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Annexure I
SCOPE OF WORK

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Requirement of Leaseline Internet connection

IDSA has major dependence on Internet for research, communication, maintenance of website and many other important tasks. Since, April 2008 IDSA is having 2 Mbps (1:1) Leaseline connectivity from MTNL.

In these three years, number of Internet users at IDSA has increased substantially. The communication over email has also increased manifolds. IDSA's website is also now more dynamic and is updated frequently.

In order to have good quality, reliable Internet connection at competitive and best pricing, IDSA invites bids reputed ISPs.

Vendor should quote for aggregated 4 Mbps (1:1), 8 Mbps (1:1) and 10 Mbps (1:1) uncompressed symmetrical bandwidth with responsibility to distribute the bandwidth on Ethernet port. The vendor should be direct ISP (with valid licenses) and preferably should have multiple internet gateways. No intermediaries will be allowed. They should have quality experience in providing ISP facilities.

Existing system environment at IDSA, New Delhi

Network has Cisco Catalyst 3750 Series, Cisco 2800 Series router, a paid of modem - CTC Union SHDT403/V.35-RB connected further to switches/hubs in Client/Server environment.

Service Level Agreement Benchmarks

A detailed Service Level Agreement (SLA) is required to maintain effective quality of service. Minimum requirements of the SLA are listed below.

1.   **Service Availability**: Services for IP network shall be provided at a level of 99.5% uptime guaranteed. This shall apply to Services provided on network between landings up to IP router port offered by the service provider. In the event that service levels fall below 99.5%, penalty will be levied.

2.   **Round Trip delay /IP Layer Connectivity**: The average monthly round trip delay (two ways, going plus coming back) measured over a calendar month from the IP gateway router port of IDSA, New Delhi to the IP port of the first hop router of upstream provider shall not be greater than 120msec.   The average monthly round trip delay of first hop in USA or other country pop of the service provider shall not be more than 250 msec in all cases.
Measurement shall be done by ping tests conducted over ten minutes intervals by sending 10 UNIX based packets of data each consisting of 52 to 100 bytes.
The average monthly packet drop to the last hop router in any PoP of the Service Provider shall be 0% measured over a calendar month from the IP gateway router port of IDSA, New Delhi.

3.   **IP Addresses**: The bidder shall provide atleast 10 full class C real static IP addresses for the given location for exclusive use by IDSA.

4.   **Installation**: The bidder shall do installation and configuration of modems, routers etc to make the entire system working to provide sustained Internet connection.

5.   **Last Mile connectivity**: Providing last mile connectivity to the IDSA premises will be the responsibility of ISP. Existing system environment at IDSA is given above. The ISP shall meet the additional requirements of associated hardware such as modems/converters/routers etc at his own cost. Additional Router, if required, should be Cisco make with minimum two WAN and four Ethernet ports.

6.   **Termination details:** Complete details of service provisioning including offered bandwidth, termination details etc. are to be clearly stated.

7.   **Monitoring software/tools**: The service provider will provide suitable software/tools for monitoring and recording the uptime of the leased line. The software should also provide packet loss and bandwidth usage at five minutes intervals. The service provider shall also provide packet loss and latency statistics at different PoPs throughout their network.

8.   **Support:** The ISP must have adequate support facility in NCR/Delhi to provide 24x7x365 customer support. The service provider should have centralized trouble ticketing tool for call logging and troubleshooting purpose. The service provider must have Toll Free number/Help Desk for all the call logging and status update.

9.   **MRTG**: The ISP has to provide MRTG login where Purchaser can check monthly MRTG report of usage of Bandwidth.