



भारतीय प्रौद्योगिकी संस्थान कानपुर  
INDIAN INSTITUTE OF TECHNOLOGY KANPUR  
संगणक केन्द्र  
COMPUTER CENTRE

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CC/IITK/09/2060  
May 20, 2015

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 Link-1 of IIT Kanpur
2. 1 Gbps (1:1) internet bandwidth for Link-2 of IIT Kanpur

The details of the tender along with terms and conditions are given in annexure-I. The services of Link-1 and Link-2 will be awarded to two different ISPs. Also the services for Link-2 will be awarded to that ISP which does not have any overlapping network with the ISP of Link-1 from Computer Centre, IIT Kanpur to the International Gateway.

Sealed technical and financial bids should reach the Head, Computer Centre, IIT Kanpur by 17/06/15, 5 P.M.

  
20-5-15  
(Ashish Dutta)

## Annexure-I

### A. Name of services:

1. 1 Gbps (1:1) internet bandwidth for Link-1 of IIT Kanpur for one year.
2. 1 Gbps (1:1) internet bandwidth for Link-2 of 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 500 Mbps 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 Service Tax 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 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 (X) | <350ms     | <250ms        | <120ms              |

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, 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<br>(Packet drop will be treated as link unavailability) | $\geq 99.5\%$         | Nil                          |
|   | Between 98.5 and 99.5 | Amount equivalent to 2 days  |
|   | Between 97.5 and 98.5 | Amount equivalent to 4 days  |
|   | 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 IP addresses and an AS Number provided by APNIC. The ISP will be required to provide BGP routing of both 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 more year 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 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 bids for Link-1 and Link-2 in separate sealed envelope. Each envelope should be clearly marked as "Financial bid for Internet Link-1" or "Financial bid for Internet Link-2".
- The envelopes containing Part-I and Part-II should be labeled clearly and kept in a bigger sealed envelope.
- 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., June 17, 2015 at Computer Centre office, IIT Kanpur.

### **G. Important dates:**

1. For any clarification: Please contact Head, Computer Centre, IIT Kanpur on June 01, 2015, during 10 A.M. – 1 P.M.
2. Last date of submission of technical and financial bids: 5 P.M., June 17, 2015.
3. Opening of technical bids: 11 A.M., June 29, 2015 in Conference Room of Computer Centre, IIT Kanpur. Representatives of bidders, duly authorized on his behalf by the bidders, can be present during opening of the technical bids. No further notice will be sent to this effect.
4. Opening of the financial bids: Qualified ISPs will be informed the date of opening of financial bids.

### **H. Selection Criteria:**

- First the technical bids will be opened and evaluated. The qualified ISPs will be shortlisted for opening financial bids.
- The financial bids of Internet Link-1 will be opened first and then the financial bids for Link-2 will be opened. The L1 (lowest bidder) of Link-1 will not be considered for Link-2. However, order will be placed only after a thorough examination of the bids by the committee and subsequent approval of the committee recommendation by the competent authority of the Institute.
- If the price quoted by an eligible bidder for Link-2 is higher than that of Link-1, then the bidder will be asked to match the price of Link-1 or vice versa.
- If the price of both the link is not the same after negotiation, Institute reserves the right to purchase only one link that is available at the lower price and cancel the purchase process of the other link. In that scenario, a fresh tender process for the other link will be initiated after taking approval from the competent authority.



**I. Final Decision Making Authority:**

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

**J. 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.



### Compliance Sheet

| Sr. No                | Name of ISP   | Compliance (Yes/ No) |                     |               |                     |                       |        |        |        |  |
|-----------------------|---|----------------------|---------------------|---------------|---------------------|-----------------------|--------|--------|--------|--|
| 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 500 Mbps 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 Service Tax 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 with the bid.  |                      |                     |               |                     |                       |        |        |        |  |
| 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 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 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                    | <p>The maximum latency from IIT Kanpur gateway router should be as under:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Location</th> <th style="text-align: center;">USA Region</th> <th style="text-align: center;">Europe Region</th> <th style="text-align: center;">Asia Pacific Region</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">Latency Guarantee (X)</td> <td style="text-align: center;">&lt;350ms</td> <td style="text-align: center;">&lt;250ms</td> <td style="text-align: center;">&lt;120ms</td> </tr> </tbody> </table> <p>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.</p> | Location             | USA Region          | Europe Region | Asia Pacific Region | Latency Guarantee (X) | <350ms | <250ms | <120ms |  |
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| Latency Guarantee (X) | <350ms  | <250ms               | <120ms              |               |                     |                       |        |        |        |  |
| 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, 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:  |                              |               |           |   |               |     |                       |                             |                       |                             |                       |                             |                       |                              |          |                              |         |   |     |      |                             |       |                             |       |                             |       |                              |            |                              |  |
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| Service Parameter   | Service Level  | Penalties                    |               |           |   |               |     |                       |                             |                       |                             |                       |                             |                       |                              |          |                              |         |   |     |      |                             |       |                             |       |                             |       |                              |            |                              |  |
| Link availability<br>(Packet drop will be treated as link unavailability) | $\geq 99.5\%$  | Nil                          |               |           |   |               |     |                       |                             |                       |                             |                       |                             |                       |                              |          |                              |         |   |     |      |                             |       |                             |       |                             |       |                              |            |                              |  |
|   | Between 98.5 and 99.5  | Amount equivalent to 2 days  |               |           |   |               |     |                       |                             |                       |                             |                       |                             |                       |                              |          |                              |         |   |     |      |                             |       |                             |       |                             |       |                              |            |                              |  |
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|   | $< 95.5$   | 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 |               |           |   |               |     |                       |                             |                       |                             |                       |                             |                       |                              |          |                              |         |   |     |      |                             |       |                             |       |                             |       |                              |            |                              |  |
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| 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 IP addresses and an AS Number provided by APNIC. The ISP will be required to provide BGP routing of both the pools with different weights.  |                              |               |           |   |               |     |                       |                             |                       |                             |                       |                             |                       |                              |          |                              |         |   |     |      |                             |       |                             |       |                             |       |                              |            |                              |  |

*Ans*