

भारतसरकार, रक्षामंत्रालय
रक्ष्या अनुसंधान एवं विकास संघठन
वैमानिकीय विकास संस्थापन, बेंगलूर
न्यू तिप्पसन्द्रा बेंगलूर, - 560 075
Tel no: 080-2505 7335/7841/7840
Fax no: 080-2505 7843
e-mail : mmdtec@ade.drdo.in,
headmmd@ade.drdo.in



Tender Ref No:
210155/ADE/MM/A/TB/22ATT168
Government of India, Ministry of Defence
Defence Research & Development
Organisation
Aeronautical Development Establishment
New Thippasandra, Bangalore -560075
Tel no: 080-2505 7335/7841/7840
Fax no: 080-2505 7843
e-mail : mmdtec@ade.drdo.in, headmmd@ade.drdo.in

Date: 28/12/2021

Online Invitation of Bids

Invitation of Online Bids for Supply of **Wind Tunnel Model Design, Fabrication & Testing of Unmanned Fighter Aircraft.**

Tender / Request for Proposal (RFP) Reference No **210155/ADE/MM/A/TB/22ATT168.**

1. **Online Bids** are invited for supply of items listed in Part V of this RFP as per **Two Bid System**. The online bid (both techno-commercial and price bid) should be uploaded by the bidder before the due date and time.
2. **The documents may be downloaded from Defence e-Procurement site <https://defproc.gov.in>**
3. The address and contact number for seeking clarification regarding this RFP are given below:
 - i) All queries to be addressed to : **The Director ADE, Bangalore**
 - ii) Postal address : **New Thippasandra, Bangalore - 560075**
 - iii) Name & designation of the contact Officer : **Rajendran S, Technical Officer 'C'(Commercial)**
Saravanan B, Sc 'E' (Technical)
 - iv) Telephone number(s) of the contact Officer : **080-2505 7335/7835 (Commercial)**
080-2505 7121 (Technical)
 - v) Fax number(s) : **080-2505 7843**
 - vi) e-mail ID of contact Officer : **mmdtec@ade.drdo.in**
4. This RFP is divided into **VII** parts as follows:
 - i) **Part I (A)** contains **General Information and Instructions for the Bidders** about the RFP such as the time, online submission and opening of Bids, Validity period of Bids, etc.
 - Part I (B)** contains Tender Acceptance Letter to be filled by Bidder and uploaded in cover 1.
 - ii) **Part II (A)** contains **Standard Terms and Conditions of RFP**, which will form part of the Contract/Supply Order (herein after referred as the Contract) with the successful bidder(s).
 - Part II (B)** contains instructions for online submission of Bids.
 - iii) **Part III** contains **Special Terms and Conditions** applicable to this RFP and which will also form part of the Contract with the successful Bidder(s).
 - iv) **Part IV** contains **Vendor Qualification Criteria**.
 - v) **Part V** contains **Details of the Store(s)/Service(s) Required** e.g. Technical Specifications, Delivery Period, Mode of Delivery, Consignee details etc.
 - vi) **Part VI** contains Evaluation criteria of bids
 - vii) **Part VII** contains **Format of Price Bid**. Price bid needs to be filled and uploaded as per Supplied Format only.
5. This RFP is being issued with no financial commitment and the Buyer reserves the right to change or vary any part thereof or foreclose the instant procurement at any stage. The Buyer also reserves the right to disqualify any vendor, should it be necessary, at any stage on grounds of National Security.
6. Vendors are advised to submit online offers in advance, last day submission may lead to technical issues due to net traffic or issues on website.
7. **You may contact The Director, ADE, New Thippasandra, Bangalore for any grievance related to bidding condition, bidding process and/or rejection of bid. With regard to bidding condition, this shall be done in writing at least seven days in advance of the stipulated date of submission of bid.**

Yours Sincerely,

(Rajendran S, TO C)
For & on behalf of President of India

Part I (A) – General Information and Instructions

- 1.1 Pre-bid Conference:** Not Applicable.
- 1.2 Last Date and Time for Uploading the Bids:** On **12/01/2022** (dd/mm/yy) at **10:30** Hrs. The online Bids (both Techno-Commercial and Price bid, in case of two bids system) should be uploaded by the due date and time. The responsibility to ensure this lies with the Bidder.
- 1.3 Location of the Tender Box:** Online submission only (for receipt of documents such as EMD (Bid Security), Tender Fee, Earnest Money for Integrity Pact and signed Integrity Pact document (if applicable) /Technical Brochure, catalogues if any, other than techno-commercial and financial bids being submitted in electronic mode).
- 1.4 Manner of Uploading the Online Bids:** Bids (both Techno-Commercial and Price bid, in case in case of two bids system) is required to be submitted online on DPP-portal <https://defproc.gov.in>). Bids sent by Post/ FAX or e-mail will not be considered.
- 1.5 Time and Date for Opening of Bids:** Bids will be opened online on **13/01/2022** (dd/mm/yy) at **10:30** Hrs (*Specify date and time*). If due to any exigency, the due date for opening of the bids is declared a closed holiday, the bids will be opened on the next working day at the same time or on any other day/time, as intimated by the Buyer.
- 1.6 Place of Opening of the Bids:** **e-tender cell, Security Office, Raman gate, ADE, Bangalore.** Bids will be opened online only.
- 1.7 Marking of Bids:** Envelope containing documents such as EMD, Tender Fee, Earnest Money for Integrity Pact and signed Integrity Pact document (if applicable) / Technical Brochure, if any, must be clearly marked with Tender Reference No. and Date of opening.
- 1.8 Procedure for Submission of Bid:** Bids would be submitted as per standard online e-procurement procedure for **Two bid System**. The original tender fee, EMD instrument (if applicable), Earnest Money for Integrity Pact and signed Integrity Pact document (if applicable) / Technical Brochure, if any should be sent in an envelope duly marked with tender reference no. and addressed to Director, on or before **“Bid submission end date and time”**. In case **Original tender fee and EMD instrument** (if applicable) are not received on or before **“techno-commercial bid opening date and time”**, bid of such bidders will summarily be rejected.
- 1.9 Forwarding Of Bids:** Bids should be submitted by Bidders online only , under the firm’s memo / letter pad inter alia furnishing details like GSTIN number, Bank address with NEFT Account if applicable, etc. and complete postal and email address of firm’s office failing which the bid would not be considered.
- 1.10 Clarification Regarding Contents of the RFP:** A prospective bidder who requires clarification regarding the contents of the bidding documents shall notify to the Buyer in writing about the clarifications at least 07 (Seven) days prior to the date of opening of the Bids. Copies of the query and clarifications by the purchaser will be sent to all prospective bidders who received the bidding document from the lab and would be posted on the website.
- 1.11 Submission of offer:** Firms need to quote only in Indian Rupees.
- 1.12 Validity of Bids:** The Bids should remain valid for **180 days (Two Bid System)** from the date of Opening of the Bids.
- 1.13 Modification and Withdrawal of Bids:** If a bidder intends to modify or withdraw his Bid after online submission, it can be done through selection of appropriate option available on the DPP Portal.
- 1.14 Bid Security/ Earnest Money Deposit:**
Exemption from submission of EMD:
The following organizations/ firms are exempted from submission of EMD:
- i) Bidders registered with DRDO, Min of Defence and NSIC
 - ii) DPSUs, Other Govt. Organizations.
 - iii) KVIC, Kendriya Bhandar/ NCCF
 - iv) Micro and Small Enterprises (MSEs) as per their registration:
 - v) Startups as recognized by Dept. of Industrial Policy and Promotion (DIPP).

Such bidders would be required to furnish the relevant documents in their Techno-Commercial bid in support of the claim.

For other bidders or the bidders not willing to submit documents required for exemption: Bidders may submit a Bid securing declaration accepting that if they withdraw or modify their Bids during the period of validity, or if they are awarded the contract and they fail to sign the contract, or to submit a performance security before the deadline defined in the request for bids document, they may be suspended for the period up to 2 years from being eligible to submit bids for contracts with any of the procuring entities of DRDO.

Note: The bidder should submit EMD declaration in the company letter head duly signed and stamped by the authorized person along with technical bid.

- 1.15 Clarification Regarding Contents of the Bids:** During evaluation of the bids, the Buyer may, at his discretion, ask the bidders for clarification(s) on the Bid(s). The request for clarification will be given in writing. No clarification on the initiative of the bidder will be entertained after opening of bid.
- 1.16 Rejection of Bids:** Canvassing by the Bidder in any form, unsolicited letter and post tender correction may invoke summary rejection and punitive action. Conditional bids will be rejected. Non-compliance of applicable General Information will disqualify the Bid.
- 1.17 Unsolicited Bids:** Unsolicited offers received as a result of e-publishing in limited bidding/single bidding/proprietary bidding mode would not be considered for the instant procurement but the response would be given to the Vendor Registration Committee for consideration for future procurements.
- 1.18 Unwillingness to Quote:** Bidders unwilling to quote should ensure that intimation to this effect reaches before the due date and time of opening of the Bid, failing which the defaulting Bidder may be de-registered for the range of items in this RFP, as per the policy in vogue.
- 1.19** Bids of debarred/blacklisted firms will not be considered for evaluation.
- 1.20 Document to be submitted with Techno-commercial Bid :**
The following documents are to be furnished by the Bidder in **Cover-1** along with Techno Commercial Bid as per the tender document:
- 1.20.1** Signed and Scanned copy of appropriate valid company registration certificate or partnership deed (if applicable), experience certificate as required, PAN No and Tender Acceptance Letter as per Part I (B).
 - 1.20.2** Signed and scanned copy of previous three years Income-tax/GSTIN /Affidavit of partnership firm. If not applicable kindly upload a pdf document indicating Not Applicable.
 - 1.20.3** Scanned copy of instrument used to provide Tender Fee and Earnest Money Deposit or Proof of Registration with DRDO/MOD/ NSIC etc.
 - 1.20.4** Signed and Scanned Copy of the Make and model of all the systems, sub systems and additional items as mentioned in the Techno Commercial Bid.
 - 1.20.5** Signed and Scanned Copy of legal Agency Agreement/100% Subsidiary Certificate/Registration as an Agent (if applicable). If not applicable kindly upload a pdf document indicating Not Applicable.
 - 1.20.6** Scanned Copy of Proforma of End User Certificate for Export License (if applicable). If not applicable kindly upload a pdf document indicating Not Applicable.
 - 1.20.7** ***Provide the list of item/systems/components and their country of origin with your technical bid for evaluation.***
- 1.21 Price Bid to be uploaded in Cover-2.** Schedule of price bid in the form of BOQ_XXX.xls

(Technical Officer 'C')

Part I (B) – Tender Acceptance Letter (e-Procurement)

(To be filled by Bidder and uploaded with technical bid in two bid system)
(To be given on Company Letter Head)

Date: __/__/2021

To,

**The Director
Aeronautical Development Establishment,
Bangalore -560075**

Sub: Acceptance of Terms & Conditions of Tender

Tender Reference No & ID :

Tender ID :

Name of Tender/Work: _____

Dear Sir,

1. I / We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: _____ as per
Your advertisement, given in the above mentioned website(s).
2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc.), (duly filled Compliance table attached) which will form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/ organizations related to this tender too have also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
5. I / We do hereby declare that our firm/company has not been blacklisted / debarred by any Govt. Department/Public Sector undertaking.
6. I / We certify that all information furnished by the our firm/company is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including punitive action.

Yours Faithfully,
(Signature of the Bidder, with Official Seal)

| SNo. | Part of RFP | Compliance para/sub para of RFP (Yes/No) | Reason for compliance/Non-Compliance (If any) | Remarks |
|------|-------------|--|---|---------|
| | | | | |
| | | | | |

Part II (A) – Standard Terms and Conditions

The Bidder is required to give confirmation of their acceptance of the Standard Terms and Conditions of the RFP mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder as selected by the Buyer. Failure to do so may result in rejection of the Bid.

- 2.1 Effective Date of the Contract: (Acceptance of Contract)** In case of placement of a supply order, the date of acceptance of the Supply Order would be the effective date. The firm should check the supply order and convey acceptance of the same within seven days of its receipt. If such an acceptance or communication conveying firm's objection to certain parts of the supply order is not received within the stipulated period, the supply order will be deemed to have been fully accepted by the firm. In case a contract is to be signed by both the parties, the Contract shall come into effect on the date of signatures of both the parties on the Contract (Effective Date) or as agreed during negotiations. The performance of the Contract shall commence from the Effective Date of the Contract/Supply Order.

Note: If any discrepancy is there, it should be brought to the notice within 07 days from the date of Contract/Supply Order else it will be presumed as Contract/Supply Order is accepted.

- 2.2 Law:** The Contract shall be considered and made in accordance with the laws of the Republic of India and shall be governed by and interpreted in accordance with the laws of the Republic of India.

- 2.3 Arbitration:** All disputes or differences arising out of or in connection with the Contract shall be settled by bilateral discussions. Any dispute, disagreement or question arising out of or relating to the Contract or relating to product or performance, which cannot be settled amicably, shall be resolved by arbitration in accordance with any one of the following provisions:

Option : 01 For Defence PSUs: Not Applicable.

Option : 02 For Central Public Sector Enterprises (CPSEs): In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs) and DRDO, such disputes of difference shall be taken up by either party for resolution through Administrative Mechanism for Resolution of CPSEs Disputes (AMRC) as per provisions of Department of Public Enterprises OM No. 4(1)/2013-DPE (GM)/FTS-1835 dated 22-05-2018.

Option: 03 For Other Firm: Not Applicable.

- 2.4 Penalty for Use of Undue influence:** The Seller undertakes that he has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the Buyer or otherwise in procuring the Contract or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the Contract or any other contract with the Government of India for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other contract with the Government of India. Any breach of the aforesaid undertaking by the Seller or anyone employed by him or acting on his behalf (whether with or without the knowledge of the Seller) or the commission of any offers by the Seller or anyone employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1986 or any other Act enacted for the prevention of corruption shall entitle the Buyer to cancel the contract and all or any other contracts with the Seller and recover from the Seller the amount of any loss arising from such cancellation. A decision of the Buyer or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the Seller. Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the Seller towards any officer/ employee of the Buyer or to any other person in a position to influence any officer/employee of the Buyer for showing any favour in relation to this or any other contract, shall render the Seller to such liability/ penalty as the Buyer may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the Bank Guarantee and refund of the amounts paid by the buyer.

- 2.5 Agents / Agency Commission:** If Applicable.

The Seller confirms and declares to the Buyer that the Seller has not engaged any individual or firm, whether Indian or foreign whatsoever, to intercede, facilitate or in any way to recommend to the Government of India or any of its functionaries, whether officially or unofficially, to the award of the contract to the Seller; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Seller agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in any way incorrect or if at a later

stage it is discovered by the Buyer that the Seller has engaged any such individual/firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this contract, the Seller will be liable to refund that amount to the Buyer. The Seller will also be debarred from entering into any contract with the Government of India for a minimum period of five years. The Buyer will also have a right to consider cancellation of the Contract either wholly or in part, without any entitlement or compensation to the Seller who shall in such an event be liable to refund all payments made by the Buyer in terms of the Contract along with interest at the rate of 2% per annum above (i) Prime Lending Rate of State Bank of India for Indian bidders, and (ii) London Inter Bank Offered Rate (LIBOR) for the foreign bidders. The applicable rates on the date of opening of tender shall be considered for this. The Buyer will also have the right to recover any such amount from any contracts in vogue with the Government of India

Or

The Seller confirms and declares in the Techno-Commercial bid that they have engaged an agent, individual or firm, for performing certain services on their behalf. The Seller is required to disclose full details of any such person, party, firm or institution engaged by them for marketing of their equipment in India, either on a country specific basis or as a part of a global or regional arrangement. These details should include the scope of work and responsibilities that have been entrusted with the said party in India. If there is noninvolvement of any such party then the same also be communicated in the offers specifically. The information is to be submitted as per the format at **DRDO.SA.01**. Without prejudice to the obligations of the vendor as contained in various parts of this document, appointment of an Agent by vendors will be subjected to the following conditions: The Seller confirms and declares in the Techno-Commercial bid that they have engaged an Agent, individual or firm, for promotion of their product.

In such case, following details are to be submitted in the

- i) Details of all Agents will be disclosed at the time of submission of offers and within two weeks of engagement of an Agent at any subsequent stage of procurement.
- ii) The Seller is required to disclose termination of the agreement with the Agent, within two weeks of the agreement having been terminated.
- iii) Buyer /MoD reserves the right to inform the Seller at any stage that the Agent so engaged is not acceptable whereupon it would be incumbent on the Seller either to interact with Buyer / MoD directly or engage another Agent. The decision of Buyer /MoD on rejection of the Agent shall be final and be effective immediately.
- iv) All payments made to the Agent 12 months prior to tender submission would be disclosed at the time of tender submission and thereafter an annual report of payments would be submitted during the procurement process or upon demand of the Buyer / MoD.
- v) The Agent will not be engaged to manipulate or in any way to recommend to any functionaries of the Govt of India, whether officially or unofficially, the award of the contract to the Seller or to indulge in corrupt and unethical practices.
- vi) The contract with the Agent will not be a conditional contract wherein payment made or penalty levied is based, directly or indirectly, on success or failure of the award of the contract.
- vii) On demand, the Seller shall provide necessary information/inspection of the relevant financial documents/information, including a copy of the contract(s) and details of payment terms between the Seller and the Agent engaged by him.
- viii) If the equipment being offered by the Seller has been supplied /contracted with any organisation, public/private in India, the details of the same may be furnished in the technical as well as commercial offers. The Sellers are required to give a written undertaking that they have not supplied/is not supplying the similar systems or subsystems at a price lower than that offered in the present bid to any other Ministry/Department of the Government of India and if the similar system has been supplied at a lower price, then the details regarding the cost, time of supply and quantities be included as part of the commercial offer. In case of non disclosure, if it is found at any stage that the similar system or subsystem was supplied by the Seller to any other Ministry/Department of the Government of India at a lower price, then that very price, will be applicable to the present case and with due allowance for elapsed time, the difference in the cost would be refunded to the Buyer, if the contract has already been concluded.

Following details are also to be submitted in the Techno-Commercial bid:

- (a) Name of the Agent
- (b) Agency Agreement between the Seller and the agent giving details of their contractual obligation
- (c) PAN Number, name and address of bankers in India and abroad in respect of Indian agent
- (d) The nature and scope of services to be rendered by the agent and
- (e) Percentage of agency commission payable to the agent

- 2.6 Access to Books of Accounts:** In case it is found to the satisfaction of the Buyer that the Bidder/Seller has violated the provisions of Para 4 and/or Para 5 above to obtain the Contract, the Bidder/Seller, on a specific request of the Buyer, shall provide necessary information/ inspection of the relevant financial documents/information/Books of Accounts.
- 2.7 Non-disclosure of Contract Documents:** Except with the written consent of the Buyer/ Seller, other party shall not disclose the Contract or any provision, specification, plan, design, pattern, sample or information thereof to any third party.
- 2.8 Handling of Classified Information by Indian Licensed Defence Industry:** Any classified document/information/ equipment being shared with Indian Licensed Defence Industries will be protected/ handled to prevent unauthorized access as per provisions of Chapter 5 of Security Manual for Indian Licensed Defence Industries issued by MoD (Department of Defence Production).
- 2.9 Withholding of Payment:** In the event of the Seller's failure to submit the Bonds, Guarantees and Documents, supply the stores/goods and conduct trials, installation of equipment, training, etc. as specified in the Contract, the Buyer may, at his discretion, withhold any payment until the completion of the Contract.
- 2.10 Liquidated Damages:** The Buyer may deduct from the Seller, as agreed, liquidated damages at the rate of 0.5% per week or part thereof, of the basic cost of the delayed stores which the Seller has failed to deliver within the period agreed for delivery in the contract. LD can also be levied on the Seller on the basic cost of the stores supplied partially within the scope of the order/ contract that could not be put to use due to late delivery of the remaining stores. The maximum quantum of LD would be 10% of the total order value."
- 2.11 Termination of Contract:** The Buyer shall have the right to terminate the Contract in part or in full in any of the following cases :
- 2.11.1** The store/service is not received/rendered as per the contracted schedule(s) and the same has not been extended by the Buyer Or
 - 2.11.2** The delivery of the store/service is delayed for causes not attributable to Force Majeure for more than <03 > months after the scheduled date of delivery and the delivery period has not been extended by the Buyer.
 - 2.11.3** The delivery of store/service is delayed due to causes of Force Majeure by more than 06 months provided Force Majeure clause is included in the contract and the delivery period has not been extended by the Buyer.
 - 2.11.4** The Seller is declared bankrupt or becomes insolvent.
 - 2.11.5** The Buyer has noticed that the Seller has violated the provisions of Para 2.4 (Use of Undue Influence) and/or Para 2.5 (Employment of Agent) above to obtain the Contract.
 - 2.11.6** As per decision of the Arbitration Tribunal.
- 2.12 Notices:** Any notice required or permitted by the Contract shall be written in English language and may be delivered personally or may be sent by FAX/email or registered pre-paid mail/ airmail, addressed to the last known address of the party to whom it is sent.
- 2.13 Transfer and Sub-letting:** The Seller has no right to give, bargain, sell, assign or sublet or otherwise dispose of the Contract or any part thereof, as well as to give or to let a third party take benefit or advantage of the Contract or any part thereof without written consent of the Buyer.
- 2.14 Use of Patents and other Industrial Property Rights:** The prices stated in the Contract shall be deemed to include all amounts payable for the use of patents, copyrights, registered charges, trademarks and payments for any other Industrial Property Rights. The Seller shall indemnify the Buyer against all claims from a third party at any time on account of the infringement of any or all the rights mentioned in the previous paragraphs, whether such claims arise in respect of manufacture or use.
The Seller shall be responsible for the completion of the supplies including spares, tools, technical literature and training aggregates irrespective of the fact of infringement of the supplies or any or all the rights mentioned above.
- 2.15 Amendments:** No provision of the Contract shall be changed or modified in any way (including this provision) either in whole or in part except when both the parties are in written agreement for amending the Contract.
- 2.16 Taxes and Duties :**
- 2.16.1 In respect of Foreign Bidders:** Not Applicable.
 - 2.16.2 In respect of Indigenous Bidders:**

i) General

- (a) If the quoted prices exclude GST / Local Tax or any other Statutory Duties/Taxes, the same must be specifically stated with applicable rates. In the absence of same, it will be presumed that the prices include all such charges and no claim for the same will be entertained.
- (b) If reimbursement of any Duty/Tax is intended as extra over the quoted prices, the Bidder must specifically say so. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of such duty/tax will be entertained after the opening of tenders.
- (c) If a Bidder chooses to quote a price inclusive of any duty/tax and does not confirm that duty/tax so included is firm and final, he should clearly indicate the rate of such duty/tax and quantum of such duty/tax included in the price. Failure to do so may result in ignoring any request for change of duty/tax at a later date due to any reason whatsoever.
- (d) Any addition to duty/tax and change in any duty/tax upward/downward as a result of any statutory variation in duty/tax taking place within contract terms shall be allowed to the extent of actual quantum of such variation of duty/tax paid by the supplier. Similarly, in case of downward revision in any duty/tax, the actual quantum of reduction of such duty/tax shall be reimbursed to the Buyer by the Seller. All such adjustments shall include all reliefs, exemptions, rebates, concession etc., if any, obtained by the Seller.
- (e) TDS as per Income Tax Rules will be deducted and a certificate to that effect will be issued by the Buyer/ Buyer's paying authority.

ii) Customs Duty: Not Applicable.

iii) Goods and Services Tax (GST) :

- (a) DRDO is a public funded research institution and has been given provision of concessional GST payment, under Notification No. 47/2017-Integrated Tax (Rate) dtd 14 Nov 2017 & Notification No. 45/2017-Central Tax (Rate) dtd 14 Nov 2017 as amended as per the description of stores and Conditions thereon.
- (b) The successful bidder would be issued Concessional GST Certificate, if applicable, by the Buyer under the said notification as decided during tender negotiation and to be issued to Firm/Vendor before invoice raising for procurement of goods against the Contract.
- (c) Bidders may note that Concessional GST Certificate would be issued ONLY in favour of beneficiary of the Contract.
- (d) Unless otherwise specifically agreed to in terms of the Contract, the Buyer shall not be liable for any claim on account of fresh imposition and/or increase of GST on raw materials and/or components used directly in the manufacture of the contracted stores taking place during the pendency of the contract.
- (e) Bidders are advised to specifically mention the rate of GST payable in spite of issuance of concessional GST Certificate to facilitate correct evaluation of quotes. In the absence of such explicit declaration regarding % of tax rate, it would be deemed that quoted prices include applicable GST.

iv) Local Taxes :

Normally, materials to be supplied to Government Departments against Government Contracts are exempted from levy of Town Duty, Terminal Tax and other levies of local bodies. The local Town/Municipal Body regulations at times, however, provide for such exemption only on production of such exemption certificate from any authorised officer. Seller should ensure that stores ordered against contracts placed by this office are exempted from levy of Town Duty, Terminal Tax or other local taxes and duties. Wherever required, firm should obtain the exemption certificate from the Buyer, to avoid payment of such local taxes or duties.

In case where the Municipality or other local body insists upon payment of these duties or taxes, the same should be paid by the Seller to avoid delay in supplies and possible demurrage charges. After the issue of exemption certificate by the Buyer, the Seller may get the reimbursement from the local authority. In case of any difficulty, the receipt obtained for such payment should be forwarded to the Buyer without delay together with a copy of the relevant act or by-laws/notifications of the Municipality of the local body concerned to enable this office to take up the case for refund with the concerned bodies if admissible under the said acts or rules.

- 2.17 Denial Clause:** Denial clause informs Seller that the Buyer reserves the right to admit additional payment due to upward revision of statutory levies beyond the original delivery schedule in case Seller fails to deliver the goods as per schedule. Variations in the rates of statutory levies within the original delivery schedule will be allowed if taxes are explicitly mentioned in the contract/supply order and delivery has not been made till the revision of the statutory levies. Buyer reserves the right not to reimburse the enhancement of cost due to increase in statutory levies beyond the original delivery period of the supply order/contract even if such extension is granted without imposition of LD.
- 2.18 Pre-Integrity Pact Clause:** Not Applicable.
- 2.19 Independent External Monitors (IEM):** Not Applicable.
- 2.20 Undertaking from the Bidders:** Bidder/firm/company/vendor will submit an undertaking that in the past they have never been banned / debarred for doing business dealings with Ministry of Defence/Govt. of India/any other Govt. organisation and that there is no enquiry going on by CBI/ED/any other Govt. agency against them.
- 2.21 Liability Clause :**
- 2.21.1** Any damage caused to the property or suffered by the personnel of Buyer during the execution of Contract shall remain the liability of the Buyer. Such liability shall be fixed on Seller in case of grossly negligent act or omission on the part of Seller.
 - 2.21.2** This provision is limited to the relations between the Parties. It is without prejudice to the rights and actions to which the victims of damage, or any Social Security Organizations could prevail themselves legally.
 - 2.21.3** Either party would provide reasonable assistance to resolve the claim of other Party to mitigate loss or damage.
 - 2.21.4** Neither, the Seller shall be liable to the Buyer, nor shall the Buyer be liable to the Seller for any immaterial, punitive, indirect, special, incidental, or consequential loss or damage. This will hold good irrespective of whether such liability is based or claimed to be based on any breach of a Party's obligation under the Contract, or any negligent act or omission of a Party, its employees, servants, appointed representatives, sub-contractor or professional consultants, or such liability arises otherwise out of or in connection with the Contract.
 - 2.21.5** The Buyer shall not be liable for any compensation in any manner to the Seller for whatsoever reason.
 - 2.21.6** The Seller shall be liable to the Buyer for any compensation in any manner for whatsoever reasons for a sum not exceeding value of the Contract.
- 2.22 Risk and Expense Purchase:** In case Seller fails to honor the contractual obligations within the stipulated delivery period and as amended, Buyer may procure the said contracted goods/services through a fresh supply order/contract and the defaulting Seller has to bear the excess cost incurred, if any.
- 2.23 INCOTERMS for Delivery and Transportation (for Foreign Bidders only):** Not Applicable.

Technical Officer C

Part II (B) – Instructions for Online Bid Submission

- 1 The bidders are required to submit soft copies of their bids electronically on the Defence e-Procurement Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the Defence e-Procurement Portal, prepare their bids in accordance with the requirements and submitting their bids online on the Defence e-Procurement Portal.
- 2 More information useful for submitting online bids on the Defence e-Procurement Portal may be obtained at: <https://defproc.gov.in>.
- 3 **Registration**
 - 3.1 Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://defproc.gov.in/nicgep/app>) by clicking on the link "Online bidder Enrollment" on the Defence e-Procurement Portal which is free of charge.
 - 3.2 As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
 - 3.3 Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the Defence e-Procurement Portal.
 - 3.4 Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
 - 3.5 Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse
 - 3.6 Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.
- 4 **Searching For Tender Documents :**
 - 4.1 There are various search options built in the Defence e-Procurement Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the Defence e-Procurement Portal.
 - 4.2 Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the Defence e-Procurement Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
 - 4.3 The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.
- 5 **Preparation Of Bids**

Bidder should take into account any corrigendum published on the tender document before submitting their bids.

 - 5.1 Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
 - 5.2 Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

- 5.3** To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

6 Submission of bids :

- 6.1** Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 6.2** The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 6.3** Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- 6.4** Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 6.5** Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 6.6** The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 6.7** All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 6.8** The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 6.9** Upon the successful and timely submission of bids (ie after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 6.10** The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

7 ASSISTANCE TO BIDDER

- 7.1** Any queries relating to the tender 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 tender.

7.2 For any technical related queries please call at 24 x 7 Help

Desk Number. 0120-4200 462, 0120-4001 002, 0120-4001 005, 0120-6277 787.

International Bidders are requested to prefix +91 as country code.

Email Support:

For any Issues or Clarifications relating to the published tenders, bidders are requested to contact the respective Tender Inviting Authority.

Technical - support-eproc (at) nic (dot) in.

Policy Related - cppp-doe (at) nic (dot) in.

Note: For latest updated information about online e-procurement system please refer Defence e-Procurement website.

Technical Officer C

Part III – Special Terms and Conditions

The Bidder is required to give confirmation of their acceptance of Special Terms and Conditions of the RFP mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder as selected by the Buyer. Failure to do so may result in rejection of Bid submitted by the Bidder.

3.1 Apportionment of Quantity: Not Applicable.

3.2 Performance Security Bond:

3.2.1. The successful bidder may be required to submit Performance Security Bond either in the form of **electronic Military Receivable Order (e-MRO)** or in the form of Fixed Deposit Receipt (FDR)/ Bank Guarantee (BG), in favour of The Director ADE Bangalore for an amount equal to **3% of the contract value** (inclusive of taxes and duties) at the time of acceptance of tender for safeguarding the Buyer's interest in all respects during the currency of the contract. The Bond submitted in the form of Fixed Deposit Receipt (FDR) / Bank Guarantee (BG) should be valid up to sixty days beyond the accepted delivery date. In case the execution of the contract is delayed beyond the contracted period and the Buyer grants the extension of delivery period, with or without liquidated damages, the Seller must get the Bond revalidated, if not already valid. The specimen of bond can be provided on request.

Indemnity bond: Indemnity bond will be accepted from Government Departments/ DPSUs/ PSUs in lieu of BG in favour of director ADE, Bangalore.

Note: The Performance Security Bond will be forfeited by the Buyer, in case the conditions regarding adherence to delivery schedule and/or other provisions of the Contract/ SO are not fulfilled by the Seller.

3.3 Option Clause: Not Applicable.

3.4 Repeat Order Clause: Not Applicable.

3.5 Tolerance Clause: Not Applicable.

3.6 Purchase Preference Clause: Purchase preference will be granted to the nominated agencies for the specified quantity as per the policy of Govt. of India in vogue as per Public Procurement (Preference to Make in India), order 2017 as amended and Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 as amended.

3.6.1 The minimum local content as per provisions of **Public Procurement (Preference to Make in India), order 2017 dated 15 June 2017 for the subject procurement as per part IV of RFP**. The local supplier at the time of tender, bidding or solicitation shall be required to provide self-certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made.

3.6.2 In case of procurement for a value in excess of Rs.10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

3.7 Transfer of Technology (ToT): Not Applicable.

3.8 Permissible Time Frame for Submission of Bills: To claim payment (part or full), the Seller shall submit the bill(s) along with the relevant documents within 30 days from the completion of the activity/supply.

3.9 Payment Terms:

The payment will be made as per the following terms, on production of the requisite documents:

Milestone based Payment will be released within 30 days through CDA (R&D), Bangalore after satisfactory completion of job/service and on receipt of job completion certificate from the user

| Milestone | Percentage | Description | Time line |
|--------------|------------|---|-----------|
| -- | 30% | Advance payment on basic cost | T0 |
| Milestone -1 | 40% | 40% of Total amount after completion of study and data handover | T0 + 15 |
| Milestone- 2 | 30% | 30% Total amount after submission of reports & deliverables as per Para 3 of technical details + taxes on advance | T0 + 18 |

T0 – Date of placement of order

3.10 Advance Payments: Applicable.

Interest free mobilization advance payment of **30%** of the Contract value (excluding GST) may be made, preferably in not less than two installments, against submission of Bank Guarantee, in favour of The Director ADE, Bangalore, of 110% of advance payment by the firm (or against submission of Indemnity Bond by the Govt. organizations/ PSUs).

The advance BG/IB should be valid for 2 months beyond receipt, inspection, installation, commissioning and acceptance of stores in good condition or satisfactory completion of job, wherever applicable.

In case of termination of the Contract/extension of delivery period due to default of the Seller or where advance taken has not been/could not be used for the purpose of order execution, interest free mobilization advance would be deemed as interest bearing advance, compounded quarterly, at the rate of 2% above (i) Prime Lending Rate/ **MCLR (Marginal Cost of Funds Based Lending Rate)** of State Bank of India for Indian seller, and (ii) LIBOR/EURIBOR rate for the foreign seller. The rates as applicable on the date of receipt of advance will be considered for this. Delivery period (DP) extension for the default of the seller would make advances paid interest bearing.

3.11 Part Supply and *Pro rata* Payment: Applicable with milestone payment.

3.12 Mode of Payment: It will be mandatory for the Bidders to indicate their bank account numbers and other relevant e-payment details to facilitate payments through ECS/NEFT mechanism instead of payment through cheque, wherever feasible.

3.13 Documents to be furnished for Claiming Payment

- i) Ink-signed copy of Contractor's Bill.
- ii) Ink-signed copy of Commercial Invoice / Seller's Bill.
- iii) Bank Guarantee for Advance, if applicable.
- iv) Guarantee/ Warranty Certificate, if applicable.
- v) Performance Warranty Bond/ Indemnity Bond, if applicable.
- vi) Details for electronic payment viz. Bank name, Branch name and address, Account Number, IFS Code, MICR Number (if these details are not already incorporated in the Contract).
- vii) Copy of the Contract and amendments thereon, if any.
- viii) Self certification from the seller that the GST received under the contract would be deposited to the concerned taxation authority
- ix) Job Completion Certificate from the user / RIN.

3.14 Exchange Rate Variation (ERV) Clause: Not Applicable.

3.15 Force Majeure Clause: Force majeure clause allows a party to suspend or terminate the performance of its obligation when certain circumstances beyond their control arise, making performance inadvisable, commercially impracticable, illegal or impossible. The provision may state that the contract is temporarily suspended, or that it is terminated in the event of force majeure continues for a prescribed period of time. The standard text of this clause is as under:

- i) Neither party shall bear responsibility for the complete or partial non-performance of any of its obligations, if the non-performance results from such Force Majeure circumstances as Flood, Fire, Earth Quake and other acts of God as well as War, Military operations, blockade, Acts or Actions of

- State Authorities or any other circumstances beyond the parties control that have arisen after the conclusion of the present contract.
- ii) In such circumstances the time stipulated for the performance of an obligation under the Contract is extended correspondingly for the period of time commensurate with actions or circumstances and their consequences.
 - iii) The party for which it becomes impossible to meet obligations under the Contract due to Force Majeure conditions, is to notify in written form to the other party of the beginning and cessation of the above circumstances immediately, but in any case not later than 10 (Ten) days from their commencement.
 - iv) Certificate of a Chamber of Commerce (Commerce and Industry) or other competent authority or organization of the respective country shall be considered as sufficient proof of commencement and cessation of the above circumstances.
 - v) If the impossibility of complete or partial performance of an obligation lasts for more than 6 (six) months, either party hereto reserves the right to terminate the Contract totally or partially upon giving prior written notice of 30 (thirty) days to the other party of the intention to terminate without any liability other than reimbursement on the terms provided in the agreement for the goods received.

3.16 Buy-Back: Not Applicable.

3.17 Export License: Not Applicable.

3.18 Free Issue of Material (FIM): Not Applicable.

3.19 Terms of Delivery: The delivery of service shall be on FOR ADE, Bangalore basis.

3.20 Packing and Marking Instructions :

3.20.1 The Seller shall provide packing and preservation of the equipment and spares/goods contracted so as to ensure their safety against damage in the conditions of land, sea and air transportation, transshipment, storage and weather hazards during transportation, subject to proper cargo handling. The Seller shall ensure that the stores are packed in containers, which are made sufficiently strong. The packing cases should have provisions for lifting by crane/fork lift truck. Tags with proper marking shall be fastened to the special equipment, which cannot be packed.

3.20.2 The packing of the equipment and spares/goods shall conform to the requirements of specifications and standards in force in the territory of the Seller's country.

3.20.3 A label in English shall be pasted on the carton indicating the under mentioned details of the item contained in the carton. The cartons shall then be packed in packing cases as required

| | | | |
|-----------------|-----------------------|---|-------|
| 3.20.3.1 | Part Number | : | _____ |
| 3.20.3.2 | Nomenclature | : | _____ |
| 3.20.3.3 | Contract annex number | : | _____ |
| 3.20.3.4 | Annex serial number | : | _____ |
| 3.20.3.5 | Quantity contracted | : | _____ |

3.20.4 One copy of the packing list in English shall be inserted in each cargo package, and the full set of the packing lists shall be placed in Case No.1 painted in a yellow colour.

3.20.5 The Seller shall mark each package with indelible paint in English language as follows

| | | | |
|-----------------|-------------------------------|---|-------|
| 3.20.5.1 | Contract No. | : | _____ |
| 3.20.5.2 | Consignee | : | _____ |
| 3.20.5.3 | Port / airport of destination | : | _____ |
| 3.20.5.4 | Ultimate consignee | : | _____ |
| 3.20.5.5 | Package No. | : | _____ |
| 3.20.5.6 | Gross/net weight | : | _____ |
| 3.20.5.7 | Overall dimensions/volume | : | _____ |
| 3.20.5.8 | The Seller's marking | : | _____ |

3.21 Inspection Instructions :

3.21.1 Inspection Authority: The Inspection will be carried out by a representative of the Lab/Estt duly nominated by the Director.

3.22 Acceptance: Conformance to scope of work.

3.23 Franking Clause: Not Applicable.

3.24 Claims :

3.24.1 The quantity claims for deficiency of quantity and/ or the quality claims for defects or deficiencies in quality noticed during the inspection shall be presented within 45 days of completion of inspection.

3.25 Warranty Clause: Not Applicable.

3.26 Product Support: Not Applicable.

3.27 Annual Maintenance Contract (AMC) Clause: Not Applicable.

3.28 Price Variation (PV) Clause: Not Applicable.

3.29 Intellectual Property Rights (IPR): The rights of Intellectual Property, developed under the Contract, will be the property of Govt. of India.

3.30 Training: Not Applicable.

3.31 Insurance: Not Applicable.

3.32 Installation & Commissioning: Not Applicable.

3.33 Registration: It is advised to register yourself in ADE by submitting application for registration in the prescribed format. Which is available on request, If you are already registered as above, please furnish the details thereof.

3.34 Minimum Order Quantity: Not Applicable.

3.35 Fall Clause: Not Applicable.

3.36 Certificate in respect of Fall Clause: Not Applicable.

3.37 General: No correspondence/discussions will be entertained on the subject unless specifically called for by ADE after opening of the tenders for technical discussions/price negotiations. Any violation of this will render the quotation invalid and the firm is liable to be blacklisted. Director reserves the right to call for techno- commercial/price negotiation. The company should depute competent authorized representative for discussions/negotiations whenever called for and he shall be competent to take on the spot decisions. Drawing/specification must be returned along with your quotation/regret letter.

3.38 The Director, ADE reserves the right to accept or reject any or all offers in part or in full without assigning any reasons and also will not be responsible for any postal delays.

3.39 The commercial terms and conditions are summarized at Appendix 'A' of this tender document. Same needs to be filled signed and uploaded along with technical bid.

3.40 The Make in India Declaration at Appendix-B, Bidder Declaration, and tender document needs to be filled signed and uploaded along with technical bid in company letter Head.

Technical Officer C

PART IV- Vendor Qualification Criteria

Important Note:

- i. **Only bidders who qualify as “LOCAL SUPPLIERS (either as class - I or class -II local suppliers)”** as per Government order No. **No. P-45021/2/2017-PP (BE-II)** dated **16 Sep 2020** issued by **Govt. of India, Ministry of Commerce and Industry, Department of Promotion of Industry and Internal Trade (Public Procurement Section), New Delhi [Subject: Public procurement (preference to Make in India), Order 2017-Revision]** are eligible to participate in the tender. A certificate for meeting the above criteria to be provided by the vendor along with the technical bid.
- ii. Any bidder from such countries sharing a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority as provided in Govt. of India order (Public Procurement No. 1) vide F.No. 6/18/2019-PPD dated 23 Jul 2020. A certificate in compliance for the same to be submitted by the vendor along with technical bid.

Technical Officer C

Part V – Essential Details of Services Required

5.1 Schedule of Requirements: List of services required are as follows –

| Name/Description of Service(s) | Qty. required |
|--|---------------|
| Wind Tunnel Model Design, Fabrication & Testing of Unmanned Fighter Aircraft | 1 Job |

Note:

- Provide the list of item/systems/components and their country of origin with your technical bid for evaluation.
- Provide the total foreign content as Percentage (%) of the bid value.

5.2 Technical Details:

1. Wind Tunnel Model Design, Fabrication & Testing of Unmanned Fighter Aircraft at NWTF.

The activity consists of model design, fabrication and wind tunnel testing at National Wind tunnel Test Facility (NWTF), IIT Kanpur with appropriate flow through intake at various flight conditions at low Mach Numbers to estimate the force and moments.

The technical requirements to do wind tunnel model design and fabrication of Futuristic Unmanned Fighter Aircraft (FUFA) are as follows.

- Speed: 60 m/s
- Angle of incidence range: -15° to 30°
- Side slip angles: -20° to 20°
- Model should have provision to have a closed-air intake and flow through air intake
- Elevon deflection range: -30° to 30° in steps of 5°
- Split rudder deflection range: 5° to 60° in steps of 5° up to 30° and in steps of 10° beyond 30°.

A total of 500 blowdowns are planned. The wind tunnel test plan is given in Table 1.

Table 1: Low speed WT Test Matrix

| Sl. No. | | Model Configuration | Flow Condition | | | Control Surfaces Positions | | | No. of Polars | Purpose of test / Remark |
|----------------------|-----------------------|--|----------------|-----------------------------------|-----------------------------------|----------------------------|--|---|---------------|----------------------------------|
| | | | Speed | α | β | δ_s | δ_{IB} | δ_{OB} | | |
| 1 | Stability Derivatives | Basic (Extended LG) for four different Speed up to 80m/s | 60m/s | -10°, -5°, 0°, 5°, 10° | -20° to 20° | 0° | 0° | 0° | 5 | Basic-lateral/longitudinal |
| | | | | -15° to 30° | -15°, -10°, -5°, 0°, 5°, 10°, 15° | | | | 7 | |
| | | Basic with Intake closed | | 0° | -20° to 20° | | | | 1 | |
| | | | | -15° to 30° | 0° | | | | 1 | |
| Basic without LG | | -10°, -5°, 0°, 5°, 10° | | -20° to 20° | 5 | | | | | |
| | | -15° to 30° | | -15°, -10°, -5°, 0°, 5°, 10°, 15° | 7 | | | | | |
| 2 | | Basic without NLG | | 0° | -20° to 20° | | | | 2 | LG Failure |
| -15° to 30° | | | | 0° | | | | | | |
| 3 | | Basic without 1-MLG | | 0° | -20° to 20° | | | | 2 | LG Failure |
| 4 | | | | -15° to 30° | 0° | | | | | |
| 5 | | Basic without LG (From 30 to 70m/s in steps of 10m/s) | 30 to 70m/s | -15° to 30° | 0° | | | | 5 | Reynolds number test |
| Total Number of runs | | | | | | | | | 35 | Total Basic Runs |
| 1 | Elevons Derivatives | Elevon IB (SB) deflection | 60m/s | -15° to 30° | -10°, -5°, 0°, 5°, 10° | 0° | -30° to+30° ($\Delta\delta=5^\circ$, Exc. $\delta=0^\circ$) | 0° | 60 | IB Elevon Effectiveness |
| 2 | | Elevon OB (SB) deflection | 60m/s | -15° to 30° | -10°, -5°, 0°, 5°, 10° | 0° | 0° | -30° to +30° ($\Delta\delta=5^\circ$, Exc. $\delta=0^\circ$) | 60 | OB Elevon Effectiveness |
| 3 | | Elevon deflection(OB) [Port+SB] | 60m/s | -15° to 30° | 0° | 0° | 0° | -20°, -10°, +10°, +20° (Port and SB same) | 4 | Elevon effectiveness as Elevator |
| 4 | | Elevon deflection(OB) [Port+SB] | 60m/s | -15° to 30° | 0° | 0° | 0° | -20°, -10°, +10°, +20° (Port and SB | 4 | Elevon effectiveness as |

| | | | | | | | | | | |
|----------------------------------|---|---|-----------|-------------|---------------------------|---|---------------------------------------|--------------------------------------|-----|--|
| | | | | | | | | differentially) | | Aileron |
| 5 | | Elevon deflection(SB) [IB+OB] | 60m/ s | -15° to 30° | 0° | 0° | -30° to+30° (Δδ=10°, Exc. δ=0°) | -30° to+30° (Δδ=10°, Exc. δ=0°) | 6 | Elevon effectiveness[IB+ OB] |
| Total Number of runs | | | | | | | | | 134 | |
| 1 | Split Rudder- Elevons Interferenc e Effects | Only Inboard(SB) Control Surface deflection in the presence of Split Rudder | 60m /s | -15° to 30° | 0° | 10° | -30° to+30° (Δδ=5°, Exc. δ=0°) | 0° | 12 | Split Rudder + Inboard Elevon Effectiveness - interference |
| 2 | | | | | | 20° | | | 12 | |
| 3 | | | | | | 30° | | | 12 | |
| 5 | | | 60m /s | -15° to 30° | 10° & 10° | 10° | -20° to+20° (Δδ=5°, Exc. δ=0°) | 0° | 16 | |
| 6 | | | | | | 20° | | | 16 | |
| 7 | | | | | | 30° | | | 16 | |
| 8 | | Only Outboard(SB) Control Surface deflection in the presence of Split Rudder | 60m /s | -15° to 30° | 0° | 10° | 0° | -30° to+30° (Δδ=5°, Exc. δ=0°) | 12 | Split Rudder + Outboard Elevon Effectiveness – interference |
| 9 | | | | | | 20° | | | 12 | |
| 10 | | | | | | 30° | | | 12 | |
| 12 | | | 60m /s | -15° to 30° | 10° & 10° | 10° | 0° | -20° to+20° (Δδ=5°, Exc. δ=0°) | 16 | |
| 13 | | | | | | 20° | | | 16 | |
| 14 | | | | | | 30° | | | 16 | |
| Total Number of runs | | | | | | | | | 168 | |
| 1 | Split Rudder Derivatives | Split Rudder Control Surface deflection [SB Side only] | 60m /s | -15° to 30° | -10°, -5°, 0°, 5°, 10° | 5° to 25° in steps of 5°, 30° to 60° in steps of 10° | 0° | 0° | 40 | |
| 2 | | Split Rudder Control Surface deflection [SB+Port] | 60m /s | -15° to 30° | 0°, 10° | 10° to 60° in steps of 10° | 0° | 0° | 12 | |
| Total Number of runs | | | | | | | | | 52 | |
| GROUND EFFECT TESTING | | | | | | | | | 44 | |
| Flow Visualization and PIV Study | | | | | | | | | 14 | |
| Repeat Runs | | | | | | | | | 8 | |

| | | |
|-----------------------------|-----|----------------------------------|
| TOTAL | 455 | |
| Additional Runs | 45 | Based on the Test results |
| Total Number of runs | 500 | |

2. Inputs from ADE:

ADE will provide the CAD model for the configuration, air loads expected on the model and wind tunnel test matrix

3. Deliverables:

The following are the expected deliverables out of this activity.

1. Model design and analysis report
2. Wind Tunnel Model Inspection Report.
3. Wind Tunnel Model (Hardware). After the completion of testing, the model has to be delivered to ADE.
4. Wind tunnel test data analysis and report
5. Raw Wind tunnel test data of all runs along with Recorded Video and Still Photograph in Portable Hard disk..

4. General Terms and Conditions

- IIT-K to verify CAD geometry with ADE before starting the model design.
- Model design has to be vetted by ADE team before starting fabrication.
- IPR of the technologies developed based on the demanded items rests with ADE.

5.3 Bidders are required to furnish clause by clause compliance of specifications bringing out clearly the deviations from specification, if any. Bidders are advised to submit compliance statement for the technical parameters separately in the following format along with the Techno-Commercial Bid:

| Para of RFP specifications (item-wise) | Specifications of item offered | Compliance to RFP specifications – whether Yes / No Remarks | Remarks (In case of non-compliance, deviation from RFP to be specified in unambiguous terms. In case of compliance, catalogue/brochure reference, if available, to be indicated) |
|---|---------------------------------------|--|---|
| | | | |

For Commercially-Off-The-Shelf (COTS) items, it is mandatory to enclose/ provide Catalogue/technical brochure to support the claims of compliance.

5.4 Delivery Period: Expected Delivery Period for supply of items/rendering services would be **18 Months** from the Effective Date of the Contract. Please note that the Contract can be cancelled unilaterally by the Buyer in case items are not received within the contracted delivery period. Extension of contracted delivery period with/ without LD clause will be at the sole discretion of the Buyer.

5.5 Consignee details:

| | | |
|-----------------|---|---|
| Name | : | Director ADE |
| Address | : | New Thippasandra, Bangalore-560075 |
| Contact details | : | (080)2505 7335/7841/7840, Fax No. :(080) 2505 7843 e-mail: mmdtec@ade.drdo.in, headmmd@ade.drdo.in |

(Technical Officer C)

Part VI – Evaluation criteria of bids

6.1 Evaluation and acceptance Criteria of Bids: The bid will be considered and selected based on instructions contained in Part I and Part II of the RFP for further evaluation of bids as per sequence given below :

6.1.1 Techno-Commercial Bid Evaluation: Bids will be evaluated based on vendor qualification requirement as per Part IV of RFP, if applicable, and bids of the qualified bidders will be considered for further evaluation as mentioned in Part V of the RFP.

Note: Any quotation received with cost included in Technical bid would be liable for rejection.

6.1.2 Price Bid Evaluation: The Price bid of those bidders whose Techno-Commercial bid (if applicable) has been accepted will be opened and comparative statement will be prepared. The best acceptable bid will be decided upon the lowest price quoted by the particular Bidder as per the Price Format given at Part VII of the RFP.

6.2 Procedure for evaluation of Bids: The basis for evaluation of Bids in different situations would be as follows:

- a) The financial bids of the qualified bidders will be compared on the basis of price quoted in the price bid format of the RFP/Bid document.
- b) **Total Cost:** All the cost of the deliverables (FOR destination basis – consignment to Buyer's premises) and services including statutory levies, taxes and duties on final product which are to be paid extra as per actuals. Custom Duty on input materials will not be loaded in their total cost, if such duties are exempted under existing Notifications.
Note: L1 will be decided based on Total Cost.
- c) If there is any discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected accordingly.
- d) If there is any discrepancy between words and figures, the amount in words will prevail for calculation of price.
- e) The best acceptable bid will be considered further for placement of the Contract after price negotiation as decided by the Buyer.

Technical Officer C

Part VII – Price Bid Format

7.1 Price Bid Format: The Price Bid Format as per online BOQ (uploaded) to be filled by Bidder:

Note:

- 1. Vendor should quote as per online BOQ only otherwise bids will be rejected.
- 2. Any quotation received with cost included in Technical bid would be liable for rejection.

(Technical Officer C)

COMMERCIAL TERMS AND CONDITIONS – ADE

Firms are requested to indicate their acceptance for under mentioned

Standard Commercial Terms & Conditions of ADE.

Our Quotation No. _____ & Date _____

| SI NO. | Commercial Terms | ADE Terms | Confirmation of vendors to ADE Terms | |
|--------|--|---|--------------------------------------|--------------------------|
| 1. | Currency | In Indian Rupees Only | Yes/No | <input type="checkbox"/> |
| 2. | Payment | As per Para 3.9, Part III of RFP. | Yes/No | <input type="checkbox"/> |
| 3. | Terms of Delivery | F.O.R. ADE , Bangalore | Yes/No | <input type="checkbox"/> |
| 4. | Packing & Forwarding charges(if any) | Quoted cost inclusive of P&F charges | Yes/No | <input type="checkbox"/> |
| 5. | Freight | Quoted cost to be inclusive of Freight | Yes/No | <input type="checkbox"/> |
| 6. | Delivery schedule | As mentioned in Tender documents (If not, indicate your Delivery Schedule) | Yes/No | <input type="checkbox"/> |
| 7. | Validity of quote | 180 days from the date of opening of the tender | Yes/No | <input type="checkbox"/> |
| 8. | Goods and Service Tax (GST) | Indicate % of GST with supporting documents (As mentioned in Para 2.16, Part II of RFP). | _____% Yes/No | <input type="checkbox"/> |
| 9. | Bid Security /Earnest Money Deposit(EMD) | As per Para 1.14, Part I (A) of RFP. | Furnished/ Not Furnished | <input type="checkbox"/> |
| 10. | Performance Security Bond | As per Para 3.2, part III of RFP. | Agreed/ Not Agreed | <input type="checkbox"/> |
| 11. | Liquidated Damage (LD) | As per Para 2.10, Part II of RFP. | Agreed/ Not Agreed | <input type="checkbox"/> |
| 12. | Make In India Declaration Form | Make In India Declaration Form Appendix B | Submitted/ Not submitted | <input type="checkbox"/> |
| 13. | Ordering Information [Order to be placed on] | (Indicate Name, Address of the firm, Contact No. and Email Id) | | |

Note: Vendors are requested to submit this format duly completed with their seal and signature along with their quotation. Non submission of this format may lead to rejection of your offer.

Note:

N-1 : Those bid received without Make In India Declaration Form is liable for rejection of bid without any notice.

N-2 : Copy of EMD exemption documents (Vendor Registration certificate, Security Declaration Letter etc.) to be uploaded during online submission of Technical Bid for immediate notice at the time of opening the bid.

N-3 : It is mandatory to register in GeM Portal for release of OAL/PO. If the vendors are not registered with GeM Portal, it is advised to get registered with GeM immediately.

Web URL: <https://mkp.gem.gov.in/registration/signup#!/seller>.

Mail Id: helpdesk-gem[at]gov[dot]in; Toll free Number:1800-419-3436;1800-102-3436

Make In India Declaration Form

A certificate in company's letterhead to be provided for compliance to the make in India

| SI No | Clause | Remark of vendor |
|---|--|------------------|
| 1 | Only bidders who qualify as "LOCAL SUPPLIERS (either as class - I or class -II local suppliers)" as per Government order No. No. P-45021/2/2017-PP (BE-II) dated 16 th Sep 2020 issued by Govt. of India, Ministry of Commerce and Industry, Department of Promotion of Industry and Internal Trade (Public Procurement Section), New Delhi [Subject: Public procurement (preference to Make in India), Order 2017-Revision] are eligible to participate in the tender. | |
| 2 | Any bidder from such countries sharing a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority as provided in Govt. of India order (Public Procurement No. 1) vide F. No. 6/18/2019-PPD dated 23 Jul 2020. | |
| 3. | <i>Provide the list of item/systems/components and their country of origin with your technical bid for evaluation</i> | |
| 4. | Total foreign content as Percentage (%) _____ of the bid basic value | |
| <p>Note: For Bids more than 10 crores kindly provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.</p> | | |

(Signature of the Bidder, with Official Seal)