be given by the Purchase Officer and any reference to the opinion of the Purchaser in the terms and conditions contained in these General Conditions of all Contracts shall mean and be construed as reference to the opinion of any of the persons mentioned in this clause.

24. TRAINING

24.1 The successful tenderer shall, if required by the Purchaser, provide facilities for the practical training of Purchaser's engineering or technical personnel for their active association on the manufacturing process throughout the manufacturing period of the Contract/stores, number of such personnel to be mutually agreed upon. If demanded by the Purchaser, such training shall be conducted at Purchaser's site by the Contractor free of charge. The duration of training shall be mutually decided upon by the Purchaser and the Contractor.

25. RISK PURCHASE

25.1 In the event supplier fails to fulfill the contractual obligations as per the terms and conditions of the Contract, the Purchaser has an option of completing the Contract at the risk and expenses of the Contractor. While initiating risk purchase at the risk and expenses of the supplier, the Purchaser must satisfy himself that the supplier has failed to deliver and he has been given all the opportunities as per the Contract to execute the Contract and also adequate and proper notice. Wherever risk purchase is resorted to, the supplier is liable to pay the additional amount spent by the government, if any as compared to contracted amount. All the factors including the method of recovering such amount should also be considered while taking a decision to invoke the risk purchase.

26. LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS

26.1 Any sum of money due and payable to the Contractor under any contract may be withheld or retained by way of lien by the purchaser or

- any other person or persons contracting through the Director, IPR against any claim of the Purchaser or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Purchaser or with other such person or persons.
- 26.2 It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Purchaser will be kept withheld or retained as such by purchaser till this claim arising out of in the same contract or any other contract is either mutually settled or determined by the arbitrator, and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

SPECIAL CONDITIONS OF CONTRACT GOVERNING SUPPLIES OF PLANT AND MACHINERY

In addition to the General Conditions of Contract hereinbefore set out the following special conditions shall apply to contracts for the supply of Plant and Machinery and manufactured equipment. These Special Conditions where they differ from the General Conditions shall over-ride the later.

27. DEFINITION OF PLANT

27.1 The word ""PLANT" wherever, appears in these "Special Conditions of Contract governing supplies of Plants and Machinery" shall mean all machinery, plants, equipment or parts thereof or what the Contractor agrees to supply under contract as specified in the Purchase Order.

28. MISTAKES IN DRAWING

28.1 The Contractor shall be responsible for and shall pay for an alterations of the works due to any discrepancies, errors or omissions in the drawings or other particulars supplied by him whether such drawings or particulars have been approved by the Purchaser or not.

29. RESPONSIBILITY FOR COMPLETENESS

29.1 All fittings or accessories which may not be specifically mentioned in the specification but for which are usual or necessary, are to be provided by the Contractor without extra charge and the plant must be complete in all respects.

30. REJECTION OF DEFECTIVE PLANT

30.1 If the completed plant or any portion thereof before it is finally accepted is found to be defective or fails to fulfill the requirements of the contract, the Purchaser shall give the Contractor notice setting forth with the details of such defects or failure and the contractor shall forthwith rectify the defective plant or alter the same to make comply with the requirement of the contract. Should the contractors fail to do so within a reasonable time the Purchaser may reject and replace at the cost of the Contractor, the whole or any portion of the Plant as the case may be, which is defective or fails to fulfill the requirement of the contract.

Such replacement shall be carried out by the Purchaser within a reasonable time and at reasonable price and where reasonably possible to the same specifications and under competitive conditions. The Contractor shall be liable to pay to the Purchaser the extra cost, if any, of such replacement delivered and or erected as provided for in the contract such extra cost being the difference between the price paid by the Purchaser under the provisions above mentioned for such replacement and the contract price for them. Contractor shall refund to Purchaser any sum paid by the Purchaser to the Contractor in respect of such defective plant.

31. INSPECTION AND FINAL TESTS

31.1 All tests necessary to ensure that the plant complies with the particulars and guarantees shall be carried out at such place or places as may be determined by the inspector. Should, however, it be necessary for the final tests as to performance or guarantees to be held over until the Plant is erected at site they shall be carried out within one month of completion of erection.

32. TRANSPORT AND RESPONSIBILITY FOR BREAKAGES EN-ROUTE

32.1 Unless otherwise specified the Purchaser will take delivery of the plant from the place named in the purchase order but the contractor will be responsible for any damage which may be caused to the Plant during transit to the site of erection thereof.

33. ERECTION AND COMMISISONING

- 33.1 In all cases where contracts provide for supervision of erection and commissioning or for test at the Purchaser's premises the Purchaser except where otherwise specified, shall provide free of charge, such labour, materials, fuels, stores, apparatus and instruments as may be required from time to time and as may reasonably by demanded by the contractor to carryout efficiently such supervision of erection and commissioning and for the requisite test. In case of contracts requiring electricity for the completion of erection, commissioning and testing at site, such electricity shall be supplied free to the contractor.
- 33.2 Action by the Purchaser under the clause shall not relieve the contractor of his warranty obligations under the contract.

34. WARRANTY

- 34.1 The contractor warrants that stores to be supplied under the contract shall be free from all defects and faults in materials, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards for stores of the types under the contract in full conformity with the specifications, drawings or samples, if any and shall if operable, operate properly. This warranty shall expire (except in respect of complaints notified to the contractor prior to such date) twelve months from the date of acceptance of material.
- 34.2 For a period of twelve calendar months after the plant/machinery/equipment/instruments has been put into operation (or a suitable mutually agreed longer period to be reckoned from the date of last major shipment depending upon the nature of the

plant/machinery/equipment/instrument) the Contractor shall be responsible for any defects that may develop under conditions provided for the contract and under proper use, arising from the faulty materials, design or workmanship in the plant or from faulty erection of the plant by the Contractor, but otherwise and shall rectify such defects at his own cost when called upon to do so by the Purchaser who shall state in writing such defects.

- 34.3 If it becomes necessary for the Contractor to replace or renew any defective portions of the plant for purpose of rectification under this clause, the provisions of this clause shall apply to the portions of the plant so replaced or renewed under the expiration of six months from the date of such replacement or renewal or until the end of the above mentioned period of twelve months whichever may be the later. If any defects not rectified within reasonable time, the purchaser may proceed to get the work done at contractor's risk and expenses but without prejudice to any other rights which the Purchaser may have against the Contractor in respect of such defects as provided in clause 9.2.4 or 9.2.5.
- 34.4 All inspections adjustments, replacements or renewals carried out Contractor during the warranty period shall be subject to the same conditions as in the contract.
- 34.5 Contractor shall, spare parts of equipment before going out of production, give adequate advance notice to the purchaser so that the latter may order requirement of spares in one lot if so desires.
- 34.6 The contractor shall further guarantee that if spare parts go out of production, will make available blue prints, drawings of spare parts and specifications of material at no cost to the Purchaser, if and when required in connection with the equipment to enable Purchaser to fabricate or procure spare parts from other sources.
- 34.7 The provision of this clause shall remain effective and binding upon the Contractor even after the completion or expiration of the contract and till the plant/machinery/equipment supplied under the contract is in use by the Purchaser.

35. MODE OF PAYMENT

Unless otherwise agreed to in writing between the Purchaser and the Contractor, payment for the delivery of the material will be made as follows.

Within 30 days from the date of final acceptance and on receipt of Performance Bank guarantee for 10% of the contract value amount from SBI/nationalized banks or any one of the scheduled banks mentioned in the bracket (Axis Bank, HDFC Bank, ICICI Bank and IDBI Bank) valid through out the guarantee period mentioned in the contract/purchase order.

35.1.1 In case any of the vendors seek advance or progressive payment prior to delivery of the material, such requests can be considered only in exceptional cases of large value items, in which case the vendor will be required to furnish a bank guarantee for an equivalent amount of the advance/progressive payment sought for, valid till the execution of the contract. The bank guarantee shall be got executed as per the Purchaser's format from the State Bank of India (SBI)/nationalized banks or any one of the scheduled banks mentioned in the bracket (Axis Bank, HDFC Bank, ICICI Bank and IDBI Bank).

- 35.1.2 Besides, the offers of the vendors seeking advance/progressive payment will be evaluated by loading 12% interest charges per annum on the amount of advance desired up to the delivery period quoted.
- 35.1.3 In case any of the vendors seek pro-rata payment for the stores to be supplied they should clearly mention in their offer the maximum number of installments of supply. However, such installment delivery and pro-rata payment will be considered only in respect of contract involving large value and sizeable quantity of the item and the maximum number of installments shall be normally restricted to four. Acceptance or otherwise of this condition is reserved by the purchaser.
- 35.1.4 **Bank Charges:** All bank charges to be borne by the Contractor/Supplier.
- 35.1.5 No correspondence will be entertained within 30 days from the date of receipt of material and bills, whichever is later.
- 35.1.6 Interest for delay in supply beyond the contractual delivery date: Wherever advance payments are sought for by the contractor and admitted in the contract, against Bank Guarantee for equivalent amount, in the event of any delay in supply beyond the contractual delivery date for reasons attributable to the contractor, interest charges @ 12% shall be levied for the period beyond the contractual delivery date, on the amount of balance advance payment to be adjusted.

36. DELAY IN ERECTION

36.1 Wherever erection of a plant or machinery is the responsibility of the Contractor as a term of the contract and in case the Contractor fails to carry out the erection as and when called upon as to do within the period specified by the Purchaser, the Purchaser shall have right to get the erection done through any source of his choice. In such an event, the contractor shall be liable to bear any additional expenditure that the Purchaser may incur towards erection. The Contractor shall, however, not be entitled to any gain due to such an action by the Purchaser.

SECTION 'C'

TECHNICAL SPECIFICATIONS OF STORES AND DRAWINGS

Please refer tender document

SECTION 'D' FORMAT FOR SUBMISSION OF PRICE

Please refer tender document

TENDER FORM INSTITUTE FOR PLASMA RESEARCH

(An Aided Institute of Department of Atomic Energy, Government of India) Near India Bridge; Bhat; Gandhinagar-382428; India

Following terms are replaced in our Form for Tender No.IPR/TN/PUR/ET/18-19/41 dated 8-12-2018.

1) Sr.No.3.1 (Section-A) under heading "Earnest Money Deposit (EMD)" of Form No.IPR-LP-ET-03.V2 (Terms and Conditions) is replaced with the following: The Tenderer shall submit, as part of its bid, interest free Earnest Money Deposit (EMD) for an amount as specified in the Tender Notice. EMD shall be submitted by way of Demand Draft from SBI/nationalized banks or any one of the scheduled banks mentioned in the bracket (Axis Bank, HDFC Bank, ICICI Bank and IDBI Bank) issued in favour of "Institute for Plasma Research" and payable at Ahmedabad. Tender received without EMD will be rejected at the discretion of IPR.

(Copy of Demand Draft to be uploaded with the quotation, Original DD should be sent to IPR on or before the specified closing date and time)

- 2) Sr.No.3.4 (Section-A) under heading "Earnest Money Deposit (EMD)" of Form No.IPR-LP-ET-03.V2 (Terms and Conditions) is replaced with the following: **Exemption from payment of EMD:** The firms registered with DGS&D, NSIC, DPS or Micro & Small Enterprises (MSEs) which are actual producers/manufacturers of tendered items are exempted from payment of EMD provided valid registration certificate is uploaded along with the offer.
- 3) Sr.No.17 (Section-A) under heading "Statutory Levies such as Customs Duty, Goods and Service Tax" of Form No.IPR-LP-ET-03.V2 (Terms and Conditions) is replaced with the following:

 Clause Nos.17.1, 17.2, 17.3 and its sub-clauses deleted from Form No: IPR-LP-ET-03.V2.
- 4) Sr.No.21 (Section-A) under heading "Submission of Drawings" of Form No.IPR-LP-ET-03.V2 (Terms and Conditions) is replaced with the following:

 Submission of Pre-installation Project reports: The tenderer shall furnish all documents pertaining to the plant/machinery/ equipment/component to the Purchaser along with the tender for correct understanding and appreciation of the tender in quadruplicate. Besides, tenderers should also furnish the documents mentioned under clause No.D(1) of Section-C within 15 days from the date of receipt of Purchase Order for approval. Such documents should be furnished along with the tender. Tenderer's drawing/documents will form part of the purchase order/contract only after these are approved by the Purchaser.
- 5) Sr.No.31 (Section-A) under heading "Delivery" of Form No.IPR-LP-ET-03.V2 (Terms and Conditions) is replaced with the following:

Delivery: Tenderer should note that no tender will be considered by the Purchaser unless the Tenderer can meet the delivery schedule specified by the Purchaser. All equipments/machinery/plant/component covered by this tender document should be supplied & commissioned at IPR as per the Execution/Delivery schedule given under Clause No.E of Section-C. The prices quoted by the tenderer should include all charges involved for direct and safe delivery of the items by Road to the project site of the Purchaser. If a tenderer so desires/separate lumpsum charges for transportation and safe delivery to Purchaser's site could be furnished. Purchaser will neither undertake responsibility for transit insurance nor pay for it separately. No other, delivery term will be accepted by the Purchaser

- 6) Sr.No. 34.2 (Section-B) under heading Warranty of "General Conditions of Contract" of Form No.IPR-LP-ET-03.V2 (Terms and Conditions) is replaced with the following:
 - a) Warranty/Guarantee: Twenty (20) years warranty for all passive components (excluding racks) and their installation at the final testing of the network and Five (5) years warranty for all active components from the date of acceptance against all sorts of manufacturing defects, faulty material and poor workmanship. Please refer Clause No.C of Section-C (Technical specification) for more details on Warranty & support.
- 7) Sr. No. 35 (Section-B) under heading Mode of Payment of "General Conditions of Contract" of Form No.IPR-LP-ET-03.V2 (Terms and Conditions) is replaced with the following:

Payment: Unless otherwise agreed to in writing between the Purchaser and the Contractor, payment for the delivery of the tendered items, will be made as follows.

- a) 80% of supply portion (i.e. Sr.No.1 to 22 of Price Schedule Section-D) + 100% of all other charges will be paid after receipt of material at IPR site and its verification by IPR representative and on receipt of invoice in triplicate.
- b) Balance 20% of supply portion (i.e. Sr.No.1 to 22 of Price Schedule Section-D) + 100% of Sr.No.23 to 43 of Price Schedule Section-D will be paid within 30 days from the date of acceptance and on receipt of Performance Bank Guarantee for 10% of the order value from SBI/nationalized banks or any one of the scheduled banks mentioned in the bracket (Axis Bank, HDFC Bank, ICICI Bank and IDBI Bank) valid throughout the warranty period and on receipt of final invoice.

Following terms is **added to** our Form No. IPR-LP-ET-03.V2 for Tender No. No.IPR/TN/PUR/ET/18-19/xx dated 20-11-2018.

a) **TDS as per CGST Act**: As per the provisions mentioned under Section No. 51 of the CGST Act 2017, TDS @ 2% (IGST 2% or CGST 1% and SGST 1%) will be deducted while making payment to the suppliers where total value of the purchase order/contracts/work orders exceeds Rs.2.5 Lakhs. Necessary TDS Certificate will be issued to the supplier after TDS deduction.

IMPORTANT NOTE:

- [1] QUOTATIONS ARE INVITED IN INDIAN CURRENCY ONLY
- [2] QUOTATIONS RECEIVED OTHER THAN "INR" QUOTE SHALL SUMMARILY BE REJECTED.

INSTITUTE FOR PLASMA RESEARCH

Tender No: IPR/TN/PUR/ET/18-19/41 DATED 8/12/2018

Section-C

SST-1 Networking System

Technical Specifications

SST-1 Operation Division

The document contains the detailed technical specifications for SST-1 networking System.

A. General terms and conditions for vendor/bidder

1. The supply, installation and commissioning will be at IPR campus.

Working days: Monday – Friday Working Time: 9:00 AM – 5:30 PM

- 2. The complete solution (including switches, optical fibre and UTP cables) should be compatible for 10Gbps or higher bandwidth.
- **3.** All equipment recommended by the bidder shall be industry proven products, complying ISO/IEC/EIA/TIA standards as mentioned in detailed technical specification.
- **4.** The bidders are requested to offer their price bid preferably of these makes/brands:

For Active Components: HP, CISCO, DELL, JUNIPER, BROCADE

For Passive Components: TYCO, MOLEX, CORNING, PANDUIT, SYSTIMAX, R&M

- 5. It is mandatory that Original Equipment Manufacturer (OEM) for quoted active and passive components, should have a registered office in India since last 3 years from the date of publishing of this tender. Provide supporting document for this.
- 6. The bidder shall be certified by the OEM in all aspects of design, installation, and testing of the products described herein, for the active as well as passive components. A valid Authorization certificate as given in 'Annexure-III', from the OEM in the name of bidding organization is required to be furnished, failure to which the bid shall be rejected.
- 7. The bidder shall has to work at a height of 30 meters at certain locations. Hence the bidder shall follow IPR safety rules during the installation/test/commissioning plans. The bidder shall arrange and bring all safety equipments (Helmet, safety belt etc.) along with him during network commissioning work.
- **8.** The bidder has to compliance all the security, safety and labour rules and regulation enforced by IPR.
- 9. Under any circumstances, campus existing services like existing network, telephone and electric lines should not be disturbed and vendor has to take extra care for functionality/continuity of the services. In any case, if damaged due to negligence of vendor/subcontractor, the services to be restore as soon as possible at vendors time, cost and risk.
- **10.** The bidder shall submit the schedule of network installation/commissioning & testing work and shall take IPR's approval for the schedule in advance.
- **11.** The vendor should arrange all necessary resources including labours, equipment etc., whose entire responsibility, whatsoever would be of the vendor only.
- **12.** The payment for service/labour charges will be made as per actual.

- **13.** Any extra fitting/fixtures material remaining after execution of the job will have to be taken by the vendor and no payment will be made for such excess material.
- **14.** All the civil or carpentry work if required to deploy the networking system, shall be responsibility of the vendor.
- **15.** The vendor shall bring all tools required for installation / commissioning. No labour or tools will be provided by IPR.
- **16.** While execution of the work, covering of equipment and cleaning of that area will be in vendor scope. The necessary resources has to bring by the vendor for covering the equipment.

B. Site Visit

Prospective bidder may visit IPR for site survey only on working days (Monday to Friday) excluding government holidays, at least before 3 days of closing the tender between 14:00 hours to 17:00 hours, by taking prior appointment from Mr. Aveg Kumar (Ph. No.: 079-23964005).

C. Warranty and support

- 1. The bidder and OEM both must provide the Support Matrix to call the engineer for any support.
- 2. The bidder will register any call log to OEM for any issues related to supplied Hardware and Software during the entire warranty period.
- 3. The OEM warranty certificate of 20 years shall be required for all passive components (excluding racks) and their installation at the final testing of the network, from the date of acceptance. The vendor shall include the certification procedure and testing condition be fulfilled to get this certification.
- **4.** The OEM warranty certificate for a period of 5 years from the date of acceptance, shall be required for all the active components.
- 5. The bidder shall provide the written letter from OEM of active components stating, that support of quoted active components will be provided at least for 5 years from the date of acceptance.
- **6.** The bidder shall quote all the active and passive components by taking the above mentioned warranty at **Point C.3 and C.4** into consideration.
- 7. The bidder has to provide Technical support for administration/maintenance as and when required/requested (both software and hardware levels) of proposed Network Switches and Network Management Software during warranty period. The bidder must send support engineer on the site within 24 hours after problem report. The warranty will start from the date of installation and commissioning at our site (i.e. from the date of acceptance).

8. The bidder must have well established service and support facility in Ahmedabad/Gandhinagar. Provide support document for this.

D. Scope of Work

The network shall be based on star topology as given in Network Diagram at 'Annexure-I' of this document. The main star point shall be installed in SST-1 central control room in IPR campus. This diagram shall be followed for basic minimum reference. The additional networking features which can increase the reliability and performance of the network can be incorporated by bidder. The bidder can optimize the solution while fulfilling the requirements mentioned in this document. The detailed specifications for equipment's be supplied are at 'Annexure-II' of this document. The selected bidder (vendor) will be required to carry out all of the below mentioned activities:

1. LAN Survey and Document preparation

The vendor will submit two documents namely **Pre-Installation Project Report** and **Project Completion Document** comprising of test results as mentioned at **Point-4** of the tender document.

- 1.1 On confirmation of the order from IPR, the vendor/System Integrator, is required to carry out survey of the site. The purpose of this exercise is to study, gather information for providing the required services at each location of the site.
 - 1.1.1 The vendor will designate project engineer for the site to coordinate with IPR representative for gathering required data in consultation with IPR representative.
 - **1.1.2** The vendor will prepare and submit a Pre-installation Project Report (Hard & Soft Copy) to IPR, for the site covering the following aspects:
 - a. LAN design It will address total LAN node requirement i.e. surveying & preparing list of nodes' locations.
 - **b.** Engineering It will address preparation of LAN IP addressing scheme, creation of VLAN for segregation between Ethernet and experimental network (intranet), address all the LAN issues and switch configuration.
 - c. Structured cabling installation It will address cable routing on building blueprint/plan, identification of existing cable risers and equipment closets to be used, labelling plan for cabling infrastructure, marking & identification of entire LAN infrastructure, creation of separate cable trays / pathways / raceways if required.
 - **d.** Commissioning, testing & maintenance It will address strategy for phase-wise installation & commissioning of LAN, testing & certification of

LAN components & cabling infrastructure, tools and manuals required for the maintenance.

- 1.2 The vendor shall complete the above-said activities within 15 days after At the end of the project, complete working network as per the IPR's requirements to be handed over to IPR and a **Project Completion Document** (Hard & Soft Copy) shall be submitted to IPR detailing the following:
 - **1.2.1** Floor Plan duly marked with all node locations and their numbering scheme for each location details data and voice connects in AutoCAD/PDF/PPT/DOC.
 - 1.2.2 Rack Elevation Plans for all Network racks.
 - 1.2.3 Jack Panel patching Scheme.
 - **1.2.4** Bill of Material Utilized.
 - **1.2.5** Schematic layout of Backbone connectivity scheme and the numbering scheme for backbone.
 - **1.2.6** Any other Data as may be required by IPR.
 - **1.2.7** Diagram of fiber laying path.
 - **1.2.8** Diagram of Ethernet end points (location-wise).
 - **1.2.9** LAN IP addressing schema, VLAN schema and switch configuration.

2. Supply and installation of LAN Passive items/equipment's, laying of cables

The vendor will supply all the passive LAN cabling equipment's according to the Detailed Project Report and BOQ submitted.

- **2.1** All structured cabling material (Passive Components) should be from Single OEM.
- **2.2** Average length of all fiber and copper backbone cables in the BOQ are on assumptions and may vary during **LAN Survey and documentation phase**.
- **2.3** The **Detailed Project Report** shall be followed for the cabling routing plan, labelling of the cabling infrastructure and for complete installation.
- **2.4** For any change in the passive cable laying path or connectivity, vendor has to take permission from IPR's representative.
- 2.5 Network environment is having magnetic field/ X-ray/RF so optical fibre and copper cables shall be shielded end to end as mentioned in detailed specifications.
- 2.6 The entire cabling system shall be based on structured cabling as per TIA/EIA 568-B and TIA/EIA 569-A. For this the vendor shall post Project Manager along with the skilled manpower till the completion of installation & commissioning of the cabling/LAN equipment's.
- 2.7 The vendor will lay all the optical cables through existing HDPE duct while for any extra laying will use HDPE class-B conduit.

- 2.8 The pipes shall be adequately supported to avoid any displacement / disturbance to the copper & fiber optic cabling. The supply of necessary clamps and other related accessories (for support) will be in vendor's scope.
- **2.9** All the clamps, screws and other accessories used shall be of stainless steel or anti-corrosive material and shall be included in BOQ.
- **2.10** The other supplied accessories must be of good quality and have ISI certified.
- **2.11** The optical cables shall be laid in continuous lengths from LIU to LIU and shall not exceed the length specified by the OEM to ensure gigabit performance.
- **2.12** Fiber core slacks shall be neatly coiled within the fiber termination panel. No fiber core slacks shall be permitted outside the panel.
- **2.13** The bending radii of the cable shall follow the OEM's installation standards / recommendations
- **2.14** Dust caps will be provided by the vendor on the connectors, couplers and switches (to cover unused fiber and Ethernet ports).
- **2.15** Each cable shall be clearly tagged / labelled on the cable jacket behind the patch panel, at a location, that can be viewed clearly without removing cables or the cable ties.
- **2.16** Numbering / tagging / ferruling on each rack, LIU, port on the LIU, fiber optic cable etc. shall be done as per existing cable tagging scheme or standards.
- **2.17** Wrap labels to be installed on all patch cord labels and cables neatly fanned out and dressed.
- **2.18** All Labelling on Jack Panels shall be done as per coloured scheme for the respective colour considered.
- **2.19** All cables shall be bundled in the rack with Velcro / Button ties for ease of bundling and re-bundling again if required in future.
- **2.20** Backbone naming convention for all Copper and fiber to be in accordance to discussion with IPR by numbering at either ends of cables in accordance to the link between the respective Hub rooms.
- **2.21** Node labelling has to be done as per ISO standard. Only printed labels will be allowed for labelling.
- **2.22** Factory crimped fiber optic patch cords shall be used for connecting LIU and the switch ports.
- **2.23** All copper cables shall be installed in ISI mark Casing-Capping. The conduit/pipe/casing-capping etc. shall be included in BOQ.
- **2.24** The entry of all the cables (Fibre/UTP/Power) in the network racks shall be through Flame-retardant heat-shrinkable cable entry seals.

2.25 The vendor shall quote the racks of same make and of same colour in order to house all networking equipment at different locations as specified in detailed specifications for network racks.

3. Supply, Installation & configuration of LAN active equipment's

The vendor will supply, install & configure all the active devices like Layer 2 / Layer 3 switches etc. according to the Detailed Project Report and BOM submitted.

- 3.1 All the active components (Core and Access Switches and SFP+ modules) shall be of same make/OEM.
- **3.2** The core switches shall have sufficient backplane capacity in order to handle full load on the network switches.
- **3.3** All the network switches shall be manageable from a central place (SST-1 Central Control Room).
- **3.4** All network switches shall be supplied with all the optical patch cords, power cord and stacking cables, with appropriate licenses (if required) to make the switches functional.
- **3.5** The switches need to be updated with latest version of IOS. IOS / software update during the warranty period shall be responsibility of the vendor.
- **3.6** The vendor must cover all the unused ports on network switches resides in the racks with anti-dust jack cover.
- 3.7 The vendor will integrate the proposed networking system with the existing IPR's Ethernet network by creating
- 3.8 The LAN IP addressing scheme, proxy configuration, configuration for all the LAN security issues and creation of in-building VLAN for segregation between Ethernet and experimental network (intranet) will be carried out by the vendor as per the Detailed Project Report.
- 3.9 The vendor will submit a post installation document ("Hardware Deployment Document") for maintenance purpose which will include all the above activities & details of site-wise equipment deployed with corresponding IP address, configuration of switches & related policies implemented.

4. Testing of entire network

The testing of entire network will be done in presence of IPR representative. The tests will be done according to **TIA/EIA** standards. All testing should be pass as per ISO & IEEE standards not marginal pass through Fluke/JDSU.

4.1 End-to-End Link Attenuation Tests:

- **4.1.1** Testing shall be performed on each cabling segment (connector to connector) for all cores in single cable.
- **4.1.2** Horizontal and vertical backbone link measurements tests at specified bandwidth in each direction.
- **4.1.3** Attenuation test results shall be less than that calculated according to standards of **TIA/EIA**.
- 4.2 The switches will be tested end-to-end for bandwidth, throughput and offered load. These tests shall be performed on different platforms and different operating systems (Linux/Windows).
- **4.3** The vendor will document all these test results and submit it along with the post installation document.
- **4.4** For benchmarking vendor has to submit the test results for copper using Penta Scanning and the test results for fiber using OTDR.

5. Training to IPR personnel

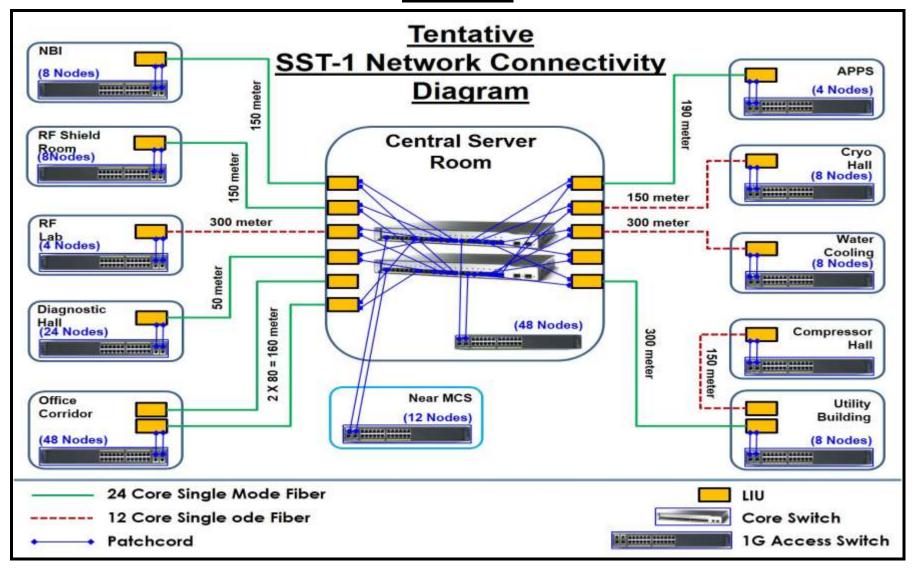
After completion of network commissioning and testing vendor will arrange a half/full day training session, needs to be conducted in IPR premises at an agreed time. This shall include the demonstration of complete network configuration / monitoring management tools.

E. EXECUTION/DELIVERY SCHEDULE

Sr. No.	Activities	Delivery Time
1.	Site survey and submission of Pre-	Within 10 days from date of the
	Installation Project Report as mentioned in	issuance of the order.
	the Tender Document Point No. D-1.	
2.	Approval of the Pre-Installation Project	Within 5 days from the date of
	Report from IPR.	submission of the document.
3.	Supply of complete material (Active and	Within 6 weeks from the date of
	Passive) as per final BOQ.	approval of Pre-Installation
		Project Report.
4.	Installation, commissioning and configuration	Within 6 weeks from the date of
	of the complete network (Active as well as	delivery, of the material.
	passive components) as mentioned in the	
	Tender Document Point No. D-2 and D-3.	

5.	Integrated testing of the network as	Within 10 days from the date of
	mentioned in the Tender Document Point	complete installation,
	No. D-4 and submission of Project	commissioning and
	Completion Document as mentioned in the	configuration.
	Tender Document Point No. D-1.	
6.	Training to IPR personnel as mentioned in	Within 10 days from the date of
	the Tender Document Point No. D-5.	completion of testing and
		submission of Project
		Completion Document.
6.		completion of testing and submission of Project

Annexure-I



Annexure-II

Detailed Technical Specifications

Tab	le-1: Network Layer 3 Core Switch			
Make	Make, OEM Model/ OEM Part No.:			
Sr. No.	IPR Specification	Compliance (Yes/No)	Remarks	
1	Architecture			
1.1	The switch should have at least 24 nos. of 10 Gigabit Ethernet SFP+ ports with optional uplink modules.			
1.2	The switch should have non-blocking architecture to easily handle unexpected traffic loads.			
1.3	The switch architecture should be stackable with at least 8 switches in a single stack. Stacking cable should be provided.			
1.4	The switch should have at least one RJ-45/USB 2.0 port for OS management port.			
1.5	The switch should be 19" rack mountable (including mounting brackets) and should not take space more than 1 Rack Unit (RU).			
1.6	The switch should have redundant, hot-swappable and modular power supplies and fans with IO to PSU Airflow			
2	Performance	l	l	
2.1	The switch should have at least 256 MB Flash and 512 MB DRAM.			
2.2	The switch should support Jumbo frame sizes of at least 9 Kbytes on Gigabit Ethernet and 10-Gigabit ports for large data transfer.			
2.3	The switch should have switching capacity of at least 480 Gbps for providing non-blocking performance.			
2.4	The switch should have minimum 350 Mpps switching throughput.			
2.5	The switch should support at least 4000 Active VLAN ID's.			
2.6	The switch should support at least 64K MAC Addresses.			
2.7	The switch should support at least 5K IPv4 and 5K IPv6 unicast routes.			
3	Layer 3 Features	I	1	
3.1	The switch should support dynamic routing protocols like RIPv1&v2.			
3.2	The switch should support Virtual Router Redundancy Protocol VRRPv2&v3.			
3.3	The switch should support Policy Based Routing (PBR).			
3.4	The switch should support IPv4 and IPv6 multicast routing.			
3.5	The switch should support DHCP server, client, snooping and relay.			
3.6	The switch should support Internet Group Management Protocol (IGMP).			
3.7	The switch should support Neighbor discovery.			
4	Layer 2 Features			
4.1	The switch should support Link Aggregation Control Protocol (LACP) to allow creation of Ethernet channeling supporting at least 32 Group.			
4.2	The switch should support Remote Switched Port Analyzer (RSPAN) or equivalent.			
4.3	The switch should support Bridge protocol data unit (BPDU) Guard or equivalent.			

4.4	The switch should support port based, MAC based, protocol	
	based, subnet based, private, voice and guest VLANs. The switch should support Spanning Tree Protocol (STP), Rapid	
4.5	Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP).	
4.6	The switch should support IP multicast snooping IGMP v1, v2, v3	
4.7	The switch should support Multicast Listener Discovery (MLD	
	v1/2) snooping. The switch should support Unidirectional Link Detection (UDLD).	
4.8	The switch should support Generic VLAN Registration Protocol	
4.9	(GVRP) and Generic Attribute Registration Protocol (GARP)	
5	Network Security Features	
	The switch should support drop or rate limit based on source and	
5.1	destination MAC, VLAN ID or IP address, protocol, port, TCP/UDP source and destination ports information or any combination of these fields.	
	The switch should support MAC, IPv4, IPv6, TCP, UDP ACL,	
5.2	Protocol based ACL, ACL over VLAN and Dynamic ACL.	
5 0	The switch should support RADIUS, TACACS/TACAS+ and	
5.3	username/password for authentication, authorization and accounting.	
	The switch should support secure communications to the	
5.4	management interface and system through SSL, Secure Shell	
	(SSHv2) and SNMPv3	
5.5	The switch should support DHCP snooping.	
5.6	The switch should support IP Source Guard.	
5.7	The switch should support port access authentication according to 802.1x.	
5.8	The switch should support dynamic Address Resolution Protocol (ARP) Inspection.	
5.9	The switch should support Broadcast, Multicast and Unicast Network Storm control.	
5.10	The switch should support STP root guard and BPDU guard.	
5.11	The switch should support IP/MAC/Port Binding (IPMB).	
5.12	The switch should support port security.	
6	Quality of Service	
6.1	The switch should support at least eight egress queues per port.	
6.2	The switch should be capable of deploying QoS policies. The switch should support Class of Service (CoS) based on; Port,	
6.3	802.1p, IP precedence, IP ToS, IP DSCP and DiffServ QoS.	
C 4	The switch should support Strict priority and weighted round-	
6.4	robin (WRR) scheduling.	
7	Manageability	
	The switch should support secure management via IPv4 or IPv6	
7.1	through features such as Secure Shell (SSHv1/2), Secure Sockets Layer (SSL), and Simple Network Management Protocol	
	(SNMPv1, 2, 3).	
	The switch should support manageability using Network	
7.2	Management Software with Web based Graphical User Interface	
	(GUI).	
7.3	The switch should support integrated standard based Command Line Interface (CLI), Telnet, SCP, TFTP, HTTP access for switch	
1.3	management/upgrade/monitoring.	
7.4	The switch should support NetFlow/sFlow or equivalent.	
7.5	The switch should support Remote Switch Port Analyzer	
	(RSPAN).	
7.6	The switch should support Remote Monitoring (RMON).	
7.7	The switch should support other management features like: Ping,	

	Telnet, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog.	
8	Standards and Compliance	
8.1	The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.1w (RSTP), IEEE 802.1p (L2 Prioritization, QoS), IEEE 802.1Q (VLAN Tagging), IEEE 802.1X (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3ae 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP), IEEE 802.3x Flow Control.	
8.2	Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC Part 15 (CFR 47) Class A.	

Tab	Table-2: Network Layer 2 Access Switch 24 ports			
Make, OEM Model/ OEM Part No.:				
Sr. No.	IPR Specification	Compliance (Yes/No)	Remarks	
1	Architecture			
1.1	The switch should have 24 100/1000 Base-TX, auto-negotiating			
	and auto sensing ports. The switch should have at least 2 nos. of Small Form-Factor,			
1.2	pluggable, 10G SFP+ uplink ports in addition to the above ports.			
4.0	The switch should have at least one RJ-45/USB 2.0 port for OS			
1.3	management (uploading, downloading and configuration).			
1.4	The switch should be rack mountable and should not take space			
1	more than 1 Rack Unit (RU).			
1.5	The switch architecture should be stackable with at least 4			
2	switches in a single stack, using additional stacking port. Performance			
2.1	The switch should have at least 256 MB Flash and 512 MB RAM.			
2.2	The switch should support Jumbo Frames of at least 9 Kbytes.			
2.3	The switch should support at least 128 Gbps of switching			
	bandwidth.			
2.4	The switch should have at least 95 Mpps of forwarding rate.			
2.5	The switch should support at least 256 Active VLAN.			
2.6	The switch should support at least 16K MAC Addresses. Layer 2 Features			
	The switch should be able to discover (on both IPv4 & IPv6			
	Network) the neighboring device giving the details about the			
3.1	platform, IP Address, MAC address etc. and should be able to			
	detect duplicate IP address.			
3.2	The switch hardware should be able to run both IPv4 & IPv6 simultaneously.			
3.3	The switch should support Link Aggregation Control Protocol (LACP).			
3.4	The switch should support Multicast Listener Discovery (MLD v1/2) snooping.			
3.5	The switch should support Voice VLAN, IP based VLAN and MAC based VLAN.			
3.6	The switch should support Remote Switched Port Analyzer (RSPAN) or equivalent.			
3.7	The switch should support Bridge protocol data unit (BPDU) Guard or equivalent.			
3.8	The switch should support DHCP client, snooping and relay.			
3.9	The switch should support Internet Group Management Protocol (IGMP).			
3.10	The switch should support Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP).			
4	Network Security Features	_		
4.1	The switch should support port security.			
4.2	The switch should support DHCP snooping			
4.3	The switch should support dynamic Address Resolution Protocol (ARP) Inspection.			
4.4	The switch should support RADIUS, TACACS/TACAS+ and username/password for authentication, authorization and accounting.			

The switch should support Broadcast, Multicast and Unicast Network Storm control to 802.1x. The switch should support port access authentication according to 802.1x. The switch should support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3 4.8 The switch should support BPDU guard. 5 Quality of Service 5.1 The switch should support Rate Limiting. 5.2 The switch should support Class of Service (CoS) based on; Port, 802.1p, destination MAC and IP and IP DSCP. 5.4 The switch should support Strict priority and weighted roundrobin (WRR) scheduling. 6 Manageability The switch should support secure management via IPv4 or IPv6 through features such as Secure Shell (SSHv1/2), Secure Sockets Layer (SSL), and Simple Network Management Protocol (SNMPv1, 2, 3). The switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). 7.1 The switch should support memore Switch Port Analyzer (RSPAN). 6.2 In switch should support Remote Switch Port Analyzer (RSPAN). 7. The switch should support Remote Switch Port Analyzer (RSPAN). 7. The switch should support Remote Switch Port Analyzer (RSPAN). 7. The switch should support Remote Switch Port Analyzer (RSPAN). 7. The switch should support Remote Monitoring (RMON). 7. The switch should support Remote Switch Port Analyzer (RSPAN). 7. The switch should support Remote Switch Port Analyzer (RSPAN). 7. The switch should support Remote Switch Port Analyzer (RSPAN). 7. The switch should support Remote Switch Port Analyzer (RSPAN). 7. The switch should support Remote Switch Port Analyzer (RSPAN). 8. Standards and Compliance 9. Standards and Compliance 10. Standards and Compliance 11. EEE 802.1s (RSTP), IEEE 802.1D (STP), IEEE 802.1b (IEEE 802.1b (IEEE 802.3b 1000BASE-T Ethernet, IEEE 802.3a 1000BASE-T Ethernet, IEEE			
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5.2 The switch should be capable of deploying QoS policies. The switch should support Class of Service (CoS) based on; Port, 802.1p, destination MAC and IP and IP DSCP. The switch should support Strict priority and weighted roundrobin (WRR) scheduling. 6 Manageability The switch should support secure management via IPv4 or IPv6 through features such as Secure Shell (SSHv1/2), Secure Sockets Layer (SSL), and Simple Network Management Protocol (SNMPv1, 2, 3). The switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). The switch should support integrated standard based Command Line Interface (CLI)/Telnet/SCP/TFTP/HTTP access for switch management/upgrade/monitoring. 6.4 (RSPAN). 6.5 The switch should support Remote Switch Port Analyzer (RSPAN). 6.6 The switch should support other management features like: Ping, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog. 7 Standards and Compliance The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.14w (RSTP), IEEE 802.1y (L2 Prioritization, QoS), IEEE 802.1Q (VLAN Tagging), IEEE 802.1X (Network Access Control), IEEE 802.3 ab 1000BASE-T Ethernet, IEEE 802.3ac Gigabit Ethernet, IEEE 802.3ac 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). 7.1 (Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	5	Quality of Service	
5.3 The switch should support Class of Service (CoS) based on; Port, 802.1p, destination MAC and IP and IP DSCP. 5.4 The switch should support Strict priority and weighted roundrobin (WRR) scheduling. 6 Manageability The switch should support secure management via IPv4 or IPv6 through features such as Secure Shell (SSHv1/2), Secure Sockets Layer (SSL), and Simple Network Management Protocol (SNMPv1, 2, 3). The switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). The switch should support integrated standard based Command Line Interface (CLI)/Telnet/SCP/TFTP/HTTP access for switch management/upgrade/monitoring. The switch should support Remote Switch Port Analyzer (RSPAN). 6.4 The switch should support Remote Monitoring (RMON). The switch should support other management features like: Ping, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog. 7 Standards and Compliance The switch should be compliant with IEEE 802.1s (MSTP), IEEE 802.1t (RSTP), IEEE 802.1t (L2 Prioritization, QoS), IEEE 802.1w (RSTP), IEEE 802.1t (L2 Prioritization, QoS), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3 1000BASE-T Ethernet, IEEE 802.3ac 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). 7.1 Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	5.1	The switch should support Rate Limiting.	
5.3 802.1p, destination MAC and IP and IP DSCP. The switch should support Strict priority and weighted roundrobin (WRR) scheduling. 6 Manageability The switch should support secure management via IPv4 or IPv6 through features such as Secure Shell (SSHv1/2), Secure Sockets Layer (SSL), and Simple Network Management Protocol (SNMPv1, 2, 3). The switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). The switch should support integrated standard based Command Line Interface (CLI)/Telnet/SCP/TFTP/HTTP access for switch management/upgrade/monitoring. The switch should support Remote Switch Port Analyzer (RSPAN). 6.5 The switch should support Remote Monitoring (RMON). The switch should support other management features like: Ping, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog. 7 Standards and Compliance The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1Y (NSTP), IEEE 802.1Y (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3ac 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	5.2	The switch should be capable of deploying QoS policies.	
7.1 robin (WRR) scheduling. 6 Manageability The switch should support secure management via IPv4 or IPv6 through features such as Secure Shell (SSHv1/2), Secure Sockets Layer (SSL), and Simple Network Management Protocol (SNMPv1, 2, 3). The switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). The switch should support integrated standard based Command Line Interface (CLI)/Telnet/SCP/TFTP/HTTP access for switch management/upgrade/monitoring. 6.4 The switch should support Remote Switch Port Analyzer (RSPAN). 6.5 The switch should support Remote Monitoring (RMON). The switch should support other management features like: Ping, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog. 7 Standards and Compliance The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1p (L2 Prioritization, QoS), IEEE 802.14 (VLAN Tagging), IEEE 802.17 (L2 Prioritization, QoS), IEEE 802.10 (VLAN Tagging), IEEE 802.1X (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3ac 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	5.3	802.1p, destination MAC and IP and IP DSCP.	
The switch should support secure management via IPv4 or IPv6 through features such as Secure Shell (SSHv1/2), Secure Sockets Layer (SSL), and Simple Network Management Protocol (SNMPv1, 2, 3). The switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). The switch should support integrated standard based Command Line Interface (CLI)/Telnet/SCP/TFTP/HTTP access for switch management/upgrade/monitoring. 6.4 The switch should support Remote Switch Port Analyzer (RSPAN). 6.5 The switch should support Remote Monitoring (RMON). The switch should support other management features like: Ping, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog. 7 Standards and Compliance The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1D (STP), IEEE 802.1X (NSTP), IEEE 802.1X (NSTP), IEEE 802.33 10BASE-T Ethernet, IEEE 802.33 10BASE-T Ethernet, IEEE 802.33 10BASE-T Ethernet, IEEE 802.33 Gigabit Ethernet, IEEE 802.33 Link Aggregation Control Protocol (LACP). Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	5.4		
through features such as Secure Shell (SSHv1/2), Secure Sockets Layer (SSL), and Simple Network Management Protocol (SNMPv1, 2, 3). The switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI). The switch should support integrated standard based Command Line Interface (CLI)/Telnet/SCP/TFTP/HTTP access for switch management/upgrade/monitoring. The switch should support Remote Switch Port Analyzer (RSPAN). 6.5 The switch should support Remote Monitoring (RMON). The switch should support other management features like: Ping, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog. 7 Standards and Compliance The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.1v (RSTP), IEEE 802.1y (L2 Prioritization, QoS), IEEE 802.1 (VLAN Tagging), IEEE 802.1X (Network Access Control), IEEE 802.3 100BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3ac Gigabit Ethernet, IEEE 802.3ac 1 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	6	Manageability	
6.2 Management Software with Web based Graphical User Interface (GUI). The switch should support integrated standard based Command Line Interface (CLI)/Telnet/SCP/TFTP/HTTP access for switch management/upgrade/monitoring. 6.4 The switch should support Remote Switch Port Analyzer (RSPAN). 6.5 The switch should support other management features like: Ping, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog. 7 Standards and Compliance The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.1w (RSTP), IEEE 802.1y (L2 Prioritization, QoS), IEEE 802.1Q (VLAN Tagging), IEEE 802.1X (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3ac 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	6.1	through features such as Secure Shell (SSHv1/2), Secure Sockets Layer (SSL), and Simple Network Management Protocol	
6.3 Line Interface (CLI)/Telnet/SCP/TFTP/HTTP access for switch management/upgrade/monitoring. 6.4 The switch should support Remote Switch Port Analyzer (RSPAN). 6.5 The switch should support Remote Monitoring (RMON). The switch should support other management features like: Ping, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog. 7 Standards and Compliance The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.1w (RSTP), IEEE 802.1p (L2 Prioritization, QoS), IEEE 802.1Q (VLAN Tagging), IEEE 802.1X 7.1 (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3ac 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). 7.2 Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	6.2	Management Software with Web based Graphical User Interface (GUI).	
 (RSPAN). 6.5 The switch should support Remote Monitoring (RMON). The switch should support other management features like: Ping, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog. 7 Standards and Compliance The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.1w (RSTP), IEEE 802.1p (L2 Prioritization, QoS), IEEE 802.1Q (VLAN Tagging), IEEE 802.1X 7.1 (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3ae 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC 	6.3	Line Interface (CLI)/Telnet/SCP/TFTP/HTTP access for switch	
The switch should support other management features like: Ping, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog. 7 Standards and Compliance The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.1w (RSTP), IEEE 802.1p (L2 Prioritization, QoS), IEEE 802.1Q (VLAN Tagging), IEEE 802.1X (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3ae 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC		, ,	
6.6 Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog. 7 Standards and Compliance The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.1w (RSTP), IEEE 802.1p (L2 Prioritization, QoS), IEEE 802.1Q (VLAN Tagging), IEEE 802.1X 7.1 (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3ae 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	6.5		
The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.1w (RSTP), IEEE 802.1p (L2 Prioritization, QoS), IEEE 802.1Q (VLAN Tagging), IEEE 802.1X (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3ae 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	6.6	Port mirroring, DHCP client, Simple Network Time Protocol	
IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.1w (RSTP), IEEE 802.1p (L2 Prioritization, QoS), IEEE 802.1Q (VLAN Tagging), IEEE 802.1X 7.1 (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3ae 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP). Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	7	Standards and Compliance	
	7.1	IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.1w (RSTP), IEEE 802.1p (L2 Prioritization, QoS), IEEE 802.1Q (VLAN Tagging), IEEE 802.1X (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3ae 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP).	
	7.2	Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC	

Tab	Table-3: Network Layer 2 Access Switch 48 ports			
Make	e, OEM Model/ OEM Part No.:			
Sr. No.	IPR Specification	Compliance (Yes/No)	Remarks	
1	Architecture			
1.1	The switch should have 48 100/1000 Base-TX, auto-negotiating and auto sensing ports.			
1.2	The switch should have at least 2 nos. of Small Form-Factor, pluggable, 10G SFP+ uplink ports in addition to the above ports.			
1.3	The switch should have at least one RJ-45/USB 2.0 port for OS management (uploading, downloading and configuration).			
1.4	The switch should be rack mountable and should not take space more than 1 Rack Unit (RU).			
1.5	The switch architecture should be stackable with at least 4 switches in a single stack, using additional stacking port.			
2	Performance	Τ		
2.1	The switch should have at least 256 MB Flash and 512 MB RAM.			
2.2	The switch should support Jumbo Frames of at least 9 Kbytes. The switch should support at least 176 Gbps of switching bandwidth.			
2.4	The switch should have at least 130 Mpps of forwarding rate.			
2.5	The switch should support at least 256 Active VLAN.			
2.6	The switch should support at least 16K MAC Addresses.			
3	Layer 2 Features			
3.1	The switch should be able to discover (on both IPv4 & IPv6 Network) the neighboring device giving the details about the platform, IP Address, MAC address etc. and should be able to detect duplicate IP address.			
3.2	The switch hardware should be able to run both IPv4 & IPv6 simultaneously.			
3.3	The switch should support Link Aggregation Control Protocol (LACP).			
3.4	The switch should support Multicast Listener Discovery (MLD v1/2) snooping.			
3.5	The switch should support Voice VLAN, IP based VLAN and MAC based VLAN.			
3.6	The switch should support Remote Switched Port Analyzer (RSPAN) or equivalent.			
3.7	The switch should support Bridge protocol data unit (BPDU) Guard or equivalent.			
3.8	The switch should support DHCP client, snooping and relay.			
3.9	The switch should support Internet Group Management Protocol (IGMP).			
3.10	The switch should support Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP).			
4	Network Security Features	1	T	
4.1	The switch should support port security.			
4.2	The switch should support DHCP snooping			
4.3	The switch should support dynamic Address Resolution Protocol (ARP) Inspection.			
4.4	The switch should support RADIUS, TACACS/TACAS+ and username/password for authentication, authorization and accounting.			

4.5	The switch should support Broadcast, Multicast and Unicast Network Storm control.		
4.6	The switch should support port access authentication according to 802.1x.		
4.7	The switch should support secure communications to the management interface and system through SSL, Secure Shell (SSHv2), Secure Copy and SNMPv3		
4.8	The switch should support BPDU guard.		
5	Quality of Service		
5.1	The switch should support Rate Limiting.		
5.2	The switch should be capable of deploying QoS policies.		
5.3	The switch should support Class of Service (CoS) based on; Port, 802.1p, destination MAC and IP and IP DSCP.		
5.4	The switch should support Strict priority and weighted round-robin (WRR) scheduling.		
6	Manageability	<u>, </u>	
6.1	The switch should support secure management via IPv4 or IPv6 through features such as Secure Shell (SSHv1/2), Secure Sockets Layer (SSL), and Simple Network Management Protocol (SNMPv1, 2, 3).		
6.2	The switch should support manageability using Network Management Software with Web based Graphical User Interface (GUI).		
6.3	The switch should support integrated standard based Command Line Interface (CLI)/Telnet/SCP/TFTP/HTTP access for switch management/upgrade/monitoring.		
6.4	The switch should support Remote Switch Port Analyzer (RSPAN).		
6.5	The switch should support Remote Monitoring (RMON).		
6.6	The switch should support other management features like: Ping, Port mirroring, DHCP client, Simple Network Time Protocol (SNTP), cable diagnostics and syslog.		
7	Standards and Compliance		
7.1	The switch should be compliant with IEEE compliance: IEEE 802.1AB (LLDP), IEEE 802.1D (STP), IEEE 802.1s (MSTP), IEEE 802.1w (RSTP), IEEE 802.1p (L2 Prioritization, QoS), IEEE 802.1Q (VLAN Tagging), IEEE 802.1X (Network Access Control), IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-T Ethernet, IEEE 802.3ab 1000BASE-T Ethernet, IEEE 802.3z Gigabit Ethernet, IEEE 802.3ae 10 Gigabit Ethernet, IEEE 802.3ad Link Aggregation Control Protocol (LACP).		
7.2	Certification: UL (UL 60950), CSA (CSA 22.2), CE mark, FCC Part 15 (CFR 47) Class A.		

Tab	Table-4: 10G BASE SFP+ LR Module			
Mak	e, OEM Model/ OEM Part No.:			
Sr. No.	IPR Specification	Compliance (Yes/No)	Remarks	
1	Should be 10G base SFP+ LR 1310nm SMF module.			
2	Should support 10GBASE Ethernet in accordance with IEEE 802.3ae.			
3	Should be fully compatible with the quoted core and access switches with no inter-operability issue.			
4	Should be suitable for connection using quoted LC type patch cord.			
5	Should be hot-swappable, no need to power down the switch while installing/replacing.			
6	The module should support transmission on link length of at least 500 meter on standard single-mode fibre.			

Table-5: Network Passive UTP Cabling Components (Quantity decided by bidder as per the distance and other inputs provided)					
Make	Make, OEM Model/ OEM Part No.:				
Sr. No.	IPR Specifications	Compliance (Yes/No)	Remarks		
1	All specifications for components & cabling should be tested at least up to 600Mhz, UL/ETL listed and verified, UL/ETL marking should be embossed and/or printed on the passive items & their packing.				
2	Item: Shielded Foiled Twisted Pair (S/FTP) Cable at least CAT6	A			
2.1	Should be S/FTP, 4 pair 23 AWG solid bare copper, with foil shielding of pair and overall braided screen and LSZH jacket.				
2.2	Should support network line speeds up to 10 Gbps.				
2.3	Outer jacket color: Should be gray				
2.4	Should Compliant with standards: IEC 61156-5, EN50288-6-1, ANSI/TIA568C.2, ISO/IEC 11801-1 Ed 1.0, ETL verified to TIA/EIA-568-B.2-10 Category 6A standards for physical & electrical specifications.				
2.5	Should be certified by independent test lab for 10G (Gigabit) Ethernet Performance up to 100 meters.				
3	Item: 24 port Shielded Patch Panel - at least CAT6A				
3.1	Should be 19", 1U height patch panel for 24 x RJ45 connection, metallic, high strength, shielded, modular Patch Panel with shutter on each port.				
3.2	Should have operating life at least for 20 reterminations.				
3.3	Should have contact material of copper alloy or equivalent.				
3.4	Should have provision for color coding on the patch panel side for identification.				
3.5	Should have Zigzag type IO placement for better alien cross talk.				
3.6	Should be Compliant with standards: Should confirm or exceed the EIA/TIA 568 C.2 (CAT6A) Class EA standards. Transmission channels of Class EA with up to 4 plugged connections according to ISO/IEC 11801 ed. 2.2, EN 50173-1 May 2011 (DIN EN50173-1) and Class F on 2 pairs, as well the U.S. standard Cat. 6A according to TIA 568-C.2.				
4	Item: Wire Manager/Patch Chord Minder panel		•		
4.1	19", 1U height rack mountable, Metallic / high strength or equivalent jumper rings for routing cable assemblies.				
5	Item: Shielded Information Outlets with surface mount box a CAT6A	nd face plates	s - at least		
5.1	Should have RJ-45 connection module for shielded CAT6A cable in surface mount box with ABS British style face plate having shutter for dust protection in Single or Dual port configuration.				
5.2	RJ45 data jack should offer superior alien crosstalk suppression, excellent insertion loss, and provides enhanced electromagnetic interference (EMI) protection.				
5.3	Cat 6A Shielded Jack should be designed for high-speed 10GB data transmission.				
5.4	Should be Non PCB type, multiple time reusable and independent termination without any tool.				
5.5	Should have facility to have visual inspection of Contact area.				
5.6	Should have gold/Zinc alloy plated contacts for at least 700 insertion cycles.				
5.7	The face plate should be supplied with screw hole covers.				

5.8	Should compliant with standards: IEEE 802.3 section 4, for 10GBASE-T applications up to 100 m. For the setting up of transmission channels of Class EA with up to 4 plugged connections in accordance with ISO/IEC 11801 ed. 2.2, June 2011, TIA 568-C.2, UL/ETL listed and verified.		
6	Item: Shielded Patch Cord 1meter / 2 meter / 3 meter - at least 0	CAT6A	
6.1	Should be S/FTP, flexible, LSFRZH cable with 4 x 2 x AWG 26/7 inner conductor.		
6.2	Should have RJ-45 connector with matching color molded boot at both the ends.		
6.3	All patch cords shall be factory crimped and packed.		
6.4	Should support network line speeds up to 10 Gbps.		
6.5	Should support applications such as ISDN, POE, token ring & VOIP.		
6.6	Preferred Color: BlueBlack		
6.7	Should Compliant with standards: Cable should be low-smoke in acc. with IEC 61034 and halogen-free in acc. with IEC 60754-1. Halogen-free and heavy-metal free in acc. with EU directives RoHS 2. RJ45 connector compliant with Cat 6A ISO component standard: IEC 60603-7-41 RJ45 category 6A. Strain-relief function in acc. with TIA 568-C. For the setting up of transmission channels of Class EA with up to 4 plugged connections acc. to ISO/IEC 11801 ed. 2.2, June 2011, Complies with Category 6A ISO requirements of the standards ISO/IEC 11801 ed. 2.2, June 2011, EN 50173-1 May 2011, as well as TIA 568-C.2.		

(Quai	le-6: Network Passive Optical Fiber Cabling C		S									
Mak	e, OEM Model/ OEM Part No.:											
Sr. No.	IPR Specifications	Compliance (Yes/No)	Remarks									
1	Item: Single Mode Fibre Optic armored cable 12 and 24 core											
1.1	Should be 9.2/125 micron graded index, Single mode OS2 non-metallic, anti-rodent, armored cable.											
1.2	Should be suitable for indoor as well as outdoor applications.											
1.3	Should be protected inside jelly filled loose tubes, armoring with acrylic coated good quality steel tape, with FRP strength member, water proof tape and double layer of HDPE jacket.											
1.4	Should be able to meet Gigabit & 10G Ethernet performance requirement up to 1000 m specified by IEEE 802.3z (1000 Base-X) & IEEE 802.3ae (10G Base-X)											
1.5	Should confirm or exceed the ISO/IEC 11801:2002; IEC 60794-1-2 E1; IEC 60794-1-2 E3; IEC 60794-1-2 F1; IEC60794-1 and ITU Recommendation G.652.D standard standards for Fibre and cable performance specifications. Should be certified third party labs for IEC 60332-3 for flame retardant, IEC 61034-2 for low smoke & IEC 60754-2 for toxicity & acidity.											
2	Item: LC style fully loaded light interface unit (LIU) for terminating 9.2/125µ SM fibre											
2.1	Should be 19", 1U/2U height rack mountable metallic distribution enclosure with removable back cover.											
2.2	The metallic box and front panel material should be powder-coated stainless steel.											
2.3	Should have all necessary accessories for fiber management inside such as Fiber guides, radius controls & secure tie downs within the LIU.											
2.4	Should have fusion splicing tray for termination of fibre.											
2.5	Shall be slide-out type drawer enclosure for Easy access to splicing tray, Easy access to back side of the connector and have labels for better identification.											
2.6	Should be loaded with duplex LC couplers (OS2) and adaptor plates with all clamps, harnessing rings, ties etc. for termination of 12/24 and 48 fibres 9.2/125 micron SM.											
2.7	Should be loaded with 12/24/48 nos. of ISO/IEC-11801-OS2 Pigtails with LC Type Connectors in accordance with IEC 61754-20 with plastic dust cover.											
2.8	The LC adapter/couplers should be in accordance with IEC 61754-20 and should have option for physical lock protection.											
3	Item: Optical Patch Cord 3 meter and 30 meter											
3.1	Should be single mode 9.2/125 µm OS2 with LSZH jacket. Should confirm to EIA/TIA-568C.3 and ISO/IEC-11801 and											
3.2	should be RoHS compliant.											
3.3	Patch cord should be factory mounted on both sides with ceramic LC-Duplex connectors in accordance with IEC 61754-4.											
3.4	Should support network line speed up to 10Gbps.											
3.5	Connectors should tune in accordance with IEC 61755-3-1 and qualified in accordance with IEC 61753-1 for category U (uncontrolled environment).											
3.6	Should have duplex clip, 1 x blue and 1 x red strain relief with plastic dust cover.											

Tabl	e-7: Floor Standing Network Rack – 32U												
Make	Make, OEM Model/ OEM Part No.:												
Sr. No.	IPR Specification	Compliance (Yes/No)	Remarks										
1	Size												
1.1	Should be 19" having usable height of 32U and overall height with castors should not exceed 1800mm.												
1.2	Should have maximum overall depth of 1000mm.												
1.3	Should have minimum 500 Kg load bearing capacity.												
2	Material												
2.1	Should have rigid frame structure.												
2.2	Should have glass front door.												
2.3	Should have single or dual rear perforated doors.												
2.4	Should have removable side panels with slam latches & indents for easy access.												
2.5	Should have ventilated top and bottom covers with cable entry provision. The top cover should have provision for fan tray mounting.												
2.6	All the frames, front/rear door and side panels should be made up of CRCA steel with 80-100 microns powder coating.												
3	Power Management												
3.1	Should have at least one CE approved 1U power distribution unit made of high flame retardant & insulating material, having at least 10 numbers of 5/15 Amp AC power distribution universal sockets, spike suppressor, indicator and MCB with 2 meter cable having 3 pin plug termination.												
4	Accessories												
4.1	Should have fully accessible 19" mounting angles at front and rear with "U" marking for easy location of equipment in the designated slots.												
4.2	Should have at least 4 nos. of 1U, 19" horizontal cable manager.												
4.3	Should have fan tray with 4 nos. of 230 VAC, low noise, good quality, ball bearing type, 90 CFM fans.												
5	Others												
5.1	Should have floor placement using 2 nos. of castors with foot brakes and 2 nos. of castors without brake and levelling legs.												
5.2	Should have earth continuity kit.												
5.3	Should have wall mounting hardware.												
5.4	Should have at least 5 nos. of equipment mounting hardware packet with at least 20 items each.												
6	Standards												
6.1	Should be compliant with the standards DIN 41494, IEC 297, environment friendly according to RoHS and ISO 9001-2000, ISO 14001 -2004.												

Tab	le-8: Standing/Wall mount Network Rack – 9U										
Make	e, OEM Model/ OEM Part No.:										
Sr. No.	IPR Specification	Compliance (Yes/No)	Remarks								
1	Size										
1.1	Should be 19" having usable height of 9U.										
1.2	Should have maximum overall depth of 500mm.										
1.3	Should have minimum 50 Kg load bearing capacity.										
2	Material										
2.1	Should have rigid frame construction.										
2.2	Should have glass front door.										
2.5	Should have ventilated top and bottom covers with cable entry provision. The top cover should have provision for at least two fans tray mounting.										
2.6	All the frames, front/rear door and side panels should be made up of CRCA steel with 80-100 microns powder coating.										
3	Power Management										
3.1	Should have at least one CE approved 1U power distribution unit made of high flame retardant & insulating material, having at least 6 numbers of 5 Amp AC power distribution universal sockets, spike suppressor, indicator and MCB with 1.5 meter cable having 3 pin plug termination.										
4	Accessories										
4.1	Should have fully accessible 19" mounting angles at front and rear with "U" marking for easy location of equipment in the designated slots.										
4.2	Should have at least 1 no. of 1U, 19" horizontal cable manager.										
4.3	Should have fan tray with 2 nos. of 230 VAC, low noise, good quality, ball bearing type, 90 CFM fans.										
5	Others										
5.1	Should have provision to stand on the floor as well as for wall mounting.										
5.2	Should have earth continuity kit.										
5.3	Should have wall mounting hardware.										
5.4	Should have at least 2 nos. of equipment mounting screws/hardware packet.										
6	Standards										
6.1	Should be compliant with the standards DIN 41494, IEC 297, environment friendly according to RoHS and ISO 9001-2000, ISO 14001 -2004.										

Annexure-III

Manufacturer's Authorization Form

Ref:
Date:
Γο,
The Purchase Officer
nstitute for Plasma Research
Near Indira Bridge, Bhat
Gandhinagar, Gujarat-382428
Sub: Manufacturer Authorization for Tender No.
Sir,

We, < **OEM** > having our registered office at < **OEM address>**, are an established manufacturer of < **name of quoted item** >. We < OEM> solely authorized
bidder's name> to quote our product for above mentioned tender.

Our full support is extended in all respects for supply, warranty and maintenance of our products. We also ensure to provide the warranty and service support for the supplied equipment's for a period of 5 years for Active Components and 20 years for passive components from the date of installation of the equipment's as per tender terms. In case of any difficulties in logging complaint at bidder end, user will have option to log complaint at our call support center.

We also undertake that in case of default in execution of this tender by the **<Bidder Name>**, the **<OEM/Company Name>** will take all liabilities and responsibilities and necessary steps for successful execution against this tender.

We also undertake that to meet the timelines defined in the Tender, we will ensure that the Systems are made available to <bidder> in time. If any product is declared end of life, we will ensure that a suitable equivalent or higher roll over product is offered through <bidder> to IPR for due approval and Order executions thereafter.

Thanking You

For **<OEM>** <(Authorized Signatory)> Name:
Designation:

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. The Bidder in its bid should include it.

(This need to be printed in Tenderer's letter head)

To
The Purchase Officer
Institute for Plasma Research
Near Indira Bridge
Bhat
Gandhinagar-382428 (INDIA)

Ref: Tender Notice No.IPR/TN/PUR/ET/18-19/41 dated 8-12-2018

Dear Sir,

I/We have gone through the tendering conditions pertaining to the Two Part Tender and General Conditions of Contracts and Special Conditions of Contracts contained in Section "B" of Form No: IPR-LP-ET-03.V2. I/We hereby agree to supply the stores conforming to the tender specifications and also agree to abide by your General Conditions of all Contracts and Special Conditions of Contract contained in Section "B" of the Tender document.

- You will be at liberty to accept any one or more of the items of stores offered by us and I/We shall be bound to supply you the stores as may be specified in the Purchase Order/Contract.
- I/We hereby agree to keep the price valid for your acceptance for a period of 120 days from the date of opening of the tender.
- Deviations to technical specifications of the tender documents are detailed in Annexure-A of the tender form while deviations proposed to the General/Special Conditions of Contract are detailed in Annexure "B" to this tender.
- I/We are also uploaded all the leaflets/catalogue, etc. pertaining to the stores offered.

Yours faithfully Stamp and Signature of the Tenderer

Institute for Plasma Research (An Autonomous Institute of Dept. of Atomic Energy) Bhat, Gandhinagar

	TERMS & CONDITIONS	
ITEM ESCRIPTION	Supply, installation, commissioning and testing of integrated fiber optic ba as per the specification mentioned in the tender document	sed SST-1 Local Area Network (LAN) Syste
SI. No.	PARTICULARS	REMARKS
1	Name of the Supplier	
II	IPR Enquity NO & Date	IPR/TN/PUR/ET/18-19/41 DATED 8-12-2018
<u>III</u>	Vendor Offer No & Date	
IV 	Postal address Contact with STD code	
VI	Fax with STD code	
VII	Name of Contact person	
VIII	Mobile No.	
IX	e-mail ID	
X	Currency of offer/quotation SCANNED COPY OF THE BELOW MENTIONED DOCUMENTS NEED TO UPLOAD AT www.tenderwizard.com/DAE AT THE TIME OF PARTICIPATION OF TENDER WITHIN THE PERIOD OF SUBMISSION.	"YES" OR "NO"
1	Certificates: i) Prodict ration Cortificate if Any, with DCS&D/NSIC/MSME	
	i) Registration Certificate if Any, with DGS&D/NSIC/MSME ii) PAN (Permanent Account Number) Registration	
	iii) Certificates of Registration for Sales Tax/ VAT/ WCT or Service Tax iv) Authorization certificate/ Agency Agreement from Manufacturer (if not manufacturer)	
	Commericial Terms for Quoted items (Please Provide Commercial terms and conditions in the below form)	
2	Price Shall be firm and fixed through out the currency of contract, in the event of placement of purchase order.	
<u>3</u>	Please select the CURRENCY OF OFFER / QUOTATION first Have you offered Packing and forwarding charges in the price bid (if	
5	applicable)? Goods and Services Tax: Have you specified HSN / SAC Code for Goods and	
	Services Tax in Price Bid?	
<u>6</u> 7	Have you offered Freight charges in the price bid? Have you offered Insurance charges in the price bid?	
8	Delivery period (as per Clause No.E of Section-C of Form No.	
	IPR_LP_ET_ 03.V2 (Terms and Conditions) attached with the tender/enquiry). (Also refer document named "Deferred_terms_IPR_LP_ET_03.V2" for Delivery/Execution schedule)	
9	Have you offered Installation and commissioning charges?	
10	Liquidated Damages:- as per Sr. No.22 of Section B of Form No IPR-LP-ET- 03.V2 (Terms and Conditions) attached with the tender/enquiry	
11	Terms of Payment:- as per Sr. No.35 of Form No. IPR_LP_ET_ 03.V2 (Terms and Conditions) attached with the tender/enquiry. (Also refer document named "Deferred_terms_IPR_LP_ET_03.V2" for amended payment terms)	
12	Guaranty / Warranty:-as per Sr. No. 34.2 (Section-B) of Form No. IPR_LP_ET_ 03.V2 (Terms and Conditions) attached with the tender/enquiry. (Also refer document named "Deferred_terms_IPR_LP_ET_03.V2" for amended Guarantee/warranty terms)	
13	Validity of offer/quotation:- 120 days from the date of opening of tender QUESTIONNAIRE TO BE FILLED BY BIDDER IN AND SENT ALONG WITH OFFER DULY SIGNED	
14	In the event of a purchase order/contract vendor has to provide Security Deposit in the form of Bank Guarantee for 10% of contract/ order value from SBI/nationalized banks or any one of the scheduled banks mentioned in the bracket (Axis Bank, HDFC Bank, ICICI Bank and IDBI Bank) valid till final acceptance of the supplied goods at IPR, wherever applicable shall be	
15	submitted. In the event of a purchase order/contract Performance Bank Gurantee for 10% of the contract/order value from SBI/nationalized banks or any one of the scheduled banks mentioned in the bracket (Axis Bank, HDFC Bank, ICICI Bank and IDBI Bank) valid throughout the guarantee period, wherever applicable shall be submitted.	

16	I/We hereby offer to supply the stores detailed in the schedule hereto at the price given in the said schedule and agree to hold this offer open till expiry of quotation. I/We shall be bound to supply the stores hereby offered upon issue of purchase order communicating the acceptance thereof on or before the expiry of the last mentioned date. You will be at liberty to accept any one or more of the items of stores tendered for or portion of any or more of the items of such stores and I/We notwithstanding that the offer in the tender has not been accepted in whole shall be bound to supply to you- such item or items and such portion or portions of one or more of the items as may be specified in the said Purchase Order communicating the acceptance.	
17	I/we have understood the General Conditions of all Contracts and special conditions of contract governing supplies of plant and machinery in the Form No.IPR_LP_ET_ 03.V2, included in the General Conditions of all Contracts and special conditions of contract governing of plant and machinery applicable to contracts placed by the Institute for Plasma Research and the instructions to Tenderer annexed to the invitation to tender Form and have thoroughly examined the specification / drawing and / or pattern quoted or referred to in the Schedule hereto and am/are fully aware of the nature of the stores required any my/our offer is to supply stores strictly in accordance with subject tender to the terms and conditions stipulated in your above Form No. IPR_LP_ET_ 03.V2 and also contained in the Purchase Order Communicating acceptance of this Tender.	
18	Whether All Documents Related to tender Viewed?	
19	Vendor should upload the complete technical details (Tehnical specifications with product data sheet	
20	In case of two part tender whether unpriced quotation has been uploaded (Failing which offer will not be considered for technical evaluation)	
21	Free Issue Material: Successful tenderer will have to arrange insurance showing beneficiary as "Institute for Plasma Research" at their risk and cost towards adequate security for the materials/property provided/issued by the Purchaser as Free Issue Material for the due execution of the contract, wherever applicable.	

Institute for Plasma Research (An Autonomous Institute of Dept. of Atomic Energy) Bhat, Gandhinagar

	Eligibility Criteria (Annexure-A)										
ITEM DESC RIPTI ON	Supply, installation, commissioning and testing of integrated the specification mentioned in the tender document	d fiber optic based SST-1 Local Area Network	((LAN) System as per								
SI. No.	PARTICULARS	REMARKS									
ı	Name of the Vendor										
II	IPR Enquity NO & Date	IPR/TN/PUR/ET/18-19/41 DATED 8-12-2018									
III	Vendor Offer No & Date										
Sr. No.	Criteria	Documents required to upload	Status of Documents (Uploaded/ Not- Uploaded in e-Tender Portal)								
1	The bidder must be an OEM (Original Equipment Manufacturer) or an authorized system/network (Active and Passive both) integrator of the OEM, who must have supplied and successfully installed similar kind of system/network.	company profile for OEM products. In case the									
2	The bidder should be a single legal entity/ individual organization. Consortium is not allowed.	Undertaking signed by authorized signatory in this regard should be submitted as proof.									
3	The bidder must be in business of system integration of networking system (Active and Passive both) at least for 5 years and must have executed at least 5 orders of system/network (Active and Passive both) integration as on the date of publication of this tender	with technical specification and at least two successful completion certificates of the job as									
4	The bidder must have executed at least single order value of minimum Rs. 30 lacs and above of system/network (Active and Passive both) integration for any State/Central Government/Department /Organization/PSUs/Institutes, Government funded, in the last 5 years from the date of publication of this tender.	Copy of Purchase order (Priced) and successful completion certificate of a job as system/network integrator carried out during 06/12/2013 to 06/12/2018									

Note:

The response to tender without submission of proof of above points will summarily be rejected without further communication

The bidder shall not be under a declaration of

ineligibility for corrupt or fradulent practices or blacklisted with any of the Government agencies
Original documents shall be produced for
verifications, if required.

Institute for Plasma Research (An Aided Institute under Dept. of Atomic Energy) Bhat, Gandhinagar

PRICE SCHEDULE	(SECTION-D
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IPR Enquiry NO & Date : IPR/TN/PUR/ET/18-19/41 DATED 8-12-2018

From

NAME OF THE CONTRACTOR:

Offer no & date:

										į		<u>.</u>		
Sl.No	Item Description	Item DescriptionTenderedUnQuantityMeen		Rate in INR			Packing and Forwarding Freight Charges Per Unit Charges Per Unit (In percentage) (In percentage)			Insurance per unit (In percentage)		Remarks		
			(UOM)	HSN Code (*1)	Basic Unit Rate	Discount (in amount)	Basic Unit rate after discount	(in %) Only	Amount	(in %) Only	Amount	(in %) Only	Amount	
	Supply of 24 port Layer 3 Managed Core Switch (24x 10GBASE SFP+) with cables	2	Nos				0.00		0.00		0.00		0.00	
	Supply of 24 port Layer 2 Managed Access Switch (24x 100/1000 Base-T with at least 2 SFP+ uplinks) with cables	10	Nos				0.00		0.00		0.00		0.00	
3	Supply of 48 port Layer 2 Managed Access Switch (48x 100/1000 Base-T with at least 2 SFP+ uplinks) with cables	2	Nos				0.00		0.00		0.00		0.00	
4	Supply of Single mode SFP+ Fiber Module (10G LC LR).	56	Nos				0.00		0.00		0.00		0.00	
	Supply of 12 core Single-mode Outdoor Armored 9/125µ OS2 OFC Cable.	900	Mtrs				0.00		0.00		0.00		0.00	
6	Supply of 12 core Single-mode Outdoor Armored 9/125µ OS2 OFC Cable.	1000	Mtrs				0.00		0.00		0.00		0.00	
7	Supply of 12 Port Fiber Optic LC style fully loaded LIU with duplex LC couplers (OS2) with all clamps, harnessing rings, ties, Pigtails with LC Type Connector at one end and all necessary accessories for rack mounting.	8	Nos				0.00		0.00		0.00		0.00	
8	Supply of 24 Port Fiber Optic LC style fully loaded LIU with duplex LC couplers (OS2) with all clamps, harnessing rings, ties, Pigtails with LC Type Connector at one end and all necessary accessories for rack mounting.	14	Nos				0.00		0.00		0.00		0.00	
9	Supply of Single-mode (9/125µ), LC-LC Duplex, LSZH Fiber Optic Patch Cable - 3 Meter.	44	Nos				0.00		0.00		0.00		0.00	
10	Supply of Single-mode (9/125µ), LC-LC Duplex, LSZH Fiber Optic Patch Cable - 30 Meter.	2	Nos				0.00		0.00		0.00		0.00	
11	Supply of CAT-6A S/FTP Cable.	2500	Mtrs				0.00		0.00		0.00		0.00	
	Supply of CAT 6A Shielded Non PCB type Reusable Information outlets.	400	Nos				0.00		0.00		0.00		0.00	
13	Supply of Dual port CAT 6A British/American style Face plate with Back Box and wall mounting accessories	100	Nos				0.00		0.00		0.00		0.00	

1 /	Supply of 1U 24 port CAT 6A FTP Jack Panel	14	Nos		Λ ΛΛ	0.00	0.00	0.00	
14	(Rack Mount) with all necessary mounting	14	INOS		0.00	0.00	0.00	0.00	
	accessories.								
15	Supply of Dual Ended Mounting FTP Cat6A	180	Nos		0.00	0.00	0.00	0.00	
13	patch Cord - 1 meter.	100	1103		0. 00	0.00	0.00	0.00	
16	Supply of Dual Ended Mounting FTP Cat6A	180	Nos		0.00	0.00	0.00	0.00	
.0	patch Cord - 2 meter.	100	1100		0.00	0.00	0.00	0.00	
17	Supply of 9U wall mount Network Rack with	9	Nos		0.00	0.00	0.00	0.00	i
	necessary accessories.				0.00	0.00		0.00	
18	Supply of 32U Floor mounting Network Rack	1	Nos		0.00	0.00	0.00	0.00	
	with necessary accessories.								
19	Supply of 40mm HDPE Pipe with bands, tee,				0.00	0.00	0.00	0.00	
	couplers, clamps, screws, cable ties and all								
	necessary accessories required for laying it on	1500	Mtrs						
	the walls or through cable trays. Color: Orange								
			-						
20	Supply of ISI mark PVC duck type casing caping				0.00	0.00	0.00	0.00	
	75mmX50mm with coupler, elbow and all	400	Mtrs						
	mounting/laying accessories (Screws, Clapms								
21	etc.). Supply of ISI mark PVC duck type casing caping		-		0.00	0.00	0.00	0.00	
	25mmX16mm with coupler, elbow and all				0.00	0.00	0.00	0.00	
	mounting/laying accessories (Screws, Clapms	400	Mtrs						
	etc.).								
22	Supply of 25mm PVC Flexible Pipe.	100	Mtrs		0.00	0.00	0.00	0.00	
	Installation and configuration of 24x Layer 3		Nos		0.00	0.00	<u></u>		
	Core Switch.	2			0.00	0.00		5.00	
24	Installation and configuration of 24x Layer 2	10	Nos		0.00	0.00	0.00	0.00	
	Core Switch.	10							
25	Installation and configuration of 48x Layer 2	2	Nos		0.00	0.00	0.00	0.00	
	Core Switch.								
26	Laying of 12/24 core Single-mode Outdoor				0.00	0.00	0.00	0.00	
	Armored 9/125µ OS2 OFC Cable in Cable Tray/	1900	Mtrs						
	HDPE Pipe.				0.00	0.00	0.00	0.00	
	Installation of 12/24 Port Fiber LIU.	22	Nos		0.00	0.00		.0 <mark></mark>	
28	Splicing of OFC Pigtails and fiber, testing and	432	Nos		0.00	0.00	0.00	0.00	
~~	db Loss Measurement for Fiber Cores.		Noo		Λ ΛΛ	0.00	0.00	0.00	
29	Installation, labelling & dressing of OFC Patch Cords.	46	Nos		0.00	0.00	0.00	0.00	
30	Installation and routing of CAT 6A S/FTP, 24		Nos		0.00	0.00	0.00	0.00	
00	Port Jack Panel.	14	1103		0. 00	0.00	0.00	0.00	
31	Laying of CAT-6A FTP Cable in cable				0.00	0.00	0.00	0.00	
0.	trays/casing-caping.	2500	Mtrs		0.00	0.00	0.00	0.00	
32	Installation of CAT 6A Information outlets.	400	Nos		0.00	0.00	0.00	0.00	
33	Installation of CAT 6A dual port Face Plate and	400	Nos		0.00	0.00			
	Back Box.	100			0.00			3133	
34	Termination of Cat 6A S/FTP cable with	200	Nos		0.00	0.00	0.00	0.00	
	Labeling, Dressing and Ferruling (Both end).	200							
35	Labeling & Dressing of Cat 6A S/FTP Patch	200	Nos		0.00	0.00	0.00	0.00	
	Cords.								
	Testing of CAT 6A Nodes.	200	Nos		0.00	0.00	· <u></u>		
37	Installation of HDPE pipe on wall/through cable	1500	Meter		0.00	0.00	0.00	0.00	
	trays.				2 2 -			2.2.2	
	Installation of casing/caping on wall.	800	Mtrs		0.00	0.00	<mark></mark>		
	Installation of PVC flexible pipe.	100	Mtrs		0.00	0.00		.g <mark></mark> j	
40	Istallation and dressing of 9U wall mount	9	Nos		0.00	0.00	0.00	0.00	
	Network Rack.								

=	Istallation and dressing of 32U floor standing Network Rack.	1	Nos		0.00	0.00	0.00	0.00	
42	Site Certification and Documentation Charges.	1	Job		0.00	0.00	0.00	0.00	
	Charges for Project Management viz project engineering, logistics, coordination, inspection and supervision, Q.A, for the execution period till handing over period.	1	Job		0.00	0.00	0.00	0.00	
44	Other items (if any)								
а	Optional Item/ Accessories				0.00	0.00	0.00	0.00	
b	Optional Item/ Accessories				0.00	0.00	0.00	0.00	
С	Optional Item/ Accessories				0.00	0.00	0.00	0.00	
d	Optional Item/ Accessories				0.00	0.00	0.00	0.00	
е	Optional Item/ Accessories				0.00	0.00	0.00	0.00	

NOTE: The quantities mentioned above for the *passive components*, are tentative and may vary as per the proposed solution in accordance with the tentative network connectivity diagram (Annexure -I of the tender document), however the payment for the passive components as well as the Implementation charges shall be made for the actual used quantities.

Place of delivery IPR Gandhinagar NOTES:

- (a) If freight is not shown seperately it will be treated as "FREE DELIVERY" (applicable for INR Quote)
- (b) Detailed specifications and scope of work are as per Attached Annexure
- (c) If the rate cells are left blank, it will be treates as "0" (ZERO)
- (e) Kindly enable the Macros if you receive the "Security Warning" message. (Click on options in "Security Warning" and select "Enable this content"

IMPORTANT NOTES: 1) Custom Duty Exemption certificate will not be issued to any bidder under any circumstances.

- 2) Prices in this bid format alone are acceptable
- 3) GST (IGST, CGST, SGST or any form) should not be included in the basic cost (Unit Rate Column) for either goods or services
- 4) Evaluated total cost on the basis of bid prices will be calculated by Purchaser after bid opening
- (*1) HSN/SAC Code: For indigenous goods/services, to be filled by the bidder
- 1) QUOTATIONS ARE INVITED IN INDIAN CURRENCY ONLY.
- 2) QUOTATIONS RECEIVED OTHER THAN "INR" QUOTE SHALL SUMMARILY BE REJECTED.