## वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद् Council of Scientific & Industrial Research

## राष्ट्रीय वांतरिक्ष प्रयोगशालाएं National Aerospace Laboratories



Dated: 09-Mar-2020

#### INVITATION FOR BIDS/NIT

#### Tender No. NAL/PUR/CEM/635/19-Y

CSIR- National Aerospace Laboratories (NAL), Bengaluru, India is one of the premier laboratories under Council of Scientific and Industrial Research (CSIR), 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 online quotation for procurement of the following item(s) for day to day research work.

SI.No.	Description of Items	Unit	Quantity
1	Dielectric substrates	Nos	20
	As per Attached list Quantity as per the list		

Single / Double Bid	Single
Bid Security (EMD) (in INR)	Bid Security Declaration should be enclosed with quotation
Performance Security	Nil

- O1. Tender Documents may be downloaded from Central Public Procurement Portal <a href="https://www.etenders.gov.in">https://www.etenders.gov.in</a>. Aspiring Bidders who have not enrolled/ registered in e- procurement should enroll/ register before participating through the website <a href="https://www.etenders.gov.in">https://www.etenders.gov.in</a>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission'.
- O2. Tenderers can access tender documents on the website (For searching in the NIC site <a href="https://www.etenders.gov.in">https://www.etenders.gov.in</a>, 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 <a href="https://www/etenders.gov.in">https://www/etenders.gov.in</a> as per the schedule given in the next page.
- O3. Either the Indian Agent on behalf of the Foreign principal or the Foreign principal can bid directly in a tender but not both. However, the offer of the Indian Agent should also accompany the authorization letter from their principal. To maintain sanctity of tendering system, one Indian Agent cannot represent two different Foreign principals in one tender.
- 04. Unsolicited / conditional / unsigned tenders (Quotations) shall not be considered. Quotations received after the due date and time shall be summarily rejected.
- 05. The Bidder shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection.
- O6. The Director, CSIR- National Aerospace Laboratories., Bengaluru reserves the right to accept any or all the tenders either in part or in full or to split the order without assigning any reasons there for.

Raman Kumar (Section Officer S&P)

पी बी सं. 1779, एचएएल एयरपोर्ट रोड , कोडिहल्ली, बेंगलुरु - 560 017, भारत, P B No 1779, HAL Airport Road, Kodihalli, Bengaluru - 560 017, INDIA फोन / Phone : (का./ Off): +91 - 80 - 2508 6040 - 45, फैक्स / FAX: +91-80-2526 9611





# CSIR-National Aerospace Laboratories, Bengaluru-560 017, INDIA

### SCHEDULE CUM CRITICIAL DATE SHEET

1	Name of Organization	CSIR-National Aerospace Laboratories, Bengaluru			
2	Tender Reference No	NAL/PUR/CEM/635/19-Y dated: 09-Mar-2020			
3	Tender Type (Open/Limited/EOI/Auction/Single)	Open Tender			
4	Type/Form of Contract (Work / Supply / Auction / Service / Buy / Empanelment / Sell)	Supply			
5	No of Covers (One/Two/Three/Four)	One			
6	Tender Category (Services/Good/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	No			
10	Work Item Title	Dielectric substrates			
11	Work Description	Dielectric substrates			
12	Delivery Schedule	30 days from the date of purchase order			
13	Product Category (Civil Works / Electrical Works / Fleet Management / Computer Systems)	R & D Equipment			
14	Is Multi Currency Allowed	Yes			
	a) Tender Publishing Date -	09-Mar-2020	1800 Hrs		
	b) Document Download Start Date-	09-Mar-2020	1800 Hrs		
15	c) Bid Submission Start Date-	09-Mar-2020	1800Hrs		
	d) Bid Submission End Date-	26-Mar-2020	1000 Hrs		
	e) Bid Opening Date-	27-Mar-2020	1100 Hrs		
16	Bid Validity Days	90 days			
17	Address for communication	Stores and Purchase Officer CSIR-National Aerospace Laboratories, HAL Airport Road, Kodihalli, Bengaluru - 560017			
18	Inviting Officer	Director, CSIR-NAL			
19	Contact No	25086040, 25086041			
20	E-mail Address	purchasek@nal.res.in			
21	Detailed specification of item	Refer Invitation for bids / NIT			
22	Tender Terms & Conditions & Instruction for online bid submission	The prospective bidders are requested to refer to the Standard Tender Document available on NAL Internet (www.nal.res.in) under the icon Tender-Purchase before formulating and submitting their bids			

No	Product	Dielectric Constant, er @ 10 GHz (2.5 GHz) (Typical		Dissipatio n(1) Factor TAN d @ 10 GHz (2.5 GHz) (Typical)	Dielectric Thickness (Inches)	Copper Thicknes s (Micron)	Quantity
1.	92ML <sup>™</sup> Woven Glass Reinforced Modified Epoxy Laminates	5.3 (1 MHz)	-	0.011 (1 MHz)	(0.203mm) ± 0.0015"	35	1
2	AD255C <sup>™</sup> Woven Glass Reinforced PTFE Antenna Grade Laminates	2.55 ± 0.04	2.60	0.0013	(1.524mm) ± 0.0030" 0.125"	18 35	1
3	AD255C <sup>™</sup> Woven Glass Reinforced PTFE Antenna Grade Laminates	$2.55 \pm 0.04$	2.60	0.0013	(3.175mm) ± 0.0060"	18 35	1
4	TMM 4 Hydrocarbon Ceramic	$4.50 \pm 0.045$	4.7	0.0020	0.020" (0.508mm) ± 0.0015"	18	1
5	Kappa <sup>™</sup> 438 Hydrocarbon / Ceramic / Woven Glass UL 94 V-0 Laminates	$4.10 \pm 0.08$	4.38	0.005	0.030" (0.762mm) ± 0.0020"	35	1
6	Kappa <sup>TM</sup> 438 Hydrocarbon / Ceramic / Woven Glass UL 94 V-0 Laminates	$4.10 \pm 0.08$	4.38	0.005	(1.524mm) ± 0.0040"	35	1
7	RO3006™ PTFE Ceramic	$6.15 \pm 0.15$	6.5	0.002	0.005" (0.127mm) ± 0.0005"	18 35	1
8	TMM 10i Hydrocarbon Ceramic	$9.80 \pm 0.245$	9.9	0.0020	0.050" (1.270mm) ± 0.0015"	18	1
9	TMM 13i Hydrocarbon Ceramic	$12.85 \pm 0.35$	12.2	0.0019	0.060" (1.524mm) ± 0.0015	18	1
10	RT/duroid 5880 PTFE Random Glass Fiber	$2.20 \pm 0.02$	2.20	0.0009	(0.787mm) ± 0.0010" 0.062"	18 35	1



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11	RT/duroid 5880 PTFE Random Glass Fiber	$2.20 \pm 0.02$	2.20	0.0009	$(1.575 \text{mm}) \pm 0.0020$ "	18	1
11	R1/duroid 5880 PTFE Random Glass Fiber	2.20 ± 0.02	2.20			35	1
13	RO4730G3™ Hydrocarbon / Ceramic / Woven Glass UL 94 V-0 Antenna Grade	$3.00 \pm 0.05$	2.98	0.0029 (0.0023)	0.0307" (0.780mm) ± 0.002"	18	1
14	RO4730G3 <sup>TM</sup> Hydrocarbon / Ceramic / Woven Glass UL 94 V-0 Antenna Grade	$3.00 \pm 0.05$	2.98	0.0029 (0.0023)	0.0407" (1.542mm) ± 0.004"	18	1
15	Laminates  AD1000™  Woven Glass Reinforced PTFE	10.20±0.35	10.2	0.0023	0.030" (0.762mm) 0.0020"	18 35	1
16	AD1000 <sup>TM</sup> Woven Glass Reinforced PTFE	10.20±0.35	10.2	0.0023	0.120" (3.048mm) 0.0060"	18 35	1
17	TC350 <sup>TM</sup> PTFE Ceramic Woven Glass Reinforced	$3.50 \pm 0.05$	-	0.0020	0.030" (0.762mm) 0.0020"	18 35	1
18	ТС350 <sup>тм</sup>	$3.50 \pm 0.05$		0.0020	0.060" (1.524mm) 0.0030"	18	1
10	PTFE Ceramic Woven Glass Reinforced					35	1



#### **BID-SECURING DECLARATION FORM**

	Date:			
	Bid No			
To (inse	ert complete name and address of the purchaser)			
I/We. Th	he undersigned, declare that:			
I/We un	nderstand that, according to your conditions, bids must be supported by a Bid Securing Declaration.			
	ccept that I/We may be disqualified from bidding for any contract with you for a period of one year e date of notification if I am /We are in a breach of any obligation under the bid conditions, because			
(a)	have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or			
(b) having been notified of the acceptance of our Bid by the purchaser during the period o				
	(i) fail or refuse to execute the contract, if required, or			
	(ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.			
Bidder,	nderstand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty ter the expiration of the validity of my/our Bid.			
-	(insert signature of person whose name and capacity are shown) apacity of (insert legal capacity of person signing the Bid Securing Declaration).			
Name: (	(insert complete name of person signing he Bid Securing Declaration)			
Duly aut	thorized to sign the bid for an on behalf of: (insert complete name of Bidder)			
Dated o	on day of(insert date of signing)			
Corpora	ite Seal (where appropriate)			
Note:				

- In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid.
- Bid Security declaration must be signed in by the Proprietor/CEO/MD or equivalent level of Officer of the company.