



TENDER DOCUMENT

**PROCUREMENT OF EQUIPMENT AND ACCESSORIES FOR
INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY (ISPA),
UNIVERSITY OF KARACHI**

UNIVERSITY OF KARACHI

Opening date: 09-07-2021



UNIVERSITY OF KARACHI

KARACHI

Ref: P.O./2021-1984

Cost of form
Rs. 2,000/=(Non refundable)

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PROCUREMENT OF EQUIPMENT AND ACCESSORIES FOR INSTITUTE OF SPACE SCIENCE AND TECHNOLOGY (ISPA), UNIVERSITY OF KARACHI (NRPU project #8612 “Measuring the Impact of Signal Distortions on Telecommunication Networks using Radio Spectrometry”)

S. #	Description	Qty	Unit Price	Make & Model/ Country of Origin	Total Price FOR Basis
1	COMPACT RADIO TELESCOPE (Spider 230C or equivalent) Specification: <ul style="list-style-type: none">• Antenna diameter (m): 2.3• Antenna type: Prime focus• Working frequency: 1420 MHz• Bandwidth: 50 MHz• Feed: H-FEED, optimized for 1420 MHz• LNA: 2 high gain and stability 1420 MHz LNA units• Polarization: circular, left and right hand• Receiver: H142-One for 1420 MHz radio astronomy• Spectrometer: 1024 channels• Radiometer: 50 MHz instantaneous bandwidth• A/D converter: 14 bits• Mount: Optional, in order to work the SPIDER 230C needs for an equatorial GOTO mount with at least 50 kg payload capacity, Losmandy style dovetail clamp and ASCOM driver.• Remote control: yes• Control software: RadioUniversePRO• Weatherproof: No	01			
2	Radio Solar Spectrometer (e-Callisto Receiver or Equivalent) Frequency range 45.0 – 870.0MHz (in 3 separate rf-band) Frequency resolution 62.5 KHz Observation bandwidth 300 KHz @ -3dB Antenna input impedance ~50	01			

	<p>Dynamic range -120 ... -10 2) dBm</p> <p>SFDR > 40 dB</p> <p>Detector sensitivity 25.4 ± 1 mV / dB</p> <p>Noise figure max 10 dB</p> <p>ALLAN time @ To 100 Sec min</p> <p>Warm up time 10 Minutes</p> <p>Sampling time internal Clock ≤ 800 1) Samples/sec</p> <p>Sampling time external Clock ≤ 1000 1) Samples/sec</p> <p>Max. Gradient dF/dT ~30.0 MHz/msec</p> <p>Number of channels 4, 5 ,8 ,10, 16, 20, 25, 32, 40, 50, 80, 100, 160, 200, 400 entries</p> <p>Timing uncertainty ≤ 0.3 sec</p> <p>Voltage power supply 12.0 ± 2.0 Volt</p> <p>Current power supply ~225±20 mA</p> <p>COM-parameters 115200N81 (no handshake) Baudrate</p> <ul style="list-style-type: none"> • Receiver • Professionally manufactured printed circuit board (PCB), 2-sided, silkscreened with all components installed and tested • Extruded aluminum enclosure with custom machined and labeled front/rear end panels • Interface connectors and associated wiring components for RF input, focal plane unit, external clock, power input, video output and EIA-232 interface • CD with application software and construction and setup manuals • EIA-232 cable (DB-9F to DB-9M, straight-through wiring, shielded) • USB-serial adapter • 50 ohm terminations and coaxial cable test jumper cable • AC adapter power supplies, 115 Vac, 60 Hz input (North America only) or Universal Input for 50 or 60 Hz. <u>Note:</u> A power supply capable of at least 500 mA or 6 W at 12 Vdc is required for powering the CALLISTO-NA receiver when the receiver does not control a focal plane unit. A power supply capable of at least 1000 mA or 12 W at 12 Vdc is required for powering the CALLISTO-NA receiver when it controls a focal plane unit. 				
3	Creative Design CLP 130.1N	01			
4	Tower Mounted Amplifier	01			

TERMS & CONDITIONS

- The Procuring Agency may reject all bids at any time prior to the acceptance of a bid under SPP-Rules, 2010 (amended 2019).
- 2% Bid Security should be attached with the bidding document in shape of pay-order drawn in favor of University of Karachi.
- Bids not accompanied by the Bid Security will not be considered.
- Copies of the Sales Tax Registration and NTN are to be attached with the bidding documents.
- The quoted price shall be inclusive of all applicable Govt. Taxes and Charges.
- Procurement Committee shall finalize the bids in light of SPP-Rules, 2010 clause (8).
- The bid must be submitted along with the detailed company profile.
- Prices shall be quoted on FOR basis.
- The method of procurement is open competitive bidding single stage one envelop procedure.
- The price to be quoted shall be filled in the bidding documents mandatory.
- The successful bidders who undertake to execute the contract shall be liable to forfeiture of their Bid Security as a penalty.
- The bid shall be evaluated on the following criterion.
 - Lowest evaluated bid in terms of Value for Money.
 - As per specifications, terms & conditions mentioned in the bidding document.
- Period of Bid Validity (days):- 90 (Ninety) Days
- Delayed Delivery: 10% liquidity damages of the total amount will be imposed per month for which the company/firm/agency failed to deliver within the delivery/execution period.
- Quality Factors: The quality of Goods must be of prime quality.
- Condition of Goods / Works: All items must meet in all respects with the specs & conditions of the Order and must be in good condition otherwise they will be liable to reject.
- The last date of issuance of bidding document is day 08-07-2021 at 04:30 p.m.
- The last date of receipt bidding document is 09-07-2021 at 11:00 a.m. The bid shall be opened on the same day at 11:30 a.m. in presence of the bidders who may wish to be present.
- In case of any holiday or disturbance the bids shall be opened on the next working day as per schedule.
- The Tender Notice shall be available on the Official website www.pprasinhd.gov.pk as well as Procuring Agency's website www.uok.edu.pk

Total Amount _____

(Rupees _____ **Only)**

(Total Earnest Money Rs. _____ **)**

SIGNATURE OF THE PROPRIETOR
AND RUBBER STAMP OF THE COMPANY

Instruction to Bidders (ITB)

Preparation of Bids

- 1. Scope of Work** The *University of Karachi* plans to develop / acquire a comprehensive integrated solution for all the functional needs and requirements of *Equipment and Accessories* as described in later pages.
- 2. Method and Procedure of Procurement** National Competitive Bidding Single Stage *Single Envelope* Procedure as per SPP Rules 2010 (amended 2019)
- 2. Language of Bid** The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Procuring Agency, shall be written in English language
- 3. Documents Comprising the Bid** The bid prepared by the Bidders shall comprise the following components:
 - (a) Price Schedule completed in accordance with ITB Clauses 4, 5 and 6.
 - (b) Bid security furnished in accordance with ITB Clause 9.
- 4. Bid Prices**
 - 4.1 The Bidder shall indicate on the appropriate Price Schedule the unit prices (where applicable) and total bid price of the *Equipment and Accessories* it proposes to supply under the contract.
 - 4.2 The prices shall be quoted inclusive of all taxes, stamps, duties, levies, fees and installation and integration charges imposed till the delivery of services specified in the Schedule of Requirements. No separate payment shall be made for the incidental services.
 - 4.3 Prices quoted by the Bidder shall remain fixed during the Bidder's performance of the contract and not subject to variation on any account, unless otherwise specified in the Bid Data Sheet.
 - 4.4 Prices shall be quoted in Pak Rupees unless otherwise specified in the Bid Data Sheet.
- 5. Bid Form** The Bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the bidding documents, indicating the *Equipment and Accessories* to be supplied.
- 6. Bid Currencies** Prices Shall be quoted in Pak Rupees.
- 7. Documents Establishing Bidder's Eligibility and Qualification** The Bidder shall furnish, as part of its bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted.
 - (a) That the Bidder has the financial and technical capability necessary to perform the contract;
 - (b) That the Bidder meets the qualification criteria listed in the Bid Data Sheet.

- 8. Documents**
“Equipment and Accessories”
Eligibility and Conformity to Bidding Documents
- The documentary evidence of conformity of the *Equipment and Accessories* to the bidding documents may be in the form of literature and data.
- 9. Bid Security**
- 9.1 The bid security is required to protect the Procuring agency against the risk of Bidder’s conduct, which would warrant the security’s forfeiture
- The bid security shall be denominated in the currency of the bid:
- (a) 2% Bid Security should be deposited with the bid;
 - (b) be submitted in its original form; copies will not be accepted;
 - (c) remain valid for a period of at least 14 days beyond the original validity period of bids, or at least 14 days beyond any extended period of bid validity
- 9.2 Bid securities shall be released to the unsuccessful bidders once the contract has been signed with the successful bidder or the validity period has expired.
- 9.3 The successful Bidder’s bid security shall be discharged upon the Bidder signing the contract, and furnishing the performance security.
- 9.4 The bid security may be forfeited:
- (a) if a Bidder withdraws its bid during the period of bid validity or
 - (b) in the case of a successful Bidder, if the Bidder fails:
 - (i) to sign the contract in accordance
- 10. Period of Validity of Bids**
- 10.1 Bids shall remain valid for the period specified in the Bid Data Sheet after the date of bid submission prescribed by the Procuring agency. A bid valid for a shorter period shall be rejected by the Procuring agency as non responsive.
- 10.2 In exceptional circumstances, the Procuring Agency may solicit the Bidder’s consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The bid security shall also be suitably extended as per Rule-38 of SPP Rules, 2010 (amended 2019). A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.
- 11. Format and Signing of Bid**
- 11.1 The Bidder shall prepare an original bid indicated in the Bid Data Sheet, clearly marking each “ORIGINAL BID”.
- 11.2 The original and bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the contract. All pages of the bid, except for un-amended printed literature, shall be initialed by the person or persons signing the bid.
- 11.3 Any interlineations, erasures, or overwriting shall be valid only if they are initialed by the person or persons signing the bid.

Submission of Bids

- 12. Sealing and Marking of Bids**
- 12.1 The Bidder shall seal the original envelopes, duly marking the envelopes as “ORIGINAL BID”. The outer envelopes shall be addressed to the Procuring agency at the address given in the Bidding Documents, and carry statement “DO NOT OPEN BEFORE [09-07-2021].
- 12.2 If the outer envelope is not sealed and marked as required, the Procuring Agency shall assume no responsibility for the bid’s misplacement or premature opening.

- 13. Deadline for Submission of Bids**
- 13.1 Bids must be received by the Procuring Agency at the address specified in Bidding Documents, not later than the time and date specified in the Bid Data Sheet.
- 13.2 The Procuring Agency may, at its discretion, extend this deadline for the submission of bids by amending the bidding documents. in such case all rights and obligations of the Procuring agency and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

- 14. Late Bids**
- Any bid received by the Procuring Agency after the deadline for submission of bids prescribed by the Procuring agency shall be rejected and returned unopened to the Bidder.

- 15. Modification and Withdrawal of Bids**
- 15.1 The Bidder may modify or withdraw its bid after the bid’s submission, provided that written notice of the modification, including substitution or withdrawal of the bids, is received by the Procuring agency prior to the deadline prescribed for submission of bids.
- 15.2 No bid may be modified after the deadline for submission of bids.
- 15.3 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiry of the period of bid validity. Withdrawal of a bid during this interval may result in the Bidder’s forfeiture of its bid security.

Opening and Evaluation of Bids

- 16. Opening of Bids by the Procuring agency**
- 16.1 The Procuring agency shall open all bids in the presence of bidders’ representatives who choose to attend, at the time, on the date, and at the place specified in the Bid Data Sheet. The bidders’ representatives who are present shall sign a register/attendance sheet evidencing their attendance.
- 16.2 The bidders’ names, bid modifications or withdrawals, bid prices, discounts, and the presence or absence of requisite bid security and such other details as the Procuring agency may consider appropriate, will be announced at the opening.

- 17. Clarification of Bids**
- During evaluation of the bids, the Procuring agency may ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the prices or substance of the bid shall be sought, offered, or permitted.

- 18. Preliminary Examination**
- 18.1 The Procuring agency shall examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
- 18.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the Supplier does not accept the correction of the errors, its bid will be rejected, and its bid security may be forfeited. If there is a discrepancy between words and figures, the amount in words will prevail.
- 18.3 Prior to the detailed evaluation, the Procuring agency will determine the substantial responsiveness of each bid to the bidding documents. A substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. Procuring agency's determination of a bid's responsiveness is to be based on the contents of the bid itself.
- 18.4 If a bid is not substantially responsive, it will be rejected by the Procuring agency and may not subsequently be made responsive by the Bidder by correction of the nonconformity.
- 19. Evaluation and Comparison of Bids**
- 19.1 The Procuring agency will evaluate and compare the bids which have been determined to be substantially responsive.
- 19.2 The Procuring agency's evaluation of a bid will be on delivery to consignee's end inclusive of all taxes, stamps, duties, levies, fees and execution charges imposed till the delivery location.
- 20. Contacting the Procuring agency**
- 20.1 No Bidder shall contact the Procuring agency on any matter relating to its bid, from the time of the bid opening to the time of announcement of Bid Evaluation Report. If the Bidder wishes to bring additional information to the notice of the Procuring agency, it should do so in writing.
- 20.2 Any effort by a Bidder to influence the Procuring agency in its decisions on bid evaluation, bid comparison, or contract award may result in the rejection of the Bidder's bid.
- 21. Post-qualification**
- 21.1 In the Procuring agency may determine to its satisfaction whether that selected Bidder having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily.
- 21.2 The determination will take into account the Bidder's financial and technical capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 7 as well as such other information as the Procuring agency deems necessary and appropriate.

- 21.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Procuring agency will proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.
- 22. Award Criteria** The Procuring agency will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.
- 23. Procuring agency's Right to Accept any Bid and to Reject any or All Bids**
- 23.1 Subject to relevant provisions of SPP, Rules, 2010 (amended 2019), the Procuring agency reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award.
- 23.2. Pursuant to Rule 45 of SPP Rules 2010 (amended 2019), Procuring agency shall hoist the evaluation report on Authority's web site, and intimate to all the bidders seven days prior to notify the award of contract.
- 24. Notification of Award** Prior to the expiration of the period of bid validity, the Procuring agency shall notify the successful Bidder in writing, that its bid has been accepted.
- 25. Signing of Contract**
- 25.1 At the same time as the Procuring agency notifies the successful Bidder that its bid has been accepted, the Procuring agency will send the Bidder the Contract Form provided in the bidding documents, incorporating all agreements between the parties.
- 25.2 Within the period specified in BDS, of receipt of the Contract Form, the successful Bidder shall sign and date the contract and return it to the Procuring agency.
- 26. Performance Security** Failure of the successful Bidder to comply with the requirement of ITB Clause 25 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Procuring agency may make the award to the next lowest evaluated Bidder or call for new bids.
- 27. Corrupt or Fraudulent Practices**
- 27.1 The Government of Sindh requires that Procuring agency's (including beneficiaries of donor agencies' loans), as well as Bidders/Suppliers/Contractors under Government-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the SPPRA, in accordance with the SPP Act, 2009 and Rules made thereunder:
- (a) **"Corrupt and Fraudulent Practices"** means either one or any combination of the practices given below;
- a. **"Coercive Practice"** means any impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the

property of the party to influence the actions of a party to achieve a wrongful gain or to cause a wrongful loss to another party;

- b. **“Collusive Practice”** means any arrangement between two or more parties to the procurement process or contract execution, designed to achieve with or without the knowledge of the procuring agency to establish prices at artificial, noncompetitive levels for any wrongful gain;
 - c. **“Corrupt Practice”** means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the acts of another party for wrongful gain;
 - d. **“Fraudulent Practice”** means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- (b) **“Obstructive Practice”** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract or deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements before investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or acts intended to materially impede the exercise of inspection and audit rights provided for under the Rules.

Bid Data Sheet

The following specific data for the *Equipment and Accessories* to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

Introduction	
ITB 1	Name and address of Procuring Agency: <i>University of Karachi, Karachi.</i>
ITB 1	Name of Contract. <i>“Equipment and Accessories”</i>
Bid Price and Currency	
ITB 4	Prices quoted by the Bidder shall be <i>“fixed” and in” Pak Rupees”</i>
Preparation and Submission of Bids	
ITSB 19	<i>Qualification requirements:</i> <ol style="list-style-type: none"> 1) NTN 2) Sales Tax 3) Minimum three years’ experience relevant field 4) Turnover of at least last three years
ITB 7	Amount of bid security. As per SPP –Rules, 2010, Clause 37(1)
ITB 8	Bid validity period. 90 days
ITB 10	Number of copies. <i>One Original</i>
ITB 19.1	Deadline for bid submission. <i>09-07-2021 at 11:00 noon</i>
ITB 20	Bid Evaluation: <ul style="list-style-type: none"> ○ Lowest evaluated bid in terms of Value for Money. ○ As per specifications mentioned in the bidding document.
	Under following conditions, Bid will be rejected: <ol style="list-style-type: none"> 1. Conditional tenders/bids; 2. Bids not accompanied by bid security (Earnest Money); 3. Bids received after specified date and time; 4. Bidder submitting any false information; 5. Black Listed Firms by Sindh Government or any entity of it

SUMMARY SHEET
TENDER NOTICE

S. No.	Bid Value on FOR Basis	Equivalent in PKR

Total Bid Value in PKR		
Earnest Money @ 2% in PKR		
Pay Order/Demand Draft No:		Date:
Signature :	Seal :	