

भारत सरकार/GOVERNMENT OF INDIA  
अंतरिक्ष विभाग/DEPARTMENT OF SPACE  
क्रय यूनिट-III/PURCHASE UNIT-III  
विक्रम साराभाई अंतरिक्ष केंद्र/VIKRAM SARABHAI SPACE CENTRE  
तिरुवनंतपुरम/THIRUVANANTHAPURAM - 695 022

विज्ञा. सं. वीएसएससी/एसपीआरई-क्रय/39 दि. 05/06/2024  
ADVT. NO. VSSC/SPRE-PUR/39 DT. 05/06/2024

भारत के राष्ट्रपति के लिए तथा उनकी ओर से वरिष्ठ प्रधान, क्रय एवं भंडार, विक्रम साराभाई अंतरिक्ष केंद्र (वीएसएससी), तिरुवनंतपुरम, निम्नलिखित के लिए ई-प्रापण के माध्यम से (क्रम सं. 1 के लिए) निविदाएं आमंत्रित करता है: -

For & on behalf of the President of India, the Sr. Head Purchase & Stores, Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram invites Expression of Interest (for Sl. No. 1) for the following :-

क्रम सं. Sl. No	निविदा सं. Tender No.	वर्णन / Description	मात्रा Qty.	निविदा शुल्क Tender Fee
1	VSSC/PURCHASE UNIT III (SPRE)/APEP/VS202300625201 [लोक निविदा - दो भाग/ PUBLIC TENDER- TWO PART]	“450केवी डिजिटल रेडियोग्राफी के लिए उपसाधनों सहित फ्लैट पैनल संसूचक” “Flat panel detector for 450kV Digital radiography with acces sories”	1यूनिट./ 1 Unit	लागू नहीं / NA

**विशेष टिप्पणी/Special Note:-**

विदेशी विक्रेताओं को निविदा प्रस्तुत करने की अनुमति नहीं है। मेक इन इंडिया नीति के अनुसार केवल श्रेणी-I और श्रेणी-II के स्थानीय आपूर्तिकार इस बोली में भाग लेने हेतु पात्र हैं। विदेशी ओईएम से सीधे प्राप्त उद्धरणों/या विदेशी ओईएमओं की ओर से उद्धरण प्रस्तुत कर रहे एजेंटों को इस निविदा में भाग लेने की अनुमति नहीं है।

Foreign vendors are not permitted to quote. Only Class-I and Class-II Local suppliers as per Make in India Policy are eligible to participate in the bid. Quotations directly from foreign OEM/ or from agents quoting on behalf of foreign OEMs are not allowed to participate in this tender.

क्रम सं. Sl. No.	बोली प्रस्तुत करने की समय-सीमा Time limit for submission of Bid	बोली खोलने की तिथि Bid Opening date
1.	दिनांक 27/06/2024 [14:00 बजे तक]	दिनांक 27/06/2024 [14:01 बजे ]

क्रम सं. 01 के लिए, ब्यौरे इसरो ई-प्रापण पोर्टल <https://eproc.vssc.gov.in> पर उपलब्ध हैं।

For Sl. No. 01., details are available on ISRO e-procurement portal <https://eproc.vssc.gov.in>.

शुद्धिपत्र, यदि कोई हो तो, हमारे वेबसाइट [www.vssc.gov.in](http://www.vssc.gov.in) / [www.isro.gov.in](http://www.isro.gov.in) में मात्र प्रकाशित किया जाएगा।

Corrigendum, if any will be published in our websites : [www.vssc.gov.in](http://www.vssc.gov.in) / [www.isro.gov.in](http://www.isro.gov.in) only.

हस्ताक्षरित/Sd/-

वरि. प्रधान, क्रय एवं भंडार / Sr. Head, Purchase & Stores

E-Tenders are invited for the above mentioned procurements through our E-procurement site <https://eproc.vssc.gov.in>. Bids can be submitted before the due dates mentioned.

Only online tenders will be accepted. No manual / Postal / e-mail / fax offers will be entertained. No manual tender document will be issued. Parties interested to participate in this e-Tender are required to register themselves as vendors, if not already registered, in our e-procurement portal <https://eproc.vssc.gov.in> by downloading plugins and help demos listed on the home page of the e-procurement link mentioned above to complete the vendor registration process. They can seek help from help desk 0471-2565454 also as provided in the home page of e-procurement portal in case of any problem for registration and subsequent process. Vendors may please note that without registering in our e-procurement portal, they will not be able to quote for this e-tender.

Important Notice: Tender will be automatically closed on the due date if at least one offer is received. If the tender could not be opened on the first day due to any technical snag, it will be opened on the subsequent day as per the schedule.

This being a Two Part Tender, Cost shall be mentioned in the Price Bid Only. All the documents being uploaded like quote split up details, AMC cost etc should not contain the rates/costs. However, a copy of your PRICE BID, AMC quote etc WITHOUT PRICE SHALL BE UPLOADED in the Documents Solicited from the Vendor Field [available in Bid forms] TO KNOW THE PATTERN OF QUOTE. [ENSURE NOT TO MENTION ANY PRICE, OTHERWISE THE QUOTE WILL BE INVALID].

**THE TECHNICAL DOCUMENTS NEED TO BE ATTACHED ONLINE AS A SINGLE PDF FILE WITHOUT ANY PRICE INFORMATION, TECHNICAL BID CONTAINING PRICE DETAILS WILL BE TREATED AS REJECTED.**

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
VIKRAM SARABHAI SPACE CENTRE (VSSC)  
THIRUVANANTHAPURAM**

**Tender for Flat panel detector for 450kV Digital radiography with accessories**

**Bids to be submitted online**

**Tender No.: VSSC/PURCHASE UNIT III (SPRE)/VS202300625201 dated 16-05-2024**

## A. Tender Details

Tender No :	VSSC/PURCHASE UNIT III (SPRE)/VS202300625201
Tender Date :	16-05-2024
Tender Classification:	GOODS
Purchase Entity :	PURCHASE UNIT III (SPRE)
Centre :	VIKRAM SARABHAI SPACE CENTRE (VSSC)

### Flat panel detector for 450kV Digital radiography with accessories

This is a PT TWO-PART tender i.e. Techno-Commercial Bid (Part-I) and Price Bid (Part-II) shall be submitted separately. All technical and commercial terms and conditions shall be furnished in the Techno-Commercial Bid while price shall be indicated only in the Price Bid. Uploading price details anywhere else other than the price-bid shall lead to unconditional rejection of the tender. Please make note of the same.

Tenderers are advised NOT TO UPLOAD any documents revealing the price of the main equipment, accessories, spares or AMC. They are however, requested to upload UNPRICED BIDS (i.e. Price details masked) showing appropriate break-up of components of main equipment, individual accessories and spares as desired. Purchase preference to eligible vendors are applicable as per extant notifications issued by the Government of India.

#### A.1 Tender Schedule

Tender Publish Date :	17-05-2024 18:00
Bid Clarification Due Date :	04-06-2024 14:00
Bid Submission Start Date :	17-05-2024 18:10
Bid Submission Due Date :	27-06-2024 14:00
Bid Opening Date :	27-06-2024 14:01
Price Bid Opening Date :	10-07-2024 10:00

## **A.2 Pre-bid Meeting Details**

**Date :** 04-06-2024 11:00

**Place :** VSSC, Trivandrum

**Location :** RPP, VSSC

**Centre :** VIKRAM SARABHAI SPACE CENTRE  
(VSSC), THIRUVANANTHAPURAM, KERALA

**Details :** Interested vendors who needs site visit shall intimate  
Purchase and Stores Officer, SPRE Purchase , phone  
No.0471 2563609, email id: pso2\_prso\_pur@vssc.gov.in.

## **B. Tender Attachments**

NA

### **Instructions To Vendors**

#### **1. PROFORMA FOR INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER (IG)**

1. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.

(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.

(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.

(d) Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

2. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.

(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.

(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.

(d) Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

#### **3. ACCEPTANCE OF STORES:**

(a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by

the purchaser at the Contractor's own risk, expense and cost.

(b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the purchaser, whose decision shall be final.

(c) If, in the opinion of the purchaser, all or any of the stores do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the Contractor.

(d) If the whole or any part of the stores supplied are rejected in accordance with Clause No. (c) above, the purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

4. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.

5. a) Your offer should be valid for 90 days from the date of opening of the tender.

b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.

6. DESPATCH: The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

7. d) The term "Purchase Order" shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.

#### 8. GUARANTEE & REPLACEMENT:

(a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.

(b) For a period of twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called

upon to do so within a period of 14 months from the date of acceptance thereof by the purchaser who shall state in writing in what respect the stores or any part thereof are faulty.

(c) If, in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser, provided the notice informing the Contractor of the defect is given by the purchaser in this regard within the said period of 14 months from the date of acceptance thereof.

(d) Should the Contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.

(e) The decision of the Purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the Stores supplied by the Contractor are defective or any defect has developed within the said period of 12 months or any other period or as to whether the nature of defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.

(f) To fulfill guarantee conditions outlined in (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser)

**9. PACKING FORWARDING & INSURANCE:** The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

**10.** Preference will be given to those tenders offering supplies from ready stocks and on the basis of FOR destination/delivery at site.

**11. PRICES:** Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

**12. REJECTED STORES:**

Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

**13.** Sales Tax and/or other duties/levies legally leviable and intended to be claimed should be mentioned in the price bid template. If nothing is mentioned, then it will be presumed that the rate quoted is inclusive of all taxes/duties.



14. SECURITY DEPOSIT: Wherever, the Purchase Order value is Rs. 5.00 Lakhs or more, on acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding ten percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, 'Security' and the Contractor fails to provide the security 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 re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause regarding Delivery. (b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

## 15. TERMS & CONDITIONS OF TENDER

16. TEST CERTIFICATE: Wherever required, test certificates should be sent along with the despatch documents.

17. The authority of the person signing the tender, if called for, should be produced.

18. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.

19. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.

20. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser.

21. The term Contractor shall mean, the person, firm or company with whom or with which the order for the supply of Stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.

22. The term Purchaser shall mean the President of India or his successors or assigns.

23. The term "Stores" shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.

## 2. Instructions to Vendors

1. Last minute clarification on tenders will not be entertained.

2. This is an E Tender. Hence Postal/Fax/Email tenders will not be accepted.

### **3. Conditions for BIDDER FROM A COUNTRY WHICH SHARES LAND BORDER WITH INDIA**

1. Any bidder from a country which shares a land border with India will be eligible to bid in this tender, only if the bidder is registered with the Competent Authority.

Competent Authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

2. Any false declaration and non-compliance of the above would be a ground for immediate rejection of offer or termination of the contract and further legal action in accordance with the laws.

3.

Validity of Registration: Registration should be valid at the time of submission of bids and should be valid at the time of placement of order.

### **4. Specific Terms and Conditions to Tender (MII Compliant)**

1. (I) Please quote applicable GST separately.

2. (II) Our standard delivery term is FOR, VSSC. In case any vendor offers delivery term of Ex-works, Packing and Forwarding charges if any should be indicated separately either as a percentage of the quoted rate or as a Lumpsum amount.

3. (III) Our standard payment term is 100% within 30 days after receipt and acceptance of the items at our site (after installation and commissioning in cases where installation and commissioning is required).

4. (IV) Liquidated Damages: The delivery period quoted should be realistic. The delivery period so quoted and mentioned in the order is the essence of the order/contract. In case of delay in delivery of material as per the delivery schedule, Liquidated Damage @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value shall be levied. Wherever, installation and commissioning is also involved, the supply will be deemed to have been completed only when the entire Stores is supplied, installed and accepted.

5. (V) Performance Bank Guarantee: Wherever products offered carry warranty, the warranty should

be for one year or as per manufacturers standard warranty term. Against such cases, please confirm submission of Performance Bank Guarantee. The Performance Bank Guarantee should be for 3% of the order value covering the warranty period obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of the warranty period. Alternately vendors can request for withholding 3% payment till completion of the warranty period.

6. (VI) Security Deposit: Wherever the offer value is Rs. 5.00 Lakhs or above, the successful tenderer should submit Security Deposit @ 3% of the order value by way of Bank Guarantee / FD Receipt. The Bank Guarantee shall be obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of all contractual obligations. If the Contractor is called upon by the Purchaser to deposit, Security and the Contractor fails to provide the security 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 re-purchase of the stores Contracted at the risk of the Contractor. In case if Security Deposit is submitted and the contractor fails to execute the order, then the security deposit will be forfeited.

7. (VII) Note: SD, LD and PBG clauses are mandatory and offers of the vendors who have not agreed for the above conditions will be excluded from the procurement process. Micro and Small Vendors are not exempted from the submission of Security Deposit. Only Govt Departments/PSUs/PSEs can submit Indemnity Bond instead of Bank Guarantee towards SD/PBG.

8. (VIII) Please upload the Technical Details / Catalogue / Data Sheets (wherever applicable)

9. (IX) The offer should be valid for a period of minimum 90 days from the date of opening of Tender and 180 Days for PT Two Part (120 Days for Technical Bid and 60 Days for Price Bid from the date of opening).

10. (X) In order to avail of the benefits extended to by Govt. of India to the Micro and Small Sectors, please submit attested copy of the valid Entrepreneur Memorandum Part-II signed by the General Manager, District Industries Centre / Udyog Adhar / NSIC Registration Certification along with your offer.

11. (XI) If any bidder submits forged / false document along with the tender, offer of such vendors will be summarily rejected and such bidders will be blacklisted for all future tenders.

12. (XII) Wherever samples are required to be submitted along with the quotation, offer without sample will not be considered.

13. (XIII) The other attached forms are our standard terms and conditions, which are to be complied with. If any conflict arise between the specific terms and standard terms, then in those cases, the specific terms will prevail over the standard terms.

14. (XIX) Purchase preference to eligible vendors are applicable as per extant notifications issued by the Government of India.

15. (XV) Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales Quotes not permitted. The bids shall be in INR only.

16. (XVI) Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: a) Equal to or more than 50% : Class-I local supplier. b) Minimum 20% but less than 50% : Class-II local supplier. c) Less than 20% : Non-local supplier.

17. (XVII) Local content means the amount of value added in India (i.e. indigenous items/services added in the offered products/services/works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent. Indicate extent of Minimum Local Content in offered product/service and location of such value additions.

18. (XVIII) The Class-I & II local supplier should provide a Self Certification along with your offer in PDF format indicating that the item offered meets the minimum local content as called for in the tender as mentioned above and provide the % of local content along with details of the location(s) at which the local value addition is made. In case of two part tenders, it is mandatory to indicate compliance to MLC(minimum local content) in technical bid itself.

19. (XIX) The Class-I/Class-II Local suppliers, at the time of submitting their offer, shall also indicate percentage of local content and provide self-certification that the item (s) offered meets the local content requirement for Class-I/Class-II Local Suppliers as the case may be. They shall also give details of location (s) at which the local value addition is made.

20. (XX) In cases if the item(s) offered exceed Rs. 10 Crores, the Class-I/Class-II Local Suppliers shall provide a Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

21. (XXI) False Declarations will be in breach of the Code of Integrity under Rule 175 (1) (i) (h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

22. (XXII) Purchase Preference Policy:- Goods/Works which are divisible in nature (required quantity is greater than 1 or not a package basis): i. If L1 is 'Class-1 local supplier', the order/contract for full quantity shall be awarded to L1 bidder. ii. If L1 bid is not from a 'Class-I local supplier', 50% of the

order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference (i.e. 20%) and contract for that quantity shall be awarded to such Class-I local supplier subject to matching the L1 price (inclusive of duties, taxes and freight & insurance). iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In cases where none of the 'Class-I local supplier' within the margin of purchase agree to match L1 price, in such cases 100% quantity shall be ordered on original L1 bidder. iv. In case no offers are received from 'Class-I local supplier' or none of the 'Class-I local supplier' falls within the margin of purchase preference of 20%, the order shall be processed on L1 vendor. v. In case L1 bidder (not a 'Class-I local supplier') is not accepting splitting of order on 50:50 basis, in that case the order/contract shall be awarded to such 'Class-I local supplier' for full quantity subject to matching the L1 price. vi. Regarding MSEs (Indian vendors): a) The following additional aspect as indicated below would be applicable for procurement which are falls under divisible category (i.e., not applicable for indivisible category), in case of participation of MSEs in the tendering who are also complying to the Minimum Local Content (MLC) stipulated in the tender. b) If any Indian vendor satisfies the requirement of MSEs stipulation and also falls within the purchase preference margin as called for in MSME policy (in case of matching L1 price) will be considered for ordering 25% of tendered quantity, the balance quantity / works will be considered for distribution amongst all bidders (including MSEs) as per the purchase preference policy. c) In case no MSEs qualifies for purchase preference or do not match with L1 price then the total tendered quantity will be distributed amongst all bidders as per the purchase preference policy.

23. Purchase Preference Policy:- Goods/Works which are not divisible in nature (required quantity is 1 or on a package basis):

(i). If L1 is 'Class-1 local supplier', the order/contract for full quantity shall be awarded to L1 bidder. (ii). If L1 bid is not from a 'Class-I local supplier', then, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price subject to the Class-I local supplier's quoted price falling within the margin of purchase preference (i.e. 20%) and contract for that quantity shall be awarded to such Class-I local supplier subject to matching the L1 price (inclusive of duties, taxes and freight & insurance). (iii). In case such lowest eligible 'Class-I local supplier' fails to match the L1 price , the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price and so on, and contract shall be awarded accordingly. In cases where none of the 'Class-I local supplier' within the margin of purchase agree to match L1 price, in such cases the contract shall be placed on original L1 bidder. (iv). In case no offers are received from 'Class-I local supplier' or none of the 'Class-I local supplier' falls within the margin of purchase preference of 20%, the order shall be processed on L1 vendor.

## **5. PPP Make in India(Non- Divisible Items-Class I & II Local Suppliers Only)**

1. In line with Public Procurement (Preference to Make in India), Order 2017 & its amendments issued by Govt. of India from time to time with a view to support the Indian industries, ISRO has implemented "Purchase Preference Policy". The "Purchase Preference" is applicable for the "Class-I Local Supplier" for the goods/ services/ works covered in this tender, subject to the following terms & conditions:-
2. a) The subject item falls under Non-divisible category. b) The offers sought only from Class-I & Class-II local suppliers
3. Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: a) Equal to or more than 50% : Class-I local supplier. b) Minimum 20% but less than 50% : Class-II local supplier. c) Less than 20% : Non-local supplier.
4. 'Local content' means the amount of value added in India (i.e. indigenous items/services added in the offered products/ services/ works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent.
5. The margin of Purchase Preference shall be up to 20%.
6. 'Margin of purchase preference' means the maximum extent to which the price quoted by the "Class-I local supplier" above the L1 (landed cost).
7. 'L1' means the lowest technically accepted tender / bid / quotation (i.e. lowest landed cost including duties, taxes and freight & Insurance).
8. Works means all works as per Rule 130 of GFR- 2017, and will also include 'turnkey works'. Works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.
9. Purchase Preference Policy:- Goods/Works which are not divisible (ie., required quantity is 1 or as a package) and Services:
  - a) If L1 is from a 'Class-I local supplier', the contract will be awarded to L1 bidder.
  - b) If L1 is not from a 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference (i.e. 20%) and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price (inclusive of duties, taxes and freight & insurance).
  - c) In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on, and order/contract shall be awarded accordingly. In case where none of the 'Class-I local supplier' within the margin of purchase preference agree to match the L1 price, then the order/contract shall be awarded to the original L1 Bidder.

10. The 'Class-I & II local supplier' should provide a "Self Certification" along with technical offer indicating that the item offered meets the minimum local content [as per Sl. No.(3)] as called for in the tender and provide the percentage of local content along with details of the location(s) at which the local value addition is made. In case of two bid tenders, it is mandatory to indicate compliance to MLC(minimum Local Content) in technical bid zone.

11. The ink-signed certificate shall be provided on vendors letter head along with the offer (in case of online tender, copy of ink-signed certificate shall be uploaded along with your offer under concerned tab. Original in Hard copy shall be produced on request). In case of non-submission of certificate, the purchase preference shall not apply.

12. A committee (with an external expert from a practicing cost accountant or practicing chartered accountant, if required) constituted for independent verification shall verify the self-declarations & auditor's / accountant's certificates on random basis, as per the requirements.

13. In cases the quoted price is in excess of Rs.1000 Lakhs (including duties, taxes and freight & Insurance) the 'Class-I & II local supplier shall provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in case of suppliers other than companies) giving the percentage of local content.

14. In case of a complaint received from any local supplier indicating a need for review / verification of Local content of successful vendor / awarded vendor, for accepting a complaint from such complainant (w.r.t the false declaration given by the successful vendor on the local content), a complaint fee of Rs.2Lakhs or 1% of the locally manufactured items being procured (subject to a maximum Rs. 5Lakhs), whichever was higher, to be paid by demand draft by the complainant. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

15. False declarations will be in breach of code of the integrity for which a bidder or its successor's will not be eligible/debarred for purchase preference from further tenders / pending tenders for two years along with other actions as may be applicable.

16. The Public Procurement (Preference to Make in India), Order 2017 issued by Govt. of India indicates that if there are any general or specific restrictive clauses to restrict participation of Indian companies in those countries procurement tenders, reciprocity clause need to be invoked as per the order. Hence, if ISRO or Govt. of India come across that Indian suppliers of an item are not allowed to participate and / or compete in procurement by your government, the bid submitted by you will be not be considered and excluded from eligibility for procurement. Please note this point.

6. This is a PT TWO-PART tender i.e. Techno-Commercial Bid (Part-I) and Price Bid (Part-II) shall be

submitted separately. All technical and commercial terms and conditions shall be furnished in the Techno-Commercial Bid while price shall be indicated only in the Price Bid. Uploading price details anywhere else other than the price-bid shall lead to unconditional rejection of the tender. Please make note of the same

7. Tenderers are advised NOT TO UPLOAD any documents revealing the price of the main equipment, accessories, spares or AMC. They are however, requested to upload UNPRICED BIDS (i.e. Price details masked) showing appropriate break-up of components of main equipment, individual accessories and spares as desired. Purchase preferenceto eligible vendors are applicable as per extant notifications issued by the Government of India.

8. The Class-I/Class-II Local suppliers, at the time of submitting their offer, shall also indicate percentage of local content and provide self-certification that the item (s) offered meets the local content requirement for Class-I/Class-II Local Suppliers as the case may be. They shall also give details of location (s) at which the local value addition is made

9. In cases if the item(s) offered exceed Rs.10 Crores, the Class-I/Class-II Local Suppliers shall provide a Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

10. False Declarations will be in breach of the Code of Integrity under Rule 175 (1) (i) (h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law

11. Technical Bids will be opened at the scheduled due date & time. No further intimation will be sent in this regard. The schedule for price bid opening shown is only indicative. Price bids will only be opened in the case of parties who have been techno-commercially accepted, the details of which will be communicated at a later stage.



## C. Bid Templates

### C.1 Technical Bid - Flat panel detector for 450kV Digital radiography with accessories

#### 1. FLAT PANEL DETECTOR FOR DIGITAL RADIOGRAPHY

##### Item specifications for FLAT PANEL DETECTOR FOR DIGITAL RADIOGRAPHY

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Supply, installation, commissioning & training of 450 kV Flat Panel Detector and shutter system at VSSC. The system should be supplied PC based acquisition, review system with hardware and software for Real Time digital radiography of launch vehicle components.		-		
2	Safe to expose directly to a Energy minimum of 450kV X-ray at a distance of 1m from the source		-		
3	Indirect conversion type with Gd <sub>2</sub> O <sub>2</sub> S:Tb or CsI scintillator and Amorphous Silicon receptor.		-		
4	Fibre optic data transfer from detector to work station		-		
5	Active area of FPD should be equal to 16X16 inches		-		
6	The Pixel Pitch of the detector should be 100 microns or less		-		

7	Frame rate of the detector should be 4fps @ 1x1 binning & and 15 fps @ 2 x 2 binning ( minimum)		-		
8	The A/D conversion of the FPD should be 14 bit or better		-		
9	Spatial resolution of the FPD should be greater than $\geq 3$ lp/mm or better		-		
10	Dynamic range of the FPD should be 10000:1 or better		-		
11	Maximum Weight of the FPD with shielding and shutter system should not exceed 50 kg		-		
12	The pixel Matrix of the FPD should be more than or equal to 3072 x 3072		-		
13	The FPD should be resistant enough accordance with IEC 60068 and as per IEC 610 10/1.		-		
14	FPD should be in accordance with ASTM E2597 / DICONDE compliant.		-		
15	Operating temperature range of 10to 40 °C or wider and an operating humidity range of 30 to 85% or wider.		-		
16	Detector should have water based closed circuit cooling with external heat exchanger		-		
17	Suitable remotely operated shutter system compatible for the FPD of detector size 16x16 inches		-		
18	The movable shutters shall provided in the front side of the FPD in both horizontal and vertical direction for setting the exposed area in the FPD		-		

19	Suitable electric cable length ( min. 40m) has to be provided from control room to FPD installed position		-		
20	Detailed drawing of the shutter system and the fixtures for fixing the FPD in the existing DR system		-		
21	All the required hardware and software for acquisition of radiographic image from portable flat panel should be PC based and supplied with perpetual licence		-		
22	Specifications for Image acquisition system : Image capturing system should be DICONDE enabled		-		
23	The capture workstation should have a TFT desktop compatible to the FPD and the review system with a display size of min. 17 inch or better		-		
24	The system should be capable of communicating in Wired mode (wire length minimum 40 mtr between FPD and capture workstation)		-		
25	Provision for entering the technique parameters for the X-Ray exposure		-		
26	Provision to check the quality of captured image before sending it to review station		-		

27	The computer of the system should be of a reputed brand with Processor: i7 or better;RAM: 8GB DDR4 or better; Internal Storage Capacity: 4TB or better; Operating System: Should be compatible with software		-		
28	The imaging software shall have Acquisition module and Analysis module		-		
29	Acquisition module shall be compatible with standard Flat-Panel X-ray Detector (FPD) available in the market. Other provisions shall include (a) configuration and storage of scan settings for given imaging setup (b) real time imaging (c) storage of acquisition parameters and projections for post processing & analysis		-		
30	Analysis module shall have provisions for All standard and user defined filtering functions, Gray scaling functions, Local Gray scaling within a Region Of Interest (ROI) ,Additional window for reference image with interlinked functions, Zooming/Flip/ Rotate functions, Noise reduction through integration / frame averaging.		-		

31	<p>Arithmetic linking of two images including min/ max values, Image improvement by normalization , Histogram for complete image / ROI, Line profile (Gray value profile along a line in any direction) Length and area measurement, calibration of length &amp; area measurement, graphic marking of error regimes, storing and recalling of calibration etc., export of radiographic image (processed / unprocessed) Image format conversion to all conventional image formats including JPEG, TIFF, BMP etc.</p>		-		
32	<p>For Detector calibration and qualification viz., bad pixel map, image lag, gain-offset correction, the Flat Panel X-ray Detector shall comply with ASTM E2597, ASTM E2736 standards.</p>		-		
33	<p>Software shall have features in compliance with ASTM E2699, E2339 standards for image tag and storage, image archival, sharing, etc.</p>		-		
34	<p>Specifications for Image/processing and review system : Image enhancement and review system should be DICONDE enabled and independent work station and monitor for image acquisition and Image review.</p>		-		

35	The image reviewing workstation should be compatible to the capture workstation and capable of receiving the pixel data and technique data of the captured image. It should also have high resolution (3MP or more), TFT monitor with a display size of 24" or more ,Monochrome for review.		-		
36	The system should be capable of communicating in wired mode (wire length maximum of 5 mtr between capture and review workstation)		-		
37	An option of Local gray value scaling within ROI should be present		-		
38	It should be equipped with Gray value scaling function		-		
39	There should be provision for zooming/flipping/rotating/stitching etc for the processed image.		-		
40	There should be provision for all standard filtering functions		-		
41	The Noise reduction feature through integration/frame averaging should be present		-		
42	Threshold Binarisation option should be present		-		
43	Histogram for complete image/ROI should be obtainable		-		
44	It should be provided with an option of Line profiling (obtaining gray value along any line in any orientation).		-		

45	There should be provision for calibration and measurement of Length & area of interest. It should also have graphic marking option( to enter text or comments by user on the processed image for future reference) or error regimes, storing and recalling of calibration etc. for the processed images.		-		
46	There should be an option to Print/Print Preview of entire image/ROI (suitable ports should be present in the system for the same)		-		
47	A provision to save digitized image on hard disc, CD/DVD/Pen drive or External Hard-disc / net work should be present.		-		
48	The system should be capable of image format conversion to all standard image file formats including JPEG,BMP etc		-		
49	The computer of the system should be of a reputed brand and compatible with the supplied software with following nominal specifications:Processor: i7 or better, RAM: 4 X 16 GB DDR4 or better ,Internal Storage Capacity: 4TB or more, Operating System: Should be Compatible with software, In addition to above a suitable Graphics card should also be provided		-		

50	The equipments should work in 220-250 Volts AC, 50-60Hz Indian electricity supply conditions		-		
51	All electrical circuit connections and interface cables required for the system shall be supplied along with the system.		-		
52	All electrical connections and cables should be properly covered and shielded		-		
53	The system except the shutter system should be a standard, registered model from a reputed Original Equipment Manufacturer (OEM) or an authorized dealer of OEM. The dealer should have authorization from the OEM (should submit a copy of authorization certificate along with the quote) for the full integrated system (except the shutter system), if the quote is from a dealer.		-		
54	The party has to ensure the availability of spare and service for at least next 10 years from the date of installation of the system.		-		
55	The party should have after sales service facility in India. Trained engineers, authorized by the OEM should be available in India to attend after sales service. The OEM should also support on real time basis, in case of urgency.		-		



56	The equipment should be provided with warranty for a minimum period of two years after installation and commissioning, for defect-free operation.		-		
57	The calibration of the FPD should also be carried out once in a year during the warranty period or as and when required		-		
58	Party has to submit an additional quote along with the offer for post warranty Non Comprehensive -AMC with 2 preventive maintenance visits per year and any number of breakdown calls for a period of at least 5 years.		-		
59	AMC cost will also be considered in the total cost of the item for finalizing the lowest tender value.		-		
60	List of existing customers in India with address to whom the same FPD were supplied along with the year of supply is to be provided. The party has to provide compliance sheet along with the quote, explaining detailed compliance against each serial number of the specification list. Offer without the compliance matrix shall not be considered for evaluation. Stating just "Yes" or "Complied" is not enough.		-		
61	Party has to supply 25 litres of spare coolant for the cooling system of FPD.		-		

62	The Party has to do installation, commissioning, demonstration of the manufacturing characteristics and satisfactory functioning of the entire system in our existing 5 axis object manipulator and 450 KV X-ray system at our site in RPP/ VSSC (Party has to visit the facility to understand about the fixing of the shutter system and FPD in the existing system )		-		
63	The party has to impart exhaustive training to NDT personnel on all the functions and working of the system.		-		
64	Two sets of user manual and quick start guide (in soft and hard copy), complete documentation for the Portable flat panel and review system , operation manual and service manual, warranty certificate, operational manual of the image acquisition system and processing software should be provided along with the system (all documents should be in English Language).		-		

**Document : [Item Doc FLAT PANEL DETECTOR FOR DIGITAL RADIOGRAPHY\\_1\\_Figure 1.pdf](#)**

**Document : [Item Doc FLAT PANEL DETECTOR FOR DIGITAL RADIOGRAPHY\\_1\\_03.1 Detailed Sub-system cost break-up format for FPD.pdf](#)**

**Common Specifications (Applicable for all items)**

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Safe to expose directly to a Energy minimum of 450kV X-ray at a distance of 1m from the source	Safe to expose directly to a Energy minimum of 450kV X-ray at a distance of 1m from the source	Yes / No / Explain		
2	Indirect conversion type with Gd2O2S:Tb or Csl scintillator and Amorphous Silicon receptor.	Indirect conversion	Yes / No / Explain		
3	Fiber optic data transfer from detector to work station	Fiber optic data transfer from detector to work station	Yes / No / Explain		
4	Active area of FPD should be equal to 16X16 inches	16x16 inches	Yes / No / Explain		
5	The Pixel Pitch of the detector should be 100 microns or less	100 microns	Yes / No / Explain		
6	Frame rate of the detector should be 4fps @ 1x1 binning & and 15 fps @ 2 x 2 binning ( minimum)	4fps @ 1x1 binning & and 15 fps @ 2 x 2 binning ( minimum)	Yes / No / Explain		
7	The A/D conversion of the FPD should be 14 bit or better	14 bit or better	Yes / No / Explain		
8	Spatial resolution of the FPD should be greater than $\geq 3$ lp/mm or better	should be greater than $\geq 3$ lp/mm or better	Yes / No / Explain		
9	Dynamic range of the FPD should be 10000:1 or better	10000:1 or better	Yes / No / Explain		

10	Maximum Weight of the FPD with shielding and shutter system should not exceed 50 kg	should not exceed 50 kg	Yes / No / Explain		
11	The pixel Matrix of the FPD should be more than or equal to 3072 x 3072	3072 x 3072	Yes / No / Explain		
12	The FPD should be resistant enough accordance with IEC 60068 and as per IEC 610 10/1.	The FPD should be resistant enough accordance with IEC 60068 and as per IEC 610 10/1.	Yes / No / Explain		
13	FPD should be in accordance with ASTM E2597 / DICONDE compliant.	ASTM E2597 / DICONDE compliant.	Yes / No / Explain		
14	Operating temperature range of 10to 40 °C or wider and an operating humidity range of 30 to 85% or wider.	10to 40 °C or wider and an operating humidity range of 30 to 85% or wider.	Yes / No / Explain		
15	Detector should have water based closed circuit cooling with external heat exchanger	Detector should have water based closed circuit cooling with external heat exchanger	Yes / No / Explain		
16	Suitable remotely operated shutter system compatible for the FPD of detector size 16x16 inches	For the FPD of detector size 16x16 inches	Yes / No / Explain		

17	The movable shutters shall provided in the front side of the FPD in both horizontal and vertical direction for setting the exposed area in the FPD	front side of the FPD in both horizontal and vertical direction for setting the exposed area in the FPD	Yes / No / Explain		
18	Suitable electric cable length ( min. 40m) has to be provided from control room to FPD installed position	Min. 40m has to be provided from control room to FPD installed position	Yes / No / Explain		
19	Detailed drawing of the shutter system and the fixtures for fixing the FPD in the existing DR system	To be provided	Yes / No / Explain		
20	All the required hardware and software for acquisition of radiographic image from portable flat panel should be PC based and supplied with perpetual license	PC based and supplied with perpetual license	Yes / No / Explain		
21	Specifications for Image acquisition system : Image capturing system should be DICONDE enabled	Image capturing system should be DICONDE enabled	Yes / No / Explain		
22	The capture workstation should have a TFT desktop compatible to the FPD and the review system with a display size of min. 17 inch or better	TFT desktop compatible to the FPD and the review system with a display size of min. 17 inch or better	Yes / No / Explain		

23	The system should be capable of communicating in Wired mode (wire length minimum 40 mtr between FPD and capture workstation)	Wired mode (wire length minimum 40 mtr between FPD and capture workstation)	Yes / No / Explain		
24	Provision for entering the technique parameters for the X-Ray exposure	Provision for entering the technique parameters for the X-Ray exposure	Yes / No / Explain		
25	Provision to check the quality of captured image before sending it to review station	To be provided	Yes / No / Explain		
26	The computer of the system should be of a reputed brand with Processor: i7 or better; RAM: 8GB DDR4 or better; Internal Storage Capacity: 4TB or better; Operating System: Should be compatible with software	To be provided	Yes / No / Explain		
27	The imaging software shall have Acquisition module and Analysis module	To be provided	Yes / No / Explain		

28	Acquisition module shall be compatible with standard Flat-Panel X-ray Detector (FPD) available in the market. Other provisions shall include (a) configuration and storage of scan settings for given imaging setup (b) real time imaging (c) storage of acquisition parameters and projections for post processing & analysis Noise reduction through integration / frame averaging,	To be provided	Yes / No / Explain		
29	Software shall have features in compliance with ASTM E2699, E2339 standards for image tag and storage, image archival, sharing, etc.	To be provided	Yes / No / Explain		
30	Specifications for Image/processing and review system : Image enhancement and review system should be DICOM enabled and independent work station and monitor for image acquisition and Image review.	To be provided	Yes / No / Explain		

31	The image reviewing workstation should be compatible to the capture workstation and capable of receiving the pixel data and technique data of the captured image. It should also have high resolution (3MP or more), TFT monitor with a display size of 24" or more ,Monochrome for review.	To be provided	Yes / No / Explain		
32	The system should be capable of communicating in wired mode (wire length maximum of 5 mtr between capture and review workstation)	Wire length maximum of 5 mtr between capture and review workstation	Yes / No / Explain		
33	An option of Local gray value scaling within ROI should be present	To be provided	Yes / No / Explain		
34	It should be equipped with Gray value scaling function	To be provided	Yes / No / Explain		
35	There should be provision for zooming/flipping/rotating/stitching etc for the processed image.	To be provided	Yes / No / Explain		
36	There should be provision for all standard filtering functions	To be provided	Yes / No / Explain		



37	The Noise reduction feature through integration/frame averaging should be present	To be provided	Yes / No / Explain		
38	Threshold Binarisation option should be present	To be provided	Yes / No / Explain		
39	Histogram for complete image/ROI should be obtainable	To be provided	Yes / No / Explain		
40	It should be provided with an option of Line profiling (obtaining gray value along any line in any orientation).	To be provided	Yes / No / Explain		
41	There should be provision for calibration and measurement of Length & area of interest. It should also have graphic marking option( to enter text or comments by user on the processed image for future reference) or error regimes, storing and recalling of calibration etc. for the processed images.	To be provided	Yes / No / Explain		

42	There should be an option to Print/Print Preview of entire image/ROI (suitable ports should be present in the system for the same)	To be provided	Yes / No / Explain		
43	A provision to save digitized image on hard disc, CD/DVD/Pen drive or External Hard-disc / net work should be present.	To be provided	Yes / No / Explain		
44	The system should be capable of image format conversion to all standard image file formats including JPEG,BMP etc	To be provided	Yes / No / Explain		

45	The computer of the system should be of a reputed brand and compatible with the supplied software with following nominal specifications: Processor: i7 or better, RAM: 4 X 16 GB DDR4 or better ,Internal Storage Capacity: 4TB or more, Operating System: Should be Compatible with software, In addition to above a suitable Graphics card should also be provided	To be provided	Yes / No / Explain		
46	The equipment should work in 220-250 Volts AC, 50-60Hz Indian electricity supply conditions	220-250 Volts AC, 50-60Hz Indian electricity supply conditions	Yes / No / Explain		
47	All electrical circuit connections and interface cables required for the system shall be supplied along with the system.	To be provided	Yes / No / Explain		
48	All electrical connections and cables should be properly covered and shielded	To be provided	Yes / No / Explain		

49	<p>The system except the shutter system should be a standard, registered model from a reputed Original Equipment Manufacturer (OEM) or an authorized dealer of OEM. The dealer should have authorization from the OEM (should submit a copy of authorization certificate along with the quote) for the full integrated system (except the shutter system), if the quote is from a dealer.</p>	<p>The system except the shutter system should be a standard, registered model from a reputed Original Equipment Manufacturer (OEM) or an authorized dealer of OEM. The dealer should have authorization from the OEM (should submit a copy of authorization certificate along with the quote) for the full integrated system (except the shutter system), if the quote is from a dealer.</p>	<p>Yes / No / Explain</p>		
50	<p>The party has to ensure the availability of spare and service for at least next 10 years from the date of installation of the system.</p>	<p>To be provided</p>	<p>Yes / No / Explain</p>		
51	<p>The party should have after sales service facility in India. Trained engineers, authorized by the OEM should be available in India to attend after sales service. The OEM should also support on real time basis, in case of urgency.</p>	<p>To be provided</p>	<p>Yes / No / Explain</p>		

52	The equipment should be provided with warranty for a minimum period of two years after installation and commissioning , for defect-free operation.	To be provided	Yes / No / Explain		
53	The calibration of the FPD should also be carried out once in a year during the warranty period or as and when required	To be provided	Yes / No / Explain		
54	Party has to submit an additional quote along with the offer for post warranty Non Comprehensive -AMC with 2 preventive maintenance visits per year and any number of breakdown calls for a period of at least 5 years.	To be provided	Yes / No / Explain		
55	AMC cost will also be considered in the total cost of the item for finalizing the lowest tender value.	AMC cost will also be considered in the total cost of the item for finalizing the lowest tender value.	Yes / No / Explain		

56	List of existing customers in India with address to whom the same FPD were supplied along with the year of supply is to be provided. The party has to provide compliance sheet along with the quote, explaining detailed compliance against each serial number of the specification list. Offer without the compliance matrix shall not be considered for evaluation. Stating just "Yes" or "Complied" is not enough.	To be provided	Yes / No / Explain		
57	Party has to supply 25 litres of spare coolant for the cooling system of FPD.	25 litres of spare coolant for the cooling system of FPD	Yes / No / Explain		

58	<p>The Party has to do installation, commissioning , demonstration of the manufacturing characteristics and satisfactory functioning of the entire system in our existing 5 axis object manipulator and 450 KV X-ray system at our site in RPP/ VSSC (Party has to visit the facility to understand about the fixing of the shutter system and FPD in the existing system )</p>	To be provided	Yes / No / Explain		
59	<p>The party has to impart exhaustive training to NDT personnel on all the functions and working of the system.</p>	To be provided	Yes / No / Explain		

60	Two sets of user manual and quick start guide (in soft and hard copy), complete documentation for the Portable flat panel and review system , operation manual and service manual, warranty certificate, operational manual of the image acquisition system and processing software should be provided along with the system (all documents should be in English Language).	To be provided	Yes / No / Explain		
61	For Detector calibration and qualification viz., bad pixel map, image lag, gain-offset correction, the Flat Panel X-ray Detector shall comply with ASTM E2597, ASTM E2736 standards.	To be provided	Yes / No / Explain		



62	Analysis module shall have provisions for All standard and user defined filtering functions, Gray scaling functions, Local Gray scaling within a Region Of Interest (ROI) ,Additional window for reference image with interlinked functions, Zooming/Flip/Rotate functions,	To be provided	Yes / No / Explain		
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**Supporting Documents required from Vendor**

- 1. Quote for the Flat panel detector for 450kV Digital radiography system as per the specification given ( Cost of FPD, Operating /Image review software and workstation and review monitors shall quote separately.). (Price Bid Related)**
  - 2. Party has to submit an additional quote along with the offer for post warranty Non Comprehensive -AMC with 2 preventive maintenance visits per year and any number of breakdown calls for a period of at least 5 years. (Price Bid Related)**
  - 3. Declaration regarding the percentage of local content (or value addition) in the item offered as well as the split up in %.**
  - 4. unpriced quotation with techno commercial terms in PDF format is mandatory**
- 5 additional documents can be uploaded by the vendor

## C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	Detailed equipment catalogue shall provided along with the quotation	Yes / No / Explain	
2	Detailed compliance statements of specifications of the item with supporting documents shall be provided in the bid as per the format attached in the tender document (mere yes/compliance or no/not compliance will not be considered for the evaluation).	Yes / No / Explain	
3	Lump-sum of the total system(including all components and accessories) is not acceptable and hence individual cost break-up of each item should be provided.	Yes / No / Explain	
4	The price bid should contain cost of Flat Panel Detector, Shutter system, Acquisition System and Review System and other essential/ optional accessories & software separately.	Yes / No / Explain	
5	Certificate of warranty and Certificate of conformities for electrical safety, and environmental protection should be supplied.	Yes / No / Explain	
6	The Party has to do installation, commissioning, demonstration of the manufacturing characteristics and satisfactory functioning of the entire system in our existing 5 axis object manipulator and 450 KV X-ray system at our site in RPP/ VSSC	Yes / No / Explain	
7	AMC cost will also be considered in the total cost of the item for finalizing the lowest tender value.	Yes / No / Explain	
8	Party has to submit an additional quote along with the offer for post warranty Non Comprehensive - AMC with 2 preventive maintenance visits per year and any number of breakdown calls for a period of at least 5 years.	Yes / No / Explain	
9	The party should have after sales service facility in India. Trained engineers, authorized by the OEM should be available in India to attend after sales service	Yes / No / Explain	
10	The system except the shutter system should be a standard, registered model from a reputed Original Equipment Manufacturer (OEM) or an authorized dealer of OEM.	Yes / No / Explain	

11	All the required hardware and software for acquisition of radiographic image from portable flat panel should be PC based and supplied with perpetual licence.	Yes / No / Explain	
12	The system should be supplied PC based acquisition ,review system with hardware and software for Real Time digital radiography of launch vehicle components	Yes / No / Explain	
13	Supply, installation, commissioning& training of 450 kV Flat Panel Detector and shutter system.	Yes / No / Explain	
14	Taxes and other costs, [GST extra at applicable rates]	Yes / No / Explain	
15	Security Deposit (Applicable if Offer Value is Rs. 5 Lakhs or above. MSME/NSIC Units are NOT EXEMPTED from the payment of SD. Bank Guarantee @ 3% of Order Value valid till 60 days from the date of supply to be submitted. Mandatory compliance required. Only Government Bodies/PSUs/PSEs can submit Indentity Bond in lieu of BG. In the event of non-performance of contractual obligations, SD will be forfeited).	Yes / No / Explain	
16	Delivery Terms. [FOR VSSC TVM]	Yes / No / Explain	
17	Delivery Period [Time required for the delivery of the item on receipt of PO]	Yes / No / Explain	
18	Installation [Please specify the period required for completing installation and commissioning work on intimation from VSSC on site readiness]	Yes / No / Explain	
19	Liquidated Damages (Applicable beyond the delivery period mentioned in this tender @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value. Mandatory compliance required).	Yes / No / Explain	
20	Warranty [The item shall be waranteed for a period of two years after installation and commissioning, for defect-free operation.]	Yes / No / Explain	

21	AMC [Party has to submit an additional quote along with the offer for post warranty Non Comprehensive -AMC with 2 preventive maintenance visits per year and any number of breakdown calls for a period of at least 5 years	Yes / No / Explain	
22	Performance Bank Guarantee (PBG) Bank Guarantee @ 3% of Order Value valid till the completion of warranty period plus 2 months claim period to be submitted. Mandatory compliance required. Only Government Bodies/PSUs/PSEs can submit Indemnity Bond in lieu of BG. In the event of non-performance of warranty obligations, PBG will be forfeited).	Yes / No / Explain	
23	Payment Term: (Our Default payment term: For indigenous orders: 100% within 30 days after receipt and acceptance of item at our site. NOTE: CONSEQUENT TO COVID 19 PANDEMIC AND AS PER EXTANT GUIDELINES FROM DEPARTMENT OF SPACE, NO ADVANCE PAYMENT IS PAYABLE TO THIS TENDER).	Yes / No / Explain	
24	Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: a) Equal to or more than 50% : Class-I local supplier. b) More than 20% but less than 50% : Class-II local supplier. c) Less than or equal to 20% : Non-local supplier. Mention your category.	Yes / No / Explain	
25	Local content means the amount of value added in India (i.e. indigenous items/services added in the offered products/services/works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent. Indicate extent of Minimum Local Content in offered product/service and location of such value additions.	Yes / No / Explain	

26	The Class-I & II local supplier should provide a Self Certification along with your offer in PDF format indicating that the item offered meets the minimum local content as called for in the tender as mentioned above and provide the % of local content along with details of the location(s) at which the local value addition is made. In case of two part tenders, it is mandatory to indicate compliance to MLC(minimum local content) in technical bid itself. Confirm attachment of Self declaration along with the offer.	Yes / No / Explain	
27	PO Placement Address (with Name and Contact Details of sales person concerned).	Yes / No / Explain	
28	Any Other Terms [01.VSSC reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted. Confirm Acceptance. 02. There should be no variation between the price quoted in the price bid template and PDF format of the price bid. In the event of any variation, the price quoted in the E-proc price bid template shall be considered. CONFIRM]	Yes / No / Explain	
29	Offer Validity [180 days]	Yes / No / Explain	

### C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	FLAT PANEL DETECTOR FOR DIGITAL RADIOGRAPHY	1.00 Unit		-		

### Common charges (Applicable for all items)

<b>P&amp;F Charges</b>	
<b>Freight charge</b>	
<b>AMC Charges for 1st Year after warranty period</b>	

<b>AMC Charges for 2nd Year after warranty period</b>	
<b>AMC Charges for 3rd Year after warranty period</b>	
<b>AMC Charges for 4th Year after warranty period</b>	
<b>AMC Charges for 5th Year after warranty period</b>	
<b>Installation &amp; Commissioning Charges</b>	