SOCIETY FOR ELECTRONIC TRANSACTIONS AND SECURITY (SETS)

MGR Knowledge City, CIT Campus, Taramani, Chennai – 600 113
Website: www.setsindia.in

Tender Reference No.: SETS/06/PUR/2026-27/ETHERNET SYSTEM Date: 03.11.2026

NOTICE INVITING TENDER (NIT)

Sealed tenders are invited under the Two-Cover System (Technical Bid and Price Bid) from eligible OEMs / authorised vendors for the supply of the AXI 1G/2.5G Ethernet Subsystem, including applicable licence provision and technical support, in accordance with the terms and conditions of this tender.

Last date and time for submission of tender: 16:00 hrs on 19.11.2026.

1. TENDER DETAILS

Sl. No.	Particulars	Details
1	Tender Reference No.	SETS/06/PUR/2026-27/ETHERNET SYSTEM
2	Tender Document Date	03.11.2026
3	Tender Publication Date	04.11.2026
4	Last Date and Time for Submission of Tender	16:00 hrs on 19.11.2026
5	Date and Time of Opening of Technical Bid	16:00 hrs on 19.11.2026
6	Name of Procurement	Supply of AXI 1G/2.5G Ethernet Subsystem
7	Validity of Tender Offer	90 days from the date of opening of the Technical Bid
8	Estimated Tender Value	₹7,08,000/-
9	Address for Submission of Tender	The Purchase Officer, Society for Electronic Transactions and Security (SETS), MGR Knowledge City, CIT Campus, Taramani, Chennai – 600 113.

Note: The tender shall be submitted in accordance with the terms and conditions specified in this NIT and the accompanying tender documents.

2. SCOPE OF PROCUREMENT

The procurement covers the supply/licensing of the following item:

Sl. No.	Description	Quantity
1	AXI 1G/2.5G Ethernet Subsystem	1 No.

The offered IP Core shall be suitable for implementation and development using the specified AMD Vivado development environment and shall comply with the technical requirements specified in this NIT.

3. TECHNICAL SPECIFICATIONS

Sl. No.	Parameter	Required Specification
1	IP Core	AXI 1G/2.5G Ethernet Subsystem
2	AMD Product Guide	PG138
3	Required PG Version	Version 8.0

4	Ethernet Speeds	1 Gb/s and 2.5 Gb/s
5	1G Operating Modes	10/100/1000 Mb/s, depending on PHY interface
6	2.5G Mode	2.5 Gb/s
7	MAC	AMD Tri-Mode Ethernet MAC (TEMAC)
8	User-side Interface	AXI4-Stream
9	Control Interface	AXI4-Lite
10	PHY Interfaces	MII, GMII, RGMII, SGMII, 1000BASE-X
11	2.5G PHY Interfaces	2500BASE-X / 2.5G SGMII
12	PHY Management	MDIO/MII management
13	Flow Control	Ethernet pause frames
14	Priority Flow Control	IEEE 802.1Qbb PFC support
15	IEEE 1588	Hardware timestamping support
16	Checksum Offload	TCP/UDP checksum offload
17	VLAN	VLAN tagging, stripping and translation
18	Multicast Filtering	Extended multicast filtering
19	AVB	Ethernet Audio Video Bridging support
20	Supported FPGA Families	Versal, Versal Gen 2, UltraScale+, UltraScale, Kintex-7, Virtex-7, Artix-7, Zynq-7000, Spartan UltraScale+ and 7-Series
21	Development Environment	AMD Vivado
22	Software Support	Standalone and Linux support

4. SCOPE OF SUPPLY

The successful bidder shall:

1. Supply/provide one (1) AXI 1G/2.5G Ethernet Subsystem conforming to the specified technical requirements.
2. Provide the applicable IP Core licence, licence entitlement, activation details and licence files/keys, wherever applicable.
3. Provide all necessary OEM documentation required for lawful use, implementation and integration of the IP Core.
4. Provide access to AMD Product Guide PG138 and relevant technical documentation, as applicable.
5. Provide installation, licence activation and/or integration assistance, wherever included in the offered licensing model.
6. Provide technical support for initial enablement, configuration and integration of the IP Core with the specified AMD Vivado development environment.
7. Provide applicable licence certificates, entitlement information, activation keys and other licence-related documents without additional charges, wherever applicable.
8. Provide user manuals, release notes, installation instructions and relevant technical documentation in electronic form.
9. Clearly specify all applicable licensing conditions, including licence validity, permitted usage, device/node restrictions, FPGA/device restrictions, renewal requirements, transferability (if any), development and production usage rights, and any other applicable restrictions.

5. ELIGIBILITY CRITERIA

The bidder shall submit documentary evidence demonstrating compliance with the following eligibility requirements:

5.1 Experience

The bidder shall have a minimum of five (05) years of experience in the relevant field as on 31.03.2026.

5.2 Financial Capacity

The bidder shall have an average annual turnover for the last three financial years equivalent to at least 70% of the quoted bid value. Supporting documents, including audited financial statements duly certified by a Chartered Accountant, shall be submitted.

5.3 Past Performance

The bidder shall have successfully completed similar supply orders during the last three years, meeting any one of the following criteria. Values shall be exclusive of GST:

- One completed work having a value of at least 80% of the quoted value; OR
- Two completed works, each having a value of at least 60% of the quoted value; OR
- Three completed works, each having a value of at least 40% of the quoted value.

The bidder shall submit relevant Work Orders, Completion Certificates and/or End-User Certificates.

5.4 OEM Authorisation

The bidder shall submit a valid OEM Authorisation Certificate, wherever applicable, confirming that the bidder is authorised to supply/license the offered IP Core. Where the bidder is the OEM or an authorised distributor/channel partner, appropriate documentary evidence shall be submitted.

5.5 Non-Debarment / Non-Blacklisting

The bidder shall submit a declaration confirming that it is not debarred, banned or blacklisted by any Central Government Department, State Government Department, Government Agency, PSU or other competent authority, as applicable.

6. EARNEST MONEY DEPOSIT (EMD) AND ePBG

6.1 Earnest Money Deposit (EMD)

1. The bidder shall submit an Earnest Money Deposit (EMD) equivalent to 2% of the estimated tender value, as specified in this NIT.
2. EMD shall be remitted through NEFT/RTGS to the bank account of SETS indicated in Clause 6.2.
3. Bids submitted without the required EMD, wherever applicable, may be treated as non-responsive and rejected.
4. Bidders claiming exemption from payment of EMD shall submit valid documentary evidence supporting their eligibility for exemption, in accordance with applicable Government of India procurement rules and guidelines.
5. The EMD of unsuccessful bidders shall be refunded without interest after completion of the tender process, in accordance with applicable procurement rules.

6. The EMD of the successful bidder shall be dealt with in accordance with the tender conditions and refunded/adjusted, wherever applicable, after submission of the required Performance Security.

6.2 Bank Details for EMD and ePBG

Sl. No.	Particulars	Details
1	Bank Name	INDIAN BANK, L.B. ROAD BRANCH
2	Account Number	6312902297
3	MICR Code	600019028
4	IFSC Code	IDIB000L006

6.3 Electronic Performance Bank Guarantee (ePBG)

1. The successful bidder shall furnish an Electronic Performance Bank Guarantee (ePBG) equivalent to 3% of the Purchase Order value, unless otherwise specified in the tender document.
2. The ePBG shall be furnished in favour of "The Purchase Officer, Society for Electronic Transactions and Security (SETS)", payable at Chennai.
3. The ePBG shall be submitted within seven (7) days from the date of issue of the Purchase Order/Work Order, unless otherwise specified by SETS.
4. The ePBG shall remain valid for the entire contractual period, including the applicable warranty/defect liability period, wherever applicable, and shall include the required claim period.
5. Failure to submit the ePBG within the stipulated period may result in appropriate action in accordance with the tender terms and conditions.

7. BID SUBMISSION – TWO-COVER SYSTEM

Bidders shall carefully examine all tender documents, instructions, eligibility criteria, technical specifications, scope of supply and terms and conditions before submitting their bids.

The tender shall be submitted in two separate sealed covers as follows:

Cover I – Technical Bid

The first sealed cover shall be superscribed "TECHNICAL BID" and shall contain:

EMD / valid EMD exemption documents
OEM Authorization Certificate
Technical Compliance Statement
Relevant experience documents
Past performance documents
Turnover documents
Non-debarment / non-blacklisting declaration
Warranty / technical support commitment
GST / PAN and other statutory documents

Cover II – Price Bid

The second sealed cover shall be superscribed "PRICE BID" and shall contain:

- The Technical Bid and Price Bid shall be submitted in **separate covers/envelopes** as prescribed under the Two-Cover System. **Annexure - II**
- The **Price Bid shall be opened only for technically qualified bidders**.

- Prices quoted shall be **inclusive of GST and all applicable taxes, duties, freight, insurance, delivery, installation, testing, commissioning, and all other incidental charges**, representing the total landed cost to SETS.

Address for submission:
The Purchase Officer
Society for Electronic Transactions and Security (SETS)
MGR Knowledge City, CIT Campus, Taramani
Chennai – 600 113

Tender-related clarifications and correspondence:
Email: purchaseofficer@setsindia.net
CC: purchase@setsindia.net
Copy to: caao@setsindia.net
Phone: 044-66632529

8. DELIVERY

The delivery period shall be twelve (12) weeks from the date specified in the Purchase Order issued by SETS, unless otherwise specified in the tender document or Purchase Order.

9. PAYMENT

- No advance payment shall be made.
- Payment shall be released within ten (10) working days after successful completion of the contractual scope, including delivery, installation, testing and commissioning, wherever applicable.
- Payment shall be subject to satisfactory inspection, verification and acceptance by SETS and submission of all required documents, including invoice, delivery documents and installation/commissioning report, wherever applicable.

10. WARRANTY / TECHNICAL SUPPORT

The bidder/OEM shall provide a minimum one (1) year warranty/technical support period, wherever applicable to the offered IP Core/licensing model. The warranty/support shall cover the scope specifically committed by the bidder/OEM and shall include resolution of licence-related and technical issues attributable to the supplied IP Core, as applicable. The bidder shall clearly specify the scope, validity and limitations of the warranty/technical support in its offer.

11. LIQUIDATED DAMAGES

Timely delivery is critical. In case of delay attributable to the bidder, Liquidated Damages (LD) may be levied at 0.5% of the Purchase Order value per week or part thereof, subject to a maximum of 10% of the total Purchase Order value, unless otherwise provided in the Purchase Order. LD shall be governed by the applicable Purchase Order and Government procurement provisions. Delays due to Force Majeure or reasons demonstrably attributable to SETS shall be dealt with in accordance with the applicable contractual provisions.

12. MSME / NSIC RELAXATION

Eligible bidders registered with NSIC, including Micro, Small and Medium Enterprises (MSMEs), may be exempted from prior turnover and experience requirements, subject to applicable Government of India rules and provided that the bidder meets the prescribed technical, quality and other essential requirements of the tender.

13. TENDER VALIDITY

The tender shall remain valid for a period of ninety (90) days from the date of opening of the Technical Bid. Any bid having a shorter validity period may be treated as non-responsive. During the validity period, bidders shall not modify or withdraw the terms of their offers, except as permitted under applicable procurement rules.

14. EXTENSION OF VALIDITY

In exceptional circumstances, before expiry of the original validity period, SETS may request bidders to extend the validity of their bids for an additional specified period. Such requests and responses shall be communicated in writing through email or other prescribed means. Bidders agreeing to an extension shall remain bound by the terms and conditions of their original bids during the extended validity period.

15. RIGHT TO ACCEPT OR REJECT BIDS

SETS reserves the right, subject to applicable rules, to:

- Accept or reject any bid;
- Annul the bidding process, either wholly or partially;
- Modify the bidding process at any stage; and
- Reject all bids at any time before award of the contract.

16. BIDDER'S TECHNICAL COMPLIANCE DECLARATION

The bidder shall complete the following compliance statement and submit it along with the Technical Bid. The bidder shall indicate the offered specification and state compliance as "Yes" or "No" against each requirement.

Sl. No.	Parameter / Requirement	Offered Specification	Compliance (Yes/No)
1	IP Core – AXI 1G/2.5G Ethernet Subsystem		
2	AMD Product Guide – PG138		
3	Required PG Version – Version 8.0		
4	Ethernet Speeds – 1 Gb/s and 2.5 Gb/s		
5	1G Operating Modes – 10/100/1000 Mb/s		
6	2.5G Mode – 2.5 Gb/s		
7	MAC – AMD Tri-Mode Ethernet MAC (TEMAC)		
8	User-side Interface – AXI4-Stream		
9	Control Interface – AXI4-Lite		
10	PHY Interfaces – MII, GMII, RGMII, SGMII, 1000BASE-X		
11	2.5G PHY Interfaces – 2500BASE-X / 2.5G SGMII		
12	PHY Management – MDIO/MII		
13	Flow Control – Ethernet pause frames		
14	Priority Flow Control – IEEE 802.1Qbb PFC		

15	IEEE 1588 – Hardware timestamping		
16	Checksum Offload – TCP/UDP		
17	VLAN – Tagging, stripping and translation		
18	Multicast Filtering – Extended multicast filtering		
19	AVB – Ethernet Audio Video Bridging		
20	Supported FPGA Families as specified in Clause 3		
21	Development Environment – AMD Vivado		
22	Software Support – Standalone and Linux		

Bidder Declaration: We hereby confirm that the above technical compliance statement is true and correct to the best of our knowledge. Any deviation, limitation or exception has been clearly disclosed in our bid.

Name of Bidder: _____

Name and Designation of Authorised Signatory: _____

Signature and Seal: _____ Date: _____

17. BIDDER DOCUMENT CHECKLIST

Sl. No.	Document / Requirement	Requirement	Bidder Check
1	EMD / valid EMD exemption documents	As applicable	☐
2	OEM Authorisation Certificate	Mandatory, wherever applicable	☐
3	Technical Compliance Statement	Mandatory	☐
4	Relevant experience documents	As per eligibility criteria	☐
5	Past performance documents	As per eligibility criteria	☐
6	Turnover documents	As per eligibility criteria	☐
7	Non-debarment / non-blacklisting declaration	Mandatory	☐
8	Warranty / technical support commitment	Mandatory	☐
9	GST / PAN and other statutory documents	Mandatory, as applicable	☐
11	Price Bid in separate sealed cover	Mandatory	☐

Annexure-II

COVER–II: PRICE BID

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MGR Knowledge City, CIT Campus, Taramani, Chennai – 600 113.

Tender Reference No.: SETS/06/PUR/2026-27/ETHERNET SYSTEM

Name of the Work: Supply, Installation, Testing and Commissioning of AXI 1G/2.5G Ethernet Subsystem.

PRICE BID – FINANCIAL QUOTATION

1. Price Schedule

Sl. No.	Description	Qty.	Unit	Unit Price (₹)	Total Price (₹)
1	AXI 1G/2.5G Ethernet Subsystem (AMD PG138, Version 8.0), including applicable licence, activation and technical support	1	No.		
	Subtotal				
	GST				
	Grand Total				

Total Quoted Amount in Figures: ₹ _____

Total Quoted Amount in Words: Rupees _____ only.

2. Commercial Details

Sl. No.	Particulars	Bidder's Details
1	Delivery Period	
2	License Validity	
3	Warranty / Technical Support Period	

4. Declaration by the Bidder

We hereby declare that:

1. The prices quoted above are firm and inclusive of all applicable charges, taxes and duties as specified in the tender.
2. We have carefully read and understood all the terms and conditions of the Notice Inviting Tender.
3. The quoted price shall remain valid for 90 days from the date of opening of the Technical Bid.
4. No additional charges other than those indicated in the Price Bid shall be claimed from SETS.
5. We agree to execute the supply and provide the services in accordance with the terms and conditions of the tender.

Place:

Date: