

भारतीय प्रौद्योगिकी संस्थान कानपुर INDIAN INSTITUTE OF TECHNOLOGY KANPUR

संगणक केन्द्र COMPUTER CENTRE

पत्रालय-आई .आई .टी .कानपुर-208016(भारत) P.O.-I.I.T. KANPUR - 208 016 (India)

> CC/IITK/09/ 667 August 07, 2018

Sealed technical and financial bids are invited for the Internet bandwidth for one year as per following:

1. 1 Gbps (1:1) internet bandwidth for IIT Kanpur.

The details of the tender along with terms and conditions are given in annexure-I.

Sealed technical and financial bids should reach the Head, Computer Centre, IIT Kanpur by 30/08/2018, 5 P.M.

(Dr. Amey Karkare) Head

Annexure-I

A. Name of services:

1. 1 Gbps (1:1) internet bandwidth for IIT Kanpur for one year.

B. Scope of services:

The proposed Internet links will be installed at the Computer Centre, IIT Kanpur. The services involve supply, installation, commissioning and management* of the link for one year. (* See item D. 13 for further details on management).

C. Estimated duration of installation/ commencement of service: Maximum 4 weeks from the date of placing order.

D. Terms and conditions (ISP bid should clearly state the compliance of the terms and conditions as given):

- 1. ISP should have a VALID Class A license.
- 2. ISP Should have experience in providing satisfactory service for at least 3 internet links of 1Gbps or higher bandwidth each for a period of at least two years. Certificate to this effect from the customer organization signed by an officer not below the rank of General Manager/Head of the user section or equivalent must be provided in original.
- 3. ISP Should have its own MPLS core network and NLD backbone.
- 4. ISP Should have valid GST Registration number.
- 5. ISP should have its own/direct access to International Gateway in India for providing Internet bandwidth.
- 6. ISP should have direct peering with Tier 1 carriers to minimize the number of hops and latency to international destinations. Details of Tier-1 carriers with which peering is done are to be provided. It should have local peering, within India, with at least one other ISP and it should have an aggregate international capacity of at least 10 Gbps at the time of commissioning. An undertaking to this effect is required to be submitted.
- 7. ISP should have fully resilient and self healing network architecture on fiber medium for the domestic backbone in India. The complete fiber and transmission systems from Computer Centre, IIT Kanpur, to International Gateway should be of the bidder only at the time of commissioning. An undertaking to this effect is required to be submitted.
- 8. ISP should have fully resilient and self healing network architecture on fiber medium for its international backbone, either owned or hired. In case ISP's international backbone uses the infrastructure of other licensed ILDOs, the ISP must indicate the capacity available through these other providers' networks as well as provide the existing Service Level Agreement (SLA) with all involved providers.
- 9. The bandwidth should be provided through a fiber link on SDH/MEN ring terminating in Computer Centre, IIT Kanpur and should be made available on Multi Gigabit Ethernet.
- 10. The primary path and the backup path for Internet link between IIT Kanpur and International gateway each should be a single pipe of 1 Gbps.
- 11. Complete network architecture diagram depicting the 1 Gbps connectivity between IIT Kanpur (both primary and backup paths) and International gateway should be provided. The ISP should also provide its international network diagram.



12. The maximum latency from IIT Kanpur gateway router should be as under:

Location	USA Region	Europe Region	Asia Pacific Region
Latency Guarantee	<350ms	<250ms	<120ms
(X)			

The bidder is required to monitor the latency figures at different times of day and report it at least once every quarter or whenever asked for.

13. The ISP should provide Managed services for monitoring (link up/down, packet drop, latency and other QS parameters) and maintenance of the link. The link (including the last mile) should be monitored on 24x7 basis by the provider. SNMP access to the IITK Gateway Router will be provided for monitoring. A dedicated service manager should be there who will liaison with the NOC in case the link goes down. This will include reporting, complaint logging, ticket generation and follow-up action. These services will be provided by the ISP directly and not through channel partner.

14. SLA should commit at least 99.5% service availability, including the last mile connectivity. The following penalties will be imposed in case of violation of SLA:

Service Parameter	Service Level	Penalties	
Link availability	>=99.5%	Nil	
(Packet drop will be	Between 98.5 and 99.5	Amount equivalent to 2 days Amount equivalent to 4 days	
treated as link	Between 97.5 and 98.5		
unavailability)	Between 96.5 and 97.5	Amount equivalent to 7 days	
	Between 95.5 and 96.5	Amount equivalent to 10 days	
	< 95.5	Amount equivalent to 30 days	
Latency	X	Nil	
•	X+5%	Amount equivalent to 2 days	
	X+10%	Amount equivalent to 4 days	
	X+15%	Amount equivalent to 7 days	
	X+20%	Amount equivalent to 10 days	
	> X+20%	Amount equivalent to 30 days	

- 15. The service provider should have well-equipped Operations & Maintenance (O&M) centres staffed with experienced personnel. The service provider shall maintain sufficient spares at the O&M centres to comply with committed MTTR of less than six hours.
- 16. IITK has two pools of Class C Public IPv4 addresses, one pool of IPv6 addresses and an AS Number provided by APNIC. The ISP will be required to provide BGP routing of all the pools with different weights.
- 17. The contract period will be for one year. During the contract period, IIT Kanpur can terminate the services by giving 4 weeks advance notice. In that case, payment will be made only for the period during which service is provided on a pro-rata basis.
- 18. Payment term: Total amount payable in four equal quarterly instalments (at the end of each quarter) subject to satisfactory continuation of the service confirmed by the Head, Computer Centre, IIT Kanpur.
- 19. After the contract period of one year is over, if IIT Kanpur wishes to continue the services for a short period, the same should be provided on pro-rata basis for that period.
- 20. The contract period can be extended for one or two more years at the end of the first year provided the service provided by the ISP is excellent and the price offered by the ISP for the second and third year is acceptable to IIT Kanpur.
- 21. The link will be tested for a period of 2 weeks before acceptance of the services.
- 22. Price should be quoted exclusive of applicable taxes. However, details of all applicable taxes as on date of submission of the bid should be clearly mentioned separately.

E. Method of application:

The ISP should submit the quotation in two parts:

- Part-I (Technical): The technical bid should contain all the technical details and required documents including completed technical compliance sheets. It should contain un-priced bid along with terms & conditions. This envelope should be marked as "Technical Bid".
- Part-II (Financial): The ISP should submit the financial bid in separate sealed envelope. The envelop should be clearly marked as "Financial Bid".
- The prices should not be quoted in the technical bid.
- The bids should be signed on all pages by the authorized signatory of ISP and should bear his/her name, position and seal.

F. Submission date of technical and financial bid:

Till 5 P.M., August 30, 2018 at Computer Centre office, IIT Kanpur.

G. Important dates:

- 1. For any clarification: Please contact Head, Computer Centre, IIT Kanpur (headcc@iitk.ac.in)
- 2. Last date of submission of technical and financial bids: 5 P.M., August 30, 2018

H. Final Decision Making Authority:

The decision of the Director, IIT Kanpur will be binding on all bidders.

I. Disclaimer:

- 1. Information disclosed under and in accordance with the tender document will not constitute as an offer, also the acceptance of responses to this tender cannot be considered as a binding contract.
- 2. Applicants are solely responsible for all expenses associated with responding to this tender.
- 3. IITK reserves the right to annul the tender process at any time, without thereby incurring any liability to the affected bidders or specifying the grounds for the action.

J. Legal

- If any dispute, difference, question of disagreement or matter, whatsoever, before or after completion or abandonment of work, hereafter arises between the parties, as to the meaning, operation or effect of the contract or out of or relating to the contract or breach thereof, the same shall be referred to a Sole Arbitrator to be appointed by the Director of the Institute at the time of dispute.
 - a. The venue of the arbitration shall be at Kanpur.

Livery

- b. Subject to as aforesaid, the provisions of the Arbitration and Conciliation Act. 1996 and any statutory modifications or re-enactment there of and rules made there-under and for the time being in force, shall apply to the arbitration proceedings under this clause.
- 2. The contract shall be governed by and construed according to the laws in force in India. The Parties shall hereby submit to the jurisdiction of the courts situated at Kanpur.

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Compliance Sheet

Sr. No	Name of ISP					
1	ISP should have a VALID Class A license.					
2	ISP Should have experience in providing satisfactory service for at least 3 internet links of 1 Gbps or higher bandwidth each for a period of at least two years. Certificate to this effect from the customer organization signed by an officer not below the rank of General Manager/ Head of the user section or equivalent must be					
3	provided in original. ISP Should have its own MPLS core network and NLD backbone.					
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7	be submitted with the bid. ISP should have fully resilient and self healing network architecture on fiber medium for the domestic backbone in India. The complete fiber and transmission systems from Computer Centre, IIT Kanpur, to International Gateway should be of the bidder only at the time of commissioning. An undertaking to this effect is required to be submitted with the bid.					
8	ISP should have fully resilient and self healing network architecture on fiber medium for its international backbone, either owned or hired. In case ISP's international backbone uses the infrastructure of other licensed ILDOs, the ISP must indicate the capacity available through these other providers' networks as well as provide the existing Service Level Agreement (SLA) with all involved providers.					
9	The bandwidth should be provided through a fiber link on SDH/MEN ring terminating in Computer Centre, IIT Kanpur and should be made available on Multi Cigabit Ethernet					
10	The primary path and the backup path for internet link between III Kanpur and International gateway each should be a single pipe of 1 Gbps.					
11	Complete network architecture diagram depicting the 1 Gbps connectivity between IIT Kanpur (both primary and backup paths) and International gateway should be provided. The ISP should also provide its international network diagram.					
12	The maximum latency from IIT Kanpur gateway router should be as under: Location					
13	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					



	services will be provid	ed by the ISP directly ar	neration and follow-up action. The not through channel partner.		
14	SLA should commit at least 99.5% service availability, including the last mile connectivity. The following penalties will be imposed in case of violation of SLA:				
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		Between 96.5 and 97.5	Amount equivalent to 7 days		
		Between 95.5 and 96.5	Amount equivalent to 10 days		
		< 95.5	Amount equivalent to 30 days		
8 - 8	Latency	X	Nil		
		X+5%	Amount equivalent to 2 days		
		X+10%	Amount equivalent to 4 days		
		X+15%	Amount equivalent to 7 days		
		X+20%	Amount equivalent to 10 days		
		> X+20%	Amount equivalent to 30 days		
15	centers staffed with ex	perienced personnel. Th	ed Operations & Maintenance (O&N) le service provider shall maintain		
	sufficient spares at the O&M centers to comply with committed MTTR of less than six hours.				
16	IITK has two pools of Class C Public IPv4 addresses, one pool of IPv6 addresses and an AS Number provided by APNIC. The ISP will be required to provide BGP routing of all the pools with different weights.				

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