

Tender Reference No.AO/3-36(20)/2020-2021/ 2973

Dated: 25 February, 2021

TENDER (E - PROCUREMENT MODE)

for

Custom-built scientific imaging camera for Astronomy



Registrar
ARIES, Manora Peak
Nainital

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Registrar
ARIES, Manora Peak
Nainital

A. Background :

Aryabhatta Research Institute of observational scienceES (acronym for ARIES; <http://www.aries.res.in>) is an autonomous research institute under the Department of Science and Technology (DST), Government of India. ARIES is on a hilly terrain called Manora Peak, near the beautiful lake city of Nainital located in the Devbhumi of Uttarakhand State in the Central Gangetic Himalayan region. The institute is carrying out fundamental research in the various fields of Atmospheric Science, Astronomy & Astrophysics and Solar physics.

B. Details:**Name of the Purchaser:****The Director,**

Aryabhatta Research Institute of Observational Sciences (ARIES),
Under Department of Science Technology (DST), Govt. of India
Manora Peak, Nainital -263 001, Uttarakhand

C. Time Schedule:

Tender documents may be downloaded from ARIES Website: <http://www.aries.res.in> (for reference only) and CPPP Site <http://eprocure.gov.in/eprocure/app> as per the schedule given in **CRITICAL DATE SHEET** as under: -

Date of publishing on CPP Portal	26-02-2021
Document Download Start Date & Time	26-02-2021 (10:00 hrs.)
Clarification Start Date & Time	26-02-2021 (10:00 hrs.)
Bid Submission Start Date & Time	26-02-2021 (10:00 hrs.)
Document Download End Date & Time	14-03-2021 (15:00 hrs.)
Clarification End Date & Time	14-03-2021 (15:00 hrs.)
Bid Submission End Date & Time	14-03-2021 (15:00 hrs.)
Bid Opening Date & Time for opening of technical bids	15-03-2021 (16:00 hrs.)
Venue, Date and Time for opening of Financial bid	Will be intimated through online CPPP to Technically Qualified Tenderer.
Earnest Money Deposit (EMD)	Rs.3,60,000.00 (Three lakh sixty thousand only)

D. Subject and Brief Scope of Work:

Supply of **Custom-built scientific imaging camera for Astronomy** as per the list in **Annexure-II** at ARIES, Nainital, Uttarakhand

E. Product Utilization :

The product is being purchased for research purposes. The components are required to satisfy all specifications mentioned in this document.

F. Contact information & contact person for technical queries about the items:

Dr. Amitesh Omar, Scientist- "F"
Aryabhata Research Institute of Observational Sciences,
Department of Science Technology, Govt. of India
Manora Peak, Nainital - 263 001, Uttarakhand, India
Tel: +91-(5942) – 270762 **Website:** <http://www.aries.res.in>

G. Contact information & contact person for administrative queries:

Sh. Ravinder Kumar, Registrar
Aryabhata Research Institute of Observational Sciences,
Department of Science Technology, Govt. of India
Manora Peak, Nainital - 263 001, Uttarakhand, India
Tel: +91-(5942) – 270729 **Website:** <http://www.aries.res.in>

H. Instructions for Online Bid Submission:

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at:
<https://eprocure.gov.in/eprocure/app>.

REGISTRATION:

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

I. SEARCHING FOR TENDER DOCUMENTS:-

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

J. PREPARATION OF BIDS:-

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note:

My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

K. SUBMISSION OF BIDS:-

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 6) The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener’s public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

- 9) Upon the successful and timely submission of bids (i.e. after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

L. ASSISTANCE TO BIDDERS :-

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

M. Technical Bid : To qualify in the Technical bid the firm should have the minimum eligibility criteria as under and the firm in this regard must submit the following documents in support of their eligibility criteria – Check list of document (Technical Bid)

- a. Specify your firm/company is a manufacturer/authorized dealer/distributor/ Agency (Attach attested copy)
- b. Bidder security as specified in the NIT; (Technical Bid);
- c. Copy of PAN Card/GST Registration.
- d. Check list of document (Annexure-I)
- e. Copy of Income Tax Return Filed Acknowledgements for last Three years.
- f. Technical Specification/datasheet/brochure & Compliance statement Form (Annexure- II)
- g. Tender Acceptance letter (Technical Bid) Annexure-III
- h. Delivery schedule.
- i. Warranty and guarantee details.
- j. The bidders should not have been suspended or blacklisted by any Govt. Organization (An undertaking to this effect must be submitted by the bidder that the firm has not been suspended or blacklisted by any Govt. Organization on company letter Head. (IV)
- k. Declaration as per **Annexure-V**
- l. Self-Certificate for Local Content Annexure-VI

Note:

- a) No Price information shall be mentioned in Technical Bid otherwise the entire bid shall be rejected

N. General instruction for price bid:

- 1) The Prices quoted should be inclusive of all taxes or duties etc. at destination site (ARIES, Nainital). ARIES, Nainital is registered with DSIR, Govt. of India and is exempted from Custom / GST. Exemption Certificate to this effect will be issued by ARIES, Manora Peak, Nainital, If required. The rates shall be of firm and final. Nothing extra shall be paid on any account.
- 2) **Custom Duty/GST:** ARIES will provide necessary certificate as ARIES is registered with DSIR for the purpose of availing custom duty/GST exemption in terms of Government Notification No. 51/96-Customs dated 23rd July, 1996, Notification No. 28/2003- Customs

dt.01.03.2003, Notification No. 43/2017-Customs dated. 30.06.2017 & Notification No. 47/2017-Integrated Tax (Rate) Dt. 14-11-2017, Notification No. 10/2018-Integrated Tax (Rate) dt. 25.01.2018, Notification No. 45/2017-Central tax (Rate) Dt. 14.11.2017 and Notification No. 45/2017- Union Territory Tax (Rate) Dt. 14.11.2017 & Notification No. 9/2018-Central Tax (Rate) dated. 25.01.2018, Notification No. 9/2018- Union Territory tax (Rate) dated. 25.01.2018, as amended from time to time for research purposes only, to avail the exemption, ARIES shall provide the above certificate along with the supply order. Subject to above, indicate applicable duty.

3) **L1 will be decided on the basis of item rate (On basic price of item).**

4) **Taxes/Other Charges:** GST charges should clearly be mentioned in price bid.

O. Award of Contract:

Contract will be awarded to successful bidder and a copy of the award of the contract will be uploaded in CPPP Portal after finalizing the tender.

P. Details of Bid Security/Earnest Money Deposit

a. Bid Security may be provided through direct transfer (RTGS/NEFT), Account Payee Demand Draft, Fixed Deposit Receipt, Banker's cheque or Bank Guarantee from a nationalized bank drawn in favour of "Director, ARIES", payable at Nainital. If Bid Security has been submitted by any other mode than NEFT/ RTGS, then hard copy of the Bid Security has to be sent by Registered Post/Speed post. It should reach ARIES, Nainital before the bid submission deadline to the name of Director, ARIES, Manora Peak, Nainital Pincode-263001. In envelope super scripted the tender Id or tender reference Number and with company full address.

b. **Exemption for Bid Security:** Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprise (MSMEs) or are registered with the Central Purchase Organization or Concerned Ministry or Department or Startups as recognized by Department of Industrial Policy and Promotion are exempted from BID SECURITY. Such bidder needs to submit relevant certificate issued by competent authority along with technical bid of tender.

c. The Bidders will be defined his exemption certificate which is relevant to our tender category for EMD exemption, If the bidder will not provide the relevant category of certificate then exemption will not be applicable.

d. The details for payment are as follows:

Account Name : Director, ARIES, Account
Bank Name : State Bank Of India
Address : HanningThe, The Mall, Nainital, Uttarakhand- 263001
Account Number : 10860840253
IFSC Code : SBIN0000687

- e. In case, if bidder is not willing to deposit in place of a bid security, this institute may require Bidders to sign a bid securing declaration accepting that if they withdraw or modify their bids during the period of validity, or if they are awarded the contract and they fail to sign the contract, of to submit a performance security before the deadline defined in the request for bids document, they will be suspended for the period of time specified in the request for bids document from being eligible to submit bids for contracts with the entity that invited the bids.
- f. No interest shall be paid on the Earnest Money deposited by the tenderer. EMD/Bid Security of disqualified vender/ vendors will be returned within 45 days after opening of commercial bid.

Q. Other terms and conditions of the tender:

- a. **Delivery:** Within 12 months from the date of received of the Purchase Order. ✓
- b. **Insurance:** Transit insurance covering all risk for all the items is to be arranged by the supplier.
- c. **Validity:** The bid should be valid for acceptance up to a period of 120 Days. The Bidders should be ready to extend the validity, if required without any additional financial implications.
- d. **Warranty/Guarantee:** -The offer should clearly specify the warranty or guarantee period for the machinery/equipment.
- e. **Transportation of Goods:** The Supplier will arrange transportation of the ordered goods as per its own procedure.
- f. **Terms of Payment:-**
1. Mode1: Stage-wise advance payment (up to 90% of the order value) can be made against pro forma invoice and an equivalent bank guarantee for a validity period of up to 12 months.
 2. Mode2: The 90% after receipt, testing and approval of materials normally within 30 days and 10% after submitting performance security in the form of Bank Guarantee of 10% of the total value of item or else 10% amount will be released beyond 2 months after completion of warranty period. Performance bank Guarantee will be released beyond 2 months after the completion of warranty period.
 3. Mode3: The first 90% payment will be made through letter of credit (LC). The rest 10% payment will be made through wire transfer after submitting of performance security in the form of Bank Guarantee of 10% of the total item or else 10% amount will be released after the completion of 02 months warranty period. Performance Bank Guarantee will be release after 2 months of the completion of warranty period.
- g. Liquidated damage as decided by ARIES will be charged, if the item(s) is/are not delivered within the stipulated time frame.
- h. ARIES reserves the right to levy a penalty for delay in delivery of material. This penalty shall be @ of 0.5 % of Purchase Order value per week of delay in deliveries/ execution of the order successfully, subject to maximum of 10% of the order value. Part of the week shall be considered as full week. ARIES will be free to Purchase the material at the risk & cost of supplier & cancel the order in case the delay is more than 5 weeks with forfeiture of EMD/Security Deposit.
- i. Any disputes, legal action/matters, arising out of/ resulting from/related or incident to the tender /quotation/Purchase order/invoices/delivery/payments shall be subject to exclusive jurisdiction of Nainital -263001. Laws of India shall govern this tender as well as any or all transactions /documents/deeds/actions/PO arising out of/ resulting from this tender.
- j. **The Bank/RTGS details must be submitted along with the quotation/Tenders on the letter head.**
- k. **Language of the Bid Proposal:** The Language of the bid proposal as prepared by the Bidders should be in English and all further correspondence with the office and all the documents pertaining to the bid proposal shall be in English.
- l. REJECTION OF STORES:**
- Rejected stores will remain at the ARIES store at the Contractor's risk and responsibility, if instructions for their taking away are not received from the Contractor within a period of 14 days from the date of receipt of the advice or rejection, the Purchaser or his representative has, at his discretion the right to dispose.
- m. Prices should be quoted on F.O.R. ARIES, Nainital basis only.
- n. The number of quantity mentioned in **Annexure-II** may be increased or decreased.

- o. The Director, ARIES reserves the right to accept or reject any or all the proposals in full or in part without assigning any reason.
- p. **Force Majeure:** If the performance of the obligation of either party is rendered commercially impossible by any of the events hereinafter mentioned the same party shall notice of 15 days from the date of such an event in writing to the others party.

a) Government Regulation. b) Legislation. c) Natural disasters. d) Strike e) Lock out f) Act of God.

r. **Important Note:** Amendment, Corrigendum if any to this tender document, will be hosted only on ARIES WEBSITE and CPP Portal and no separate press notification will be issued. Bidders are advised to visit our website and CPP Portal regularly to know such details.

R. PREFERENCE TO “MSME”:

ARIES complies with Public Procurement Policy **Micro and Small Enterprises (MSEs) Order, 2012** as notified under **section 11** of MSME Act, 2006. Purchase preference shall be given to MSEs in all procurements undertaken by ARIES in the manner specified as below:

- In case of splittable or dividable, etc., MSMEs quoting price within price band L-1 + 15%, when L1 is from someone other than MSMEs, shall be allowed to supply at least 20% of tendered value at L-1 subject to lowering of price by MSMEs to L-1.
- In case of non-splittable or non-dividable etc., MSEs quoting price within price band L-1 + 15% may be awarded for full/complete supply of total tendered value to MSME, considering spirit of policy for enhancing the Govt. Procurement from MSME.

S. Preference to “Make In India”

ARIES complies with Public Procurement Policy (Make in India) vide order No.P-45021/2/2017-PP (BE-II) dated 16 Sept 2020, issued by Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Govt. of India. Purchase preference shall be given to local suppliers in all procurements undertaken by ARIES in the manner specified in the above-mentioned O.M. Further, the guidelines mentioned below shall be followed:

Verification of Local Content-

- a. This ‘Class-I local supplier’/ ‘Class-II local supplier’ at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for ‘Class-I local supplier’/ ‘Class-II local supplier’ as the case may be. They shall also give details of the location(s) at which the local value addition is made.

Definitions:

‘Local content’ means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

- ‘Class-I local supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%, as defined under this order.
- ‘Class-II local supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 20% but less than 50%.
- ‘Non-local supplier’ means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than 20%.

Manora Peak, Nainital-263001, Uttarakhand, India

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Registrar
Aryabhatta Research Institute of
Observational Sciences

Annexure-I

T. Check list of document (Technical Bid)

Sr.No	Check list of documents/ undertakings	compliance Yes/No.	Reference, Page No
1	Name of the firm/company/proprietary concern registered		
2	Address of registered office		
3	Address of the office :		
4	Telephone Nos./Fax/E-mail		
5	Specify your firm/company is a manufacturer/ authorized dealer/ distributor/ Agency(Attach attested copy)		
6	MSME/NISC registered firms are exempted from paying the EMD(Attach attested copy)		
7	EMD EMD Details / DD No./ Dated/ Drawn on Bank- Amount :-		
8	PAN Card No. (Attach attested copy)		
9	GST Reg. No. (Attach attested copy)		
10	Copy of Income Tax Return Filed Acknowledgements for last Three years.		
11	Original Technical Catalogue of the quoted model (enclose)		
12	Accepted for all terms & conditions as per tender document		
13	Technical specification and compliance statement as per the tender document in Annexure-II.		
14	Tender Acceptance Letter as per the tender document in Annexure-III.		
15	The bidders should not have been suspended or blacklisted by any Govt. Organization (An undertaking to this effect must be submitted by the bidder that the firm has not been suspended or blacklisted by any Govt. Organization on company letter Head. (IV)		
16	Declaration Certificate as per the tender document in Annexure-V.		
17	Procurement (Preference of Make in India) Verification of Local Content self- certification as the case may be. Refer clause 'S', Annexure-VI		

(Signature of Authorized Person)

Name:

Designation:

Name of Firm/Company/Agency:


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Annexure-II

U. Technical Specification and compliance statement

Parameter	Value (specifications)	Compliance (Y/N) with comments, if any.
1. Generic name & purpose	Custom-built scientific imaging camera for astronomy, fully assembled, tested, and in working conditions at buyer's laboratory meeting below specifications. ARIES, Nainital (buyer/user) needs a scientific imaging camera for astronomy applications on the 3.6-m Altitude-over-Azimuth Devasthal Optical Telescope and other optical telescopes in its premises in India. The camera needs to be customized as per the buyer's needs and specifications and optimize for low noise and weak signals. The standard camera specifications are provided below –	
2. Scientific Usage	On ground-based astronomy telescopes for fast as well as deep imaging in broad-band (~100 nm bandwidth) and narrowband (~10 nm bandwidth) filters over entire optical band (350 nm – 950 nm).	
3. Photo-sensitive sensor (CCD – Charge-Coupled device)	Square format with active area in the range 58x58 mm ² - 62x62 mm ² with >99% fill factor. Sensor photo-sensitive surface should be flat with P-V variations not exceeding 20 micron. Sensor should be AR coated to meet quantum efficiency specifications.	
4. Pixel size (square)	Between 13 to 15 micron	
5. Wavelength range of operation	350 nm – 950 nm	
6. Quantum efficiency	>25% at 350nm, >50% at 400 nm, >70 % between 500 – 700 nm; >50% at 800nm, >25% at 900 nm (@ Temperature = -50 C)	
7. Cosmetics in photo-sensitive area	Grade-1 or following specifications, whichever is better - column defects <2 per million, dark and bright pixels < 150 per million (cluster >100 micron not acceptable within central 90% active area), Traps pixels < 4 per million. No defects in serial (shift) registers.	
8. Operating dark count	<0.01 e-/s/pix with appropriate cooling achievable by thermo-electric method.	
9. Charge transfer efficiency	> 99.999 % per pixel	
10. Cooling and associated system	Thermo-electric (with air and water cooled options at all orientations with leak-proof/self-sealing couplings) cooling to meet dark counts specifications. Sensor to be in a sealed vacuumed vessel sustaining high vacuum to prevent condensation on window or chip in these ambient operating conditions (RH up to 90%, T = 0 C to 30 C, Altitude=up to 2500 meters).	
11. Read outs	Two readouts - one between 0.1-0.5 MHz (slow) and other between 1-5 MHz (fast). Noise <7e- rms at slow speed and <15e- rms at fast speed. With RoI (region of interest/windowing) option, 1Kx1K pixels (raw or binned) should be possible to read in ~1 sec. Noise to be nearly Gaussian (random) at all read out speeds. Read out rates to be user selectable.	

12. Gains (e-/ADU)	User selectable. Gain from lowest value 1 to a suitable range such that 90% of the full pixel well depth can be utilized without registers (ADC) getting saturated.	
13. Exposure time	User definable between 0 sec to 3600 sec in steps of 0.1 sec or better (e.g., 60.1 sec).	
14. Response linearity	In the 1% to 90% of pixel full well capacity, linearity to be better than 99% over the full wavelength range of operation.	
15. Binning	User selectable. Binning in steps such that super-pixel of 75-80 micron can be formed on-chip before readout.	
16. Digital image format (output)	Image needs to be saved in Flexible Imaging Transport system (FITS) format.	
17. Operation & documentation	Camera control software in Windows (ver 10 or above) and/or Linux OS with Graphical User Interface (GUI). SDK to be compatible with Linux/Windows using c/c++, Labview or Matlab. A FITS viewer should be integrated. FITS files should have basic headers auto filled. Complete documentation/software copy should be provided before shipment, to assess performance and operation by user.	
18. Shutter	~0.1 sec exposure uniformity with a mechanical shutter. Opening/closing time should be calibrated/synchronized with software and electronics control such that desired exposure accuracy is met. Operable in temperature range 0 – 30 C.	
19. Dimensions and weights	System should be compact. Camera height (parallel to sensor plane) not to exceed 200 (+/-5) mm and length (vertical to sensor plane) not to exceed 350 (+/- 5) mm. Weight not to exceed 15 Kg. Provision (mounting holes) for mounting camera on side and from front face. Control unit can be separate with at least 1.5 meter cable distance to connect camera and dimension to be within 400 mm x 300 mm x 100 mm and weight not exceeding 15 Kg.	
20. Power supply	Power supply should be compatible to 200-250 V AC at 50 Hz.	
21. Sensor distance from front face plate	Less than 40 mm	
22. Sensor window	Optically-flat anti-reflection coated with Reflection from each surface < 1% between 450 and 800 nm. Window transmission to be >97% in the entire wavelength range of operation.	
23. Interface to PC	Direct high-speed (e.g., USB3/fibre) communication. No proprietary card based interface allowed. Drivers should be freely available.	
24. Vacuum	Desired vacuum should hold for at least 5 years, if fully hermetically sealed. It should be possible to re-vacuum either at buyer's lab (via a re-vacuum port/valve) or vendor's factory (at no service cost) in case of a loss of vacuum within 10 years of operation.	
25. Development time & delivery	Delivery within 12 months from date of issue of P.O. The assembled system should be made available for buyer to assess basic tests in seller's factory (remotely) before the shipment.	
26. Warranty of assembled camera	2 years covering performance and replacement in case system fails partially or completely. In case camera is to be sent to seller's factory, freight and insurance (to and fro) is	

to be paid by seller in this warranty period.

The following table (format) needs to be filled to indicate if above points and notes are agreed or not for each parameter (total 26 entries) given in above technical specifications.

Sr.No	Yes/No	Comments
1.		
2.		
...		
...		
26.		

(Signature of Authorized Person)

Name:

Designation:

Name of Firm/Company/Agency:

Contact Details

[Handwritten Signature]

[Handwritten Signature]

Registrar
ARIES, Manora Peak
Nainital.

Annexure-III

V. TENDER ACCEPTANCE LETTER

(To be given on Company Letter Head)

Date:

To,

**The Director,
ARIES, Manora Peak,
Nainital -263001**

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: -

Dear Sir,

1. I/ We have submitted online tender document(s) for the above mentioned Tender/Work' from the web site(s) namely:

as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc. .), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organizations too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Tenderer, with Official Seal)


Registration
Manora Peak
Nainital

Manora Peak, Nainital-263001, Uttarakhand, India
Tel +91 05942-235136, 270700 | Fax +91 05942-283439 | directoraries@aries.res.in | www.aries.res.in

Annexure-IV

W. UNDERTAKING REGARDING BLACKLISTING

(To be given on Company Letter Head)

Date:

To,

**The Director,
ARIES, Manora Peak,
Nainital -263001**

Sub: Undertaking Regarding Blacklisting .

Tender Reference No: _____

Name of Tender / Work: -

We hereby confirm and declare that we, M/s -----, is not blacklisted/
De-registered/ debarred by any Government department/Public Sector Undertaking/ Private Sector/
or any other agency for which we have Executed/ Undertaken the works/ Services.

For -----Authorised Signatory

Date:


Registrar
ARIES, Manora Peak
Nainital

Annexure-V

X. DECLARATION

(To be given on Company Letter Head)

From:-

M/s.....

.....

To

The Director,
ARIES, Nainital-263 001.
Uttarakhand.

1. I, _____ Son / Daughter / Wife of
Shri _____ Proprietor/Director authorized signatory of the
agency/Firm, mentioned above, is competent to sign this declaration and execute this tender document;
2. I have carefully read and understood all the terms and conditions of the tender and undertake
to abide by them;
3. The information / documents furnished along with the above application are true and authentic
to the best of my knowledge and belief. I / we, am / are well aware of the fact that furnishing of any
false information / fabricated document would lead to rejection of my tender at any stage besides
liabilities towards prosecution under appropriate law.
4. I/We further undertake that none of the Proprietor/Partners/Directors of the Agency/agency
was or is Proprietor or Partner or Director of any Agency with whom the Government have banned
/suspended business dealings. I/We further undertake to report to the Director, ARIES , Nainital
immediately after we are informed but in any case not later 15 days, if any Agency in which
Proprietor/Partners/Directors are Proprietor or Partner or Director of such an Agency, which is
banned/suspended in future during the currency of the Contract with you.

Yours faithfully,

(Signature of the Bidder)

Date:

Name:

Place:

Designation

Seal of the Agency

Address:

(TO BE SUBMITTED AS A PART OF TECHNICAL BID)

Y. Format for Self-Certificate for Local Content

Annexure-VI

To

The Director
Aryabhatta Research Institute of observational sciences (ARIES),
Manora Peak, Tallital Sub PO,
Nainital 263001, Uttarakhand, INDIA

Sub: Self-Certificate for Local Content

Tender Ref. No. _____

Tender ID: _____

* I / We(Name of the Bidder) hereby confirm in respect of quoted item(s) that Local Content is equal to or more than 50% and come under 'Class-I Local Supplier' Category. As being 'Class-I Local Supplier', we are eligible for Purchase Preference under 'Make in India' Policy Vide Govt Order No. P-45021/2/2017-PP (BE-II) dated 16 Sept 2020.

OR

** I / We(Name of the Bidder) hereby confirm in respect of quoted item(s) that Local Content is equal to or more than 20% but less than 50% and come under 'Class -II Local Supplier' Category.

OR

*** I / We(Name of the Bidder) hereby confirm in respect of quoted item(s) that Local Content is less than 20% and come under 'Non-local supplier' Category.

The details of the location(s) at which the local value addition made is/are as under:

- 1.....
- 2.....
- 3.....

- *Applicable for 'Class-I Local Supplier' Category
- ** Applicable for 'Class-II Local Supplier' Category
- *** Applicable for 'Non-local supplier' Category

Yours faithfully,

(Signature & Seal of the Authorized Signatory of Bidder)

Name and Designation of Authorized Signatory:

Name of Firm/Company:

Place:

Date:


Registrar
ARIES, Manora Peak
Nainital

Annexure-VII

Z. BANK GUARANTEE FORMAT

To,
The Director
Aryabhatta Research Institute of observational sciences (ARIES),
Manora Peak, Tallital Sub PO,
Nainital 263001, Uttarakhand, INDIA

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

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

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

We hereby waive the necessity of your demanding the said debt from the supplier
before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of
the contract to be performed there under or of any of the contract documents which
may be made between you and the supplier shall in any way release us from any
liability under this guarantee and we hereby waive notice of any such change,
addition or modification.

This guarantee shall be valid until the day of, 20.....

(Signature of the authorized officer of the Bank)

.....
Name and designation of the officer

.....
Seal, name & address of the Bank and address of the Branch

Item Rate BoQ

Tender Inviting Authority: Aryabhata Research Institute of Observational (ARIES), Manora Peak, Nainital

Name of Work: Custom-built scientific imaging camera for astronomy at ARIES, Nainital, Uttarakhand

Contract No: 05942270759, 05942270759, 05942270723

Name of the
Bidder/ Bidding
Firm /
Company :

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

PRICE SCHEDULE

Sl. No.	Item Description	NUMBER #	Quantity	TEXT #	UNIT	NUMBER #	BASIC RATE in Figures To be entered by the Bidder in Rs. p	NUMBER #	GST	NUMBER #	Any Other Taxes/Duties/Levies	NUMBER #	TOTAL AMOUNT Without Taxes in Rs. p	NUMBER #	TOTAL AMOUNT With Taxes	NUMBER #	TOTAL AMOUNT In Words	TEXT #
1	Custom-built scientific imaging camera for astronomy	2	4	1	No	5	13	15	17	53	0.00	54	0.00	55	0.00	0.00	INR Zero Only	
Total in Figures																	0.00	INR Zero Only
Quoted Rate in Words																	0.00	INR Zero Only

Registrar
ARIES, Manora Peak
Nainital