



TENDER DOCUMENT
FOR
THE PURCHASE OF
PIEZOELECTRIC THIN FILM ANALYSER

**NATIONAL AEROSPACE LABORATORIES
POST BAG No. 1779, AIR PORT ROAD
BANGALORE- 560017 (KARNATAKA)
INDIA**

Table of contents

Chapter No. No.	Contents	Page
1	Instructions to bidders	3
2	General Conditions of Contract (GCC) and ... Special Condition of Contract (SCC)	23
3	Schedule of Requirements and Specifications & Allied Technical Details	42
4	Price Schedule Forms	48
5	Qualification Requirements	52
6	Contract Form	53
7	Other Standard Forms	54

INVITATION FOR BIDS / NIT

1. Director, National Aerospace Laboratories, Post Bag No. 1779, Airport Road, Bangalore- 560017 (Karnataka), India invites sealed bids from manufacturers, their distributors and Indian Agent of Foreign principals, if any, for purchase of items listed below.

S.No.	Tender No.	Description of items	Quantity	Single/ Double bid	Bid Security (EMD) (in Indian Rupees)
1.	MT-308F-08	Piezoelectric thin film analyzer	01	Double	Rs. 1,50,000

2. Interested Bidders may obtain further information from the office of the Controller of Stores & Purchase, NAL Bangalore.
3. Each complete set of bidding document may be purchased by any interested bidder on submission of a written application to the above office and upon payment of a non-refundable and non-transferable fee of Rs. 300.00 in the form of a Demand Draft in favour of The Director, NAL, payable at Bangalore during office hours on all working days up to **12th March 2009** either in person or by post. Alternatively, the bidding documents can be downloaded directly from our website <http://www.nal.res.in> free of cost. **The bids must reach this office on or before 13th March 2009 up to 09.30 hours (IST) and shall be opened on 13th March 2009 at 10.30 hours. (IST).**
4. **A Pre-bid Conference will be held in Materials Sciences Conference Hall on 26th February 2009 at 10.00 hours (IST).** All prospective bidders are requested to kindly **submit their queries** to the address indicated above so as to reach NAL **latest by 20th February 2009.**
5. All bids must be accompanied by a bid security as specified above and must be delivered to the above office at the date and time indicated above. Bids will be opened in the presence of Bidders' representatives who choose to attend on the specified date and time. In the event of the date specified for bid receipt and opening being declared as a closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed time.
6. The Director, NAL Bangalore reserves the right to accept any or all tenders either in part or in full or to split the order without assigning any reasons there for.

CHAPTER 1

INSTRUCTIONS TO BIDDER

Table of Contents

Sl. No.	Clause	Page No.
1.	Eligible Bidders	6
2.	Cost of Bidding	6
3.	Fraud and Corruption	6
4.	Cost of Bidding Documents	7
5.	Content of Bidding Documents	7
6.	Clarification of bidding documents	7
7.	Amendment of Bidding Documents	8
8.	Language of Bid	8
9.	Documents Comprising the Bid	8
10.	Bid form and price schedule	9
11.	Bid Prices	9
12.	Bid Currencies	10
13.	Documents Establishing Bidder's Eligibility and qualifications	10
14.	Documents Establishing Goods' Eligibility And Conformity to Bidding Documents	11
15.	Bid Security	11
16.	Period of Validity of Bids	12
17.	Format and Signing of Bid	13
18.	Submission, Sealing and Marking of Bids	14
19.	Deadline for Submission of Bids	14

Sl. No.	Clause	Page No.
20.	Late Bids	14
21.	Withdrawal, substitution and Modification of Bids ...	15
22.	Opening of Bids by the Purchaser	15
23.	Confidentiality	16
24.	Clarification of Bids	16
25.	Preliminary Examination	16
26.	Responsiveness of Bids	17
27.	Non-Conformity, Error and Omission	17
28.	Examination of Terms & Conditions, Technical Evaluation	18
29.	Conversion to Single Currency	18
30.	Evaluation and Comparison of bids	18
31.	Contacting the Purchaser	20
32.	Post qualification	20
33.	Negotiations	20
34.	Award Criteria	20
35.	Purchaser's right to accept any Bid and to reject any or all Bids	20
36.	Notification of Award	21
37.	Signing of Contract / Order Acceptance	21
38.	Performance Security	21
39.	Purchaser's right to vary Quantities at Time of Award	22
40.	Pre-bid Conference	22

A. Introduction

1. Eligible Bidders

- 1.1 This Invitation for Bids is open to all suppliers.
- 1.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation of Bids.

2. Cost of Bidding

- 2.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and "the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

3. Fraud and corruption:

- 3.1 The purchaser requires that the *bidders* suppliers and contractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the following are defined:

“corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;

“fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;

“collusive practice” means a scheme or arrangement between two or more bidders, with or without the knowledge of the purchaser, designed to establish bid prices at artificial, noncompetitive levels; and

“coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

- 3.2 The purchaser will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question;

B. The Bidding Documents

4. Cost of Bidding Documents

- 4.1 Interested eligible bidders may purchase the bidding documents on payment of the cost of bidding documents as indicated in the invitation for bids/NIT or alternatively, the bidding documents can be downloaded from our Website as indicated in the Invitation for Bids/NIT free of cost.

5. Content of Bidding Documents

- 5.1 The goods required, bidding procedures and contract terms are prescribed in the bidding documents which should be read in conjunction. The bidding documents, apart from the invitation for bids have been divided into 7 chapters as under:

Chapter 1	:	Instructions to Bidder (ITB)
Chapter 2	:	General Conditions of Contract (GCC) and Special Conditions of Contract (SCC)
Chapter 3	:	Schedule of Requirements and Specifications and Allied Technical Details
Chapter 4	:	Price Schedule Forms
Chapter 5	:	Qualification requirements
Chapter 6	:	Contract Form
Chapter 7	:	Other Standard Forms comprising: (a) Manufacturer's Authorization Form (MAF) ; (b) Bid Security Form (c) Performance Statement Form (d) Deviation Statement Form; (e) Service Support details; (f) Bid Form (g) Performance Security Form; (h) Acceptance Certificate Form

- 5.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

6. Clarification of bidding documents

- 6.1 A prospective Bidder requiring any clarification of the Bidding Documents shall contact the Purchaser in writing at the Purchaser's address specified in the Special Conditions of Contract **(SCC)**, latest by the date specified in the invitation for Bids/NIT which would be deliberated as per clause 40 of Instructions to the Bidders. No request for clarification or query shall

be normally entertained after the pre bid conference. Should the Purchaser deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under Clause relating to amendment of Bidding documents and Clause relating to Deadline for Submission of Bids. The clarifications and amendments issued would also be hosted on the website of the purchaser for the benefit of the other prospective bidders.

7. Amendment of Bidding Documents

- 7.1 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment as enumerated in clause 40 of instructions to the bidders. The same would also be hosted on the website of the purchaser and all prospective bidders are expected to surf the website before submitting their bids to take cognizance of the amendments.
- 7.2 In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids and host the changes on the website of the purchaser.

C. Preparation of Bids

8. Language of Bid

- 8.1 The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser, shall be written in English language only.
- 8.2 The Supplier shall bear all costs of translation, if any, to the English language and all risks of the accuracy of such translation, for documents provided by the Supplier.

9. Documents Comprising the Bid

- 9.1 The bid prepared by the Bidder shall include:
 - (a) Bid security as specified in the Invitation to Bids.
 - (b) Service support details Form;
 - (c) Deviation Statement Form;
 - (d) Performance Statement Form;
 - (e) Manufacturer's Authorization Form.
 - (f) Documentary evidence establishing that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted.
 - (g) Bid form and applicable Price Schedule Form (as per clause ITB 17).

- (h) Documents establishing goods eligibility and conformity to bidding documents.
- (i) DGS&D Registration certificate in case the items under procurement falls under the restricted category of the current export-import policy of the Govt. of India.

10. Bid form and price schedule

10.1 The bidder shall complete the Bid Form and the appropriate price schedule form furnished in the bidding documents. These forms must be completed without any alterations to its format and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

11. Bid Prices

11.1 The Bidder shall indicate on the appropriate price schedule form, the unit prices and total bid prices of the goods it proposes to supply under the contract.

11.2 Prices indicated on the price-schedule form shall be entered separately in the following manner:

(a) For Goods being offered from India

- (i) The price of the goods quoted ex works including taxes already paid.
- (ii) VAT and other taxes like excise duty etc. which will be payable on the goods if the contract is awarded.
- (iii) The charges for inland transportation, insurance and other local services required for delivering the goods at the desired destination as specified in the price schedule form.
- (iv) The installation, commissioning, AMC and training charges, if any.

(b) For Goods being offered from abroad

- (i) The price of the goods, quoted on FCA (named place of delivery abroad) or FOB (named port of shipment), as specified in the price schedule form.
- (ii) The charges for insurance and transportation of the goods to the port/place of destination.
- (iii) The agency commission etc., if any.
- (iv) The installation, commissioning, AMC and training charges, if any.

11.3 The terms FOB, FCA, CIF, CIP etc shall be governed by the rules prescribed in the current edition of the Incoterms published by the International Chambers of Commerce, Paris.

11.4 Where there is no mention of packing, forwarding, freight, insurance changes, taxes etc. such offer shall be rejected as incomplete and prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account.

11.5 All lots and items must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. Lots or items not listed in the Price Schedule shall be assumed to be not included in the bid.

11.6 The purchases made by the purchaser for scientific purpose are exempt from excise duty and Custom Duty at a concessional rate is leviable.

11.7 The prices quoted by the bidder shall be fixed during the bidder's performance of the contract and not subject to variation on any account.

12. Bid Currencies

12.1 Prices shall be quoted in Indian Rupees for offers received for supply within India and in freely convertible foreign currency in case of offers received for supply from foreign countries.

13. Documents Establishing Bidder's Eligibility and qualifications

13.1 The bidder shall furnish, as part of its bid, documents establishing the bidders' eligibility to bid and its qualification to perform the contract if its bid is accepted.

13.2 The documentary evidence of the bidders qualification to perform the contract if the bid is accepted shall establish to the purchasers satisfaction that;

(a) The bidder meets the qualification criteria listed in bidding documents.

(b) Bidder that doesn't manufacture the goods it offers to supply shall submit Manufacturers' Authorization Form (MAF) using the form specified in the bidding document to demonstrate that it has been duly authorized by the manufacturer of the goods to quote and/or supply the goods.

(c) In case a bidder not doing business within the purchasers' country, that the bidder is or will be represented by an agent in the country equipped and able to carry out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period or ensure a mechanism at place for carrying out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period.

13.3 Conditional tenders shall not be accepted

14. Documents Establishing Goods' Eligibility and Conformity to Bidding Documents

14.1 To establish the goods' eligibility, the documentary evidence of the goods and services eligibility shall consist of a statement on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment.

14.2 To establish the conformity of the goods and services to the specifications and schedule of requirements of the bidding document, the documentary evidence of conformity of the goods and services to the bidding documents may be in the form of literature, drawings and data, and shall consist of:

- (a) A detailed description of the essential technical and performance characteristics of the goods;
- (b) A list giving full particulars, including available sources and current prices, of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods during the warranty period following commencement of the use of the goods by the Purchaser in the Priced-bid ; and
- (c) An item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications.

14.3 For purposes of the commentary to be furnished pursuant to above, the Bidder shall note that standards for workmanship, material and equipment, designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute these in its bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

15. Bid Security

15.1 The Bidder shall furnish, as part of its bid, a bid security **(BS)** for an amount as specified in the Invitation for Bids. In the case of foreign bidders , the BS shall be submitted either by the principal or by the Indian agent and in the case of indigenous bidders, the BS shall be submitted by the manufacturer or their specifically authorized dealer/bidder.

15.2 The bid security is required to protect the Purchaser against the risk of Bidder's conduct, which would warrant the security's forfeiture.

- 15.3 The bid security shall be in Indian Rupees for offers received for supply within India and denominated in the currency of the bid or in another freely convertible currency in the case of offers received for supplies from foreign countries in equivalent Indian Rupees. The bid security shall be in one of the following forms at the bidders' option:
- (a) A bank guarantee issued by a Nationalized/Scheduled bank/Foreign Bank in the form provided in the bidding documents and valid for 45 days beyond the validity of the bid; or
 - (b) A Banker's cheque or demand draft in favour of the purchaser.
- 15.4 The bid security shall be payable promptly upon written demand by the purchaser in case the conditions listed in the ITB clause 15.11 are invoked.
- 15.5 The bid security should be submitted in its original form. Copies shall not be accepted.
- 15.6 Any bid not secured in accordance with above will be rejected by the Purchaser as non-responsive.
- 15.7 The bid security of unsuccessful bidder will be discharged /returned as promptly as possible but not later than 15 days after the expiration of the period of bid validity or placement of order which ever is later.
- 15.8 The successful Bidder's bid security will be discharged upon the Bidder furnishing the performance security.
- 15.9 The firms registered with DGS&D & NSIC, if any, are exempted from payment of BS provided such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies.
- 15.10 The bid security may be forfeited:
- (a) If a Bidder withdraws or amends or impairs or derogates its bid during the period of bid validity specified by the Bidder on the Bid Form; or
 - (b) In case of a successful Bidder, if the Bidder fails to furnish order acceptance within 15 days of the order and/or fails to furnish Performance Security within 21 days from the date of contract/ order.

16. Period of Validity of Bids

- 16.1 Bids shall remain valid for 90 days after the date of bid opening prescribed by the Purchaser. A bid valid for a shorter period may be rejected by the Purchaser as non-responsive.
- 16.2 In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses

thereto shall be made in writing (or by cable, telex, fax or e-mail). The bid security provided shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.

- 16.3 Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

17. Format and Signing of Bid

- 17.1 The bids may be submitted in single envelop or in two parts as specified in the Invitation for Bids.
- 17.2 In case the bids are invited on single envelop basis, then the Bidder shall prepare two copies of the bid, clearly marking each "Original Bid" and "Copy Bid", as appropriate. In the event of any discrepancy between them, the original shall govern.
- 17.3 In case the bids are invited on two-bid system, the Bidder shall submit the bids in two separate parts. One part shall contain Technical bid comprising all documents listed under clause relating to Documents Comprising the Bid excepting bid form and price schedules. The other part shall contain the priced-bid comprising bid form and price- schedules. The Bidder shall prepare two copies of the bid, clearly marking each "Original Bid" and "Copy Bid", as appropriate.
- 17.4 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.
- 17.5 Any interlineations, erasures or overwriting shall be valid only if they are initialed by the persons or persons signing the bid.
- 17.6 Firms submitting bids in a single envelope against the requirement of two bid system would be considered for further evaluation at the risk & responsibility of the bidder.

D. Submission and sealing of Bids

18. Submission, Sealing and Marking of Bids

- 18.1 The bidders may submit their bids by mail or by hand.
- 18.2 In the case of bids invited on single envelop basis, the Bidders shall seal the original and each copy of the bid in separate inner envelopes, duly marking the envelopes as "original" and "copy". The envelopes shall then be sealed in an outer envelop.
- 18.3 In the case of bids invited on two part basis, the Bidder shall seal the unpriced commercial bid and the priced bid in two separate envelopes duly marked as "Technical bid" and "priced bid". Both the envelopes shall then be sealed in one outer envelope.
- 18.4 (a) The inner and outer envelopes shall be addressed to the Purchaser indicated in the **SCC**.
- (b) Bear the name and address of the bidder, Tender No., due date and a warning "Do not open before _____" to be completed with the time and date as specified in the invitation for bids.
- 18.5 If the outer envelope is not sealed and marked as required above, the Purchaser will assume no responsibility for the bid's misplacement or premature opening. In such cases, bids received in open condition within the due date and time will be accepted at the risk of the bidder if the same is presented to the Controller of Stores & Purchase before expiry of the due date and time of opening of the bids.

19. Deadline for Submission of Bids

- 19.1 Bids must be received by the Purchaser at the address specified in Invitation for bids no later than the time and date specified therein. In the event of the specified date for the submission of Bids being declared a holiday for the Purchaser, the Bids will be received upto the appointed time on the next working day.
- 19.2 The Purchaser may, at its discretion, extend the deadline for submission of bids by amending the bid documents in accordance with Clause relating to Amendment of Bidding Documents in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

20. Late Bids

- 20.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser will be rejected.

20.2 Such tenders shall be marked as late and not considered for further evaluation. They shall not be opened at all and be returned to the bidders in their original envelope without opening.

21. Withdrawal, substitution and Modification of Bids

21.1 A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice in accordance with ITB Clause 18 duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB Sub-Clause 17.4 (except that no copies of the withdrawal notice are required). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:

- (a) submitted in accordance with ITB Clauses 17 and 18 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," or "MODIFICATION;" and
- (b) Received by the Purchaser prior to the deadline prescribed for submission of bids, in accordance with ITB Clause 19.

21.2 Bids requested to be withdrawn in accordance with ITB Sub-Clause 21.1 shall be returned unopened to the Bidders. No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form or any extension thereof.

E. Opening and Evaluation of Bids

22. Opening of Bids by the Purchaser

22.1 The Purchaser will open all bids one at a time in the presence of Bidders' representatives who choose to attend, as per the schedule given in invitation for bids. The Bidders' representatives who are present shall sign the quotation opening sheet evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for the Purchaser, the Bids shall be opened at the appointed time and location on the next working day. In two part system, the financial bid shall be opened after technical evaluation.

22.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted

unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening. Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening. Only envelopes that are opened and read out at Bid opening shall be considered further.

- 22.3 The bidders' names, bid modifications or withdrawals, bid prices, discounts, and the presence or absence of requisite bid security and such other details as the Purchaser, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bid(s). The contents of the bid forms and price schedules would however be announced only at the time of opening of Priced-bids in the case of two-bid system.
- 22.4 Bids that are received late shall not be considered further for evaluation, irrespective of the circumstances.

23. Confidentiality

- 23.1 Information relating to the examination, evaluation, comparison, and post qualification of bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until publication of the Contract Award.
- 23.2 Any effort by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post qualification of the bids or contract award decisions may result in the rejection of its Bid.

24. Clarification of Bids

- 24.1 To assist in the examination, evaluation, comparison and post qualification of the bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in prices or substance of the bid shall be sought, offered or permitted. However, no negotiation shall be held except with the lowest bidder, at the discretion of the purchaser. **Any clarification submitted by a bidder in respect to its bid which is not in response to a request by the purchaser shall not be considered.**

25. Preliminary Examination

- 25.1 The Purchaser shall examine the bids to confirm that all documents and technical documentation requested in ITB Clause 9 have been provided, and to determine the completeness of each document submitted.

25.2 The Purchaser will examine the technical bids to determine whether they are complete, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. The purchaser may discuss the technical bid with the bidders, if required who may modify their bids to suit the requirement. Those whose technical specification does not reach the threshold level of acceptability will be rejected as technically unsuitable. The bidders who finally emerge as technically acceptable will be allowed to withdraw their price bids and send again a revised bid in a sealed envelope or to adhere to the original price bid sent. These price bids will be opened, evaluated and the contract awarded to the lowest evaluated bidder.

26. Responsiveness of Bids

26.1 Prior to the detailed evaluation, the purchaser will determine the substantial responsiveness of each bid to the bidding documents. For purposes of this clause, a substantive responsive bid is one, which conforms to all terms and condition of the bidding documents without material deviations, reservations or omissions. A material deviation, reservation or omission is one that:

- (a) affects in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
- (b) limits in any substantial way, inconsistent with the Bidding Documents, the Purchaser's rights or the Bidder's obligations under the Contract; or
- (c) if rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids.

26.2 The purchasers' determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

26.3 If a bid is not substantially responsive, it will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation or omission.

27. Non-Conformity, Error and Omission

27.1 Provided that a Bid is substantially responsive, the Purchaser may waive any non-conformities or omissions in the Bid that do not constitute a material deviation.

27.2 Provided that a bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the

Bidder to comply with the request may result in the rejection of its Bid.

27.3 Provided that the Bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:

- (a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
- (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the higher of the two would be taken as the bid price, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

27.4 If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security may be forfeited.

28. Examination of Terms & Conditions, Technical Evaluation

28.1 The Purchaser shall examine the Bid to confirm that all terms and conditions specified in the **GCC** and the **SCC** have been accepted by the Bidder without any material deviation or reservation.

28.2 The Purchaser shall evaluate the technical aspects of the Bid submitted in accordance with ITB Clause 14, to confirm that all requirements specified in Schedule of Requirements and Technical Specifications of the Bidding Documents have been met without any material deviation or reservation.

28.3 If, after the examination of the terms and conditions and the technical evaluation, the Purchaser determines that the Bid is not substantially responsive in accordance with ITB Clause 26, it shall reject the Bid.

29. Conversion to Single Currency

29.1 To facilitate evaluation and comparison, the Purchaser will convert all bid prices expressed in the amounts in various currencies in which the bid prices are payable to Indian Rupees at the selling exchange rate established by any bank in India as notified in the Newspapers on the date of bid opening .

30. Evaluation and comparison of bids

30.1 The Purchaser shall evaluate each bid that has been determined, up to this stage of the evaluation, to be substantially responsive.

30.2 To evaluate a Bid, the Purchaser shall only use all the factors, methodologies and criteria defined below. No other criteria or methodology shall be permitted.

30.3 The bids shall be evaluated on the following basis which shall be arrived as under:

For goods being offered from India.

- (i) The price of the goods quoted ex-works including all taxes already paid.
- (ii) VAT and other taxes like excise duty etc. which will be payable on the goods if the contract is awarded.
- (iii) Charges for inland transportation, insurance and other local services required for delivering the goods at the desired destination.
- (iv) The installation, commissioning, AMC for 10 years and training charges, if any.

For goods being offered from abroad

- (i) The price of the goods, quoted on FCA (named place of delivery abroad) or FOB (named port of shipment), as specified in the Price Schedule Form.
- (ii) The agency commission etc., if any.
- (iii) The installation, commissioning, AMC for 10 years and training charges, if any.

30.4 The comparison between the indigenous and the foreign offers shall be made on FOR destination basis and FOB/FCA basis respectively including the installation, commissioning and training charges.

Note: Where there is no mention of packing, forwarding, freight, insurance charges, taxes etc. such offers shall be rejected as incomplete.

30.5 The insurance and freight charges being obtained by the bidder is purely for the purpose of academic interest only. The foreign contracts shall normally be placed on FOB / FCA basis, at the discretion of the purchaser.

30.6 Wherever the price quoted on FOB/FCA and CIF/CIP basis are the same, the Contract would be made on CIF / CIP basis only.

31. Contacting the Purchaser

- 31.1 Subject to Clause 24, no Bidder shall contact the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded.
- 31.2 Any effort by a Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid.

32. Post qualification

- 32.1 In the absence of pre-qualification, the Purchaser will determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB Clause 13.
- 32.2 The determination will take into account the eligibility criteria listed in the bidding documents and will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, as well as such other information as the Purchaser deems necessary and appropriate.
- 32.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid.

F- Award Of Contract

33 Negotiations

- 33.1 There shall not be any negotiation normally. Negotiations, if at all, shall be an exception and only in the case of items with limited source of supply. Negotiations shall be held with the lowest evaluated responsive bidder. Counter offers tantamount to negotiations and shall be treated at par with negotiations.

34. Award Criteria

- 34.1 Subject to ITB Clause 35 the Purchaser will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.

35. Purchaser's right to accept Any Bid and to reject any or All Bids

- 35.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders.

36. Notification of Award

- 36.1 Prior to the expiration of the period of bid validity, the Purchaser will notify the successful bidder in writing by registered letter or by cable or telex or fax or e mail that the bid has been accepted by way of a purchase order/contract.
- 36.2 Until a formal contract is prepared and executed, the notification of award should constitute a binding contract.
- 36.3 Upon the successful Bidder's furnishing of the signed Contract Form and performance security pursuant to ITB Clause 38, the Purchaser will promptly notify each unsuccessful Bidder and will discharge its bid security.

37. Signing of Contract / Order Acceptance

- 37.1 Promptly after notification, the Purchaser shall send the successful Bidder the Agreement / Purchase Order for signatures which should be returned within 21 days.
- 37.2 The successful bidder should submit Order acceptance within 15 days from the date of issue of purchase order, / submit the signed version of the contract failing which it shall be presumed that the vendor is not interested and his bid security is liable to be forfeited pursuant to clause 15.11 of ITB.

38. Performance Security

- 38.1 Within 21 days of receipt of the notification of Award / Purchase Order / Agreement, the Supplier shall furnish performance security in the amount specified in **SCC**, valid till 60 days after the warranty period. Alternatively, the PS may also be submitted at the time of release of final payment in cases where part payment is made against delivery & part on installation. The PS, where applicable, shall be submitted in advance for orders where full payment is to be made on Letter of Credit (LC) or on delivery. In this case, submission of PS at the time of negotiation of documents through Bank would be stipulated as a condition in the LC.
- 38.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 38.3 The Performance Security shall be denominated in Indian Rupees for the offers received for supplies within India and denominated in the currency of the contract in the case of offers received for supply from foreign countries.
- 38.4 In the case of imports, the PS may be submitted either by the principal or by the Indian agent and, in the case of purchases from indigenous sources, the PS may be submitted by either the manufacturer or their dealer/bidder.

38.5 The Performance security shall be in one of the following forms:

- (a) A Bank guarantee issued by a Nationalized/Scheduled bank located in India or a bank located abroad in the form provided in the bidding documents. Or
- (b) A Banker's cheque or Account Payee demand draft in favour of the purchaser.

38.6 The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, unless specified otherwise in **SCC**.

38.7 In the event of any contract amendment, the supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the performance security, rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter.

38.8 The order confirmation should be received within 15 days from the date of notification of award/purchase order.

39. Purchaser's right to vary quantities at the time of award

39.1 The Purchaser reserves the right at the time of award of Contract to increase or decrease the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.

40. Pre bid conference

40.1 A pre bid conference shall be held as indicated in invitation to bid. All prospective bidders are requested to kindly attend the pre-bid conference. In order to facilitate NAL for proper conduct of the Pre-bid conference, all prospective bidders are requested to kindly submit their queries (With envelope bearing Tender No. and date on top and marked "Queries for Pre- Bid Conference") so as to reach NAL as indicated in invitation to bid. NAL shall answer the queries during the pre-bid conference, which would become a part of the proceedings of the pre-bid conference, and all the participating bidders shall sign the same. These proceedings will become a part of clarifications / amendments to the bidding documents and would become binding on all the prospective bidders. These proceedings would also be hosted on NAL website for the benefit of all the prospective bidders. Before submitting their bids, all prospective bidders are advised to surf through the NAL website after the Pre-bid Conference, in order to enable them take cognizance of the changes made in the bidding document.

CHAPTER 2

A **GENERAL CONDITIONS OF CONTRACT** **Table of Contents**

Sl. No.	Clause	Page No.
1	Definitions... ..	25
2.	Contract Documents	26
3.	Fraud and Corruption	26
4.	Joint Venture, Consortium or Association	26
5.	Scope of Supply	27
6.	Suppliers' Responsibilities	27
7.	Contract price	27
8.	Copy Right	27
9.	Application	27
10.	Standards	27
11.	Use of Contract Documents and Information	27
12.	Patent Indemnity	28
13.	Performance Security	28
14.	Inspections and Tests	29
15.	Packing	29
16.	Delivery and Documents	30
17.	Insurance	30
18.	Transportation	30
19.	Incidental Services	31
20.	Spare Parts	31
21.	Warranty	31

Sl. No.	Clause	Page No.
22.	Terms of Payment	32
23	Change Orders and Contract Amendments	32
24.	Assignment	33
25.	Subcontracts	33
26.	Extension of time	33
27.	Penalty Clause	34
28.	Termination for Default	34
29.	Force Majeure	35
30.	Termination for insolvency	35
31.	Termination for Convenience	35
32.	Settlement of Disputes	36
33.	Governing Language	37
34.	Applicable Law	37
35.	Notice	37
36.	Taxes and Duties	37
37.	Right to use Defective Goods	37
38.	Protection against Damage	38
39.	Site preparation and installation	38

1. Definitions

1.1 In this Contract, the following terms shall be interpreted as indicated:
The following words and expressions shall have the meanings hereby assigned to them:

- (a) "Contract" means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
- (b) "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto.
- (c) "Contract Price" means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.
- (d) "Day" means calendar day.
- (e) "Completion" means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
- (f) "GCC" means the General Conditions of Contract.
- (g) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
- (h) "Related Services" means the services incidental to the supply of the goods, such as transportation, insurance, installation, training and initial maintenance and other such obligations of the Supplier under the Contract.
- (i) "SCC" means the Special Conditions of Contract.
- (j) "Subcontractor" means any natural person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
- (k) "Supplier" means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
- (l) The "Council" means the Council of Scientific & Industrial Research (CSIR), registered under the Societies Registration Act, 1860 of the Govt. of India having its registered office at 2, Rafi Marg, New Delhi-110001, India and the "Purchaser" means any of the constituent

Laboratory/Institute of the Council situated at any designated place in India as specified in **SCC**.

- (m) "The final destination," where applicable, means the place named in the **SCC**.

2. Contract Documents

- 2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

3. Fraud and Corruption

- 3.1 The purchaser requires that bidders, suppliers, contractors and consultants, if any, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy,

- (a) the terms set forth below are defined as follows:

- (i) "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
- (ii) "Fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
- (iii) "Collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of the Borrower, designed to establish bid prices at artificial, noncompetitive levels; and
- (iv) "Coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

- (b) the purchaser will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question;

4. Joint Venture, Consortium or Association

- 4.1 If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the

provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser.

5. Scope of Supply

5.1 The Goods and Related Services to be supplied shall be as specified in chapter 3.

6. Suppliers' Responsibilities

6.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with Scope of Supply Clause of the GCC, and the Delivery and Completion Schedule, as per GCC Clause relating to delivery and document.

7. Contract price

7.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid.

8. Copy Right

8.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party

9. Application

9.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

10. Standards

10.1 The Goods supplied and services rendered under this Contract shall conform to the standards mentioned in the Technical Specifications and Schedule of Requirements, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

11. Use of Contract Documents and Information

11.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in

connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.

11.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated above except for purposes of performing the Contract.

11.3 Any document, other than the Contract itself, enumerated above shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

12. Patent Indemnity

12.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 12.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

(a) the installation of the Goods by the Supplier or the use of the Goods in India; and

(b) the sale in any country of the products produced by the Goods.

12.2 If any proceedings are brought or any claim is made against the Purchaser, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

13. Performance Security

13.1 Within 21 days of receipt of the notification of Award / Purchase Order / Agreement, the Supplier shall furnish performance security in the amount specified in **SCC**, valid till 60 days after the warranty period. Alternatively, the PS may also be submitted at the time of release of final payment in cases where part payment is made against delivery & part on installation. The PS, where applicable, shall be submitted in advance for orders where full payment is to be made on Letter of Credit (LC) or on delivery. In this case, submission of PS at the time of negotiation of documents through Bank would be stipulated as a condition in the LC.

- 13.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 13.3 The Performance Security shall be denominated in Indian Rupees for the offers received for supplies within India and denominated in the currency of the contract in the case of offers received for supply from foreign countries.
- 13.4 In the case of imports, the PS may be submitted either by the principal or by the Indian agent and, in the case of purchases from indigenous sources, the PS may be submitted by either the manufacturer or their dealer/bidder.
- 13.5 The Performance security shall be in one of the following forms:
- (a) A Bank guarantee issued by a Nationalized/Scheduled bank located in India or a bank located abroad in the form provided in the bidding documents. Or
 - (b) A Banker's cheque or Account Payee demand draft in favour of the purchaser.
- 13.6 The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, unless specified otherwise in **SCC**.
- 13.7 In the event of any contract amendment, the supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the performance security, rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter.
- 13.8 The order confirmation should be received within 15 days from the date of notification of award/purchase order.

14. Inspections and Tests

The inspections and tests are as detailed in Chapter 3

15. Packing

- 15.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the price schedule form/Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

15.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in **SCC** and in any subsequent instructions ordered by the Purchaser.

16. Delivery and Documents

16.1 Delivery of the Goods and completion and related services shall be made by the Supplier in accordance with the terms specified by the Purchaser in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in **SCC**.

16.2 The terms FOB, FCA, CIF, CIP etc shall be governed by the rules prescribed in the current edition of the Incoterms published by the International Chambers of Commerce, Paris.

16.3 The mode of transportation shall be as specified in **SCC**.

17. Insurance

17.1 Should the purchaser elect to buy on CIF/CIP basis, the Goods supplied under the Contract shall be fully insured in Indian Rupees against any loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in **SCC**.

17.2 Where delivery of the goods is required by the purchaser on CIF or CIP basis the supplier shall arrange and pay for Cargo Insurance, naming the purchaser as beneficiary and initiate & pursue claims till settlement, on the event of any loss or damage.

17.3 Where delivery is on FOB or FCA basis, insurance would be the responsibility of the purchaser.

17.4 With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent, if any, shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after customs clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.

18. Transportation

18.1 Where the Supplier is required under the Contract to deliver the Goods FOB, transport of the Goods, up to and including the point of putting the Goods on board the vessel at the specified port of loading, shall be arranged

and paid for by the Supplier, and the cost thereof shall be included in the Contract price. Where the Supplier is required under the Contract to deliver the Goods FCA, transport of the Goods and delivery into the custody of the carrier at the place named by the Purchaser or other agreed point shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract price.

18.2 Where the Supplier is required under the Contract to deliver the Goods CIF or CIP, transport of the Goods to the port of destination or such other named place of destination in the Purchaser's country, as shall be specified in the Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

18.3 In the case of supplies from within India, where the Supplier is required under the Contract to transport the Goods to a specified destination in India, defined as the Final Destination, transport to such destination, including insurance and storage, as specified in the Contract, shall be arranged by the Supplier, and the related costs shall be included in the Contract Price.

19. Incidental Services

19.1 The supplier may be required to provide any or all of the services, as discussed during the course of finalizing the contract.

20. Spare Parts

20.1 The Supplier shall be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

(a) Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and

(b) In the event of termination of production of the spare parts:

(i) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and

(ii) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

21. Warranty

21.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

- 21.2 The Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in India.
- 21.3 Unless otherwise specified in the **SCC**, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the **SCC**, or for eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.
- 21.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.
- 21.5 Upon receipt of such notice, the Supplier shall, within a reasonable period of time expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.
- 21.6 If having been notified, the Supplier fails to remedy the defect within a reasonable period of time; the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

22. Terms of Payment

- 22.1 The method and conditions of payment to be made to the Supplier under this Contract shall be as specified in the **SCC**.
- 22.2 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, Acceptance Certificate and by documents, submitted pursuant to Delivery and document Clause of the GCC and upon fulfillment of other obligations stipulated in the contract.
- 22.3 Payments shall be made promptly by the Purchaser but in no case later than thirty (30) days after submission of the invoice or claim by the Supplier.
- 22.4 Payment shall be made in currency as indicated in the contract.

23. Change Orders and Contract Amendments.

- 23.1 The Purchaser may at any time, by written order given to the Supplier pursuant to Clause on Notices of the **GCC** make changes within the general scope of the Contract in any one or more of the following:

- (a) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) The method of shipping or packing;
- (c) The place of delivery; and/or
- (d) The Services to be provided by the Supplier.
- (e) The delivery schedule.

23.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within fifteen (15) days from the date of the Supplier's receipt of the Purchaser's change order.

23.3 No variation or modification in the terms of the contract shall be made except by written amendment signed by the parties.

24. Assignment

24.1 The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

25. Subcontracts

25.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the Supplier from any liability or duties or obligation under the Contract.

26. Extension of time.

26.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified in the contract.

26.2 If at any time during performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without penalty, in which case the extension shall be ratified by the parties by amendment of the Contract.

26.3 Except as provided under the Force Majeure clause of the **GCC**, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to Penalty Clause of the **GCC** unless an extension of time is agreed upon pursuant to above clause without the application of penalty clause.

27. Penalty clause

27.1 Subject to **GCC** Clause on Force Majeure, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to 0.5 percent of the delivered Contract value for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of 10 Percent of the Contract value. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to **GCC** Clause on Termination for Default.

28. Termination for Default

28.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part

- (a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause on Extension of Time; or
- (b) If the Supplier fails to perform any other obligation(s) under the Contract.
- (c) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent or collusive or coercive practices as defined in GCC Clause on Fraud or Corruption in competing for or in executing the Contract.

28.2 In the event the purchaser terminates the contract in whole or in part, he may take recourse to any one or more of the following action:

- a) the Performance Security is to be forfeited;
- b) the purchaser may procure, upon such terms and in such manner as it deems appropriate, stores similar to those undelivered, and the supplier shall be liable for all available actions against it in terms of the contract.
- c) however, the supplier shall continue to perform the contract to the extent not terminated.

29. Force Majeure

- 29.1 Notwithstanding the provisions of GCC Clauses relating to extension of time, penalty and Termination for Default the Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 29.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 29.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof within 21 days of its occurrence. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- 29.4 If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of force majeure for a period exceeding 60 days, either party may at its option terminate the contract without any financial repercussions on either side.

30. Termination for Insolvency

- 30.1 The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

31. Termination for Convenience

- 31.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- 31.2 The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:

- (a) To have any portion completed and delivered at the Contract terms and prices; and/or
- (b) To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

32. Settlement of Disputes

32.1 The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

32.2 If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. .

32.3 The dispute settlement mechanism/arbitration proceedings shall be concluded as under:

- (a) In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director General, Council of Scientific & Industrial Research and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
- (b) In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration In accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.

32.4 The venue of the arbitration shall be the place from where the purchase order/contract is issued.

32.5 Notwithstanding any reference to arbitration herein,

- (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
- (b) the Purchaser shall pay the Supplier any monies due the Supplier.

33. Governing Language

33.1 The contract shall be written in English language which shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the English language only.

34. Applicable Law

34.1 The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction as specified in **SCC**.

35. Notices

35.1 Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX or e mail and confirmed in writing to the other party's address specified in the **SCC**.

35.2 A notice shall be effective when delivered or on the notice's effective date, which ever is later.

36. Taxes and Duties

36.1 For goods manufactured outside India, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside India.

36.2 For goods Manufactured within India, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred till its final manufacture/production.

36.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in India, the Purchaser shall make its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

37. Right to use Defective Goods

37.1 If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by

partial or complete replacement is made without interfering with the Purchaser's operation.

38. Protection against Damage

38.1 The system shall not be prone to damage during power failures and trip outs, etc. as per SCC

The normal voltage and frequency conditions available at site as under:

- a) Voltage 230 volts – Single phase/ 415 V 3 phase ($\pm 10\%$)
- b) Frequency 50 Hz. ($\pm 10\%$)

39. Site preparation and installation

The Purchaser is solely responsible for the construction of the equipment sites in compliance with the technical and environmental specifications defined by the Supplier. The Purchaser will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the installation of the Equipment, if required. The supplier shall inform the purchaser about the site preparation, if any, needed for installation, of the goods at the purchaser's site immediately after notification of Award / Purchase Order / Agreement.

SPECIAL CONDITIONS OF CONTRACT

Special conditions of contract (SCC)

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC 1.1(l)	The Purchaser is: The Director, National Aerospace Laboratories, Bangalore.
GCC 1.1 (m)	The Final Destination is: National Aerospace Laboratories, Post bag No. 1779, Air port Road, Bangalore- 560017 (Karnataka), India
GCC 13.1	The amount of the Performance Security shall be: 10 % of the contract value
GCC 16.1	<p>Details of Shipping and other Documents to be furnished by the Supplier are [</p> <p>(i) For Goods being offered from India</p> <p>Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by registered post / speed post and copies thereof by FAX.</p> <p>(a) Two copies of Supplier's Invoice indicating, <i>inter-alia</i> description and specification of the goods, quantity, unit price, total value;</p> <p>(b) Packing list;</p> <p>(c) Certificate of country of origin;</p> <p>(d) Insurance certificate, if required under the contract;</p> <p>(e) Railway receipt/Consignment note;</p> <p>(f) Manufacturer's guarantee certificate and in-house inspection certificate;</p> <p>(g) Inspection certificate issued by purchaser's inspector, if any and</p> <p>(h) Any other document(s) as and when required in terms of the contract.</p> <p>Note:</p> <p>1. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)</p> <p>2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses</p>

	<p>(ii) For Goods being offered from abroad</p> <p>Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by Registered Post/courier and copies thereof by FAX.</p> <p>a) Two copies of supplier's Invoice giving full details of the goods including quantity, value, etc.;</p> <p>b) Packing list;</p> <p>c) Certificate of country of origin;</p> <p>d) Manufacturer's guarantee and Inspection certificate;</p> <p>e) Inspection certificate issued by the Purchaser's Inspector, if any;</p> <p>f) Insurance Certificate, if required under the contract;</p> <p>g) Name of the Vessel/Carrier;</p> <p>h) Bill of Lading/Airway Bill;</p> <p>i) Port of Loading;</p> <p>j) Date of Shipment;</p> <p>k) Port of Discharge & expected date of arrival of goods and</p> <p>l) Any other document(s) as and when required in terms of the contract.</p> <p>Note:</p> <p>1. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)</p> <p>2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses</p>
<p>GCC 16.3</p>	<p>In case of supplies from within India, the mode of transportation shall be by Air/Rail/Road.</p> <p>In case of supplies from abroad, the mode of transportation shall be by Air/ocean.</p>
<p>GCC 17.1</p>	<p>The Insurance shall be for an amount equal to 110% of the CIF or CIP value of the contract from within "warehouse to warehouse (final destination)" on "all risk basis" including strikes, riots and civil commotion.</p>
<p>22.1</p>	<p>The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:</p> <p>Payment for Goods and services offered from abroad:</p> <p>Payment of foreign currency portion shall normally be made in the currency of contract in the following manner:</p>

	<p>(i) On Shipment: Eighty (80) percent of the Contract Price of the Goods shipped shall be paid through irrevocable letter of credit opened in favor of the Supplier in a bank in its country, upon submission of documents specified in GCC Clause 16.1.</p> <p>(ii) On Acceptance: Twenty (20) percent of the Contract Price of Goods received shall be paid within thirty (30) days of receipt of the Goods and successful installation & commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security, if any.</p> <p>The L/C will be confirmed at the suppliers cost, if requested specifically by the supplier. If L/C is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges thereof would be to the suppliers' account. Payment of local currency portion shall be made in Indian Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed. The LC for 100% value of the contract shall be established after deducting the agency commission payable, if any to the Indian agent from the FOB/FCA value.</p> <p>Payment for Goods and Services offered from India:</p> <p>Payment for Goods and Services supplied from within India shall normally be made in Indian Rupees, as follows:</p> <p>(ii) On shipment : Eighty (80) percent of the Contract Price shall be paid on receipt of the Goods and upon submission of the documents specified in GCC Clause 16.1</p> <p>(ii) On Acceptance: The remaining twenty (20) percent of the Contract value shall be paid to the Supplier within thirty (30) days after the date of the acceptance certificate issued by the Purchaser subject to submission of performance security, if any.</p>
GCC 34.1	The place of jurisdiction is Bengaluru.
GCC 35.1	<p>For notices, the Purchaser's address is</p> <p>Attention: The Controller of Stores and Purchase</p> <p>The National Aerospace Laboratories, Post Bag No. Airport Road, Bangalore -560017, (Karnataka), India.</p> <p>Telephone: 080- 25086039, 25086040, 25086041</p> <p>Facsimile number: 080-25269611</p>

Chapter 3

Schedule of requirements, Specifications and allied Technical details

Piezoelectric Thin Film (TF) Analyser

The specifications provided below for the multi functional measurement setup should allow an easy and reliable investigation on electrical and electromechanical characteristics for typically very thin piezoelectric film (200 nm to 100 μm).

The equipment should be configured with latest technology available in the market for suitable electronics, control, hardware and compatible software.

The technical specifications for the instrument provided in this document are mandatory and the quotation should be based on these.

1. Technical Specification

1.1 Basic Equipment and Accessories for Piezoelectric TF Analyzer

Piezoelectric Module

- 1) d_{33} and $d_{31,f}$ measurements on cantilever samples
- 2) Dynamic mechanical force actuation with simultaneous electrical response measurement
- 3) Maximum displacement 1mm
- 4) Maximum force 100 N
- 5) Excitation frequency 0.01 Hz - 50 Hz
- 6) Semiautomatic application of mechanical pre-stresses
- 7) Selection switchbox to change between mechanical and electrical excitation measurements
- 8) Laser-head fixture with beam adjustment mirror (semiautomatic)
- 9) Specimen holder for piezocoefficient measurements on cantilever samples (approx. size 25 mm x 3 mm x 0.5 mm) using the 4-point bending principle

Ferroelectric (FE)-Module

- 1) FE Probe head with high voltage protection circuit which fulfills international safety requirements (FCC proofed and CE certified)
- 2) Arbitrary waveform for dynamic hysteresis measurement (triangle, sine wave)
- 3) Voltage range: As per the requirement for thin/thick film (0-50 μm)
- 4) Peak Output Current: 1 A, steady state 500 mA
- 5) 18 bit analog to digital converters – 19 μV sensitivity on 50pF Csense
- 6) 0.5 μs capture rate with 0.1 μs interlace facility
- 7) Polarization, output voltage, and SENSOR inputs captured simultaneously
- 8) Minimum charge sensitivity -> 0.95 fC
- 9) Latest Measuring software for FE module

Charge Measurement Algorithm:

- 1) Virtual Ground input for the charge measurement

- 2) Voltage to charge converter
- 3) Hardware to maintain a constant signal to noise ratio and a constant distortion envelope for the sample over the test system's entire measurement envelope.

Hysteresis measurement:

- 1) Frequency range: 10 mHz - 100 kHz, and any frequency in between
- 2) Maximum hysteresis loop frequency: > 100KHz
- 3) Voltage range: ± 0.1 V up to ± 25 V or 10 kV when external amplifier is used
- 3) Number of data points measured for one hysteresis loop: 20 to 1000 points
- 4) Number of averaged loops of Dynamic Hysteresis Measurement: 1 - 100
- 5) Relaxation time before the sample is driven into saturation (Static Hysteresis Measurement): 0.1 - 1 s
- 6) Displacement measurement simultaneously (frequency range 1 Hz - 1 MHz)

Fatigue measurement:

- 1) For thin films: Up to 1 MHz, test condition 10 Vpp with appropriate capacitive load
- 2) Number of pulses: 1 to 10^{16}
- 3) Number of measurements performed within one decade of fatigue pulses: 1 to 10
- 4) Type for the intermittent measurements: Hysteresis or C (V) or leakage current

Retention measurement:

- 1) Frequency: 1 Hz to 5 kHz
- 2) Waveform: trapezoid or triangle
- 3) Max. Retention time: 1 to 10^8 s
- 4) Data points per Decade : 1 to 10
- 5) Minimum write pulse width 500 ns

Imprint measurement:

- 1) Frequency: 1 Hz to 5 kHz
- 2) Duration: 0 to 108 s
- 3) Total time: 1 to 108 s
- 4) Data points per Decade: 1 to 10

Leakage measurement: 1 pA to 100 mA

Pulse measurement:

- 1) Write Pulse width down to 500 ns
- 2) Delay of read pulse: 1s to 100 s
- 3) Psw vs. pulse width, Psw vs. amplitude measurements

C-V measurement:

- 1) Base voltage range: 0.1 V up to ± 25 V
- 2) Frequency of small signal: Any frequency in 100 Hz - 5 kHz

- 3) Number of total DC points measured: 10 to 1000
- 4) Number of AC wave repetition per point: 2 to 1000
- 5) High resolution
- 6) Piezoelectric coefficients Measurement

Manual Waveform measurement:

Possibilities to create user defined waveforms

Additional software feature required:

- 1) Flexible visualization of measurement results with the measurement software, e.g.
 - display of polarization vs. voltage
 - current vs. voltage
 - voltage, current, polarization vs. time
 - polarization, displacement vs. time
 - polarization, displacement vs. voltage
 - d_{33} , $C(V)$ vs. voltage
- 2) Export function of single measurement directly to Word or other programs
- 3) Data export in xls

Laser interferometer specifications for displacement measurements

- 1) Laser spot diameter (Varies with distance) : 10 to 100 μm
- 2) Measurement Range: > 2 mm
- 2) Maximum measurement frequency: > 100 kHz
- 3) Displacement measurement resolution: < 300 μm
- 4) Wavelength: 632.8 nm
- 5) Frequency Stability of the laser after warm up: 10^{-7}
- 6) Laser warm up time: 1 min
- 7) Displacement Velocity: 600 mm/s
- 8) Necessary software for spectrum analysis, computation of speeds (velocity) and acceleration of vibrational motion

Thin and thick film sample holder

- 1) Two precision thin film positioner
- 2) Sample platform and magnetic base plate for positioner
- 3) Sample size 25 mm x 25 mm

Poling Options: The instrument should have poling facilities to pole upto 50 μm thick films at elevated temperature and suitable power amplifier and sample holder should be provided for and the cost thereof included in the bid

Power amplifier

As per the requirement to characterize and pole the thin/thick film (1 to 50 μm) samples

TF Analyzer BASIC UNIT

- 1) 24 bit digital I/O-card
- 2) Analog input card: maximum sample rate amounts to 1 MHz and the resolution is 16 bit at a voltage range of $\pm 10\text{ V}$

- 3) Arbitrary waveform generator: The vertical resolution amounts to 16 bit at 10 Vpp and the sample frequency is up to 2.5 MHz
- 4) Separate low noise power supplies 5 V, ± 15 V, ± 30 V for the probe head and additional circuit parts to handle the different Probe Heads
- 5) Four input channels for the voltage from -10 V to 10 V (e.g. for Voltage, Current, Displacement)
- 6) 1 complete set of cables: Power cable, 2 BNC, 2 Lemos
- 7) Data backup unit
- 8) Manual (English)

Data Management Software:

- 1) All softwares should be licensed, network compliant and should have a facility to communicate results over a LAN or over the Internet.
- 2) Appropriate programmability and execution capability for a complex test on large number of samples
- 3) Minimum two license should be provided for online and offline analysis. For off-line analysis suitable interfacing should be provided
Data formats (ASCII, TIFF, JPEG, BMP) should be compatible with WINDOWS XP
- 4) During the warranty period, the upgrades if any, should be provided free of cost

1.2 Reference Samples:

Couple of piezoelectric reference samples (thin and thick film cantilever type) should be provided to conduct the tests during installation and acceptance to validate the instrument's acceptance criteria.

2. Equipment Installation and Commissioning

- Should be included in the basic equipment
- Essential subsystems for installation such as UPS, PC should be included in the offer and should be supplied by Indian Agent
- NAL would provide only the installation site and the power points. Apart from these, all necessary items like vibration free table to house the equipment, etc. essential for installation and running the equipment should be included in the BID.

3. Inspection and tests

The Supplier shall at its own expense and at no cost to the Purchaser carry out the tests and/or inspections of the Goods and Related Services as are specified in the succeeding paragraphs or as discussed during the course of finalizing the contract.

- 1) The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser. The Purchaser shall notify the Supplier in writing in a timely manner of the identity of any representatives retained for these purposes.

- 2) Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
- 3) Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.
- 4) The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at final destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.
- 5) The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
- 6) With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent, if any, shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after customs clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/ Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.
- 7) In the event of the ordered item failing to pass the acceptance test, a period not exceeding two weeks will be given to rectify the defects and clear the acceptance test, failing which, the Purchaser reserve the right to get the equipment replaced by the Supplier at no extra cost to the Purchaser.
- 8) Successful conduct and conclusion of the acceptance test for the installed goods and equipments shall also be the responsibility and at the cost of the Supplier.
- 9) Before the goods and equipments are taken over by the Purchaser, the Supplier shall supply operation and maintenance Manuals together with Drawings of the goods and equipments built. These shall be in such details as will enable the Purchase to operate, maintain, adjust and repair all parts of the works as stated in the specifications.
- 10) The Manuals and Drawings shall be in the ruling language (English) and in such form and numbers as stated in the Contract.
- 11) Unless and otherwise agreed, the goods and equipment shall not be considered to be completed for the purposes of taking over until such Manuals and Drawing have been supplied to the Purchaser.

- 12) On successful completion of acceptability test, receipt of deliverables, etc. and after the Purchaser is satisfied with the working of the equipment, the acceptance certificate signed by the Supplier and the representative of the Purchaser will be issued. The date on which such certificate is signed shall be deemed to be the date of successful commissioning of the equipment.

(a) Final acceptance Test criteria at site

The installed equipment will be finally accepted on the basis of successful demonstration and conducting tests on reference samples. The tests should be performed to study all the FE and piezoelectric properties for easy understanding of the features of the equipment (as mentioned in the specification) and evaluation. The list of acceptance tests is mentioned below;

- i. d_{33} and d_{31} measurement for thin/thick film (500nm to 50 μ m) samples
- ii. Dynamic mechanical force actuation with simultaneous electrical response measurement
- iii. hysteresis, charge and capacitance measurement for all allowable frequency range
- iv. C-V measurement
- v. Data management
- vi. Measurement of piezoelectric coefficients at prepoled and poled conditions
- vii. Retention measurement
- viii. Complete data management

5. Training of NAL Personnel

Training must be provided to 4 personnel of NAL for the complete operation of the equipment for a period of 5 working days at the final destination, i.e; NAL, Bengaluru.

6. Equipment Warranty

All items of the equipment must have warranty of at least one year

7. Annual Maintenance Contract (AMC)

NAL has the option to decide whether or not to enter into a non comprehensive annual maintenance contract after expiry of the warranty period. The cost of the on site non comprehensive AMC should be shown separately in the BID indicating the No. of breakdown and preventive maintenance calls that would be attended during the period of AMC. Indication exclusions, if any.

Chapter 4

Price Schedule Forms

Table of Contents

Sl. No.	Clause	Page No.
1.	Price schedule for Goods being Offered from abroad	50
2.	Price schedule for Goods offered from India	51

PRICE SCHEDULE FOR GOODS BEING OFFERED FROM ABROAD

Name of the Bidder _____

TENDER No. _____

1	2	3	4	5	6*		7*		8*		9*		10	11
Sl. No.	Item Description	Country of origin	Unit	Quantity	Unit price		Total price (5x6)		Charges for Insurance & transportation to port//place of destination	Total price (7+8)		Indian Agents Commission as a percent of FOB /FCA price included in the Quoted price	Appx. Shipment weight and volume.	
					FOB (named port of shipment)	FCA (named place of delivery)	FOB (named port of shipment)	FCA (named place of delivery)		CIF	CIP			
									Ocean	Air				

Note:.

- (a) Indian agents name & address _____
- (b) Installation, commissioning & training charges, if any _____
- (c) AMC charge per annum _____
- (d) The Indian agent's commission shall be paid in Indian Rupees only based on the Exchange Rate prevailing on the date of negotiation of documents in accordance with clause 22.1 of GCC.

Total Bid price in foreign currency _____ in words.

Signature of Bidder _____

Name _____

Business Address _____

PRICE SCHEDULE FOR GOODS BEING OFFERED FROM INDIA

Name of the Bidder _____

Tender No. _____

1	2	3	4	5	6	7	8	9	10	11
Sl. No.	Item Description	Country of origin	Unit	Quantity	Ex-Works. Ex-warehouse, Ex-show room off the shelf price (inclusive of all taxes already paid)	Total price Ex-Works. Ex-warehouse, Ex-show room off the shelf price (inclusive of all taxes already paid) 5x6	VAT & other taxes like excise duty payable, if contract is awarded	Packing & for warding upto station of dispatch	Charges for inland transportation, insurance to ultimate destination i.e. NAL, Bangalore	Installation, Commissioning And training Charges, If any

Total Bid price in foreign currency _____
in words.

Signature of Bidder _____

Name _____

Business Address _____

Note :

(a) AMC charge per annum _____

Chapter 5

Qualification requirements

- (a) The Bidder should be a manufacturer/authorised representative of a manufacturer who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the “Technical Specification”. Such equipments must be of the most recent series/models incorporating the latest improvements in design. The models should be in successful operation for at least one year as on date of Bid Opening.
- (b) The Bidder should furnish the information on all past supplies and satisfactory performance in the proforma (Performance Statement Form)
- (c) Bidders shall invariably furnish documentary evidence (client’s certificate) in support of the satisfactory operation of the equipment.
- (d) Details of Service Centres and information on service support facilities that would be provided after the warranty period (in the Service Support Form).
- (e) That adequate and specialized expertise is already available or will be made available following the execution of the contract in the Purchaser’s country, to ensure that the support services are responsive and adequate as per ITB 13.2(c).
- (f) The Indian Agents of foreign manufacturers/ suppliers quoting directly on behalf of their principals for items appearing in the restricted list of the current EXIM policy of the Govt. of India are registered with DGS&D.
- (g) To maintain sanctity of tendering system one Indian agent cannot represent two different foreign principals in one tender.

Chapter 6

Contract form

Contract No. _____

Date: _____

THIS CONTRACT AGREEMENT is made

the [*insert: number*] day of [*insert: month*], [*insert: year*].

BETWEEN

- (1) The Council of Scientific & Industrial Research registered under the Societies Registration Act 1860 of the Government of India having its registered office at 2, Rafi Marg, New Delhi-110001, India represented by The Director, National Aerospace Laboratories, Post bag No. 1779, Airport Road, Bangalore- 560017 (Karnataka), India (hereinafter called “the Purchaser”, which expression, where the context admits, shall include its successors), and
- (2) [*insert name of Supplier*], a corporation incorporated under the laws of [*insert: country of Supplier*] and having its principal place of business at [*insert: address of Supplier*] (hereinafter called “the Supplier”, which expression, where the context admits, shall include its successors, assigns and nominees).

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., [*insert brief description of Goods and Services*] and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of [*insert Contract Price in words and figures, expressed in the Contract currency(ies)*] (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:
 - (a) This Contract Agreement
 - (b) Special Conditions of Contract
 - (c) General Conditions of Contract
 - (d) Technical Requirements (including Schedule of Requirements and Technical Specifications)
 - (e) The Supplier’s Bid and original Price Schedules
 - (f) The Purchaser’s Notification of Award
 - (g) [*Add here any other document(s)*]

3. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.
4. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
5. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Union of India on the day, month and year indicated above.

For and on behalf of the Council of Scientific & Industrial Research

Signed: *[insert signature]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

Signed: *[insert signature]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

For and on behalf of the Supplier

Signed: *[insert signature of authorized representative(s) of the Supplier]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

Chapter 7

Other standard forms

Table of Contents

Sl. No.	Name	Page No.
1.	Manufacturers' Authorization Form	56
2.	Bid Security Form	57
3.	Performance Statement Form	58
4.	Deviation Statement Form	59
5.	Service Support Detail Form	60
6.	Bid Form	61
7.	Performance Security Form	63
8.	Acceptance Certificate Form	64

MANUFACTURERS' AUTHORIZATION FORM

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.]

Date: *[insert date (as day, month and year) of Bid Submission]*
Tender No.: *[insert number from Invitation For Bids]*

To: *[insert complete name and address of Purchaser]*

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 21 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Duly authorized to sign this Authorization on behalf of: *[insert complete name of Bidder]*

Dated on _____ day of _____, _____ *[insert date of signing]*

BID SECURITY FORM

Whereas _____ (hereinafter called the "tenderer") has submitted their offer dated _____ (date of submission of tender) for the supply of _____ (name and/or description of the goods) (hereinafter called the tender")

KNOW ALL PEOPLE by these presents that WE _____ (name of bank) of _____ (name of country), having our registered office at _____ (address of bank) (hereinafter called "the Bank"), are bound unto _____ (name of Purchaser) (hereinafter called "the Purchaser") in the sum of _____ for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this _____ day of _____ 20_____.

THE CONDITIONS OF THIS OBLIGATION ARE:

- (1) If the tenderer withdraws or amends, impairs or derogates from the Tender in any respect within the period of validity of this tender.
- (2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-
 - (a) If the tenderer fails to furnish the Performance Security for the due Performance of the contract.
 - (b) Fails or refuses to accept/execute the contract.

WE undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it, owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including forty five (45) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorized officer of the Bank)

Name and designation _____
of the Officer

Seal, name & address of _____
the Bank

PERFORMANCE STATEMENT FORM
(For a period of last 3 years)

Name of the Firm.....

Order Placed by (full address of Purchaser)	Order No. and date	Description and quantity of ordered equipment	Value of order	Date of completion of delivery as per contract	Date of actual completion of delivery.	Remarks indicating reasons for late delivery, if any	Has the equipment been installed satisfactorily? (Attach a certificate from the purchaser/Consignee)	Contact person alongwith Telephone No., FAX No. and e-mail address

Signature and Seal of the manufacturer/Bidder

Place :

Date :

DEVIATION STATEMENT FORM

1) The following are the particulars of deviations from the requirements of the tender specifications:

CLAUSE	DEVIATION	REMARKS (INCLUDING JUSTIFICATION)

Place:

Date:

Signature and seal of the
Manufacturer/Bidder

NOTE:

- 1) Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations".

SERVICE SUPPORT DETAIL FORM

Sl. No.	Nature of training imparted	List of similar type equipments serviced in the past 3 years	Address, Telephone Nos. , Fax Nos and e mail address

Signature and Seal of the manufacturer/Bidder

Place :

Date :

Bid Form

[The Bidder shall fill in this Form in accordance with the instructions indicated No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid Submission]*

Tender No.: *[insert number from Invitation*

for Bids]

Invitation for Bid No.: *[insert No of IFB]*

To: *[insert complete name of Purchaser]*

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: *[insert the number and issuing date of each Addenda]*;
- (b) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods and Related Services *[insert a brief description of the Goods and Related Services]*;
- (c) The total price of our Bid, excluding any discounts offered in item (d) below, is: *[insert the total bid price in words and figures, indicating the various amounts and the respective currencies]*;
- (d) The discounts offered and the methodology for their application are:

Discounts. If our bid is accepted, the following discounts shall apply. *[Specify in detail each discount offered and the specific item of the Schedule of Requirements to which it applies.]*

- (e) Our bid shall be valid for the period of time specified in ITB Sub-Clause 20.1, from the date fixed for the bid submission deadline in accordance with ITB Sub-Clause 24.1, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) If our bid is accepted, we commit to obtain a performance security in accordance with ITB Clause 41 and GCC Clause 13 for the due performance of the Contract;
- (g) The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*

Name of Recipient	Address	Reason	Amount
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(If none has been paid or is to be paid, indicate “none.”)

- (k) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (l) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Signed: *[insert signature of person whose name and capacity are shown]*
 In the capacity of *[insert legal capacity of person signing the Bid Submission Form]*

Name: *[insert complete name of person signing the Bid Submission Form]*

Duly authorized to sign the bid for and on behalf of: *[insert complete name of Bidder]*

Dated on _____ day of _____, _____ *[insert date of signing]*

PERFORMANCE SECURITY FORM

To

(Name of Purchaser)

WHEREAS _____

(name and address of the supplier) ((hereinafter called "the Supplier") has undertaken, in pursuance of contract No. _____ dated _____ to supply (description of goods and services) ((hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of

_____ (amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed thereunder or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the _____ day of _____, 20_____.

Signature of the authorized officer of the Bank)

Name and designation _____
of the Officer

Seal, name & address of _____
the Bank

Acceptance certificate form

No.

Dated:

M/s _____

Sub: Certificate of commissioning of equipment (Computer/Server, etc.)

1. This is to certify that the equipment as detailed below has/have been received in good condition along with all the standard and special accessories (subject to remarks in Para 2). The same has been installed and commissioned.

- (a) Contract No. _____ Date _____
- (b) Description of the equipment _____
- (c) Name of the consignee _____
- (d) Scheduled date of delivery of the consignment to the Lab./Instts. _____
- (e) Actual date of receipt of consignment by the Lab./Instts. _____
- (f) Scheduled date for completion of installation/commissioning _____
- (g) Actual date of completion of installation/commissioning _____
- (h) Penalty for late delivery (at Lab./Instts. level) Rs. _____
- (i) Penalty for late installation (at Lab./Instts. level) Rs. _____

1. Details of accessories/items not yet supplied and recoveries to be made on that account:

Sl. No.	Description	Amount to be recovered
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2. The acceptance test has been done to our entire satisfaction.
The supplier has fulfilled his contractual obligations satisfactorily

Or

The supplier has failed to fulfill his contractual obligations with regard to the following:

- (a).....
- (b)
- (c).....
- (d).....

The amount of recovery on account of failure of the supplier to meet his contractual obligations is as indicated at Sr. No. 3.

For Supplier
Signature.....
Name.....
Designation.....
Name of the firm.....
Date.....

For Purchaser (Indentor / End User)
Signature.....
Name.....
Designation.....
Name of the Lab./Instt.....
Date.....