



**TENDER DOCUMENT**

**FOR**

**PROCUREMENT OF MATERIAL TESTING MACHINE WITH ENVIRONMENTAL  
CHAMBER/HIGH TEMPERATURE FURNACE**

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**COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH  
NATIONAL AEROSPACE LABORATORIES  
PB NO.1779, HAL AIRPORT ROAD, BENGALURU – 560017  
KARNATAKA-INDIA**



Council of Scientific and Industrial Research  
National Aerospace Laboratories  
PB No.1779, HAL Airport Road, Bengaluru – 560 017, Karnataka-India  
Tel #: 00 91 80 25086040/6041  
Fax #: 00 91 80 25269611  
Email: purchasek@nal.res. in  
Website: [www.nal.res.in](http://www.nal.res.in)

**Invitation for Bids / Notice Inviting E-Tender**

CSIR- National Aerospace Laboratories (NAL), Bengaluru, India is one of the premier laboratories under Council of Scientific and Industrial Research, an autonomous body under Department of Scientific and Industrial Research (Government of India), New Delhi. CSIR-NAL is a Science and Knowledge based Research, Development and Consulting Organization. It is internationally known for its excellence in Scientific Research in Aerospace Engineering.

The Director, CSIR-NAL invites sealed bids from their Manufacturers, their distributors and Indian Agent of Foreign Principals, if any, for the procurement of the following Goods/Services for its day-to-day research. The Technical specifications, Allied requirements and scope of supply are given in **Chapter 4** appended herewith.

Sr. No.	Tender No.	Brief Description of item(s)	Unit	Quantity	Single / Two Bid
1	NAL/PUR/STTD/164/18-Z	Material Testing Machine with Environmental Chamber/ High-Temperature Furnace	No	1	Two

1. E-Bids are invited through the electronic tendering process and the Tender Document can be downloaded from the e-Tender Central Public Procurement Portal (CPPP) of Government of India, <https://etenders.gov.in>. A copy of the Tender Document is also available on CSIR-NAL Website, [www.nal.res.in](http://www.nal.res.in). **The submission of e-Bids will be only through the e-Tender portal <https://etenders.gov.in>. Bids will not be accepted in any other form.**
2. The address for submission of EMD/Bid Security and for obtaining further information:  
Stores & Purchase Officer  
Purchase Section  
CSIR- National Aerospace Laboratories  
PB No.1779, HAL Airport Road, Kodihalli, Bengaluru – 560017  
Karnataka-India  
Tel # : 080 25086040/6041/6044  
Fax # : 080 25269611  
Email : purchasek@nal.res.in, mkala@nal.res.in
3. The prospective bidders should adhere to deadlines specified in Tender Details Screen corresponding to this Tender on E-Tender portal <https://etenders.gov.in>.
4. A Pre-Bid Conference will be held on schedule mentioned below. All prospective bidders are requested to kindly submit their queries to the address indicated above so as to reach the Stores & Purchase Officer at least one day before Pre-Bid Conference.

	Date	Time in hours (IST)	Venue
Pre-Bid Conference	27-Nov-2018	14:00 Hrs	Aeroelastic Conference Hall, Technology Block, Ground Floor, CSIR-NAL, Kodihalli, Bengaluru

5. The Bid prepared by the Bidder shall include the following: -

<b>Bid Security (BS) / Earnest Money Deposit (EMD)</b>	
<b>In case of Foreign Bidder</b>	<b>In case of Indigenous Bidder</b>
<b>US\$ 3050/-</b> <b>[US\$ Three Thousand Fifty Only]</b>  <b>Euro 2700/-</b> <b>[Euro Two Thousand Seven Hundred Only]</b>	<b>Rs. 2,25,000/-</b> <b>[Rupees Two Lakh Twenty-Five Thousand Only]</b>
Form as specified in Chapter No.8	

6. The Schedule for Submission of Bids and Opening of Bids is as follows: -

<b>Date &amp; Time of Submission of Bid</b>		<b>Date and Time of Opening of Bid (Part-I – Technical Bid Only)</b>	
Date	Time (IST)	Date	Time (IST)
<b>17-Dec-2018</b>	<b>10:00 Hrs</b>	<b>18-Dec-2018</b>	<b>11:00 Hrs</b>

7. The Director, CSIR-National Aerospace Laboratories (NAL), Bengaluru, India reserves the right to accept or reject any or all tenders / offers either in part or in full or to annul the tender process at any stage or to split the order without assigning any reasons there for.

**General Instructions to Bidders:-**

01. Tender Documents May be downloaded from Central Public Procurement Portal <https://www.etenders.gov.in>. Aspiring Bidders who have not enrolled/ registered in e- procurement should enroll/ register before participating through the website <https://www.etenders.gov.in>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission'.
02. Tenderers can access tender documents on the website (For searching in the NIC site <https://www.etenders.gov.in>, kindly go to Tender Search option, select tender type and select ' Council of Scientific and Industrial Research' in organization tab and select 'NAL-Bengaluru-CSIR' in department type. Thereafter, Click on "Search" button to view all CSIR-NAL, Bengaluru tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website <https://www.etenders.gov.in> as per the schedule given in the next page.

**SCHEDULE CUM CRITICAL DATE SHEET**

1	Name of Organization	CSIR-National Aerospace Laboratories, Bengaluru
2	Tender Reference No	NAL/PUR/STTD/164/18-Z
3	Tender Type (Open/Limited/EOI/Auction/Single)	Two
4	Type/Form of Contract (Work/Supply/Auction/Service/Buy/Empanelment/Sell)	Supply
5	No of Covers (One/Two/Three/Four)	Two
6	Tender Category (Services/Goods/Works)	Goods
7	Allow Resubmission (Only in online mode within scheduled period)	Yes
8	Allow Withdrawal (Only in online mode within scheduled period)	Yes
9	Allow Offline Submission	<b>No</b>
10	Type/Form of Contract (Work/Supply/Auction/Service/ Buy/Empanelment/Sell)	Supply
11	Supply Title	Procurement of Material Testing Machine with Environmental Chamber/ High-Temperature Furnace
12	Supply Description	Procurement of Material Testing Machine with Environmental Chamber/ High-Temperature Furnace  Details as per Chapter-4
13	Product Category (Civil Works/Electrical Works/Fleet Management/ Computer Systems)	R & D Equipment
14	Is Multi Currency Allowed	Yes
15	a) Tender Publishing Date & Time	09-Nov-2018 (18:00 Hrs)
	b) Document Download Start Date & Time	09-Nov-2018 (18:00 Hrs)
	c) Seek Clarification Start Date & Time	09-Nov-2018 (18:00 Hrs)
	d) Seek Clarification End Date & Time	14-Dec-2018 (16:30 Hrs)
	e) Pre-Bid Conference Date & Time	27-Nov-2018 (14:00 Hrs)
	f) Bid Submission Start Date & Time	09-Nov-2018 (18:00 Hrs)
	g) Bid Submission End Date & Time	17-Dec-2018 (10:00 Hrs)
	h) Bid Opening Date & Time	18-Dec-2018 (11:00 Hrs)
16	Bid Validity Days	90 days from the date of Opening of the Bid
17	Address for communication	CSIR- National Aerospace Laboratories PB No.1779, HAL Airport Road, Kodihalli, Bengaluru - 560017 Karnataka-India
18	Inviting Officer	Director, CSIR-NAL
19	Contact No	25086040, 25086041, 25086044
20	E-mail Address	<a href="mailto:purchasek@nal.res.in">purchasek@nal.res.in</a> / <a href="mailto:mkala@nal.res.in">mkala@nal.res.in</a> / <a href="mailto:spo@nal.res.in">spo@nal.res.in</a>
21	Details specification of the Goods/Services	Refer Chapter-4

## CONTENTS OF TENDER / BIDDING DOCUMENT

The bidding documents, apart from the Invitation for Bids / Notice Inviting Tender have been divided into Eight (8) Chapters as under:

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### LIST OF SHORT FORMS AND FULL FORMS

ACRONYM	EXPANSION
BG	BANK GUARANTEE
BS	BID SECURITY
CIF	COST INSURANCE FREIGHT
CIP	CARRIAGE PAID TO
CSIR	COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH
CVC	CHIEF VIGILANCE COMMISSION
DGS&D	DIRECTOR GENERAL OF SUPPLIES & DISPOSAL
EMD	EARNEST MONEY DEPOSIT
ESIC	EMPLOYEES STATE INSURANCE CORPORATION
FCA	FREE CARRIAGE ALONG SIDE
FOB	FREE ON BOARD
GCC	GENERAL CONDITIONS OF CONTRACT
GOI	GOVERNMENT OF INDIA
GST	GOODS & SERVICES TAX
IT	INCOME TAX
ICC	INTERNATIONAL CHAMBERS OF COMMERCE
IEMs	INDEPENDENT EXTERNAL MONITORS
IP	INTEGRITY PACT
IPC	INDIAN PENAL CODE
IST	INDIAN STANDARD TIME
ITB	INSTRUCTION TO BIDDER
JS (A)	JOINT SECRETARY (ADMINISTRATION)
LC	LETTER OF CREDIT
LC	LETTER OF CREDIT
LD	LIQUIDATED DAMAGES
NAL	NATIONAL AEROSPACE LABORATORIES
NIT	NOTICE INVITING TENDER
NSIC	NATIONAL SMALL INDUSTRIES CORPORATION
PS	PERFORMANCE SECURITY
SCC	SPECIAL CONDITIONS OF CONTRACT
UNCITRAL	UNITED NATIONS COMMISSION ON INTERNATIONAL TRADE

**CHAPTER 1 - INSTRUCTIONS TO BIDDERS - Table of Contents**

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## A. Introduction

Instructions to bidder are broad guidelines to be followed while formulating the bid and its submission to the Purchaser. It also describes the methodology for opening and evaluation of bids and consequent award of contract.

### 1.1 Eligible Bidders

- 1.1.1. This Invitation for Bids is open to all suppliers.
- 1.1.2. 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.
- 1.1.3. Bidders who fulfil the Eligibility Criteria mentioned in **Chapter 5** will be considered for Technical Evaluation of bids.

### 1.2 Cost of Bidding

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.

### 1.3 Fraud and corruption

- 1.3.1. 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:

Sr. No.	Term	Meaning
(a)	Corrupt practice	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.
(b)	Fraudulent practice	a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract.
(c)	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, non-competitive levels.
(d)	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.

- 1.3.2. 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

### 1.4 Cost of Bidding Documents

The bidding documents are to be **downloaded Free of Cost** from CPPP Website <https://etenders.gov.in>

### 1.5 Content of Bidding Documents

- 1.5.1. The Goods / Services 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 / Notice Inviting Tender have been divided into Eight Chapters.
- 1.5.2. 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.

## **1.6 Clarification of bidding documents**

### **1.6.1. In case when there is NO PRE-BID CONFERENCE**

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 Purchaser will respond in writing through e-mail to any request for clarification, provided that such request is received not later than ten (10) days prior to the due date for submission of bids. 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 1.7* relating to amendment of bidding documents and *Clause 1.19* relating to Due date for Submission of Bids. The amendments issued would be hosted on the CPPP website <https://etenders.gov.in> of the purchaser for the benefit of the prospective bidders who are expected to take cognizance of the same before formulating and submitting their bids.

### **1.6.2. In case when there is PRE-BID CONFERENCE**

- a) A prospective Bidder requiring any clarification of the Biding 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 1.6.2 (b)** 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 1.7* relating to amendment of Bidding Documents and *Clause 1.19* relating to Due Date for Submission of Bids. The clarifications and amendments issued would also be hosted on the CPPP website <https://etenders.gov.in> of the Purchaser for the benefit of the other prospective bidders.
- b) 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 CSIR-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 CSIR-NAL as indicated in Invitation to Bid. Queries may be sent by email to [purchasek@nal.res.in](mailto:purchasek@nal.res.in)/[spo@nal.res.in](mailto:spo@nal.res.in). CSIR-NAL shall answer the queries during the pre-bid conference, which would become a part of the proceedings of the Pre-bid Conference. 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 CPPP website <https://etenders.gov.in> for the benefit of all the prospective bidders. Before formulating and submitting their bids, all prospective bidders are advised to surf through the CPPP website <https://etenders.gov.in> after the Pre-bid Conference, in order to enable them take cognizance of the changes made in the bidding document.

## **1.7 Amendment to Bidding Documents**

- 1.7.1. At any time prior to the due date 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.
- 1.7.2. All prospective bidders who have down loaded the Tender Document should surf CPPP website <https://etenders.gov.in> from time to time to know about the changes / modifications in the Tender Document. The changes / modifications would also be hosted on the CPPP website <https://etenders.gov.in>. All prospective bidders are expected to surf the CPPP website <https://etenders.gov.in> before formulating and submitting their bids to take cognizance of the amendments.
- 1.7.3. In order to allow prospective bidders reasonable time to take the amendment into account while formulating their bids, the Purchaser, at its discretion, may extend the due date for the submission of bids and host the changes on the CPPP website <https://etenders.gov.in> of the purchaser.



## C. Preparation of bids

### 1.8 Language of Bid

- 1.8.1. 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 especially when the details are technical. However, if GOI makes it mandatory under Rajbhasha Abhiyan, in that case views of Rajbhasha unit of CSIR may be sought.
- 1.8.2. The Supplier shall bear all costs of translation, if any, to the English language and bear all risks of the accuracy of such translation, for documents provided by the Supplier.

### 1.9 Documents Comprising the E-Bid

- 1.9.1. The E-bid shall comprise of the following documents as per the requirement of the Tender Document. The documents should be scanned and **uploaded in PDF format**

(a)	Bid security as specified in the Invitation to Bids	Clause No.1.15
(b)	Bidder Information Form	Chapter-8, Annexure-B
(c)	Manufacturer's Authorization Form	Chapter-5, Clause No.5.2(a), Annexure-D
(d)	Documents required to fulfil Eligibility and Qualification criteria	As per Chapter-5
(e)	Detailed Technical Specification and Scope of Supply	As per Chapter-4
(f)	Schedule of Requirements	As per Chapter-3
(g)	Performance Statement Form	Chapter-5, Clause No.5.2(b), Annexure-E
(h)	Service support details form	Chapter-5, Clause No.5.2(c), Annexure-F
(i)	Deviation Statement Form	Chapter-5, Annexure-J (Part I & II)
(j)	Bid form	Chapter-8, Annexure-C
(k)	Price Schedule Form(s)	Chapter-6
(l)	Bid security as specified in the Invitation to Bids	Clause No.1.15

The documents comprising bid should be submitted in the **above sequence in orderly manner**. **Bid is Single Bid or Two Bid is specified in NIT.**

#### 1.9.2 **Documents comprising Single Bid**

All the above documents should be submitted in Single E-Bid.

#### 1.9.3 **Documents comprising Two Bid (Technical Bid & Price Bid)**

**Technical bid** should comprise of documents listed from Sr.No.1 to 13 and Bid Form & Price Schedule Form **without mentioning** prices and discount.

**Price Bid** should comprise of Bid Form & Price Schedule Form by **mentioning** prices and discount.

### 1.10 Bid form and Price Schedule

The bidder shall complete the Bid Form and the appropriate Price Schedule form as given in Chapter-6 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. The Bid Form and the appropriate Price Schedule form shall be submitted in accordance with **ITB Clauses 1.9.2 & 1.9.3** of the bidding documents.

### 1.11 Bid Prices

- 1.11.1. The Bidder shall indicate on the appropriate price schedule form, the unit prices and total bid prices of the Goods / Services it proposes to supply under the contract.
- 1.11.2. Prices indicated on the price-schedule form shall be entered separately in the following manner:

- (a) **For Goods manufactured within India:**

i)	The price of the goods quoted Ex-works
ii)	GST 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 and training charges including any incidental services, if any.

(b) **For Goods manufactured abroad:**

i)	The price of the goods, quoted on FCA (named Airport 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 charges payable to Indian agent in Indian rupees, if any.
iv)	The installation, commissioning and training charges including any incidental services, if any

1.11.3. 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.

1.11.4. **Where there is no mention of packing, forwarding, freight, insurance charges, taxes, any charges mentioned as extras as applicable etc.; or tax at your account or tax to be borne by the Buyer, such offer may be rejected as incomplete.**

1.11.5. The price quoted shall remain fixed during the contract period and shall not vary on any account.

1.11.6. 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.

1.11.7. The CSIR-NAL is a public funded Research Institution under Department of Scientific & Industrial Research and concessional Custom Duty @5.15% is applicable for the goods purchased for research purpose vide Government of India Notification No.51/96-Customs dated 23.07.1996

1.11.8. In case of imports the freight & insurance will be paid by the Purchaser, as the consignments are to be shipped through the Purchaser nominated freight forwarder.

1.11.9. The quotation should be only in Indian Rupees for indigenous items. In case of foreign quote, the vendors may quote their rates in Indian Rupees as well as in Foreign Currency.

1.11.10. **In** case of INR bids the price criteria should be on Free Delivery to CSIR-NAL, Bengaluru. Govt. Levies like GST etc., if any, shall be paid at actual rates applicable on the date of delivery. Rates should be quoted accordingly giving the basic price, GST etc., if any.

1.11.11. Custom Duty is levied on all import meant for CSIR-NAL. Hence, the suppliers are requested to quote only on FOB/FCA basis, freight, insurance and custom duty as applicable to R&D Institutions will be paid by the Purchaser.

1.11.12. CSIR-CSIR-NAL is a public funded Research Institution under Department of Scientific & Industrial Research and concessional GST (IGST@5% OR SGST @ 2.5% and [CGST@2.5%](#)) shall be made applicable for the goods purchased for research purpose vide Ministry of Finance (Department of Revenue) Notification No.47/2017-Integrated Tax dated 14.11.2017 & Notification No.45/2017-Central Tax dated 14.11.2017 in due course of time. Till such time GST as applicable shall be paid.

**Note:** All payments due under the contract shall be paid after deduction of statutory levies at source (like ESIC, IT, etc.), wherever applicable.

## 1.12 **Bid Currencies**

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.

## 1.13 **Documents Establishing Bidder's Eligibility and qualifications**

- 1.13.1. 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.
- 1.13.2. The documentary evidence of the bidder's qualification to perform the contract if the bid is accepted shall establish to the purchaser's satisfaction that:

(a)	The bidder meets the qualification criteria listed in bidding documents, if any.
(b)	Bidder who doesn't manufacture the goods it offers to supply shall submit Manufacturers' Authorization Form 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 India, it shall furnish the certificate to the effect that the bidder is or will be represented by an agent in India, 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.

- 1.13.3. Conditional tenders / offers shall **not** be accepted.

#### **1.14 Documents Establishing Goods' Eligibility and Conformity to Bidding Documents**

- 1.14.1. 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.
- 1.14.2. 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 Price- 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.

- 1.14.3. 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.

#### **1.15 Bid Security (BS) / Earnest Money Deposit (EMD)**

- 1.15.1. The Bidder shall furnish, as part of its bid, a Bid security (BS) / Earnest Money Deposit (EMD) of amount as specified in NIT in the form of a Bank Guarantee / Demand Draft drawn on any Nationalized Bank in favour of the "Director, National Aerospace Laboratories Bengaluru".

##### **A. In case of Foreign Bidder(s):**

a)	The BS shall be submitted either by the principal or by the Indian agent
b)	The bidder who submits the tender on behalf of their principals should produce documentary evidence in support of their authority to quote
c)	The Bank Guarantee is insisted due to steep fluctuations in foreign exchange hence the foreign DDs are not accepted towards BS/EMD

##### **B. In the case of indigenous bidders:**

a)	The BS shall be submitted by the manufacturer or their specifically authorized dealer/bidder
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1.15.2. E-Bids submitted without BS/EMD will stand rejected. BS/EMD will not be accepted in the form of cash / cheque or any other form other than DD/Bank Guarantee as per format given in Chapter-8: **Annexure A**. No interest is payable on BS/EMD

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

1.15.4. 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 any freely convertible foreign exchange 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 (BG) issued by a Nationalized Bank / Foreign Bank operating in India in the form provided in the bidding documents and valid for 45 days beyond the validity of the bid. In case a bidder desires to submit a BG issued from a foreign bank, then the same should be confirmed by a Nationalised / Scheduled Indian bank; <b>OR</b>
(b)	A Banker's cheque or demand draft in favour of the <b>Purchaser</b> issued by any Nationalised Bank.

1.15.5. The bid security shall be payable promptly upon written demand by the purchaser in case the conditions listed in the **ITB clause 1.15.11** are invoked.

1.15.6. The bid security should be submitted in its original form to the address:

STORES & PURCHASE OFFICER,  
CSIR-NATIONAL AEROSPACE LABORATORY  
PB NO.1779, HAL AIRPORT ROAD, KODIHALLI,  
BENGALURU - 560017  
KARNATAKA-INDIA

Scanned Copy of Demand Draft/Bank Guarantee towards bid security should be uploaded along with the E-bid.

1.15.7. Bid security / EMD is the mandatory requirement and exemption is applicable to the firms registered with NSIC only for the manufacture of the tendered goods and not for selling products manufactured by other companies.

1.15.8. The Bid Security of unsuccessful bidder will be discharged / returned as promptly as possible but positively within a period of 30 days after the expiration of the period of bid validity or placement of order whichever is later, without any interest.

1.15.9. The successful Bidder's bid security will be discharged upon the Bidder furnishing the Performance Security, without any interest. Alternatively, the BS could also be adjusted against Performance Security, if it is paid through Demand Draft / Banker's Cheque.

1.15.10. The receipt of Bid security before time and date of submission of bid is mandatory requirement. The bid is liable to be rejected if the bid security is not received within stipulated time.

1.15.11. The bid security may be forfeited:

(a)	If Bidder withdraws or amends or modifies or impairs or derogates its bid during the period of bid validity specified by the Bidder on the Bid Form; <b>OR</b>
(b)	In case of successful Bidder, if the Bidder fails to furnish order acceptance within 15 days of the order or fails to sign the contract and / or fails to furnish Performance Security within 21 days from the date of contract / order.

1.15.12. Whenever the bidder chooses to submit the Bid Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

## 1.16 Period of Validity of Bids

- 1.16.1. Bids shall remain valid for minimum of 90 days after the date of bid opening prescribed by the Purchaser. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.
- 1.16.2. 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 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.
- 1.16.3. Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

#### **1.17 Format and Signing of Bid**

- 1.17.1. The bids may be submitted as Single-bid or Two-bid as specified in the Invitation for Bids / NIT.
- 1.17.2. In case the bids are invited on single bid basis, then the Bidder shall submit E-bid comprising all documents listed under clause 1.9 relating to documents comprising the bid.
- 1.17.3. In case the bids are invited on two-bid system, the Bidder shall submit E-bid in two separate parts. First part shall contain Technical bid comprising all documents listed under clause relating to Documents Comprising the Bid excepting bid form and price schedule forms. The second part shall contain the Price-Bid comprising Bid Form and Price Schedule forms.
- 1.17.4. The scanned copies of the E-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 un-amended printed literature, shall be initialled by the person or persons signing the bid.
- 1.17.5. Any interlineations, erasures or overwriting shall be valid only if they are initialled by the person or persons signing the bid.

#### **D. Submission of E-Bids**

##### **1.18 Submission of E-Bids**

- 1.18.1 Bids shall be submitted online only at CPPP website <https://etenders.gov.in> Manual/ Offline bids shall not be accepted under any circumstances.
- 1.18.2 The Bidder shall download the Tender Enquiry Document directly from the website <https://etenders.gov.in> and shall not tamper/modify it in any manner. In case if the same is found to be tampered/modified in any manner, Tender/Bid will be summarily rejected and EMD would be forfeited.
- 1.18.3 The complete bidding process is online. Bidders should be in possession of valid Digital Signature Certificate (DSC) of class III for online submission of bids. Prior to bidding DSC need to be registered on the website mentioned above. If the envelope is not digitally signed & encrypted the Purchaser shall not accept such open Bids for evaluation purpose and shall be treated as non-responsive and rejected.
- 1.18.4 Bidders are advised to go through “Bidder Manual Kit”, “System Settings” & “FAQ” links available on the login page of the e-Tender portal for guidelines, procedures & system requirements. In case of any technical difficulty, Bidders may contact the help desk numbers & email ids mentioned at the e-tender portal. Every Bidder will be required to obtain a Class-III Digital Signature (DSC) for submission of Bids.
- 1.18.5 Bidders are advised to visit CPPP website <https://etenders.gov.in> regularly to keep themselves updated, for any changes/modifications in the Tender Enquiry Document.
- 1.18.6 Intending bidders are advised to visit CPPP website <https://etenders.gov.in> regularly till closing date of submission of bid, for any corrigendum.
- 1.18.7 The Bid Security/Earnest Money Deposit shall be deposited through Bank Guarantee / Demand Draft drawn in favour of “The Director, National Aerospace Laboratories, Bengaluru”. The original Bid Security/EMD must be delivered at address mentioned in Sr.No.2 of NIT till bid submission date and time as mentioned in “Date Sheet” failing which the bid shall be summarily rejected.

1.18.8 Purchaser shall receive the bids online through CPPP portal only. The e-Tender portal shall automatically stop accepting bids after the scheduled date and time specified in the Tender Document. Partially submitted bids shall be treated as invalid and shall not be processed.

**1.19 Due date for Submission of E-Bids**

1.19.1. EMD/BS must be received by the Purchaser at the address specified in NIT not later than the time and date specified in NIT.

1.19.2. Bidders are advised to upload and submit their E-bids timely within due date for submission of E-Bids in view of the electronic process so as to avoid last minute issues.

1.19.3 The Purchaser may, at its discretion, extend the due date for submission of E-bids by amending the tender 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 due date will thereafter be subject to the due date as extended.

**1.20 Late Submission of EMD**

1.20.1. Any bid security/EMD received by the Purchaser after the due date for submission of bids prescribed by the Purchaser is liable to be rejected.

1.20.2. Bidders must note that the e-tender portal shall not permit uploading of bids after the scheduled time of submission.

**1.21 Withdrawal, substitution and Modification of Bids**

1.21.1 The bidder may withdraw, correct or modify his digitally signed bid after submission prior to the deadline for submission of bids, through provisions of e-tendering portal.

1.21.2 The bidder is not allowed to modify or withdraw bid after deadline for submission of bids.

**E. Opening and Evaluation of E-Bids**

**1.22 Opening of E-Bids by the Purchaser**

1.22.1 The E-bids shall be opened online by authorised officials of the Purchaser as per schedule given in Date Sheet.

1.22.2 In case, the day of bid opening is declared a holiday by the government, the E-bids will be opened on the next working day at the same time. No separate intimation shall be sent to the bidders in this regard.

1.22.3 Since, E-bid is an online process; the E-bid opening or any other process may be delayed due to any technical/server issue. If any such issue arises, this will not be tantamount to process delay and CSIR-NAL will not be responsible for the same.

1.22.4 On opening of bids online, accepting the bid will not mean that the firm is technically or financially qualified.

**1.23 Confidentiality**

1.23.1. 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 Award of the Contract.

1.23.2. 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.

#### 1.24 Clarification of Bids

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.

#### 1.25 Preliminary Examination

1.25.1. The Purchaser shall examine the bids to confirm that all documents and technical documentation requested in **ITB Clause 1.9** have been provided, and to determine the completeness of each document submitted.

1.25.2. The Purchaser shall confirm that the following documents and information have been provided in the Bid. If any of these documents or information is missing, the offer shall be rejected.

- (a) All the tenders received will first be scrutinized to see whether the tenders meet the basic requirements as incorporated in the tender enquiry document. The tenders, who do not meet the basic requirements, will be treated as non-responsive and ignored. The following are some of the important points, for which a tender may be declared as non-responsive and will be ignored, during the initial scrutiny:

i	The Bid is unsigned
ii	The Bidder is not eligible
iii	The Bid validity is shorter than the required period
iv	The Bidder has quoted for goods manufactured by a different firm without the required authority letter from the proposed manufacturer
	Bidder has not agreed to give the required performance security
vi	The goods quoted are sub-standard, not meeting the required specification, etc.
vii	Against the Requirement (Scope of supply) the bidder has not quoted for the entire requirement as specified in Chapter 4
viii	The bidder has not agreed to some essential condition(s) incorporated in the tender.

- (b) Bid Form and Price Schedule Form, in accordance with **ITB Clause 1.10**. In case of two-bid system these forms shall be examined after opening of the Price Bids of the technically qualified bidders.

#### 1.26 Responsiveness of Bids

1.26.1. 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 Tender; <b>OR</b>
(b)	limits in any substantial way, inconsistent with the Bidding Documents, the Purchaser's rights or the Bidder's obligations under the Proposed Contract; <b>OR</b>
(c)	if rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids.

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

1.26.3. 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.

#### 1.27 Non-Conformity, Error and Omission

1.27.1. 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.

1.27.2. 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 non-material non-conformities 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.

1.27.3. 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 amount in words shall prevail, 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.

1.27.4. Provided that a bid is substantially responsive, the purchaser may request that a bidder may confirm the correctness of arithmetic errors as done by the purchaser within a target date. In case, no reply is received then the bid submitted shall be ignored and its Bid Security may be forfeited.

### **1.28 Examination of Terms & Conditions, Technical Evaluation**

1.28.1. 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.

1.28.2. The Purchaser shall evaluate the technical aspects of the Bid submitted in accordance with **ITB Clause 1.14**, to confirm that all requirements specified in Chapter 4 of the Bidding Documents have been met without any material deviation or reservation.

1.28.3. 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 1.26**, it shall reject the Bid.

### **1.29 Conversion to Single Currency**

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 in the case of single bid and the rates prevalent on the date of opening of the Price Bids in case of two-bid. For this purpose, exchange rate notified in [www.xe.com](http://www.xe.com) or [www.rbi.org](http://www.rbi.org) or any other website would be used by the purchaser.

### **1.30 Evaluation and comparison of bids**

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

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

1.30.3. The bids shall be evaluated on the basis of final landing cost which shall be arrived as under:

(a) **For Goods manufactured within India**

i)	The price of the goods quoted Ex-works
ii)	GST 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 and training charges including any incidental services, if any as given in Scope of Supply (Chapter 4)



(b) **For Goods manufactured abroad**

i)	The price of the goods, quoted on FCA (named Airport 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 i.e. CIP/CIF Price.
iii)	The agency commission charges payable to Indian agent in Indian rupees, if any.
iv)	The installation, commissioning and training charges including any incidental services, if any

1.30.4. The comparison between the indigenous and the foreign offers shall be made on FOR destination basis and CIF / CIP basis respectively. However, the CIF / CIP prices quoted by any foreign bidder shall be loaded further as under: -

(a)	Towards customs duty and other statutory levies –as per applicable rates.
(b)	Towards custom clearance, inland transportation etc.- 2% of the CIF / CIP value.

1.30.5. In case of Purchase of many items against one tender, which are not inter- dependent or, where compatibility is not a problem, normally the comparison would be made on ex-works, (in case of indigenous items) and on FOB / FCA (in the case of imports) prices quoted by the firms for identifying the lowest quoting firm for each item.

1.30.6. Orders for Imported Goods need not necessarily be on FOB / FCA basis rather it can be on the basis of any of the Incoterms latest edition as may be amended from time to time by the ICC or any other designated authority and favourable to CSIR -NAL.

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

1.30.8. The GCC and the SCC shall specify the mode of transport i.e. whether by air / ocean / road / rail.

**1.31 Comparison of Bids**

The Purchaser shall compare all substantially responsive bids to determine the lowest valued bid, in accordance with **ITB Clause 1.30**.

**1.32 Contacting the Purchaser**

1.32.1. Subject to **ITB Clause 1.24**, 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.

1.32.2. 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.

**1.33 Post qualification**

1.33.1. 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 1.13**.

1.33.2. The determination will take into account the Eligibility & Qualification 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.

1.33.3. 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**

**1.34 Negotiations**

Normally, there shall not be any negotiation. 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, shall be treated at par with negotiations.

**1.35 Award Criteria**

Subject to **ITB Clause 1.37**, 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. The details of the award would be hosted on the CPPP website <https://etenders.gov.in>.

**1.36 Purchaser's right to vary Quantities at Time of Award or later**

The Purchaser reserves the right at the time of Contract award to increase or decrease the quantity of goods and services originally specified in the Chapter 4 without any change in unit price or other terms and conditions. Further, at the discretion of the purchaser, the quantities in the contract may be enhanced by 30% within the delivery period.

**1.37 Purchaser's right to accept any Bid and to reject any or all Bids**

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.

**1.38 Notification of Award**

- 1.38.1. 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 and a separate purchase order shall follow through post.
- 1.38.2. Until a formal contract is prepared and executed, the notification of award should constitute a binding contract.
- 1.38.3. Upon the successful Bidder's furnishing of the signed Contract Form and Performance Security pursuant to **ITB Clause 1.41**, the Purchaser will promptly notify each unsuccessful Bidder and discharge its bid security.

**1.39 Signing of Contract**

- 1.39.1. Promptly after notification, the Purchaser shall send the successful Bidder the Purchase Order.
- 1.39.2. Within twenty-one (21) days of date of the Purchase Order, the successful Bidder shall enter into Contract Agreement as per Chapter 7.

**1.40 Order Acceptance**

- 1.40.1. The successful bidder should submit Order acceptance within 15 days from the date of issue of Purchase Order, failing which it shall be presumed that the vendor is not interested and his bid security is liable to be forfeited pursuant to **ITB Clause 1.15.11**.
- 1.40.2. The order acceptance must be received within 15 days. However, the Purchaser has the powers to extend the time frame for submission of order acceptance and submission of Performance Security (PS). Even after extension of time, if the order acceptance / PS are not received, the contract shall be cancelled and limited tenders irrespective of the value shall be invited from the responding firms after forfeiting the bid security of the defaulting firm, where applicable, provided there is no change in specifications. In such cases the defaulting firm shall not be considered again for re-tendering in the particular case.

**1.41 Performance Security**

Within 21 days of receipt of the notification of award / Purchase Order as per the GCC Clause 2.12, the Supplier shall furnish Performance Security for the amount specified in SCC, valid for the time 60 days after the warranty period.

**1.42 Assistance to Bidders:**

- 1.42.1 Any queries relating to the Tender Enquiry Document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the NIT.
- 1.42.2 Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

**CHAPTER 2**  
**CONDITIONS OF CONTRACT**

**A. GENERAL CONDITIONS OF CONTRACT**

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**Note: The General Conditions of Contract shall form the part of Purchase Order / Contract.**

## **A. GENERAL CONDITIONS OF CONTRACT**

### **2.1. Definitions**

The following words and expressions shall have the meanings hereby assigned to them:

<b>Sr. No.</b>	<b>Words / Expressions</b>	<b>Meaning</b>
(a)	Contract	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	The documents listed in the Contract Agreement, including any amendments thereto.
(c)	Contract Price	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	Calendar day
(e)	Completion	The fulfilment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
(f)	GCC	The General Conditions of Contract.
(g)	Goods	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)	Services	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	The Special Conditions of Contract.
(j)	Subcontractor	Any natural person, private or government entity, or a combination of the above, to which any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
(k)	Supplier	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)	Council	The Council of Scientific & Industrial Research (CSIR), registered under the Societies Registration Act, 1860 of the Government of India having its registered office at 2, Rafi Marg, New Delhi-110001, India.
(m)	Purchaser	Any of the constituent Laboratory/Institute of the Council situated at any designated place in India as specified in SCC
(n)	The final destination	The place named in the SCC.

### **2.2 Contract Documents**

2.2.1 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.

2.2.2 Successful bidder shall have to enter into Contract Agreement on Rs.500/- non judicial stamp paper as per Contract Form given in Chapter 7 within 21 days of placement of Purchase Order having value above Rs.25 Lakh or equivalent amount in Foreign Currency.

### **2.3 Fraud and Corruption**

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	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
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II	Fraudulent practice	A misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract
III	Collusive practice	A scheme or arrangement between two or more bidders, with or without the knowledge of the Borrower, designed to establish bid prices at artificial, non-competitive levels
IV	Coercive practice	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.

## 2.4 **Joint Venture, Consortium or Association/Amalgamation/Acquisition, Patent Indemnity etc.**

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 fulfilment 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.

### 2.4.1. **Amalgamation/Acquisition etc.:**

In the event the Manufacturer/Supplier proposes for amalgamation, acquisition or sale its business to any firm during the contract period, the Buyer/Successor of the Principal Company are liable for execution of the contract and also fulfilment of contractual obligations i.e. supply, installation, commissioning, warranty, maintenance/replacement of spares accessories etc. You may confirm this condition while submitting the bid.

### 2.4.2 **Indemnity Bond**

In order to safeguard the interest of CSIR-NAL, the supplier should submit Indemnity Bond as given in Chapter-8 (Annexure-J) on Rs.500/- non judicial stamp paper within 21 days of placing of the order for Purchase Order having value above Rs.25 lakh or equivalent amount in Foreign Currency.

### 2.4.3 **Patent Indemnity**

- a) The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 2.4.3(a), 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:

(I)	the installation of the Goods by the Supplier or the use of the Goods in India
<b>AND</b>	
(II)	the sale in any country of the products produced by the Goods

- b) 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 claims.

## 2.5 **Scope of Supply**

Scope of Supply (i.e. the Goods to be supplied and Related Services to be performed) shall be as specified in the Chapter-4 clause 4.2

## 2.6 **Suppliers' Responsibilities**

The Supplier shall supply all the Goods and perform all Related Services included in the Scope of Supply-Clause 2.5 of the GCC and the Delivery &Completion Schedule, as per GCC Clause 2.15 relating to delivery and document.

## **2.7 Contract price**

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.

## **2.8 Copy Right**

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

## **2.9 Application**

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

## **2.10 Standards**

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.

## **2.11 Use of Contract Documents and Information**

**2.11.1** 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.

**2.11.2** 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.

**2.11.3** 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.

## **2.12 Performance Security (PS)**

**2.12.1** Within 21 days of receipt of the notification of award of contract / Purchase Order, 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 and the BS should be kept valid till such time the PS is submitted.

**2.12.2** 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.

**2.12.3** 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.

**2.12.4** 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 authorized dealer / bidder.

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

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

2.12.6 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, without levy of any interest.

2.12.7 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.

2.12.8 The order confirmation should be received within 15 days from the date of notification of award. However, the Purchaser has the powers to extend the time frame for submission of order confirmation and submission of Performance Security (PS). Even after extension of time, if the order acceptance and PS are not received, the contract shall be cancelled and limited tenders irrespective of the value would be invited from the responding firms after forfeiting the bid security of the defaulting firm, where applicable provided there is no change in specifications. In such cases the defaulting firm would not be considered again for re-tendering in the particular case.

2.12.9 Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, and then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

**2.13 Installation, Commissioning, Demonstration, Inspections and Tests**

Bidder shall be responsible for Installation, Commissioning, Demonstration, Inspections and Tests wherever applicable and for after sales service during the warranty and thereafter as specified in Chapter 4.

**2.14 Packing**

2.14.1. 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 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.

2.14.2. 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.

**2.15 Delivery and Documents**

2.15.1. 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 as given below or /and as specified in SCC.

<b>Details of Shipping and other Documents</b> to be furnished by the Supplier are :	
<b>A)</b>	<b>For goods manufactured or supplied from within India</b>
	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/email
(a)	Three copies of Supplier's Invoice indicating, inter-alia description and specification of the goods, quantity, unit price, total value
(b)	Packing list
(c)	Certificate of country of origin
(d)	Insurance certificate, if required under the contract
(e)	Railway receipt/Consignment note
(f)	Manufacturer's warrantee certificate and in-house inspection certificate, if any

(g)	Inspection certificate issued by purchaser's inspector, if any
(h)	Any other document(s) as and when required in terms of the contract
<b>NOTE:</b>	
1	The nomenclature used for the item description in the invoice(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).
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.
<b>B) For goods manufactured or supplied from abroad</b>	
	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.
(a)	Three copies of supplier's Invoice giving full details of the goods including quantity, value, etc.
(b)	Packing list
(c)	Certificate of country of origin
(d)	Manufacturer's warrantee and Inspection certificate, if any
(e)	Inspection certificate issued by the Purchaser's Inspector, if any
(f)	Insurance Certificate, if required under the contract
(g)	Name of the Vessel / Carrier
(h)	Bill of Lading / Airway Bill
(i)	Port of Loading
(j)	Date of Shipment
(k)	Port of Discharge & expected date of arrival of goods
(l)	Any other document(s) as and when required in terms of the contract
<b>NOTE:</b>	
1	The nomenclature used for the item description in the invoice(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).
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.
3	The clearing of the consignment at Bengaluru Airport shall be done by our authorized Custom House Agents (CHA). The corresponding shipping documents may be forwarded to them accordingly. It is advised to give us and our CHA, a pre-alert before the consignment is dispatched. If there is delay in clearing of the consignment for <u>not</u> giving timely pre-alert then demurrage (Ware house charges), if applicable has to be refunded to us.

2.15.2. 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 (ICC), Paris.

2.15.3. The mode of transportation shall be as specified in SCC.

2.15.4. The Bidders may please note that the delivery of the system should be strictly within delivery schedule mentioned in the Chapter-4 / Purchase Order.

2.15.5. Goods should not be dispatched until the vendor receives a firm Purchase Order

## **2.16 Insurance**

2.16.1. Indigenous goods, 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.

2.16.2. Where delivery of the goods is required by the purchaser on CIF / CIP basis for imported goods or FOR destination for Indigenous goods, the supplier shall arrange and pay for Marine / Transit Insurance, naming the purchaser as beneficiary and initiate & pursue claims till settlement, in the event of any loss or damage.

2.16.3. Where delivery is on FOB or FCA basis for imported goods or FOR dispatch station for indigenous goods, then insurance would be the responsibility of the purchaser.

2.16.4. The equipment's to be supplied will be insured by the supplier against all risks of loss or damage from the date of shipment till such time it is delivered at CSIR-NAL site in case of Rupee transaction



2.16.5. With a view to ensure that claims on insurance companies, if any, are lodged in time, the Bidders and / or the Indian agent 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 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.

**2.17 Transportation**

2.17.1. Where the Supplier is required under the Contract to deliver the Goods on FOB basis, 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 on FCA basis, 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.

2.17.2. 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.

2.17.3. 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.

2.17.4. The clearing of the consignment at Mumbai Airport shall be done by our authorized Custom House Agents (CHA) for CIP / CIF consignments. The details of CHA will be given in the Purchase Order. The corresponding shipping documents may be forwarded to them accordingly. It is advised to give us and our CHA, a pre-alert before the consignment is dispatched. If there is delay in clearing of the consignment for not giving timely pre-alert then demurrage (Ware house charges), if applicable has to be refunded to us by the Supplier / Indian Agent or the same will be deducted from any payment due to Supplier / Indian Agent against this order or any other Purchase order.

**2.18 Incidental Services**

The supplier may be required to provide any or all of the services, including training, if any, as specified in **Chapter 4: Clause-4.2.**

**2.19 Spare Parts**

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.

**2.20 Warranty**

- a) 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.
- b) 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.

- c) **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.
- d) The warranty on the associated software should cover providing of upgraded version/s, if any, released during the warranty period free of cost.
- e) The bidder shall assure the supply of spare parts after warranty is over for maintenance of the equipment supplied if and when required for a period of 10 years from the date of supply of equipment on payment on approved price list basis.
- f) The equipment must be supported by a Service Centre manned by the principal vendor's technical support engineers. The support through this Centre must be available 24 hours in a day, seven days a week and 365 days a year. Also it should be possible to contact the Principal's vendor support Centre on a toll free number/web/mail.
- g) An undertaking from the manufacturer is required in this regard stating that they would facilitate the Bidder, Service provider on regular basis with technology / product updates & extend support for the warranty as well.
- h) Supplier will have to arrange for all the testing equipment & tools required for installation, testing & maintenance etc.
- i) The Principal Supplier must have a local logistics support by maintaining a local spares depot in the country of deployment of the equipment. This is to ensure immediate delivery of spares parts from Principal Supplier of equipment to its channel partner/system integrator.
- j) Details of onsite warranty, Name of Agency that shall maintain during warranty and undertake Annual Maintenance Contract/Comprehensive Service Maintenance Contract beyond warranty shall be given in the offer. In case of foreign quote, the name of Indian Agent who shall maintain during warranty and AMC beyond warranty shall be given in the Technical Offer.
- k) 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.
- l) 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.
- m) 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.
- n) In case the Equipment / System remains non-operational or performs below the desired level for more than 1 week after intimation of the fault in the Equipment / System then Warranty period shall be extended for further period for which Equipment / System remained non-operational or performed below the desired level, without prejudice to any other terms and conditions of the Contract.
- o) The defects, if any, during the warranty period are to be rectified free of charge by arranging free replacement wherever necessary.
- p) In case of any replacement during the warranty period the same shall be made free of cost i.e. DDP for import replacement and/or free delivery to NCL for indigenous replacement. All the duties / taxes relating to these replacements have to be borne by the supplier. Dispatch details of such warranty replacements have to be informed in advance to enable us to provide documents for custom clearance.
- q) Any replacements during warranty period should be free of cost. If the defective item has to be sent back to the Principal Supplier, for such replacements / returns to the Principal Supplier / Indian Agent has to bear documentation charges. If the cost of replacement is upto Rs. 5 Lakh then the

documentation charges will be Rs. 5,000 and above Rs. 5 Lakh it is Rs. 10,000. Such charges have to be paid in favour of The Director, CSIR-NAL, Bengaluru. These charges are only for documentation. Any charges regarding packing, forwarding, freight, insurance, etc. should be borne by the Principal supplier / Indian Agent for returning of defective items. In other words, any warranty replacement has to be done immediately/within a week (7 days) without expecting CSIR-NAL to export the defective items to Principal supplier for repair/replacements. All charges involved for re-export of defective items have to be borne by Principal supplier / Indian Agent.

**2.21 Terms of Payment**

- 2.21.1. The method and conditions of payment to be made to the Supplier under this Contract shall be as specified in the SCC.
- 2.21.2. 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, and by documents, submitted pursuant to Delivery and document Clause of the GCC and upon fulfilment of other obligations stipulated in the contract.
- 2.21.3. 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.
- 2.21.4. Payment shall be made in currency as indicated in the contract.

**2.22 Change Orders and Contract Amendments**

- 2.22.1. 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.

- 2.22.2. 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 ascertained within fifteen (15) days from the date of the Supplier's receipt of the Purchaser's change order.
- 2.22.3. No variation or modification in the terms of the contract shall be made except by written amendment signed by the parties.

**2.23 Assignment**

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.

**2.24 Subcontracts**

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.

**2.25 Extension of time**

- 2.25.1. Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the Delivery schedule specified by the Purchaser.
- 2.25.2. If at any time during performance of the Contract, the Supplier or its sub-contractor(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 to the Contract.

- 2.25.3. 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.

**2.26 Penalty clause**

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 the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services or contract value for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the Percentage specified in SCC. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause on Termination for Default. The SCC shall also indicate the basis for ascertaining the value on which the penalty shall be applicable.

**2.27 Termination for Default**

- 2.27.1. 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;
(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.

- 2.27.2. 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/EMD will be forfeited;
(b)	The Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods 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.

**2.28 Force Majeure**

- 2.28.1. 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.

- 2.28.2. 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.

- 2.28.3. 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.

2.28.4. 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.

## 2.29 Termination for Insolvency

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.

## 2.30 Termination for Convenience

2.30.1. The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time. 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.

2.30.2. 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 ; <b>and / or</b>
(b)	To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods / Services and for materials and parts previously procured by the Supplier.

## 2.31 Settlement of Disputes

2.31.1. 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.

2.31.2. 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. .

2.31.3. 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 the Contract.
(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.

2.31.4. The venue of the arbitration shall be the place from where the Purchase Order or Contract is issued.

2.31.5. Notwithstanding any reference to arbitration herein,

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

### **2.32 Governing Language**

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.

### **2.33 Applicable Law / Jurisdiction**

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.

### **2.34 Notices**

2.34.1. 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, e-mail or / and confirmed in writing to the other party's address specified in the SCC.

2.34.2. A notice shall be effective when delivered or on the notice's effective date, whichever is later.

### **2.35 Taxes and Duties**

2.35.1. 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.

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

2.35.3. 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.

2.35.4. All payments due under the contract shall be paid after deduction of statutory levies (at source) (like ESIC, IT, etc.) wherever applicable.

### **2.36 Right to use Defective Goods**

If after delivery, installation and within commissioning & acceptance and within 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.

### **2.37 Protection against Damage**

The system shall not be prone to damage during power failures and trip outs. The normal voltage and frequency conditions available at site as under:

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

### **2.38 Site preparation and installation**

The Purchaser is solely responsible for the construction of the equipment sites unless otherwise specified in Chapter 4 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 / contract.

## **2.39 Annual Maintenance Contract**

- 2.39.1. The bidders should also quote for Annual Maintenance Contract after warranty for subsequent years. CSIR-NAL at its discretion may award / utilise these quotes for AMCs.
- 2.39.2. No sub-contracting will be allowed for installation or maintaining system/ equipment / instrument during or after warranty period in case AMC is awarded
- 2.39.3. Mention the charges for comprehensive maintenance contract separately in Commercial bid (for post warranty period).

## **2.40 Integrity Pact**

- 2.39.1. As per directive of the CVC all organizations including CSIR laboratories / institutes have to adopt an Integrity pact (IP) to ensure transparency, equity and competitiveness in major Public procurement having procurement value above Rs.3 Crore. The integrity pact envisages an agreement between the prospective bidders / Bidders with the buyer committing the persons / officials of both the parties with the aim not to exercise any corrupt influence on any aspect of the contract. Only those bidders / Bidders, who are willing to enter in to such an integrity pact with the Purchaser, would be competent to participate in the bidding.
- 2.39.2. IP also envisages Panel of Independent External Monitors (IEMs) which shall be provided / recommended by CSIR / its labs and institutes with the approval of by CVC.
- 2.39.3. The integrity Pact would be effective from the date of invitation of bids till complete execution of the contract.
- 2.39.4. **The SCC shall specify whether there is a need to enter into a separate integrity pact or not.** If the Integrity Pact is required for the Tender, then the format of Integrity Pact is as given in **Chapter – 8**.

## CHAPTER 2

### B. 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 Clause	Special Condition of Contract (SCC)												
GCC 2.1.1(l)	<p><b>The Purchaser is:</b>                      The Director                      CSIR- National Aerospace Laboratories                      HAL Airport Road, Kodihalli, Bengaluru – 560017                      Karnataka-India</p>												
GCC 2.1.1(m)	<p><b>The Final Destination is:</b>                      CSIR- National Aerospace Laboratories                      HAL Airport Road, Kodihalli, Bengaluru – 560017                      Karnataka-India</p>												
GCC 2.15.3	<p><b>Delivery – Mode of Shipment:</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;">(a)</td> <td>In case of supplies from within India, the <b>mode of transportation</b> shall be by <b>Road</b>.</td> </tr> <tr> <td style="text-align: center;">(b)</td> <td>In case of supplies from abroad, the <b>mode of transportation</b> shall be by <b>AIR</b></td> </tr> </table>	(a)	In case of supplies from within India, the <b>mode of transportation</b> shall be by <b>Road</b> .	(b)	In case of supplies from abroad, the <b>mode of transportation</b> shall be by <b>AIR</b>								
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GCC 2.13.1	<p><b>Performance Security/Performance Bank Guarantee</b></p> <p>The amount of the <b>Performance Bank Guarantee</b> shall be <b>10% of the contract value</b> to be submitted within 21 days from the date of PO valid up to 60 days after the date of completion of performance obligations including warranty obligations.</p>												
GCC 2.16.1	<p><b>Insurance</b></p> <p><b>From Abroad</b>                      The <b>Insurance</b> shall be for an amount equal to <b>110% of the CIF or CIP</b> value of the contract from within <b>“warehouse to warehouse (final destination)”</b> on “all risk basis” including strikes, riots and civil commotion, in addition to <b>storage policy for 60 days</b> is advised so as to ensure the inspection by the Indian Agent at the time of opening the packages.</p> <p><b>Within India</b>                      The <b>Insurance</b> shall be for an amount equal to <b>110% of the invoice</b> value of the contract from <b>“warehouse to warehouse (final destination)”</b> on “all risk basis” including strikes, riots and civil commotion, in addition to <b>storage policy for 60 days</b> is advised so as to ensure the inspection at the time of opening the packages.</p>												
GCC 2.20.3	<p><b>Warranty:</b></p> <p>The period of validity of the Warranty shall be:</p> <p>The warranty shall remain valid for <b>Two Years</b> (24) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted by CSIR-NAL at the final destination.</p>												
GCC 2.21.1	<p><b>Payment Details:</b></p> <p>The method and conditions of payment to be made to the Bidder under this Contract shall be as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;"><b>A</b></td> <td><b>Payment for Goods supplied from abroad:</b></td> </tr> <tr> <td colspan="2">Payment of foreign currency portion shall be made in currency of the Contract in the following manner:</td> </tr> <tr> <td style="text-align: center;">(a)</td> <td>On Shipment: <b>Ninety (90%)</b> percent of the Contract Price of the Goods shipped shall be paid through irrevocable letter of credit opened in favour of the Bidder in a bank in its country, upon submission of documents specified in GCC Clause 2.15.</td> </tr> <tr> <td style="text-align: center;">(b)</td> <td>On Acceptance: <b>Ten (10%)</b> percent of the Contract Price of Goods received shall be paid on successful installation, commissioning and training upon submission of claim supported by the acceptance certificate issued by the Purchaser subject to validity of PS.</td> </tr> <tr> <td style="text-align: center;">(c)</td> <td>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.</td> </tr> <tr> <td style="text-align: center;">(d)</td> <td>The LC will be confirmed at the Bidders cost, if requested specifically by the Bidder. All bank charges abroad shall be to the account of the beneficiary i.e. Bidder and all bank charges in India shall be to the account of the opener i.e. purchaser. If LC is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges</td> </tr> </table>	<b>A</b>	<b>Payment for Goods supplied from abroad:</b>	Payment of foreign currency portion shall be made in currency of the Contract in the following manner:		(a)	On Shipment: <b>Ninety (90%)</b> percent of the Contract Price of the Goods shipped shall be paid through irrevocable letter of credit opened in favour of the Bidder in a bank in its country, upon submission of documents specified in GCC Clause 2.15.	(b)	On Acceptance: <b>Ten (10%)</b> percent of the Contract Price of Goods received shall be paid on successful installation, commissioning and training upon submission of claim supported by the acceptance certificate issued by the Purchaser subject to validity of PS.	(c)	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.	(d)	The LC will be confirmed at the Bidders cost, if requested specifically by the Bidder. All bank charges abroad shall be to the account of the beneficiary i.e. Bidder and all bank charges in India shall be to the account of the opener i.e. purchaser. If LC is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges
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		thereof would be to the Bidders' 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.
	<b>B</b>	<b>Payment for Goods and Services supplied from India:</b>
		The payment shall be made in Indian Rupees, as follows:
	(a)	100% after Supply, Installation, Commissioning, Training and Acceptance, subject to validity of Performance Security to cover warranty obligations
	(b)	<b>E-Payment:</b> All payments, CSIR-NAL prefers to make Electronic Transfers (RTGS) through State Bank Of India, NAL Branch, Bengaluru.
	(c)	All payments due under the Contract shall be paid after deduction of statutory levies at source (like ESIC, Income Tax, etc.), wherever applicable.
GCC 2.27.1	<b>Liquidated Damages / Penalty Clause</b>	
	(a)	As time is the essence of the contract, Delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise the bidder will forfeit EMD/SD and also LD clause will be applicable /enforced
	(b)	If the Bidder fails to Supply, Install and Commission the system as per specifications mentioned in the order within the due date including training, the Bidder is liable to pay <b>liquidated damages of 0.5%</b> of order value per every week of delay subject to a maximum of <b>10%</b> beyond the due date. Such money will be deducted from any amount due or which may become due to the Bidder
	(c)	CSIR-NAL reserves the right to cancel the order in case the delay is beyond the due date. Penalties, if any, will be deducted from the Security Deposit
	(d)	The <b>maximum</b> amount of <b>penalty</b> shall be <b>10%</b> .
	(e)	The liquidated damages shall be levied on the delivered price of the delayed Goods or unperformed Services or contract value.
GCC 2.34.1	<b>Applicable Law / Jurisdiction</b>	
	The <b>place of jurisdiction</b> is <b>Bengaluru, India.</b>	
GCC 2.35.1	<b>Notices</b>	
	<b>For notices,</b>	the Purchaser's address is The Director CSIR- National Aerospace Laboratories PB No.1779, HAL Airport Road, Kodihalli, Bengaluru - 560017 Karnataka-India Tel #: 00 91 80 25086040/6041/6044 Fax #: 00 91 80 25269611 Email: <a href="mailto:purchasек@nal.res.in">purchasек@nal.res.in</a> , mkala@nal.res.in
GCC 2.41	Integrity Pact – Not Applicable	

### CHAPTER 3

(To be filled by the bidder and enclosed with the Technical Bid)

#### SCHEDULE OF REQUIREMENT

The Schedule of Requirement must clearly specify **the time frame required (Schedule) for delivery of goods and services to be completed** by the bidder (in reference to Scope of Supply given in Clause-4.2 of Chapter-4) if the Contract is awarded for the offer / proposal submitted by the bidder in response to this Tender.

**A) Delivery Schedule:**

Sr. No.	Brief Description of Goods and Services	Quantity & Unit	Delivery Schedule

Period of delivery shall start from : \_\_\_\_\_

**B) Term of delivery / Delivery Term :**

Goods from Abroad	
Goods from India	

**C) Time frame required for conducting installation, commissioning of the equipment, acceptance test, training, etc. after the arrival of consignment or before dispatch of equipment:**

Sr. No.	Activity	Time Frame
1	Site Preparation (if required)	
2	Installation & Commissioning	
3	Acceptance Test	
4	Training	
5		

Place : \_\_\_\_\_

Signature of the Bidder : \_\_\_\_\_

Date : \_\_\_\_\_

## CHAPTER 4

### SPECIFICATIONS AND ALLIED TECHNICAL DETAILS

#### 4.1 Detailed Specification

#### Material Testing Machine with Environmental Chamber/ High-Temperature Furnace to be used with existing DIC system

##### 4.1.1 Material Testing Machine

Sl. No.	Parameter	Specification
<b>1</b>	<b>Load Frame</b>	
1.1	Load Frame Capacity	Two Column load frame with Dynamic Fatigue rated capacity of +/-250 kN or more
1.2	Column Spacing	Minimum 650 mm or more
1.3	Day light between crosshead to platen	Minimum 1200 mm or more
1.4	Frame Stiffness	High Axial Stiffness of 500 kN/mm or more at 1m distance from base to crosshead during full reverse stress testing
1.5	Crosshead Adjustment	Hydraulically, using Lift Cylinders
1.6	Crosshead Clamp	Manual or Hydraulic
1.7	Actuator Mounting	Base Platen
<b>2</b>	<b>Actuator</b>	
2.1	Actuator Type	Electro mechanical Actuator, Servo-electric controlled
2.2	Actuator Piston	Should have high axial stiffness, backlash free and vertically driven with non-rotating single screw and captive ball nut assembly
2.3	Axial Alignment	Should have Cam roller guides on the upper end of the actuator
2.4	Actuator Capacity	Dynamic Fatigue rated Capacity of $\pm 100$ kN
2.5	Actuator Stroke	150mm (+/-75mm) or more
2.6	Power consumption	Single Phase, 230V with power consumption of less than 3 KVA at 100kN
<b>3</b>	<b>Load Cell</b>	
3.1	Load Cell Capacity	$\pm 100$ kN capacity, full reverse stress and fatigue rated
3.2	Load Cell Life	Fatigue life of $10E9$ full stress reversed cycles at full capacity
3.3	Overload Capacity	300% or more of full load cell capacity before mechanical failure
3.4	Repeatability	Better than +/-0.25% of reading from 1 % to 100% of load cell reading
3.5	Linearity	Better than +/-0.25% of reading from 1 % to 100% of load cell reading.
3.6	Accuracy	0.5% of reading or better, down to $1/250^{\text{th}}$ of the load cell full scale
3.7	Calibration standards	Must meet or surpass as per ASTM or ISO standards
<b>4</b>	<b>Controller Electronics</b>	
4.1	Digital Control System	Fully digital, closed-loop control system based on double precision floating point 64 Bit architecture
4.2	Synchronous Data Sampling Rate	Minimum 40 kHz
4.3	Synchronous Data acquisition and Control loop closure rate	Minimum 10 kHz
4.4	Control loop update to compensate for changes in specimen stiffness during a cycle	Minimum 1 kHz

4.5	Built-in Waveform Generator Frequency	0.00001Hz to 1kHz or greater
4.6	Frequency accuracy	0.01% of set frequency or better
4.7	Waveform Resolution	32 Bit
4.8	Types of Waveform	Sine, square, triangle, haversine, haversquare, havertriangle, single ramp, dual ramp or trapezoid and any other user defined profile waveforms
4.9	Cycle Counter	A cycle counter must be available. The cycle counter must display elapsed and total cycles
4.10	Built-in Signal Conditioner	Minimum four conditioners should be supplied for Position, Load, Strain 1 & Strain 2 and there should be provision to add four more
4.11	Signal Conditioner Resolution	Minimum 19-bit at 100Hz or 24 bit at 1kHz bandwidth over the full range of the transducer
4.12	Position (stroke) accuracy	$\pm 0.5\%$ of LVDT full scale, or better
4.13	Load accuracy	$\pm 0.005\%$ of full-scale Load Cell Capacity, or 0.5% of reading (whichever is the greater) or better
4.14	Strain accuracy	$\pm 0.005\%$ of full scale, or 0.25% of reading (whichever is the greater) or better.
4.15	Automatic Recognition and Calibration of Transducer	All supplied transducers shall be automatically recognised and calibrated by the controller
4.16	Controller must allow full closed-loop control for	Any connected, calibrated transducer available for control, i.e. position, load and strain control, as well as derivatives of these such as stress intensity and plastic strain.
4.17	Control System Tuning	Must have STIFFNESS BASED AUTO-TUNING, meaning the system should run a simple ramp and able to set PID Values for all the transducer in a single step.
4.18	Controller Communication with PC	The controller must feature a high-speed, industry-standard Ethernet computer interface
4.19	Watchdog for Communication	The controller must feature a watchdog to detect loss of communication with the personal computer. If communication fails, the system must shut down
4.20	Protecting the specimen from overloading while Loading	The control system must have a feature to ensure the load is kept within a predefined range during test set up and specimen loading. The minimum load is to be 0.2% of the maximum load or lower
4.21	Grip Control	The hydraulic grip should be electronically controlled
4.22	Handset Control	A handset should be provided with push buttons for coarse actuator position and a thumbwheel for fine actuator positioning
4.23	Analog Input & Output Signal	The controller must have at least one analogue input for an external analogue waveform drive signal, and at least four assignable analogue outputs
4.24	Standalone operation	A separate control panel for working without PC for minimum possible operations
4.25	Digital I/Os	4 low level input and 4 low level outputs
<b>5</b>	<b>Alignment fixture</b>	
5.1	Alignment Fixture Capacity	50 kN or more
5.2	Strain-gaged Alignment Cell	Strain Gauge Alignment Cell with min 8 gauges, suitable to offered load string
5.3	Software and Electronics	<ul style="list-style-type: none"> <li>• Suitable Electronics to perform strain gage conditioning and bridge completion</li> <li>• Suitable Software for data acquisition and to perform graphical display and test report generation for validation of testing system alignment</li> </ul>

		<ul style="list-style-type: none"> <li>• Convenient real-time graphs to indicate appropriate adjustments for systems equipped with the Alignment Fixture</li> </ul>
<b>6</b>	<b>Hydraulic Grips and Accessories – Ambient use</b>	
6.1	Hydraulic Wedge Grips	<ul style="list-style-type: none"> <li>• Suitable specimen holder to conduct static, and LCF test on flat, round, wire, coated fabric and threaded specimens of different dimensions</li> <li>• Suitable for tension and compression including full reverse-stress dynamic testing capability</li> </ul>
6.2	Dynamic load capacity	±100 kN or more
6.3	Static load capacity:	± 65 kN or more
6.4	Side-entry design	Full access for easy specimen insertion from the side
6.5	Specimen Centring	Adjustable specimen stops on flat faces
6.6	Jaws for Flat Specimen	<ul style="list-style-type: none"> <li>• 50mm wide for specimen thickness of 0 to 15mm or higher (serrated).</li> <li>• 0 to 5mm carbide coated flat jaws</li> </ul>
6.7	Jaws for Round Specimen	6.5mm or lower to 16.0 mm or higher diameter of the specimen
6.8	Reverse stress Pull rods	Fatigue rated reverse stress pull rods
<b>7</b>	<b>Stand-alone Grip Controller</b>	
7.1	Features for Grip controller	<ul style="list-style-type: none"> <li>• 210 bar hydraulic power supply, should be interlinked with the Electronic controller</li> <li>• Should include start/stop buttons and a user-adjustable timer</li> <li>• A grip control handset with magnetic pad for opening and closing of the grips.</li> <li>• After grip operation is complete, the pump should continue to operate until the end of the timer period.</li> <li>• the pump should automatically re-starts when the pressure drops below a user-adjustable threshold to restore the pressure to the</li> <li>• set level through a monitor transducer</li> </ul>
7.2	Gripping pressure	Should be adjustable between 30 and 210 bar
7.3	Flow rate	4.2 l/min under 40 bar & 1 l/min over 40 bar
7.4	Power Supply	230V AC Single-phase 50Hz
<b>8</b>	<b>Dynamic extensometer</b>	
	Dynamic extensometer	<ul style="list-style-type: none"> <li>• Extensometer for direct strain measurement and closed loop strain control</li> <li>• Should be suitable for tensile, compressive and low cycle fatigue testing</li> <li>• Should also include Strain Channel</li> <li>• Gauge length: minimum 12.5 mm</li> </ul>
<b>9</b>	<b>Personal Computer</b>	
	IBM compatible Branded PC of HP/DELL	
9.1	Processor	Intel Core i7 Processor 4770 (3.4 GHz, 8 MB) or better
9.2	Chassis	Vertical Chassis Orientation (Mini-tower)
9.3	RAM	Minimum 8GB DDR4 or Higher
9.4	Hard Drive	Minimum 1 TB (7200 rpm) SATA or Higher capacity
9.5	Graphics Card	Internal Graphics, VGA and 2 Display Port
9.6	Speaker	Internal Speaker
9.7	Ethernet Port	1- Integrated Ethernet Port and 1- Ethernet PCI-E Network Card
9.8	PCI Slot	3PCI slots ( 2 full length, 1 short length), 1 free PCI express slot

9.9	Serial Port	1x serial port (RS232)
9.10	USB Ports	4 External USB 3.0 ports & 6 External USB2.0
9.11	Mouse	2 Button USB Scroll Optical Mouse
9.12	Keyboard	UK Keyboard and English Operating System
9.13	Monitor	22 inch Wide Screen Flat Panel Monitor
9.14	Supply Voltage	220/240 V AC 50Hz
9.15	Operating System	Microsoft Windows 10 Professional 64 bit
9.16	MS Office	Latest version of MS office Business/ professional version, 64 bit
9.17	Computer warranty	3 years
<b>10</b>	<b>Software for Setup Function and Basic Operations</b>	
	The software should include;	
10.1	Live displays for all connected transducers with real-time value as well as derived values.	
10.2	Calibration of Transducers	
10.3	The setting of System units	
10.4	Setting up of low and High limits for all connected Transducers and the action when limits are crossed	
10.5	Tuning the system for all connected transducers	
10.6	Setting up of load threshold while gripping the specimen	
10.7	Running the system either for static monotonous waveforms such as Single RAMP or cyclic wave forms like Sine, Square or Triangle without data acquisition in position, Load or strain control	
10.8	Resetting the Cycle Counter	
10.9	System status display	
10.11	System settings and System logs	
<b>11</b>	<b>Generalised Test Software for Static, Cyclic and Repeated Block tests</b>	
a	Testing Software should provide user to define and run tests and to acquire data for a wide range of dynamic and quasi-static tests. Tests can range from simple single-axis ramps and repetitive waveforms to more complex multi-axis and multi-step tests	
b	Should allow to construct test methods quickly and easily using a series of steps within a matrix structure, allowing the user to have full control over waveform shape, control mode, data logging and test progress. Should allow to perform completely independent waveforms on each axis for systems with multiple axes of control. Should present with a clear graphical preview of how the test will run during the test method construction	
c	During the test, a range of comprehensive data logging and data reduction tools should be available to enable the user to acquire the required data and at the same time minimize data file size through intelligent data reduction features. One should be able to configure the Live Test Workspace to show up to four real-time graphs and add progress or status indicators	
d	Test results should be automatically grouped within a logical project structure allowing quick access to the data files and batch transfer of results. To aid results tracking a read-only copy of the test method should be stored with the test results	
e	Should acquire and store the test data to computer disk in ASCII format at rates up to 5kHz or 10kHz synchronous on all channels up to maximum 24 channels	
f	Control or acquisition of temperature from a Temperature control device	
g	Capable of 1ms inter block transfer time from one step in the sequence to the next	
h	Trend monitoring function - a change in max, min, mean or amplitude from a user-defined reference cycle control test flow or end test	
i	Amplitude control to correct for peak errors in a cyclic waveform	
j	Should support the generation of waveform such as sine, triangle, square, holds, ramps, trapezoidal, user-defined turn points files and sample data playback	
k	Mixed mode control on cyclic waveforms with Control of one Channel and controlling other parameters. Example: with Mean Load of 4kN and amplitude of +/- 2mm	

l	<ul style="list-style-type: none"> <li>• Software should have the capability to carry out simple mathematical functions like addition, subtraction, multiplication, division and trigonometric functions on acquired signals and</li> <li>• Online computation of modulus, energy in a cycle etc.</li> </ul>
m	User-defined events to control test progress
n	The ability to automatically balance extensometers and derived position channels at any stage of the test
o	Up to four real-time graphs; X-Y, Double Y, Trend, Multi channel, chart recorder etc., based on the type of test
p	Single and nested looping of steps
q	Advanced Data Reduction; either on time basis or change in channel value
r	Extensive data logging; per cycle data (max /min /amplitude /mean level), full hysteresis data, or both combined; at linear, logarithmic, change in value or user-defined intervals
s	Ability to pause and resume a test, either immediately or at some point in the future
t	External analogue/ digital data streaming of all the transducers of the machine including a temperature from environmental chamber
u	Waveform start and stop enveloping
	Tracking and Peak & Trend Live Displays
<b>11.1</b>	<b>Low Cycle Fatigue Software</b>
a	The Low Cycle fatigue software should perform axial strain controlled tests in accordance with ASTM E606 and forthcoming ISO standard ISO/TC164/SC5
b	The test should be able to carry out in total or plastic strain control
c	The test should be able to conduct at a constant strain rate or frequency over a constant strain amplitude
d	The strain rate, frequency, amplitude and mean values are all selectable
e	Before the beginning of the cyclic test, a provision should be there to run an optional measurement of specimen modulus checks if the correct specimen is being chosen. Which should avoid loading up valuable specimen under inadequate test configuration
f	During the test, There should be a provision for intelligent data logging which ensures the optimum storage of critical data, at cyclic intervals and on changes stress and plastic strain, which is when the most significant changes are occurring
<b>11.2</b>	<b>Static Test Application Package</b>
a	Complete machine control through software and analysis of data for all kinds of static testing for tensile, compressive, flexural and cyclic tests with Block Programming
b	User Specified working Screen layout for specimen dimension input, Graphical representation and Result table in one single screen
c	Standardized Test Method Template for all most all testing standards
d	Intelligent data logging with programmable time base, load, strain, stress or derived channels
e	Easy cut and paste Capability with Microsoft office products such as word, Excel, PowerPoint etc
f	User-defined Report Templates with features of WYSIWYG (What You See Is What You Get), Exportable to Microsoft Word, Adobe Acrobat and HTML format
g	Selectable mode: Prompted Testing sequence for Speed and Efficiency and Free-Form Testing for Maximum Flexibility
h	On-line, context-sensitive help and reference system with hyper graphics
i	The software should have a facility for minimum two simultaneous runtime graphs to illustrate different characteristics
j	The software should have the capability for producing Multi channels graphs.
k	The software should have auto scale plotting and selectable scale feature for real-time graphs in linear or logarithmic scales
l	The software should have the capability for single click zoom in and zoom out.
m	The software should have the facility to export user-defined test raw data and results in CSV and ASCII format and Microsoft Access format
n	The software should have the facility to reanalyze the test data of already tested sample in future.
o	The system and software should have the facility to video capture of the test. In post-test analysis, a scanning cursor on graph allowing the user to select particular points of interest with a viewing of the associated test video frame.
p	The software should also be supplied with Product Tutor

#### 4.1.2 Other accessories:

##### 1. Operator panel

To provide manual control and system status for one axis of control. Functions should include the ability to run fatigue tests in position, load, or strain control without a computer; setting of limits; setting of test waveforms; and data displays. To provide system status information when using computer control.

##### 2. Environmental chamber (Optional)

A environmental chamber with a digital temperature controller, an observation window, removable wedges, and RS232 interface with cable. The specifications of the furnace should be as follows:

i	Temperature range	150° C to + 550° C
ii	Rate of heating/cooling	5 ° C/ min
lii	Control Accuracy	±0.5° C
lv	Operation	Control through software
v	Clear window	For DIC camera viewing
vi	Size	To suite the load frame dimensions

##### 3. Load cell (Optional)

Load cell of ± 10kN capacity , full reverse stress and fatigue rated

#### 4.1.3 Calibration certificates

Calibration certificates should be supplied for load and displacement transducers along with cross reference for mater calibration of the source

#### 4.1.4 Environmental specification

The following are the environmental conditions for the supplied machine to work;

- Operating Temperature: 10° C to +55° C
- Humidity: The equipment should work in the humidity range in Bangalore (India)

#### 4.1.5 Electrical Requirements

a. **Connectors:** all power input connectors as per IS 1293: 2005 or IS 5561

b. **Power supply:** The Equipment should have powered by 230V, single phase & 50Hz/ 440V, 3phase & 50Hz

#### 4.1.6 Documentation

The vendor should supply two sets of documentation in English for the system supplied. The documentation should include but not limited to:

- a. System drawings and documents
- b. Operation and maintenance manual
- c. Software documentation

**The system drawings should include details:**

- i) System block diagram
- ii) Outline/installation drawings
- iii) Technical performance specifications
- iv) Test plan and test/alignment procedure
- v) Weight/power requirements
- vi) Input/output interface and cabling requirements
- vii) List of components with part numbers for various modules

The operation and maintenance manual should cover the detailed theory of operation, electrical circuit diagram and component list and alignment procedures for all the modules supplied by the vendor. The software documentation should provide a detailed description of the modules & input-output parameters.

#### 4.1.7 Proven Product

The firm should supply a proven product along with documentary evidence for the supply of similar products to other customers and product under development is not acceptable.



## 4.2 Scope of Supply

**Scope of Supply includes** the following:

- (i) Supply of the equipment / system as specified in Clause 4.1 above
- (ii) Pre-Dispatch Inspection as specified under Clause No.4.4
- (iii) Installation & Commissioning as specified under Clause No.4.3.3
- (iv) Training as specified under Clause No.4.5
- (v) On site comprehensive Warranty as specified under Clause No.4.6

## 4.3 Inspection & Tests

### 4.3.1 General

- (i) The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified here. The Supplier shall at its own expense and at no cost to the NAL carry out all such tests and/or inspections of the Goods and Related Services as are specified in the chapter 4 or as discussed and agreed to during the course of finalization of contract.
- (ii) The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s) in the presence of two NAL Scientists before dispatching, at the point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data - shall be furnished to the inspectors at no charge to the NAL
- (iii) 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.
- (iv) The NAL 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 NAL and what inspections and tests the NAL requires and where they are to be conducted. The NAL shall notify the Supplier in writing in a timely manner of the identity of any representatives retained for these purposes.
- (v) 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.
- (vi) 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.
- (vii) The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
- (viii) 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.
- (ix) Before the goods and equipment are taken over by the Purchaser, the Supplier shall supply operation and maintenance Manuals together with Drawings of the goods and equipment 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.
- (x) The Manuals and Drawings shall be in the ruling language (English) and in such form and numbers as stated in the Contract.

- (xi) 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.
- (xii) 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. Acceptance certificate form as given in Annexure-I (Chapter 8) should be signed by authorized representative of Supplier & Purchaser.
- (xiii) Installation demonstration is to be arranged by the supplier and the same is to be done within 15 days of the arrival of the equipment at site.

#### **4.3.2 Manufacturer's Inspection Certificate**

After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier, prior to shipment to check whether the goods are in conformity with the technical specifications. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. The purchaser reserves the options to be present at the supplier's premises during such Pre- dispatch inspection and testing.

##### **a. Factory acceptance tests**

The Pre- Dispatch Inspection at manufactures works for the following;

- a) Item wise Inventory check
- b) Test for operation and reliability: This test is meant for accessing the reliability of the machine for static and continuous fatigue (cyclic) operation for a minimum period of 10 hours. For this purpose, fabric (polymer) samples will be kept in the machine and cycled. NAL to provide samples.
- c) Static and quasi-static tests – tensile, compression, LCF also will be conducted for different stain rates. During this test, the machine loading rate will be examined as per ASTM standard.
- d) Based on the results obtained, the machine performance like load capacity, accuracy, stroke length, displacement accuracy will be studied.
- e) The modes of operation such as displacement, load and time control will also be verified.
- f) Wedge grip performance for static/cyclic operation will be verified using coupons at rated temperatures.
- g) The nesting capability of the software with the machine has to be checked. Since, the machine has to be controlled, through the software for both static & dynamic test. During the software performance checking, the operation, reliability, user-friendly, debugging, data display logging will be checked.
- h) The performance and temperature control (optional item) accuracy of the environmental chamber is important because this machine will be used to characterize/ study suitable test specimens. Therefore, the test will be conducted for different temperature ranges.
- i) The capability of the machine to conduct fatigue without a computer using operator panel will be tested.

##### **b. On-site acceptance tests**

After successful installation, manufacturer shall provide carry out the acceptance tests on the supplied system at NAL which should include;

- a. Physical inspection
- b. Electrical Tests
- c. Functional Performance Tests of the controller, software, calibrations, tuning of controller, test set up & run, emergency procedures, DAQ etc.

#### **4.3.3 Installation, Commissioning & Acceptance Test**

The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the equipment is installed at Purchaser's site in the presence of supplier's representatives. The acceptance will involve trouble free operation. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified.

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.

Successful conduct and conclusion of the acceptance test for the installed goods and equipment shall also be the responsibility and at the cost of the Supplier.

#### 4.4 Pre-Dispatch Inspection & Training at Manufacturer's Facility

1)	Location	At OEM Factory
2)	Number of persons	02
3)	Period of Inspection	Sufficient duration
4)	Nature of Inspection	As indicated in above section 4.3.2 a
5)	Period of Training	Sufficient duration
6)	Nature of Training	<p><b>Phase-I training at OEM factory:</b> The vendor should propose a training program at the OEM factory covering the following area, wherever applicable;</p> <ol style="list-style-type: none"> <li>a. Operation and usage</li> <li>b. Hardware maintenance (Preventive &amp; corrective)</li> <li>c. Software</li> </ol> <p>The training should include the following with respect to various testing, acquisition module and theory of operation;</p> <ul style="list-style-type: none"> <li>• Block schematics and wiring diagrams</li> <li>• Programmable features - Drawings, wherever applicable</li> <li>• Software training &amp; system documentation should train the engineers to maintain the software &amp; operate the system</li> </ul>

#### 4.5 Training at CSIR-NAL

1)	Location	Structural Technologies Division, CSIR-NAL, Bangalore
2)	Number of persons	
3)	Period of Training	Minimum 05 days from the date of installation / commissioning
4)	Nature of Training	After successful installation, manufacturer shall provide Detailed training on operation and maintenance of the Machine and sub-systems including a hands-on training sessions comprising the controller, software, calibrations, tuning of controller, test set up & run, emergency procedures, DAQ etc., at NAL for 5 days. Training material shall also be given by the manufacturer.

#### 4.6 Incidental Services

##### (i) On site Comprehensive Warranty:

##### a) Hardware warranty

The vendor should give a warranty for the satisfactory functioning of the system for a period of 2 years after the acceptance by NAL in Bangalore. The supplier should warrant that each item furnished will be free from defects in materials and workmanship performed by the supplier and will confirm to the applicable specifications and drawings. The warranty support should ensure replacement or repair within shortest possible time. NAL will furnish to the vendor details of the malfunction, the related technical data which will aid in the vendor servicing/debugging the fault.

##### b) Software Warranty

Any software supplied as part of the system should be warranted to be free from design defects, coding faults and bugs for a period of 2 years from the time of system acceptance. For any apparent software problems discovered during the warranty period, the vendor should attempt to analyze the fault at his facility at the earliest. If the solution of the problem is traced to a design or coding bug in the baseline software version (without user created data or menu), the vendor should correct the same and update the documentation. All software updates should be provided.

- Down-time call attendance should be within 48 hrs
- In case the Equipment / System remains non-operational for more than 7 days then warranty period will be extended for the equivalent period for which Equipment / System remained non-operational. Warranty extension in such case shall be done without prejudice to any other Term & condition of the contract.

#### 4.7 Delivery Schedule (including supply, installation, commissioning, training & acceptance)

Delivery of the Item		Installation & Commissioning		Training At CSIR_NAL, if any	Acceptance of the item
Days/ Weeks/Months	Location	Days/ Weeks/Months from the date of receipt of equipment	Location	Days/ Weeks/Months from the date of Installation & Commissioning	Days/ Weeks/Months from the date of Installation, Commissioning & Training
3 months from the date of Raise of LC	STTD, CSIR-NAL, Bengaluru	10 days	STTD, CSIR-NAL, Bengaluru	5 days	7 days

#### 4.8 Commercial evaluation of bid

The bid will be treated as **incomplete** if bidder has **not quoted** for all the components given in scope of supply (clause 4.2) and **the incomplete bid will be rejected**. The bidder should also quote for all incidental services (clause 4.5). The bid will be commercially evaluated for the components in the scope of supply.

## CHAPTER 5

### Eligibility & Qualification Requirements

#### 5.1 Eligibility Criteria

a) **Legal Valid Entity:**

The Bidder shall necessarily be a legally valid entity either in the form of a Limited Company or a Private Limited Company registered under the Indian Companies Act, 1956 or Country of Origin.

Bidder in the form of consortium and Partnership is not permitted.

**Copy of Certificate of Incorporation** issued by Registrar of firms/companies is to be submitted in support of this criterion.

- b) Indian Agent quoting on behalf of Foreign Principal supplier should submit a certified **copy of an Agreement/Memorandum of understanding (MOU)** between both the parties.
- c) The bidder shall furnish documentary evidence to demonstrate that the bidder satisfies the bidders' **eligibility criteria**, as mentioned in **ITB Clause 1.1.2** in the form as per **Annexure-K of Chapter- 8**.
- d) An **undertaking (self-certificate)** is to be submitted that the Organization has not been blacklisted during last 3 years by any Central / State Government Department/Organization in the form as per **Annexure-L of Chapter- 8**.

#### 5.2 Technical Qualification Criteria

- a) The Bidder should be a manufacturer /authorized representative of a manufacturer who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the "Technical Specification". Authorised representative / Indian Agent to submit the **Manufacturers' Authorization Form Chapter-8: Annexure B** with the technical bid.
- b) Equipment / System offered 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. The bidder (OEM/Direct Distributor/Dealer) should have supplied and installed during **past 2 years, at least two similar equipment / systems** as mentioned in Chapter-4.  
The Bidder should furnish the information on all past supplies and satisfactory performance during past 3 years in the **Performance Statement Form** (Chapter-8, Annexure D). Bidders shall invariably furnish documentary evidence (Client's certificate) in support of the **satisfactory operation of the equipment / system**.
- c) Details of Service Centres and information on service support facilities that would be provided after the warranty period (in the **Service Support Form-Chapter-8 Annexure-F**).
- d) Foreign bidder/suppliers quoting directly, should submit a letter of Authorisation in favour of Indian Agent/Representative indicating complete address, contact person and validity of Authorization if any along with their technical bid. Foreign bidder/suppliers quoting directly should ensure 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 1.13.2(c)**.

#### 5.3 Financial Qualification Criteria

- a) The Bidders are requested to submit **Audited Balance Sheet** for the **last three financial year** alongwith Technical Bid.

- 5.4 Either the Indian Agent on behalf of the foreign principal or the foreign principal directly could bid in a tender **but not both**. However, the offer of the Indian Agent should also accompany the authorization letter from their principal. Further, to maintain sanctity of tendering system **one Indian agent cannot represent two different foreign principals in one tender**.

**CHAPTER - 6A**

**PRICE SCHEDULE FOR GOODS BEING OFFER FROM ABROAD  
(BIDDER SHOULD QUOTE IN THIS FORMAT)**

Name of the Bidder & Address						
Tender No.:						
Quotation No.					Date:	
Quotation Valid upto						
Country of Origin				Currency		
Sr. No.	Description of Item	HSS/SAC Code	Unit	Quantity	Rate	Amount
1						
2						
3						
4						
Sub-Total: Ex-Works Price						
Less: Discount .....% (if any)						
Sub-Total : Net Ex-Works Price						
Add: Packing & Forwarding Charges (if any)						
Add: Inland Freight Charges						
Sub-Total: INCOTERM: FCA/FOB ..... International Airport, .....Country						
Add: Freight upto Bengaluru Airport						
Add: Insurance Charges (from Warehouse to Warehouse) (if any)						
Total (A):						
<b>OTHER CHARGES</b>						
5	Installation & Commissioning Charges (if any)					
6	Training (if any)					
Sub-Total : Before Tax						
Add: GST on Sr. No.5 & 6 (if applicable)						
7	Bank Charges (if any)					
Total (B):						
<b>Grand Total (A+B): CIP/CIF Charges - Bengaluru Price</b>						
<b>For Sl. No.5 &amp; 6 - TDS will be deducted at actuals.</b>						
<b>OTHER TERMS</b>						
Sr. No.	Approximate weight of the Consignment	Approximate dimensions of the consignment				
1						
2	Mode of Shipment					
3	<b>Port of Destination</b>	<b>Final Destination</b>				
4	Delivery Term (INCO Term)					
5	Delivery Schedule including Item, Installation, Commissioning, Training & Acceptance					
6	Payment Term					
7	Warranty					
<b>NOTE: Agency Commission, if any would be payable only in Indian Rupee as per the Exchange Rate mentioned in the Bill of Entry.</b>						

**CHAPTER - 6B**

**PRICE SCHEDULE FOR GOODS BEING OFFER FROM INDIA  
(BIDDER SHOULD QUOTE IN THIS FORMAT)**

Name of the Bidder & Address						
Tender No.:						
Quotation No.					Date:	
Quotation Valid upto						
Country of Origin				Currency		
Sr. No.	Description of Item	HSS/SAC Code	Unit	Quantity	Rate	Amount
1						
2						
3						
4						
Sub-Total: Ex-Works Price						
Less: Discount .....% (if any)						
<b>Sub-Total : Net Ex-Works Price</b>						
Add: Packing & Forwarding Charges (if any)						
Add: Transportation Charges (if any)						
Add: Insurance Charges (from Warehouse to Warehouse) (if any)						
<b>Sub-Total : Before Tax</b>						
Add: GST / IGST (against Concessional Certificate)						
<b>Total (A):</b>						
<b>OTHER CHARGES</b>						
5	Installation & Commissioning Charges (if any)					
6	Training (if any)					
<b>Sub-Total : Before Tax</b>						
Add: GST on Sr. No.5 & 6 (if applicable)						
7	Bank Charges (if any)					
<b>Total (B):</b>						
<b>Grand Total (A+B): F.O.R CSIR-NAL</b>						
<b>For Sl. No.5 &amp; 6 - TDS will be deducted at actuals.</b>						
8	<b>Annual Maintenance Contract / Charges</b>					
	<b>Comprehensive</b>			<b>Non-Comprehensive</b>		
Grand Total in Figures						
Grand Total in Words						
<b>OTHER TERMS</b>						
Sr. No.	Approximate weight of the Consignment	Approximate dimensions of the consignment				
1						
2	Mode of Shipment					
3	<b>Port of Destination</b>			<b>Final Destination</b>		
4	Delivery Term					
5	Delivery Schedule including Item, Installation, Commissioning, Training & Acceptance					
6	Payment Term					
7	Warranty					

**CHAPTER 7**

**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 National Aerospace Laboratories, Bengaluru (hereinafter called “the Purchaser”), 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”).

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:**

01. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
02. 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)	General Conditions of Contract
(c)	Special 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)]

03. 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.
04. 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.
05. 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 8**

**OTHER STANDARD FORMS**

<b>Sr. No.</b>	<b>Name of the Form</b>	<b>Annexure</b>
1	Bid Security Form / Earnest Money Deposit	A
2	Bidder Information Form	B
3	Bid Form	C
4	Manufacturer's Authorization Form	D
5	Performance Statement Form	E
6	Service Support Detail Form	F
7	Eligibility Certificate	G
8	Non Black List Certificate	H
9	No Relation Certificate	I
9	Deviation Statement Form	J
10	Performance Security Form	K
11	Indemnity Bond	L
12	Acceptance Certificate Form	M

**NOTE:**

1. Forms at Annexure A to J to be submitted along with Technical bid (excluding Bid Form - Annexure-C)
2. The Successful Bidder shall submit Documents with reference to Annexure -K, L and Chapter-7 after Award of Contract as mentioned in Purchase Order.
3. Price bid (Chapter-6) along with Bid Form (Annexure-C) should be enclosed in Financial Bid only.

**BID SECURITY FORM**

Whereas \_\_\_\_\_  
(hereinafter called the tenderer)

has submitted their offer dated \_\_\_\_\_  
for the supply of \_\_\_\_\_  
(hereinafter called the tender)

Against the Purchaser's Tender No. \_\_\_\_\_  
KNOW ALL MEN by these presents that WE \_\_\_\_\_  
of \_\_\_\_\_ having our registered office at \_\_\_\_\_  
\_\_\_\_\_ are bound unto \_\_\_\_\_ (hereinafter called the "Purchaser")

In the sum of \_\_\_\_\_

For which payment will 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 or modifies or 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
(3)	If the tenderer fails to furnish the Performance Security for the due Performance of the contract.
(4)	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 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 and address of the Branch

**Note:** Whenever the bidder chooses to submit the Bid Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

**Bidder Information Form**

- (a) [The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted. This should be done of the letter head of the firm]

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

Tender No : [insert number from Invitation for bids]

01.	Bidder's Legal Name [insert Bidder's legal name]
02.	In case of JV, legal name of each party: [insert legal name of each party in JV]
03.	Bidder's actual or intended Country of Registration: [insert actual or intended Country of Registration]
04.	Bidder's Year of Registration: [insert Bidder's year of registration]
05.	Bidder's Legal Address in Country of Registration: [insert Bidder's legal address in country of registration]
06.	<p>Bidder's Authorized Representative Information</p> <p>Name: [insert Authorized Representative's name]</p> <p>Address: [insert Authorized Representative's Address]</p> <p>Telephone/Fax numbers: [insert Authorized Representative's telephone/fax numbers]</p> <p>Email Address: [insert Authorized Representative's email address]</p>
07.	<p>Attached are copies of original documents of:</p> <p>Articles of Incorporation or Registration of firm named in 1, above.</p>

Signature of Bidder \_\_\_\_\_

Name \_\_\_\_\_

Business Address \_\_\_\_\_

**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. :

To : Director, CSIR-NAL, Bengaluru

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] as specified in Chapter 4
(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 methodologies for their application are: <b>Discounts.</b> 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 Clause 1.16, from the date fixed for the bid submission due date in accordance with ITB Clause 1.19 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 1.41 and GCC Clause 2.12 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.")

(h)	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.
(i)	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]

**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 2.20 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]*

**PERFORMANCE STATEMENT FORM**

**Details of similar equipment / systems supplied & installed during past 3 years in India & Abroad**

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 deliver as per contract	Date of actual completion of delivery	Remarks indicating reasons for late delivery, if any	Has the equipment been installed/ working satisfactory? (Attach a certificate from the purchaser / Consignee)	Name of Contact person along with Telephone No., Fax No. and e-mail address

Signature and Seal of the manufacturer/Bidder .....

Place :

Date :

SERVICE SUPPORT DETAIL FORM

Sr. No.	List of similar type of equipments serviced in the past 3 years	Address, Telephone Nos., Fax No. and e-mail address of the buyer	Nature of training Imparted/ service provided	Name and address of service provider

Signature and Seal of the manufacturer/Bidder.....

Place :

Date :

**Eligibility Certificate**

This is to certify that we are not 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 / Tender No. \_\_\_\_\_ dated \_\_\_\_\_.

Authorised Signatory

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

**Non-Black listing Self Certificate**

This is to certify that M/s. \_\_\_\_\_ has not been blacklisted by any Central / State Government Department / organization in last 3 years.

**Authorised Signatory**

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**No Relation Certificate**

I..... son of ..... resident of ..... hereby certify that none of my relative (s) called for providing Services to the CSIR-NAL, vide Tender No: .....is / are employed in CSIR-National Aerospace Laboratories, Bengaluru. In case at any stage, it is found that the information given by me is false / incorrect, CSIR-NAL shall have the absolute right to take any action as deemed fit / without any prior intimation to me.

Signed.....

For and on behalf of the Bidder

**Name** .....

**Designation** .....

**Date**.....



DEVIATION STATEMENT FORM

PART -I

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:**

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

## PART – II

(Refer Clause 1.25 of Tender Document, Chapter-7 &amp; Chapter-8)

Sr. No.	Tender Clause No.	Tender Requirement	Compliance	Document Submitted
1	1.17	Bid is Signed	Yes / No	Yes / NA
2	1.16	Bid Validity (90 days after the date of Bid opening)	Yes / No Bid valid up to	Yes / NA
3	1.15	Bid Security/Earnest Money Deposit	Yes / No	Yes / NA
4	Chapter-8, Annexure-B	Bidder Information Form	Yes / No	Yes / NA
5	Chapter-8, Annexure-C	Bid Form	Yes / No	Yes / NA
6	Chapter-8, Annexure-G	Eligibility Certificate	Yes / No	Yes / NA
7	Chapter-8, Annexure-H	Non-Black List Certificate	Yes / No	Yes / NA
8	Chapter-8, Annexure-I	No Relation Certificate	Yes / No	Yes / NA
9	Chapter-5, Clause No.5.1(a(iii))	Copy of Certificate of Incorporation	Yes / No	Yes / NA
10	Chapter-5, Clause No.5.1(b)	Copy of Agreement/Memorandum of Understanding	Yes / No	Yes / NA
11	Chapter-5, Clause No.5.2(a)	Manufacturer's Authorisation Form	Yes / No	Yes / NA
12	Chapter-5, Clause No.5.2(b)	List of Supply and Installation of the Equipment & Performance Statement Form	Yes / No	Yes / NA
13	Chapter-5, Clause No.5.2(c)	Service Support Detail Form	Yes / No	Yes / NA
14	Chapter-5, Clause No.5.3(a)	Audited Balance Sheet (Last three Financial Year)	Yes / No	Yes / NA
15	GCC 2.20.3 & as specified in SCC	Warranty: One-year warranty from the date of acceptance of the item	Yes / No	Yes / NA
16	Clause 2.12.1 & as specified in SCC	Agree to submit Performance Security 10% of PO Value	Yes / No	Yes / NA
17	Chapter-8, Annexure-L	Agree to submit Indemnity Bond	Yes / No	Yes / NA
18	Chapter-7	Original Equipment Manufacturer/ Authorised Indian Agent agree to submit Contract Agreement	Yes / No	Yes / NA

The Bidder should submit other documents such as fulfillment of financial qualification criteria, Schedule of Requirement (Chapter-3) and various forms as specified in Chapter-8.

PERFORMANCE SECURITY FORM

MODEL BANK GUARANTEE FORMAT FOR PERFORMANCE SECURITY

To,  
.....

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) (herein after 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 bank 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 there under 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 and address of the Branch

**Note:** Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

**INDEMNITY BOND**

No. \_\_\_\_\_

Date:\_\_\_\_\_

**1) Amalgamation/Acquisition**

In the event of M/s. \_\_\_\_\_proposes for amalgamation, acquisition or sale of its business to any other firm during this contract period, M/s.\_\_\_\_\_ and proposed Buyer/Successor of the Principal Company are liable to execute, fulfill contractual obligations without any deviations. For this purpose M/s. \_\_\_\_\_/M/s.\_\_\_\_\_ and proposed Buyer/Successor of the Principal Company shall indemnify itself to the Director, National Aerospace Laboratories, Bengaluru to fulfill the contractual obligations as per the terms of the CSIR-NAL Global Tender and quotation of M/s. \_\_\_\_\_No. \_\_\_\_\_ dated\_\_\_\_\_and National Aerospace Laboratories P.O. No.\_\_\_\_\_dated \_\_\_\_\_. The contractual obligations are supply, installation, commissioning, warranty maintenance/replacement of spares, accessories etc. as per the above mentioned Purchase Order.

**2) JointVenture, Consortium or Association**

If the Supplier is a joint venture, consortium, or association, all the parties shall be jointly and severally liable to the CSIR-NAL 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 CSIR-NAL.

**3) Patent Indemnity**

The Supplier shall, subject to CSIR-NAL’s compliance and indemnify and hold CSIR-NAL and its employees and officers harmless 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 CSIR-NAL 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.

For M/s.\_\_\_\_\_  
Principal Supplier.

For M/s \_\_\_\_\_  
Indian Agent.

## Acceptance Certificate

PO No.:			Dated:	
Sub: Certificate of Supply, Installation, Commissioning, Training and Acceptance of Goods & Services				
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, commissioned and accepted.			
(a)	Contract No.			
	Date			
	Value			
(b)	Description of the Equipment			
(c)	Name of the Consignee			
(d)	Scheduled date of Delivery of the Consignment to the Laboratory/Institute			
(e)	<b>Details of LC Established</b>			
	<b>Date of Establishment</b>	<b>Date of Shipment</b>	<b>Date of Expiry</b>	
(f)	<b>Actual date of receipt of Consignment by the Laboratory/Institute</b>			
	<b>Date of Shipment</b>	<b>Date of Receipt at CSIR-NAL</b>		
(g)	Scheduled date for completion of Installation, Commissioning and acceptance			
(h)	Actual date of completion of Installation, Commissioning and acceptance			
(i)	Penalty for Late Delivery (at Laboratory / Institute level) Rs.			
(j)	Penalty for Late Installation, Commissioning and Acceptance (at Laboratory / Institute level) Rs.			
2	Details of accessories/items not yet supplied and recoveries to be made on that account			
<b>Sr. No.</b>	<b>Description</b>	<b>Amount to be recovered</b>		
3	The acceptance test has been done to our entire satisfaction. The Supplier has fulfilled his contractual obligations satisfactory			
	<b>OR</b>			
	The Supplier has <b>failed to fulfill</b> his contractual obligations with regard to the following:			
<b>Sr. No.</b>	<b>Description</b>	<b>Amount to be recovered</b>		
The amount of recovery on account of failure of the supplier to meet his contractual obligations is as indicated at Para 3				

4	Liquidated Damages/Penalty Percentage				
	<b>No. of Days / Weeks delayed</b>		<b>Amount to be recovered</b>		
5	Warranty Details				
6	Training, if any				
7	Details of Performance Security submitted in the form of Bank Guarantee / Demand Draft				
	<b>BG No.</b>	<b>Date</b>	<b>Amount in USD</b>	<b>Valid till</b>	<b>% of BG</b>
<b>For Purchaser (Indenting Officer)</b>			<b>For Purchaser (Project Leader)</b>		
Signature			Signature		
Name			Name		
Designation			Designation		
Name of the Laboratory/Institute		<b>CSIR-NAL</b>	Name of the Laboratory/Institute		<b>CSIR-NAL</b>
Date			Date		
<b>HOD</b>					
Signature					
Name					
Designation					
Name of the Laboratory/Institute		<b>CSIR-NAL</b>			
Date					
<b>For Supplier</b>					
Signature					
Name					
Designation					
Name of the Firm					
Date					