

वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्
Council of Scientific & Industrial Research
राष्ट्रीय वांतरिक्ष प्रयोगशालाएं
National Aerospace Laboratories



CSIR - NAL Estd. 1959
ISO 9001 : 2015
Certified Organization

INVITATION FOR BIDS/NIT

Tender No. NAL/PUR/CSMST/459/19-Y

Dated: 20-Dec-19

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.

| Sl.No. | Description of Items | Unit | Quantity |
|--------|--|------|----------|
| 01 | Supply and Installation of Shelving Module System for Precision Tool Storage – Please refer Annexure for detailed specification. | No | 01 |

| Single / Double Bid | Two Bid |
|-----------------------------|---------------------------------|
| Bid Security (EMD) (in INR) | Rs. 50000/- |
| Performance Security | 10% of the purchase order value |

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.
03. 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.
06. 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)

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SCHEDULE CUM CRITICAL DATE SHEET

| | | | |
|----|---|---|----------|
| 1 | Name of Organization | CSIR-National Aerospace Laboratories, Bengaluru | |
| 2 | Tender Reference No | NAL/PUR/CSMST/459/19-Y dated: 20-Dec-19 | |
| 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) | Two | |
| 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 | Supply and Installation of Shelving Module System for Precision Tool Storage | |
| 11 | Work Description | Supply and Installation of Shelving Module System for Precision Tool Storage | |
| 12 | Delivery Schedule | 40 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 | |
| 15 | a) Tender Publishing Date - | 23-Dec-19 | 1800 Hrs |
| | b) Document Download Start Date- | 23-Dec-19 | 1800 Hrs |
| | c) Bid Submission Start Date- | 23-Dec-19 | 1800Hrs |
| | d) Bid Submission End Date- | 13-Jan-20 | 1000 Hrs |
| | e) Bid Opening Date- | 14-Jan-20 | 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 | |

A) Technical Specification**“Supply and Installation of Shelving Module System For Precision Tool Storage As Per List”**

| <u>Reference</u> | <u>Particulars</u> | <u>Quantity</u> |
|------------------|---|-----------------|
| 1.1 | Shelving system modular type (S1) Main Module | 1 |
| 1.1a | Add on Module to Main unit (M1) | 1 |
| 1.1b | Add on Module to Main unit (M2) | 1 |
| 1.2 | Cabinet Shelving Systems with doors | 1 |
| 1.3 | Add on Workbench with Pneumatic and Electrical points | 2 |
| 1.4 | Add on Module (Multi – Racking System) | 1 |
| 1.5 | Add on Module (Multi - Segment Box) | 1 |
| 1.6 | Add on Module Tool accessories storage | 2 |
| 1.7 | Add on Boltless Shelving Module | 3 sets |
| 1.8 | Add on Mobile Safety Ladder | 1 |
| 1.9 | Add on Tool Drawing File Cabinet | 1 |

B) Commercial Terms and Condition:

- 1) Bidder should meet all the requirements and specification invariably,
- 2) Modules has to be installed at NAL (CSMST),
- 3) Detailed catalog and specification document has to supplied by the bidder,
- 4) 2D cad model shall be supplied by the bidder for erection of civil works at NAL (CSMST),
- 5) All the module should meet ISO, SEFA and EN standards when and where required,
- 6) Material Test certificate should be provided by the bidder for all the qualifications.

Reference 1.0 Raw Material Which Are Used In Main And Add On Module Should Comply Following**Requirement:**

- 1) Shelving shall contain first quality of steel grade EN10130 & EN10111,
- 2) The raw material used in production shall be virgin steel with anti-rust and anti-corrosion, pre-treatment with special hot oil treatment to safe guard against saline and humid conditions,
- 3) The final product shall be powder coated with 55-65 micron thickness with special coatings like epoxy or equivalent.
- 4) Industrial standard powder coating is preferred for all modules,

A) Technical Terms and Conditions & Technical Specification/Qualification**Reference 1.1 Shelving system modular type (S1) Main Module & Add on Module (M1, M2) as per****Annexure I:**

| <u>Sl.no</u> | <u>Particulars</u> | <u>Specification</u> |
|--------------|-----------------------|----------------------|
| 1 | Shade | As per STD |
| 2 | Impact load (kg cm) | 150 |
| 3 | Flexibility (mm) | 2 – 4mm |
| 4 | Salt spray test | Minimum 350 hours |
| 5 | Specific gravity test | ~1.6 |
| 6 | Dry film thickness | Minimum 50 microns |
| 7 | Modularity type | Fastening |

Reference 1.2 Cabinet Shelving Systems with Doors as per Annexure I:

| <u>Sino</u> | <u>Particulars</u> | <u>Specification</u> |
|-------------|------------------------|---------------------------|
| 1 | Load carrying capacity | Minimum 700 to 750 kg UDL |
| 2 | Impact load (kg cm) | 150 |
| 3 | Flexibility (mm) | 2 – 4mm |
| 4 | Salt spray test | Minimum 350 hours |
| 5 | Specific gravity test | ~1.6 |
| 6 | Dry film thickness | Minimum 50 microns |

- 1.2a) Cabinet should be manufactured and tested as per SEFA code 8,
 1.2b) Cabinet Shelving shall contain first quality of steel grade EN10130 & EN10111,
 1.2c) Base material of the container should be High-density Poly propylene polymer ,
 1.2d) Vicat softening should be above 150^o C ISO 306,
 1.2e) Perforated panel to be spot-welded on both the doors to accommodate bins with guided rails/hooks,
 1.2f) Perforated holes should be square 10 * 10 mm,
 1.2g) Central locking systems should be available to secure the items,
 1.2h) Drawers should be made of cold rolled steel of thickness minimum 1.2mm,
 1.2i) Each drawer should be of normal extension 80% of depth.

Reference 1.3 Add on Workbench with Pneumatic and Electrical points as per Annexure I:

| <u>Sl. no</u> | <u>Particulars</u> | <u>Specification</u> |
|---------------|------------------------|---------------------------|
| 1 | Load carrying capacity | Minimum 700 to 750 kg UDL |
| 2 | Impact load (kg cm) | 150 |
| 3 | Flexibility (mm) | 2 – 4mm |
| 4 | Salt spray test | Minimum 350 hours |
| 5 | Specific gravity test | ~1.6 |
| 6 | Dry film thickness | Minimum 50 microns |

- 1.3a) Worktop should be made of multiple layers of beech wood glued and pressed with non-deformable load and wear resistance,
 1.3b) Workbench should be minimum 1.2 mm thickness Mild steel material,
 1.3c) Fully bolted construction,
 1.3d) Workbench load carrying capacity: 1500 kg,
 1.3e) The unit should fitted with anti-tilt mechanism to prevent accidental toppling.

Reference 1.4 Add on Module Multi – Racking System as per Annexure I:

| <u>Sl.no</u> | <u>Particulars</u> | <u>Specification</u> |
|--------------|-----------------------|----------------------|
| 1 | Impact load (kg cm) | 150 |
| 2 | Flexibility (mm) | 2 – 4mm |
| 3 | Salt spray test | Minimum 350 hours |
| 4 | Specific gravity test | ~1.6 |
| 5 | Dry film thickness | Minimum 50 microns |

- 1.4a) Cabinet should be manufactured and tested as per SEFA code 8,
 1.4b) Cabinet Shelving shall contain first quality of steel grade EN10130 & EN10111,
 1.4c) Central locking systems should be available to secure the items,
 1.4d) Drawers should be made of cold rolled steel of thickness minimum 1.2mm,
 1.4e) Each drawer should be of normal extension 80% of depth.

Reference 1.5 Add on Module Multi - Segment Box as per Annexure I:

- 1.5a) Material: ABS structure,
 1.5b) Transparent polystyrene compartment with high mechanical resistance,
 1.5c) Easy compartment for front opening.

Reference 1.6 Add on Module Tool accessories storage as per Annexure I:

- 1.6a) Refer Section 1.0 for Material qualification,
 1.6b) Individual locking system for cabinet,
 1.6c) Working space each cabinet: (300 mm * 500 mm),
 1.6d) Polypropylene base stand with Adjustable Height.

Reference 1.7 Add on Boltless Shelving Module as per Annexure I

- 1.7a) Body should be made from high quality virgin steel of thickness 1.8mm
 1.7b) Total storable area of two column and six rows
 1.7c) Side Panel should be made from cold pressed sheet steel & Should be powder coated to 80 micron thickness
 1.7d) Wall brackets shall be made from Galvanized steel, they are fitted onto the top of the uprights.
 1.7e) Each individual cell measures: (650*368*400 mm) of usable space,
 1.7f) The entire shelving assembly is made "Beech Wood" for extra strength.

Reference 1.8 Add on Mobile Safety Ladder as per Annexure I

- 1.8a) Material preference lightweight Aluminium,
 1.8b) Safe Working Load should be above 120 KG with a standing height of 1400 mm
 1.8c) Two swivel wheels with stoppers and two fixed

Reference 1.9 Add on Tool Drawing File Cabinet as per Annexure I

- 1.9a) Refer Section 1.0 for Material qualification,
 1.9b) Each drawer is measured to accommodate (841 x 1189 mm) drawing
 1.9c) All drawers should be lockable individually

Annexure I

| Ref | Module | Requirements | Unit Qty |
|------|---|------------------|----------|
| 1.1 | Shelving system modular type (S1) | | |
| | Add on Modular shelving system (Reference section 1.1) | | |
| | Dimension: | 2100*1000*700 mm | |
| | Gauge thickness: | 1.00mm to 1.5mm | 1 |
| | Pigeon Box: | | |
| | No. of Column: | 03 Nos | |
| | No. of Rows: | 03 Nos | |
| | No. of Drawers: | 12 Nos | |
| | Drawer Height: | 65 mm to 75 mm | |
| | All With Drawer with Door & Lock | YES | |
| 1.1a | Add on Module to Main unit (Reference section 1.1) | | 1 |
| | Dimension: | 2100*1000*700 mm | |
| | Gauge thickness: | 1.00mm to 1.5mm | |
| | Pigeon Box: | | |
| | No. of Column: | 03 Nos | |
| | No. of Rows: | 03 Nos | |
| | No. of Drawers: | 09 Nos | |
| | Rack Height: | 85mm to 105mm | |
| | All With Door & Lock: | YES | |
| 1.1b | Add on Module to Main unit (Reference section 1.1) | | 1 |
| | Dimension: | 2100*1000*700 mm | |
| | Gauge thickness: | 1.00mm to 1.5mm | |
| | Pigeon Box: | | |
| | No. of Column: | 03 Nos | |
| | No. of Rows: | 03 Nos | |
| | No. of Drawers: | 06 Nos | |

| | | | |
|------------|--|--------------------|----------|
| | Rack Height: | 140mm to 155mm | |
| | All With Door & Lock: | | |
| 1.2 | Add on Cabinet Shelving System with Doors (Reference section 1.2) | | 1 |
| | Dimension: | 2000*1000*600 mm | |
| | Gauge thickness: | 1.00mm to 1.5mm | |
| | Tool storage with perforated Board & bins: | | |
| | No. of Drawers: | | |
| | Equal spaced drawers: | 03 Nos | |
| | No of Bins on each door: | | |
| | Rows: | 07 Nos | |
| | Columns: | 03 Nos | |
| 1.3 | Add On Workbench With Pneumatic And Electrical Points (Reference section 1.3) | | 2 |
| | Gauge thickness: | 1.00mm to 1.5mm | |
| | Bench dimension: | 1300mm*700mm*950mm | |
| | No. of Drawers: | 05 Nos | |
| | Drawers Placement: | LHS | |
| | Pneumatic and Electrical attachment: | RHS | |
| | Work Table Placement: | Above The Drawers | |
| | Pneumatic operating pressure: | Up to 7 Bars | |
| | Pneumatic system: | Regulated (make) | |
| | Electrical points: | Single Phase | |
| | No. of electrical points: | 03 Nos | |
| | Color preference: | Metallic blue | |
| 1.4 | Add on Multi-Racking System (Reference section 1.4) | | 1 |
| | Dimension: | 2000*1000*600 mm | |
| | Gauge thickness: | 1.00mm to 1.5mm | |
| | No. of Drawers: | 07 Nos | |
| | Rack Height: | 280 mm to 310 mm | |

| | | | |
|------------|---|---|---------------|
| 1.5 | Add on Multi - Segment Box (Reference section 1.5) | | 1 |
| | Dimension: | 2000*700*600 mm | |
| | Gauge thickness: | 1.00mm to 1.5mm | |
| | Open Bins/Trays: | | |
| | No of Bins: | | |
| | Rows: | 06 Nos | |
| | Columns: | 18 Nos | |
| | With Door & Lock: | YES | |
| 1.6 | Add on Working accessories storage (Reference section 1.6) | | 2 |
| | Gauge thickness: | 1.00mm to 1.5mm | |
| | Dimension: | 1200*500*2000mm | |
| | No. of rows: | 2 | |
| | No. of columns: | 4 | |
| | With individual door and lock: | YES | |
| 1.7 | Add on Boltless Shelving Module (Reference section 1.7) | | 3 sets |
| | Dimension: | 1400*1000*600 mm | |
| | Rows: | 06 Nos | |
| | Column: | 02 Nos | |
| | Dimension: | 2200*1300*400mm | |
| | 1 Main + 1 Add-on | | |
| 1.8 | Add on Mobile Safety Ladder (Reference section 1.8) | | 1 |
| | Gauge thickness: | 1.00mm to 1.5mm | |
| | Dimensions: | 670*1060*2450mm | |
| | Standing height: | 1405mm | |
| | Load capacity: | 150 kg | |
| | Standard color: | Grey | |
| | Wheel arrangement: | 2 Nos swivel type with brake 2 Nos fixed type with brake | |
| | Additional safety: | Hand rails for grip | |
| 1.9 | Add on Tool Drawing File Cabinet (Reference section 1.9) | | 1 |
| | Gauge thickness: | 1.00mm to 1.5mm | |
| | Dimension: | 1370*950*570mm | |
| | No. of drawers: | 12 Nos | |
| | Cabinet layout: | Horizontally placed drawers | |