

Global Tender Notice No : RM/10-11.

February 14, 2011.

M/s.

Dear Sir/s,

The Director, Indian Institute of Astrophysics, Bangalore, invites Sealed Tenders (both commercial bid & technical bid) for the Import of **“Dual processor servers, storage and accessories for a 20 node High performance Computing Cluster - 1 system as per our specifications-Annexure B”** . The terms and conditions may be noted from IIA Website and if you are in a position to quote for the supply in accordance with the requirements, please submit your quotation. The Tender documents and other details are available on IIA web site [www.iiap.res.in/tenders.htm](http://www.iiap.res.in/tenders.htm)

**The Tender bids must be in foreign currency only.** Your completed Tender bids **(both commercial bid & Technical Bid)** must reach our office on or before **11/03/2011 by 15 00 hrs.** The bids in a separate sealed envelopes duly superscribed with the name of the supply and the Due Date must reach our office within the due Date and Time. The Technical bids will be opened in presence of the bidders or authorized representative of the company by **15.30 hrs on 11/03/2011.** The commercial Bids received will be opened of only those parties who qualify in Technical Evaluation. The date will be intimated later. There will be a pre-bid meeting at IIA campus **at 14.30 hrs on 01/03/2011.** Incomplete Bids are liable for rejection.

Thanking you,

Yours faithfully,

Y.K.Raja Iyengar  
Asst.Admin.Officer

**GLOBAL TENDER DOCUMENT No : PUR/IMP/RK/19/10-11.  
DT : 14/02/2011.**

**TENDER FORM**

FROM:

TO

THE DIRECTOR  
Indian Institute of Astrophysics,  
Bangalore - 560 034.

Sir,

I/We hereby offer to supply the Items/Equipment indicated below at the price hereunder quoted and agree to hold this office open till . I/We shall be bound to supply the items/Equipment hereby offered upon the issue of the Purchase Order communicating to the acceptance thereof on or before the expiry of the last mentioned date. You are at liberty to accept any one or more of the items such Items/Equipment. I/We not withstanding that the offer in this tender has not been accepted in whole, shall be bound to supply such items and such portion or portions of one or more of the items as may be specified in the said Purchase order communicating the acceptance.

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S No.	Description of the item(s)	Qty.	Unit	Rate	Dely. Period
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- |    |  |   |         |  |  |
|----|--|---|---------|--|--|
| 1. | <b>Dual processor servers, storage and accessories for a 20 node High performance Computing Cluster system as per Annexure B enclosed.</b> | 1 | system. |  |  |
|----|--|---|---------|--|--|

( Tender bids should be in Foreign currency only )

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Place at which the Delivery is required : Indian Institute of Astrophysics  
Bangalore - 560 034.

Date by which the supplies are required : 6 weeks from the date of order.

2 I/We have understood the items of the tender annexed to the invitation to the Tender and have thoroughly examined the specifications/drawing and / or pattern quoted or referred to herein and / are fully aware of the nature of the items/ Equipment required and my / our offer is to supply the items/ Equipment strictly in accordance with the requirements subject to the terms and conditions contained in the Purchase order communicating the acceptance of this tender either in whole or in part.

Date :

Signature and Seal of Supplier

## **Annexure - A**

### **INSTRUCTIONS TO SUPPLIERS**

1. Tenders should be sent in sealed and superscribed envelopes with mention of Tender No. date and date of opening. Only one Tender should be sent in each envelope.
2. Late and Delayed tender will not considered at all.
3. Duties, Taxes where legally leviable and intended to be claimed should distinctly shown separately in the Tender.
4. a) Your quotation should be valid for 90-120 days from the date of opening of Tender.  
b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the Tender form, relationship between the two sets of units must be furnished.
5. a) All available Technical Literature(s), Catalogue(s) and other data in support of the specifications and details of the item(s) should be furnished along with the offer.  
b) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should indicated in your offer.  
c) Air freight/sea freight charges up to Bangalore Airport may be sent along with the offer.

**d) Specifications:**

Items / Equipment offered should strictly conform to our specifications. Deviation, if any should be clearly indicated by the Supplier in their quotation. The supplier should also indicate the Make / type No. of the stores offered and provide catalogue(s), Technical literature(s) and sample(s), wherever necessary along with the quotations. Test certificates wherever necessary should be forwarded along with the supplies. Whenever options are called for in our specifications, the Supplier should address all such options. Wherever specifically mentioned by us, the Supplier could suggest changes to specifications with appropriate response for the same.

1. Corrections, if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amounts quoted in words and figures, amount quoted in words shall prevail.
2. The supplier should supply along with the tender, the Banking information for payment or any other purpose.
3. A complete set of instruction and operation manual should be supplied.
4. Final performance should be guaranteed.

## **Annexure-B**

Supply and installation of

# **Dual Processor Servers and Storage For a 20 Node High Performance Computing Cluster**

## Contents

TENDER FORM.....	2
1.Introduction .....	6
<p><u>Indian Institute of Astrophysics is the country's premier research institution devoted to studies in astronomical sciences and related areas. Its aim has been to promote, guide and conduct research in all branches of astrophysics - from studies of the Sun and the solar system to exploration of the farthest reaches of the visible universe populated by galaxies and clusters of galaxies. IIA has established and maintains major astronomical observatories in the country, trains personnel and motivates them to take up research in astrophysics, fosters national and international collaborations in the fields of astronomy and astrophysics and disseminates knowledge and information on astronomy and astrophysics as widely as possible. Its activities have grown many fold and its efforts are directed towards developing multi-wavelength capabilities. IIA has its own optical, infrared and radio facilities and it has just completed the installation of a high altitude gamma-ray array in Hanle. The Institute is a major participant in the ASTROSAT mission, ISRO's first fully dedicated astronomy satellite, and has taken the full responsibility of developing its ultraviolet payload. IIA's main campus is located in Bangalore in the southeastern part of the city. The observational facilities are spread across the length of the country, in four major field stations - Hanle (Ladakh, Jammu and Kashmir), Gauribidanur (Karnataka), and Kavalur and Kodaikanal (Tamilnadu). The Hosakote campus in the Bangalore Rural District houses the Centre for Research and Education in Science and Technology (CREST). The website <a href="http://www.iiap.res.in">www.iiap.res.in</a> has more details of the range of IIA's activities.....</u></p>	
1.Background .....	7
2.Technical Specifications .....	7
2.1Hardware: Dual Processor Servers.....	9
2.2Hardware: Associated Storage and Accessories.....	10
3.Scope of Work .....	11
4.Eligibility Criteria of Vendor .....	11
6.Expected Deliverables and Acceptance Criteria .....	12
7.Expected Time Schedule .....	13
8.Contract and General Terms and Conditions.....	13
9. Further Information/Clarifications .....	16
TERMS AND CONDITONS OF CONTRACT.....	17

## **1. Introduction**

Indian Institute of Astrophysics is the country's premier research institution devoted to studies in astronomical sciences and related areas. Its aim has been to promote, guide and conduct research in all branches of astrophysics - from studies of the Sun and the solar system to exploration of the farthest reaches of the visible universe populated by galaxies and clusters of galaxies. IIA has established and maintains major astronomical observatories in the country, trains personnel and motivates them to take up research in astrophysics, fosters national and international collaborations in the fields of astronomy and astrophysics and disseminates knowledge and information on astronomy and astrophysics as widely as possible. Its activities have grown many fold and its efforts are directed towards developing multi-wavelength capabilities. IIA has its own optical, infrared and radio facilities and it has just completed the installation of a high altitude gamma-ray array in Hanle. The Institute is a major participant in the ASTROSAT mission, ISRO's first fully dedicated astronomy satellite, and has taken the full responsibility of developing its ultraviolet payload. IIA's main campus is located in Bangalore in the southeastern part of the city. The observational facilities are spread across the length of the country, in four major field stations - Hanle (Ladakh, Jammu and Kashmir), Gauribidanur (Karnataka), and Kavalur and Kodaikanal (Tamilnadu). The Hosakote campus in the Bangalore Rural District houses the Centre for Research and Education in Science and Technology (CREST). The website [www.iiap.res.in](http://www.iiap.res.in) has more details of the range of IIA's activities.

## **1. Background**

The institute presently has an AMD Opteron™ 250 single core Processor based 8 node High Performance Computing (HPC) cluster for the parallel computing requirements. This 5 year old cluster is no longer adequate to fulfill the growing needs for faster computing requirements of Institute members. This proposal is to install a state of the art 20 node cluster as a replacement for the existing machine. In addition to the computing power, the proposed machine will also have adequate reliable storage space for data.

## 2. Technical Specifications

Technical requirements for the servers and associated storage are listed below.

**INDIAN INSTITUTE OF ASTROPHYSICS reserves the right to increase/decrease the specified quantities of any item(s) given in the tender. It also reserves the right to revise the technical specifications at any point of time, with notification to the vendors.**

1. The preferred operating system is any stable flavour of Linux.
2. The proposed solution should have single point system monitoring and control features.
3. Vendors are requested to submit, along with the technical bid, benchmark data carried out on a dual node cluster of specifications given below, for the following codes on the platform that they are proposing.
  - HPL in double precision both sequential and parallel.
  - QCD as per the instructions provided in READMEQCD.
  - Vendors may be asked to run additional codes.

All relevant details concerning these codes, including contact persons for technical queries or assistance, will be posted at the IIAP website, at [http://www.iiap.res.in/hpc\\_benchmark.html](http://www.iiap.res.in/hpc_benchmark.html). In all the above applications, single CPU performance and multiple CPU performance data (MPI parallel runs) must be submitted.

4. Vendors must include all details of space, power, and cooling requirements for their proposed solution. Heat generated by the machines in standard units for peak and sustained load conditions must be mentioned.
5. The technology road map for the proposed solution should be provided.
6. Installation of software(s) is an optional add-on. Pricing information for this component should be given separately. Details should be given as per the following categories:
  - Compilers. Intel compilers are preferred.
  - Libraries inclusive of LAPACK and BLAS. This should include MKL and VTUNE.
  - MPICH/OpenMPI
  - Batch Queuing: Torque preferred.
  - Cluster Tools

7. If multiple options are available satisfying the basic specifications and offer different price/performance advantages, the vendors may submit more than the options given below, in separate and clearly marked quotations.

## 2.1 Hardware: Dual Processor Servers

S.No [1]	Item Specification [2]	Qty [3]	Model, Make and Deviations (if any) [4]
1.	<p><b>Dual Processor Servers</b>  <b>CPU:</b> 2 x Intel Xeon X5670 Processor  (six cores, 2.93 GHz, 6.4 GT/s, 12 MB L3 cache)  <b>Chipset:</b> Intel 5520  <b>Memory:</b> 48 GB (6 x 8 GB) ECC 1333 MHz DDR3  Dual ranked RDIMMs for two Processors  (expandable)  <b>Storage:</b> 2 x 1 TB Hot-Swap NL-SAS/SATA HDD, RAID-1  Access speed &amp; cache size should be specified    <b>NIC:</b> Dual 100/1000 Mbps Ethernet  <b>Infiniband:</b> Populated with QDR 40 Gb/s Cards  <b>Ports:</b> 1 serial, at least 4 USB 2.0, 2x Network,  1x Infiniband, 1x Management, 1x Video  <b>Expansion Slots:</b> Full technical details should be given  About the PCI-slots provided  <b>All the nodes need to have the provision to accommodate two GPU cards (nVidia</b></p>	20 units	

<p><b>Tesla/Fermi or equivalent) as a future upgradation (two extra PCI-EX x16 gen2 or better with x4 bandwidth)</b></p> <p><b>Graphics:</b> ATI ES1000 with 32MB or more, or equivalent</p> <p><b>Management:</b> IPMI 2.0 Compliant with dedicated port</p> <p><b>Chassis:</b> Rack mountable. Blade or other chassis may be quoted. Rails and other items for mounting the chassis on a rack must be provided.</p> <p><b>Power Supply:</b> Redundant Hot-swap power supplies. Please provide the efficiency and rating. <b>Efficiency should at least be 85% at full load.</b></p> <p><b>Power:</b> Please give complete details of power requirements of the server with a breakup in terms of individual components. You may assume that the CPUs will work at full throttle and all of memory will be in active use all the time. You may assume that the hard disk will be idle most of the time.</p> <p><b>Cooling:</b> Please give an estimate of cooling required per node. This may be in terms of cold air flow per minute. If this is not given then we will estimate cooling based on power dissipation within the system.</p>	
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**NOTE:** Parties must mention make and model no. of the Equipment, with detail specification (on separate sheet). Otherwise their tender will not be accepted.

## 2.2 Hardware: Associated Storage and Accessories

S.No [1]	Item Specification [2]	Qty [3]	Model, Make and Deviations (if any) [4]
1.	Usable NAS of about 48 Terrabytes raw capacity with infiniband and multiple gigabit NIC, multiple RAID levels. Details of bandwidth, latency, redundant power supply should be provided	1 unit	
2.	<b>CPU:</b> 2 x Intel Xeon X5670 Processor (six cores, 2.93 GHz, 6.4 GT/s, 12 MB	1 unit	

	L3 cache) <b>Chipset:</b> Intel 5520 <b>Memory:</b> 48 GB (6 x 8 GB) ECC 1333 MHz DDR3 Dual ranked RDIMMs for two Processors (expandable) <b>NIC:</b> 2 x gigabit <b>Infiniband:</b> QDR 40 Gb/s card <b>Power supply:</b> Hotswap, redundant <b>PCIe:</b> Atleast 3 PCIe Gen2 (or better) slots		
3.	Reliable data back up with technical details		
4.	Infiniband switch – Mellanox QDR 36 Port unmanaged, with single power supply	1 unit	
5.	Infiniband Cables for QDR	24 units	
6.	Gigabit 24 Port Ethernet Switch along with CAT6 cables	1 unit	
7.	Suitable Rack as per final configuration	1 unit	

**All the items specified in the tables above should be with minimum 5 years full comprehensive free warranty.**

### 3. Scope of Work

The installation of Dual Processor Servers will be at the Indian Institute of Astrophysics, Koramangala, Bangalore.

The scope of the work includes Supply, Installation and testing of the whole system, starting with individual dual processor servers, interconnect, storage and end-to-end testing. Warranty period will start from the date of successful installation, as certified by the competent authority of IIA, of all the items at site.

The supply and installation of the Dual Processor Servers shall be made by the vendor within 8 weeks from the date of issue of the purchase order by INDIAN INSTITUTE OF ASTROPHYSICS to the vendor. All the deliveries should be on CIF basis up to INDIAN INSTITUTE OF ASTROPHYSICS, KORAMANGALA, BANGALORE. If any loss or damage occurs in transit then it will be the responsibility of the supplier to make good the loss, within the time stipulated in the tender/purchase order for installation. The vendor may take necessary action to claim the insurance money, for the item(s) lost/damaged during transit, from insurance Company.

### 4. Eligibility Criteria of Vendor

The bidder must attach the experience for Supply & Installation of servers for high performance scientific computing during the last 3 financial years in State Government or Govt. of India Department(s) or Reputed Organisation(s)(in Nos. and Value). Please attach a list of clients.

Bidders shall submit general information about the Company in the following format:

1. Name of the Company :
2. Full address of company :  
along with  
Telephone no.  
Fax No.  
E-mail address
3. Local address of :  
company, if any, for  
communication
4. Are you a manufacturer :  
or dealer/reseller
- 5 Annual turn over in last 3 :  
(a) financial years in Rs.  
Crores.  
  
i. 2005-2006  
ii. 2006-2007  
iii. 2007-2008
5. Supply & Installation of :  
(b) equivalent to our  
tendered DUAL  
PROCESSOR SERVERS  
(20 NODE CLUSTER) FOR  
last 3 years in State or  
Central Govt of India  
Departments/ Reputed  
Organisations (in Nos  
and Value). Please attach  
list of clients.
5. Trade Tax/ Sales Tax :  
(c) Registration No. with  
place.
5. Income Tax Registration :  
(d) with place.

## 6. Expected Deliverables and Acceptance Criteria

The Vendor should provide facility for basic testing and performance verification of the machine after installation. Inspection shall be done by our scientists/engineers.

All relevant test reports and operational/maintenance manuals should be provided.

All the items to be supplied should be new, of good quality and standard and as per the technical specifications (section \ref{techspecs}) mentioned in this document.

The vendor will provide operational manuals, OEM documents for peripherals, set of diagnostics to test all the sub-systems etc. along with the systems.

The installation of Dual Processor Servers will be at the Indian Institute of Astrophysics, Koramangala, Bangalore.

## 7. Expected Time Schedule

Supply, assembly, configuration, testing and commissioning should be completed within 3 months after acceptance of the offer.

## 8. Contract and General Terms and Conditions

1. Authorized manufacturers/dealers/resellers are allowed to take part in the bid for the supply and installation. Bid should be accompanied by proofs that the vendor is authorized dealer/reseller of manufacturer. Authorization letter specific to this tender should be attached with the technical bid.
- 2. The bidder must attach the experience for Supply & Installation of servers for high performance scientific computing during the last 3 financial years in State Government or Govt. of India Department(s)/Reputed Organization(s) (in Nos. and Value).**
3. The bids submitted by the vendors should be valid for a minimum period of 90 days from the date of the opening of tender and the prices should be valid till execution of purchase agreement.
- 4. The sealed envelope containing ``Terms & Conditions'', ``Technical Bid'' and ``Financial Bid'' on prescribed tender document of the Indian Institute of Astrophysics, Bangalore should reach the Director, Indian Institute of Astrophysics, Bangalore on or before 11.03.2011 upto 3:00 p.m. Otherwise the tender will not be accepted.**

- 5. The sealed envelope of the bidders containing "Terms & Conditions" and "Technical Bid" shall be opened on 11.03.2011 at 3.30 p.m. The "Financial Bid" of only those parties who qualify in Technical Bid will be opened on a later date. The date of opening will be informed to each qualified party separately.**
6. The supply and installation of the Dual Processor Servers shall be made by the vendor within 6 weeks from the date of issue of the purchase order by INDIAN INSTITUTE OF ASTROPHYSICS to the vendor. All the deliveries should be on CIF basis up to INDIAN INSTITUTE OF ASTROPHYSICS, KORAMANGALA, BANGALORE. If any loss or damage occurs in transit then it will be the responsibility of the supplier to make good the loss, within the time stipulated in the tender/purchase order for installation. The vendor may take necessary action to claim the insurance money, for the item(s) lost/damaged during transit, from insurance Company.
7. All the items to be supplied should be new, of good quality and standard and as per the technical specifications mentioned in technical bid document.
8. The vendor will provide operational manuals, OEM documents for peripherals, set of diagnostics to test all the sub-systems etc. along with the systems.
9. The installation of Dual Processor Servers will be at the Indian Institute of Astrophysics, Koramangala, Bangalore.
10. INDIAN INSTITUTE OF ASTROPHYSICS reserves the right to reject any items supplied against the purchase order, if found not working satisfactorily at the time of installation at site(s). The rejected items, if any, shall have to be taken back and replaced by good quality items forthwith at the cost of the supplier. No payment will be made for the rejected item(s).
11. If the installation of the items at site gets delayed from the stipulated period given above and to be given in the Purchase Order, then INDIAN INSTITUTE OF ASTROPHYSICS reserves the right to cancel the order and forfeit the balance payment, if any, due to the supplier for the items supplied against the purchase order.
12. The prices quoted in the technical/financial bid should be inclusive of power cables, interface cables, packing, forwarding, freight upto Indian Institute of Astrophysics, Koramangala, Bangalore, transit insurance from supplier go-down to Indian Institute of Astrophysics, Koramangala, Bangalore and installation charges at sites. Tax, if applicable, should be quoted separately at the appropriate columns provided for them in the technical/financial bid.

13. In case, excise duty and/or trade tax/sales tax are reduced or increased subsequently by the Government at the time of placement of the purchase order or delivery, then the same will be adjusted by either party on production of requisite proof.
14. Payment for the items to be supplied by the vendor against the purchase order shall be made by INDIAN INSTITUTE OF ASTROPHYSICS as follows:-
- 90% of the total payment will be released on receipt and verification of material.
  - Remaining 10% of the total payment will be made after satisfactory installation and commissioning of the servers.
- Agency commission, if any, included in the price should be explicitly stated. Agency commission will be paid to the Indian agent in Indian Rupees only after installation and commissioning.**
- 15. Complete Dual Processor Servers will carry minimum five years on site comprehensive warranty. Warranty period will start from the date of successful installation, as certified by the competent authority of IAP, of all the items at site.**
- 16. Parties should specify the make and model of each Item along with all other details.**
17. The tender must be submitted on the prescribed tender document issued by the INDIAN INSTITUTE OF ASTROPHYSICS. Any other technical details required to supplement the information quoted in the prescribed tender document may please be attached separately. The information asked in the tender document should be given at the place provided for it in the tender document. The tenders in which information is not given at the place provided for it or not in the similar format given in the tender document may be rejected.
18. All the documents required should be submitted along with the technical bid of the tender only.
- 19. Printed conditions of the vendor submitted with the tender will not be binding on INDIAN INSTITUTE OF ASTROPHYSICS.**
20. The documents containing bids shall be free from cutting and erasures. However, alterations, if any, in the tender should be attested properly by the bidder, failing which the tender is liable to be rejected.

21. The tenders submitted by telex/telegrams/fax/email will not be considered. No further correspondence will be entertained on this matter.
22. INDIAN INSTITUTE OF ASTROPHYSICS will not be responsible for any delay in obtaining the tender document from INDIAN INSTITUTE OF ASTROPHYSICS website or submission of the completed tender document to INDIAN INSTITUTE OF ASTROPHYSICS. IAP is not responsible for any delay/loss of documents in transit.
23. The registration number of the firm along with the CST/U.P.T.T. No. allotted by the sales tax/trade tax authorities and I.T. registration number (P.A.N.) along with the place of registration should invariably be given along with the **technical bid**.
24. Tender will be rejected, if technical specifications offered by the firm in the bid differ from that of financial bid.
25. Tender not conforming to any or all the above terms and conditions will be rejected.
26. Incomplete tenders are liable to be rejected.
27. **INDIAN INSTITUTE OF ASTROPHYSICS reserves the right to increase/decrease the specified quantities of any item(s) given in the tender. It also reserves the right to revise the technical specifications at any point of time, with notification to the vendors.**
28. INDIAN INSTITUTE OF ASTROPHYSICS reserves the right to reject any or all the tenders without assigning any reason whatsoever. INDIAN INSTITUTE OF ASTROPHYSICS would not be under any obligation to give any clarifications to those vendors whose tenders have been rejected.
29. All disputes are subject to Bangalore jurisdiction.

#### 9. Further Information/Clarifications

30. For further information/clarification in this respect, please contact Dr. Rekshesh Mohan on e-mail **reks@iiap.res.in**. Only e-mail inquiries will be entertained. Dr. Mohan will also be available for discussions on technical aspects in person on **01.03.2011 at 2:30 pm** in the pre bid meeting. Non technical queries will not be entertained.

## **TERMS AND CONDITONS OF CONTRACT**

### **1. DEFINITIONS:**

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- a) The terms 'Purchaser' shall mean the Director, Indian Institute of Astrophysics, Bangalore - 560 034.
- b) The term 'Supplier' shall mean, the person, firm or company with whom or with which the order for the supply of Items / Equipment is placed.
- c) The terms 'Purchase Order' shall mean the communication signed on behalf of the Purchaser by an officer duly authorized intimating the acceptance on behalf the Purchaser on the terms and conditions mentioned or referred to in the said communications accepting the tender or offer of the supplier for supply of Items/ Equipment.

### **2. PRICES:**

The price may please be indicated on unit basis only.

#### **Duty Exemption:**

Please note that we may issue "Customs duty Exemption Certificate", if acceptable under the Govt. of India notification No.51/96 valid till 2011.

### **3. GUARANTEE AND REPLACEMENT:**

The Supplier shall guarantee that the Items/Equipment supplied shall comply fully with the specifications laid down, for material workmanship and performance. The Guarantee should be for a period of Five years minimum for the date of supply.

### **4. PACKING, FORWARDING AND INSURANCE:**

The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by air / Sea to withstand transit hazards ensure safe arrival at the destination. The packing and marking of packing shall be done by and at the expenses of the contractor. The Purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the supplier and the Purchase shall pay only for such Items/Equipment as are actually received in good condition, in accordance with contract.

5. **TEST CERTIFICATE:**

Wherever required Test Certificate should be sent before dispatch of the items.

6. **ACCEPTANCE OF ITEMS / EQUIPMENT:**

a)It is expressly agreed that the acceptance of Items/Equipment, is subject to final approval by the Purchase, whose decision shall be final.

7. **DELIVERY PERIOD:**

Delivery is the essence of the contract. The supplier should adhere to delivery schedule as indicated in the Purchase order.

8. **EXTENSION OF DELIVERY TIME:**

As soon as it is apparent that Supplier dates cannot be adhered to, an application shall be sent by the Supplier to the Purchaser. If failure, on the part of the Supplier to deliver the Items/Equipment in proper time shall have arisen from any cause which the Purchaser may admit as reasonable ground for an extension of the time ( and his decision shall be final he may allow such additional time as he considers it to be justified by the circumstances of the case). In case of Letter of Credit the banking charge for the LOC amendment will be on suppliers account.

9. **PAYMENT:**

Preference will be given to the supplier whose payment terms is on Site Draft.

10. **SECURITY FOR PAYMENT:**

Successful Supplier will have to furnish in the form of a Bank Guarantee or any other form as called for by the Purchase towards any payments before supply of items/equipment. In case of payment through Letter of Credit the Banking charges outside India and inside India will be on suppliers account.