
REQUEST FOR PROPOSAL

**for
Supply and Installation
of
Fixed-base Flight Simulator**

*Under the Department of Sports and Youth Services,
Government of Mizoram.*

(RFP No. No.F.12011/4/2017-DTE (SYS) dated 10th November, 2017)

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for
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PART-I
GENERAL INFORMATION

1.0. Introduction:

The Government of Mizoram, Department of Sports and Youth Services, acknowledging the need, and pursuing the proposal made by CO 1 Mizo Air Squadron, for a **Fixed-base Flight Simulator**, has approved its procurement. Therefore, the Director, Sports and Youth Services Department, Government of Mizoram, invites sealed Quotations for **Supply and Installation of one Fixed-base Flight Simulator** as per details stated in this Request For Proposal (RFP).

The Government of Mizoram is expected to provide 100% of the estimated cost. Items of work, location for installation and delivery and other specifications will be as stated in this Request for Proposal (RFP) which is available on request as well as in the Department website at www.sys.mizoram.gov.in.

This RFP is being issued with no financial commitment and the Director, Sports and Youth Services Department, Government of Mizoram, reserves the right to change or vary any part thereof at any stage. Director, Sports and Youth Services Department, Government of Mizoram, also reserves the right to withdraw the RFP, should it become necessary at any stage without assigning any reason.

2.0. Broad Scope of Tender:

The scope of work to be performed by selected Bidder will include (but is not limited to) the following tasks:

- (a). To Supply, Install, Integrate, Configure and Test-run all equipments, items, authentic and authorised software required for functioning of Fixed-base Flight Simulator as per technical details placed at Part II and Annexure-I.
- (b). *(Optional-may or may not be procured or Qty be changed by buyer)* To Supply, Install, Integrate, Configure and Test-run all equipments, items, authentic and authorised software required for Two Remote Cockpit Systems to function in conjunction with the Fixed base Flight Simulator stated at Paragraph (a) above.
- (c). To provide Annual Maintenance Contract (AMC) services for all equipments and software, post warranty period, for the five years of operational life.

3.0. Information to Bidders:

3.1. Eligibility Conditions:

Eligible Bidder will be the one who satisfies the following conditions:

- (a). Not blacklisted or under process of being black listed by any Government agency across India.

- (b). Have past experience of supplying and installing flight simulators. Proof to be provided along with the Technical Bids in the form of supply orders and related completion certificate/payment release orders.
- (c). A Bidder shall be debarred if he falls under any of the conditions mentioned under Rule No.151 of GFR, 2005 for debarment of Bidders.

3.2. The complete process of tendering and procurement will be as per the Guidelines issued by the Government of Mizoram for Regulating Supply and Purchase of Materials, 2013, as amended and from time to time, the General Financial Rules, 2005 as adopted by Government of Mizoram and as amended from time to time and any other relevant rules being in force in the State of Mizoram.

3.3. Definitions:

For the purpose of clarity, the following words and expressions shall have the meanings hereby assigned to them:

- (a). **Approval:** means approval in writing by the designated officer of the Buyer.
- (c). **Buyer:** means the Sports and Youth Services Department, Government of Mizoram represented by the Secretary/Director, and shall also include its administrators, executors and assignees.
- (d). **Seller:** also referred to as 'Contractor' means an agency appointed by Buyer for execution of the work (supply and installation, training etc.) as stated in this RFP.
- (f). **Letter of Award (LOA) :** As defined in Part-I Clause 3.7 (d) of this RFP.
- (g). **Government:** means the Government of Mizoram, Sports and Youth Services Department.
- (h). **Departmental Purchase Advisory Board (DPAB):** means purchase board constituted by Government of Mizoram under Finance Department O.M. vide No.G.25017/1/03-FEC dated 14th March, 2013 as amended from time to time.

3.3. Brief description of bidding Process:

3.3.1: Two Bid System:

The method of **Two Bid System** through **Limited Tender Enquiry** will be adopted for selection of Bidder for awarding the contract from amongst firms and authorised dealers in India. The Bidders must satisfy themselves that they are qualified to bid and should give an understanding to this effect.

- (a). Tenders should be forwarded by Bidders under their original memo / letter pad inter alia furnishing details like CIN, PAN, GST Number and clearance certificate, Bank Address with NEFT Account if applicable, and complete postal & e-mail address of their office.
- (b). The Technical Bid and the Financial Bid should be sealed by the Bidder in separate covers duly superscribed in BOLD letters and with RED INK - . **"Quotation for Supply**

and Installation of Fixed Base Flight Simulator – Technical Bid” and “Quotation for Supply and Installation of Fixed Base Flight Simulator – Financial Bid” for the Technical Bid and for the Financial Bid respectively. The two sealed covers should be put into a bigger cover which should also be sealed and duly superscribed with - **“Quotation for Supply and Installation of Fixed Base Flight Simulator”**. **The RFP number should also be superscribed on the sealed cover below the title.** Tendering authority will not be responsible for accidental opening of the covers that are not properly superscribed and sealed.

- (c). Technical Bid should cover all the technical requirements placed at Annexure–II.
- (d). Technical Bid WILL NOT contain any reference to cost.
- (e). Rates of items is to be quoted both in figures and in words. Wherever discrepancy is noticed between the two rates, the lower amount will be considered as final. Any erasure, cutting and overwriting will be duly authenticated by the person responsible for tender and with business stamp.
- (f). The Financial Bid will include all type of Taxes, GST etc., and Supply, Installation & Training Cost at Lengpui, Mizoram.
- (g). The Financial Bid shall clearly specify delivery schedule and payment terms.
- (h). The Financial Bid shall specify Warranty details.
- (i). The Financial Bid shall specify Validity of quotes for a period of 120 days from last date fixed for submission oftender.

3.4. All Bids shall be made in the **English Language only**.

3.5. Quotation Details:

Address and contact numbers for submission of quotation or seeking clarifications is given below:

(a)	Tenders /Queries to be addressed /submitted to:	The Director, Sports & Youth Services Department Government of Mizoram, Aizawl.
b)	Postal address for sending the Tenders:	The Director, Directorate of Sports & Youth Services, Hauva Building, Dawrpui Saron Road, Aizawl, Mizoram Pin- 796001.
(c)	Name and Designation of the contact personnel:	Mr. Zothanmawia, MCS Director, Department of Sports & Youth Services Government of Mizoram
(d)	Telephone numbers of the contact personnel:	+91-0389-2325263

(e)	Email id of contact personnel:	dsysmizoram@gmail.com
(f)	Fax number:	+91-0389-2326103

3.6. Mode of delivery of Bids:

Tender box marked “**Flight Simulator**” for dropping of quotation shall be placed at **the office of the Director, Sports and Youth Services Department (address at 3.5.(a) above)** from the date of issue of this Request for Proposal, for receiving the bids. The Tender Box will be available for submission of bids during office hours on all working days. On the last day fixed for submission, it would be available upto 12:00 Noon only. The bids can also be submitted by courier/registered post in sealed envelopes. Late tenders will be summarily rejected. No responsibility will be taken for postal delay or non-delivery/non-receipt of Tender documents. Tender sent by FAX or e-mail will not be considered.

3.7. Schedule of the Bidding process:

- (a). Last date for submission of Bids is fixed at 30 (Thirty) days from the date of issue of RFP upto 12:00 Noon.
- (b). Date of opening of Technical Bids is fixed at 1:00 PM on the last day fixed for submission of bids at the office of the The Director, Sports and Youth Services Department, Mizoram, address given at Para 3.5.(b). above, who, in the presence of the Bidders or representatives who choose to attend, will subsequently examine and determine whether each Bid is responsive to the requirements of this **RFP**. A bid shall be considered responsive only if:
 - (a) It is received by the Bid due date including any extension thereof, if any.
 - (b) It is signed, sealed and marked as stipulated.
 - (c) It contains all information (Complete in all respects) as requested in this **RFP**.
 - (d) It does not contain any conditions or qualifications.

Representatives are required to bring photo identity card and Authority Letter with photograph duly attested by the owners/company without which they will not be permitted to participate in the bid. This event will not be postponed due to non-presence of any Bidders or their representatives.

- (c). Post scrutiny of the Technical Bids, the Financial Bids of only those Bidders who qualify in the Technical Bid will be opened. The date and time of opening of Financial Bids will be intimated to the Bidders whose bids are technically acceptable.

All qualified Bidders or their representatives are requested to be present on the day of opening of Technical Bids. Representatives are required to bring photo identity card and Authority Letter with photograph duly attested by the owners/company without whom they will not be permitted to participate in the bid. This event will not be postponed due to non-presence of any Bidders or their representatives.

If due to any exigency, the due date for opening of the Technical Bids or Financial Bids is/are 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 Director, Sports and Youth Services Department.

- (d). After selection, and approval of Government, a Letter of Award (LOA) shall be issued by the Buyer to the Selected Bidder and the Selected Bidder shall, within 14 (Fourteen) days of the issue of the LOA, acknowledge receipt of the same indicating therein its acceptance or otherwise of the LOA and the assignment.
- (e). Signing of Contract Agreement will be within 14 days of LOA.

3.8. GENERAL TERMS OF BIDDING:

3.8.1. Earnest Money Deposit:

Tenderers are required to submit Earnest Money Deposit (EMD) for an amount of Rs. 50,000.00 (Rupees Fifty Thousand) Only along with their **Technical Tender**. The EMD may be submitted in the form of an Account Payee Demand Draft, from any public sector banks drawn in favour of "**The Director, Sports and Youth Services Department, Mizoram**", payable at Aizawl. EMD is to remain valid for a period of forty-five days beyond the bid validity period (i.e. validity of quotes for a period of 60 days from last date of submission of tender). **No other mode of payment will be accepted.** EMD of the unsuccessful Bidders will be returned to them at the earliest without any interest after expiry of the bid validity period and latest on or before the 30th day after the award of the contract. The EMD of the successful Tenderer would be returned, without any interest whatsoever, after the receipt Performance Security (five percent of value of the contract) from them as called for in the contract. The EMD will be forfeited if the Tenderer withdraws or amends impairs or derogates from the tender in any respect within the validity period of their tender. Bids without the EMD **will be summarily rejected. Claim for exemption from submission of EMD will not be entertained for whatsoever reason it may be, unless accompanied with due notification details.**

3.8.2 Pre Tender Meeting / Clarification Regarding Contents of the RFP:

A prospective Tenderer who requires clarification regarding the contents of the Tendering documents shall notify to the Buyer about the clarifications sought well in advance (at least 3 working days) to the date of Pre Tender Meeting. All queries will be clarified via email or call.

3.8.3. Modification or Withdrawal of Tender:

Withdrawal of Tender will not be entertained once the same is deposited / dropped in the Tender Box or received. Tenderer may submit a modified tender before the last date of receipt of tender, wherein, the lowest financial tender shall be considered for evaluation.

3.8.4. Clarification Regarding Contents of the Tender:

During evaluation and comparison of Tender, the Buyer may, at its discretion, ask the Tenderer for clarification of his Tender. The request for clarification will be given in writing and no change in prices or substance of the Tender will be sought, offered or permitted. No post-tender clarification on the initiative of the Tenderer will be

entertained.

3.8.5. Rejection of Tender:

Canvassing by the Tenderer in any form, unsolicited letter and post-tender correction will invoke summary rejection with forfeiture of EMD. Conditional tenders will be rejected.

3.8.6. Liquidated Damages:

For late delivery in Part or full, later than delivery date in the contract, 0.5% of the contracted value for each week or part thereof subject to a maximum of 10%. The amount will be deducted from the amount due to the Bidder.

3.8.9. No increase in price because of any statutory increase in or fresh imposition of custom duty, excise duty, or any other tax or duty levied in respect of stores will be accepted once the bid is submitted.

3.8.10. High standard of workmanship, quality of material and timely supply are the prime requisites of the contract.

3.8.11. On award of the contract, the acknowledgement of supply order should be furnished within seven days of receipt of the supply order. Non-acceptance of supply order will result in non-refund of security deposit.

3.8.12. *The Director, Sports and Youth Services Department, Mizoram* has the authority to change the quantity of items demanded as per requirement at a later date.

3.8.13. The Board of officers constituted for opening of tender and for deciding the award of tender reserves the right of rejecting any tender without assigning any reason whatsoever, and the decision in the matter will be final. The lowest tender may not necessarily be accepted.

3.9. Check List for Submission of Bids:

(a) Documents to be submitted along with the Bids:

- (i) Forwarding letter in company letter head giving details as per Clause 3.3.1.(a) above.
- (ii) EMD in the form of Account Payee Demand Draft as per Clause 3.8.(a) above.
- (iii) Technical Bid in sealed envelope.
- (iv) Financial Bid in sealed envelope.
- (v) Copy of GST & Incorporation Certificate.
- (vi) Agreement between Bidder and Purchaser as per format given at Annexure-III.
- (vii) Experience certificate.

(b) On day of opening of Tender:

- (i) Authorization letter for representative with photo affixed and valid photo identity card.

PART-II
ESSENTIAL DETAILS OF ITEMS/SERVICES REQUIRED

1. Schedule of Requirements:

List of items / services required is as follows:-

SI No	Description of Item	Quantity
1	Fixed Base Flight Simulator	01 (One)
2	Remote Cockpit System	01 (Optional Refer Clause 2.0.(b))
3	AMC (Post Warranty)	For a period of Four years

2. Technical Details:

The technical specifications of the items are attached as Annexure-I and format for submitting capability/Capacity report of the firm is placed as Annexure-II to this RFP.

3. Compliance of Specifications:

Tenderers are required to furnish clause by clause compliance of specifications bringing out clearly the deviations from specification, if any. The Technical Bids will be evaluated by the Technical Evaluation Committee (TEC) constituted by Government and recommendations of the TEC will be final and binding. The Tenderers are advised to submit the compliance statement and capability/capacity report of the firm as per the Annexure-I & II (enclosed with RFP).

4. Delivery Period:

Delivery **and installation** of Flight Simulator will have to be delivered within 90 (Ninety) days from the date of issue of Contract Award. It is to be noted 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 will be at the sole discretion of the Buyer with applicability of Late Delivery Clause.

5. Qualitative Requirement:

The Contract can be cancelled unilaterally by the Buyer in case the Tenderer (who turns out to be 'L1' and is allotted the contract to supply and install the simulator) doesn't meet the qualitative requirements (specified in Annexure-II to this RFP as Detailed Technical Specifications) as accepted in evaluation criteria.

6. Place of Delivery and Consignee Details:

The supply and installation of the Flight Simulator Set up will be for **1 Mizo Air Squadron** at location 1 Mizo Air Sqn, Near JCB Building, Peter Street, Lower Khatla, Aizawl. The Tenderer has to provide warranty support for any un-serviceability at site where the Flight Simulator Setup is positioned. The deputing of manpower for warranty repair at location will be the responsibility of the Tenderer with no additional cost to the Buyer.

PART-III
STANDARD CONDITIONS OF REQUEST FOR PROPOSAL

1.0. The Bidder is required to give confirmation of their acceptance of the conditions mentioned in the Request for Proposal which will automatically be considered as part of the agreement concluded with the successful Bidder (i.e. Seller in the Contract) as selected by the Buyer. Failure to do so may result in rejection of the Bid submitted by the Bidder.

2.0. Law:

The contract shall be considered and made in accordance with the laws of the State of Mizoram. The contract shall be governed by and interpreted in accordance with the laws of the State of Mizoram and Republic of India.

3.0. 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 construction or performance, which cannot be settled amicably, shall be resolved by arbitration. (In this case Governor, State of Mizoram will be final arbitrator). **The place of such arbitration shall be at Aizawl, Mizoram.**

4.0. Penalty of Undue Influence:

The Seller shall undertake 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 present contract or any other contract with the Government of the State of Mizoram for showing or forbearing to show favour or disfavour to any person in relation to the present contract or any other contract with the Government of the State of Mizoram.

5.0. Agents/ Agency Commission:

The Seller shall confirm and declare to the buyer that the Seller is the original manufacturer of the stores/provider of the services referred to in this contract and 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 shall agree 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 supply 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 is 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 bank rates of Nationalized banks in India.

6.0. Access to Books of Accounts:

In case it is found to the satisfaction of the Buyer that the Seller has engaged an Agent or paid commission or influenced any person to obtain the contract as described in clauses relating to Agents/Agency Commission and penalty for use of undue influence, the Seller, on a specific request of the Buyer, shall provide necessary information / inspection of the relevant financial documents/information.

7.0. Non- Disclosure:

Except with the written consent of the Buyer/ Seller, no other party shall disclose the contract or any provision, specification, plan, design, pattern, sample or information thereof to any third party.

8.0. Liquidated Damages:

In the event of the Seller's failure to submit the bonds, guarantees and documents; to supply the stores/goods and conduct trials; to install equipment; impart training, etc as specified in this contract, the Buyer may, at his discretion, withhold any payment until the completion of the Contract.

The Buyer may also deduct from the Seller as agreed, liquidated damages to the sum of 0.5% of the contract price of the delayed/undelivered stores/services mentioned above for every week of delay or part of a week, subject to the maximum value of the Liquidated Damages being not higher than 10% of the value of delayed stores.

9.0. Termination of Contract:

The Buyer shall have the right to terminate this Contract in part or in full in any of the following cases:

- (a). The delivery of the material is delayed beyond due date for the scheduled date of delivery.
- (b). The Seller is declared bankrupt or becomes insolvent.
- (c). The Buyer has noticed that the Seller has utilised the services of any Indian/Foreign agent in getting this contract and paid any commission to such individual or company etc.

10.0. Notices:

Any notice required or permitted by the contract shall be written in the English language and may be delivered personally or may be sent by FAX or registered pre-paid mail/airmail, addressed to the last known address of the party.

11.0. 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 present contract or any part thereof.

12.0. Patents and Other Industrial Property Rights:

The prices stated in the present 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.

13.0. Taxes and Duties:

The Financial Bid will include all type of taxes like GST etc., for Supply and Installation of the equipment at Lengpui, Mizoram. The rate of such duty/tax should be clearly indicated. However, if the Bidder desires to ask for excise duty or GST as extra, the same must be specifically stated. In the absence of any such stipulation, it will be presumed that the prices include all such charges and no claim for the same will be entertained.

If a Tenderer is exempted from payment of any Duty/Tax up to any value of supplies from them, he should clearly state that no such duty/tax will be charged by him up to the limit of exemption which he may have. In case any refund of duty/ tax is granted to them by respective authorities in respect of stores supplied under the contract, they will pass on the credit to the Buyer immediately along with a certificate that the credit so passed on relates to duty/ tax, originally paid for the stores supplied under the contract. In case of their failure to do so within 10 (ten) days of the issue of the refund orders to them by the authorities, the Buyer would be empowered to deduct a sum equivalent to the amount refunded by the authorities without any further reference to them from any of their outstanding bills against the contract or any other pending Government contract and that no disputes on this account will be raised by them.

14.0. Performance Guarantee:

The Bidder will be required to furnish a Performance Guarantee by way of Demand Draft / Banker's cheque / irrevocable Bank Guarantee through a public sector bank for a sum equal to 5% of the contract value within 15 days of receipt of the confirmed order. Performance Guarantee should be valid up to 60 days beyond the certified date of completion of installation.

15.0. Fall Clause:

The Bidder will undertake to state that he has not supplied/ is not supplying similar systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or any other State/ Central Government departments across India, and if the similar system has been supplied at a lower price than the details regarding the cost, time of supply and quantities should be included in the financial offer. If it is found at any stage that similar system or sub-system was supplied by the Bidder to any other Ministry/Department of the Government of India or any other state/ Central Government departments across India at a lower price, then

that very price with due allowance for quantities and intervening time period would be applicable to the present case and the difference in the cost would be refunded by the Bidder to the Buyer, even if the contract has already been concluded.

16.0. Inspection Authority:

On completion of the installation and functional checks, the developed Fixed-base Flight Stimulator will be tested for its functionalities and replication/ resemblance of the hardware. The Inspection will be carried out by the team detailed by CO 1 Mizo Air Squadron who will submit its report of acceptance to the Director, Sports and Youth Services Department, Government of Mizoram, who will initiate process for release of payment.

17.0. Warranty:

Except as otherwise provided in the invitation tender, the Seller shall declare that the goods, stores articles sold/supplied to the Buyer under this contract is of the best quality and workmanship and new in all respects and is strictly in accordance with the specifications and particulars contained/mentioned in the contract. The Seller shall further guarantee that the said goods/stores/articles would continue to conform to the description and quality aforesaid for a period of 12 months from the date of final acceptance, post installation and testing in the premises of the Buyer.

In case of breakdown of any equipment, the downtime will commence after 12 hours after informing the office of the Seller. If the Seller fails to address the defect even after expiry of 10 working days from the date the defect was first reported, the Buyer shall have without prejudice, the right to recover damages for breach of contract.

18.0. Guarantee:

The Seller shall guarantee that they will supply spare parts, if and when required on agreed basis for an agreed price. The list of spares with agreed price of supply with percentage increase per year shall be mentioned in the list. The agreed basis could be and including, but without any limitation an agreed discount on the published catalogue or an agreed percentage of profit on the landed cost. The Seller shall guarantee to the effect that they will make available the blue prints of drawings of the spares if and when required in connection with the equipment.

The Seller shall guarantee to the effect that before going out of production for the spare parts, they will give adequate advance notice to the Buyer of the equipment so that the latter may undertake the balance of the lifetime requirements.

19.0. Spares & Maintenance Support:

Spare for critical items are to be provided as deliverable. Also, assurance for spare support for next 5 years is to be given in writing by the Seller from the date of acceptance of the hardware.

20.0 ANNUAL MAINTENANCE CONTRACT (AMC):

Annual Maintenance Contract of four years **post warranty** is required at the site. **While submission of Bids, Bidders should also submit quotes for Annual**

Maintenance Contract (actual cost and Net Present Value) which should be inclusive of all taxes. The cost component of the Annual Maintenance Contract, to the net present value (NPV), shall be added to the evaluated tender value to decide the inter-se ranking of the responsive tenders on equitable basis.

Rates of prices charged by the maintenance contractor should not exceed the prevailing rates charged by it from others for similar services. The contractor shall give a certificate to this effect in its bill while claiming payment.

The Buyer reserves the right to terminate the maintenance contract at any time without assigning any reason. The contract shall be deemed to be cancelled after forty-five (45) days from the date of issue of the notification of termination. The seller will not be entitled to claim any compensation against such termination. However, while terminating the contract, if any payment is due to the seller for maintenance services already performed in terms of the contract, the same would be paid to it as per contract terms.

Part-IV
SPECIAL CONDITIONS

1.0. Payment Terms:

Payment shall be released after all works as stated in the RFP has been completed after receipt of acceptance certificate by the user.

Advance payment of 30% (Thirty percent) may also be admissible on issue of Supply/Work Order.

2.0. Specification:

The specification clauses will form part of the contract placed on successful Bidder, the Seller shall guarantee to meet the specifications as per Part II and Annexure-I of RFP and to incorporate the modifications to the existing design configuration to meet the specific requirement of the Buyer as per modifications/requirements recommended after the maintenance evaluation trials. All technical literature and drawings shall be amended as the modifications by the Seller before delivery to the Buyer. The Seller, in consultation with the Buyer, may carry out technical upgrades/alterations in the design, drawings and specifications due to change in manufacturing procedures, indigenisation or obsolescence. This will, however, not in any way, adversely affect the end specifications of the equipment. Changes in technical details, drawings rep and maintenance techniques along with necessary tools as a result of up gradation/alterations will be provided to the Buyer free of cost within **60** days of affecting such upgradation/alterations.

3.0. OEM Certificate:

In case the Bidder is not the OEM, the agreement certificate with the OEM for sourcing the spares is mandatory. However, where OEMs do not exist, minor aggregates and spares can be sourced from authorized vendors subject to quality certification.

4.0. Earliest Acceptable Year of Manufacture:

Within one year of supply. Quality/ Life certificate will need to be enclosed with the bill.

5.0. Packing and Marking:

The following Packing and Marking clause will form part of the contract placed on successful Bidder:

(a) 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, storage and weather hazards during transportation, subject to proper cargo handling. The Seller shall ensure that the stores are packed in containers/boxes, which are made sufficiently strong. The heavy cases should have hooks for lifting by crane/fork lift truck. Tags with proper marking shall be fastened to the special equipment, which cannot be packed.

(b) 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.

- (c) Each spare, tool and accessory shall be packed in separate cartons. A label in English shall be pasted on the carton indicating the under mentioned details of the item contained in the carton. A tag in English with said information shall also be attached. The cartons shall then be packed in packing cases as required.
- (1). Part Number
 - (2). Nomenclature
 - (3). Contract Annex Number
 - (4). Annex Serial Number
 - (5). Quantity Contracted
- (d) 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.
- (e) The Seller shall mark each package with indelible paint in the English Language as follows:
- (i) Contract No:
 - (ii) Consignee:
 - (iii) Port / port of destination:
 - (iv) Ultimate consignee:
 - (v) Seller
 - (vi) Package No:
 - (vii) Gross/net weight:
 - (viii) Overall dimensions/volume
 - (ix) The Seller's marking
- (f) If necessary, each package shall be marked with warning inscriptions like "<TOP>", "DO NOT TURN OVER", "FRAGILE", category of cargo etc.
- (g) Should any special equipment be returned to the Seller by the Buyer, the letter shall provide normal packing, which protects the equipment and spares/goods from the damage of deterioration during transportation by land, or any other means. In this case the buyer shall finalize the marking with the Seller.

6.0. Transportation:

F.O.R. Destination basis inclusive of Packing, Forwarding, Freight charges, Transit Insurance and any other charges as applicable.

7.0. Quality:

The quality of the stores delivered according to the present contract shall correspond to the technical conditions and standards valid for the delivery of the same stores for in Seller's country or specifications enumerated as per RFP and shall also include therein, modification to the stores suggested by the Buyer. Such modifications will be mutually agreed to. The Seller confirms that the stores to be supplied under this Contract shall be new i.e. not manufactured before (Year of Contract), and shall incorporate all the latest improvements and modifications.

8.0. Quality Assurance:

Seller would provide the Standard Acceptance Test Procedure (ATP) within one (01) month from the date of contract. Buyer reserves the right to modify the ATP. Seller would be required to provide all test facilities at installation premises for acceptance and inspection by buyer. The details in this regard will be coordinated during the negotiation of the contract. The item should be of the latest manufacture, conforming to the current production standard and having 100% defined life at the time of delivery.

9.0. Joint Receipt Inspection:

The parties agree that the Joint Receipt Inspection (JRI) of delivered goods shall be conducted on arrival at installation site. JRI shall be completed within seven working days of arrival of good at the Consignee. JRI will consist of quantitative checking to verify that the quantities of the delivered goods correspond to the quantities defined in this contract and the invoices and status of packaging before the same is opened.

10.0. Final Inspection:

The Final Inspection will be carried out by representatives of the Director, Sports and Youth Services, Government of Mizoram, CO 1 Mizo Air Squadron and other experts as required. The mode of Inspection will be Joint Inspection. On completion of the installation and functional checks, the developed Fixed-base Flight Simulator will be tested for its functionalities and replication/ resemblance of the hardware.

11.0. Franking Clause:

- (a) In the case of Acceptance of Goods “The fact that the goods have been inspected after the delivery period and passed by the Inspecting Officer will not have the effect of keeping the Contract alive. The goods are being passed without prejudice to the rights of the Buyer under the terms and conditions of the Contract”.
- (b) In the case of Rejection of Goods “The fact that the goods have been inspected after the delivery period and rejected by the Inspecting Officer will not bind the Buyer in any manner. The goods are being rejected without prejudice to the rights of the Buyer under the terms and conditions of the Contract.”

12.0. Claims:

- (a) Claims may be presented either: (a) on quantity of the stores, where the quantity does not correspond to the quantity shown in the Packing List/Insufficiency in packing, or (b) on quality of the stores, where quality does not correspond to the quality mentioned in the Contract.
- (b) The quantity claims for deficiency of quantity shall be presented within 45 days of completion of Joint Inspection and acceptance of goods. The quantity claim shall be submitted to the Seller as per Form DPM22 (Available in MoD website).
- (c) The quality claims for defects or deficiencies in quality noticed during the Joint Inspection shall be presented within 45 days of completion of Joint Inspection

and acceptance of goods. Quality claims shall be presented for defects or deficiencies in quality noticed during warranty period earliest but not later than 45 days after expiry of the warranty period.

- (d) The description and quantity of the stores are to be furnished to the Seller along with concrete reasons for making the claims. Copies of all the justifying documents shall be enclosed to the presented claim. The Seller will settle the claims within 45 days from the date of the receipt of the claim at the Seller's office, subject to acceptance of the claim by the Seller. In case no response is received during this period the claim will be deemed to have been accepted.
- (e) The Seller shall collect the defective or rejected goods from the location nominated by the Buyer and deliver the repaired or replaced goods at the same location under Seller's arrangement.
- (f) Claims may also be settled by reduction of cost of goods under claim from bonds submitted by the Seller or payment of claim amount by Seller through demand draft drawn on a nationalised bank.
- (g) The quality claims will be raised solely by the Buyer and without any certification/counter signature by the Seller's representative.

PART -V

EVALUATION CRITERIA & PRICE TENDER ISSUES

1.0. Evaluation Criteria:

Only those Tenders will be evaluated which are found to be fulfilling all the eligibility and qualifying requirements of the RFP, both technically and financially.

2.0. Time taken for evaluation and extension of tender validity:

- (a) The evaluation of tenders and award of contract shall be completed, in 60 days, within the period for which the tenders are held valid.
- (b) In case the evaluation of tenders and award of contract is not completed within extended validity period, all the tenders shall be deemed to have become invalid and fresh tenders will be called for.

3.0. Process of tender evaluation to be confidential until the award of the contract is notified:

- (a). The Tender Inviting Authority shall ensure the confidentiality of the process of tender evaluation until relevant orders on the tenders are passed.
- (b). The Tender Accepting Authority shall cause the information on orders passed on the tenders to be published.
- (c). The Tender Inviting Authority or the Tender Accepting Authority may seek bonafide clarifications from Tenderers relating to the tenders submitted by them during evaluation of tenders.

3.0. Initial examination to determine substantial responsiveness:

Initial examination shall consider the following factors, namely -

- (a) Whether the Tenderer meets the eligibility criteria laid down in the tender documents.
- (b) Whether the crucial documents have been duly signed.
- (c) Whether the requisite earnest money deposit has been furnished.
- (d) Whether the tender is substantially responsive to the technical specifications, financial conditions set out in the Tendering documents including the testing of samples where required.

4.0. Determination of the lowest evaluated price:

- (a) Out of the tenders found to be substantially responsive after the initial examination, the Tenderer who has tendered the lowest evaluated price in accordance with the evaluation criteria or the Tenderers scoring the highest on the evaluation criteria specified as the case may be will be determined.

The cost component of the Annual Maintenance Contract, to the Net Present Value (NPV), shall be added to the evaluated tender value to decide

the inter-se ranking of the responsive tenders on equitable basis.

- (b) In determining the lowest evaluated price, the following factors will be considered, namely:
- (i) The quoted price(s) shall be corrected for arithmetical errors.
 - (ii) In cases of discrepancy between the prices quoted in words and in figures, lower of the two shall be considered.
 - (iii) Adjustments to the price(s) quoted shall be made for deviations in the financial conditions such as the delivery schedules and minor variations in the payment terms which are quantifiable but deemed to be non-material in the context of the particular tender.
 - (iv) The evaluation shall include all State/Central taxes and duties such as GST, customs duty and central excise duty as a part of the price.
 - (v) In the case of purchase of equipment, the operation and maintenance and spare part costs for appropriate periods as may be specified in Tender documents may be quantified, where practicable and considered.
 - (vi) If there is a 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.
- (c) In order to secure the best possible procurement price, negotiations with the lowest Tenderer will be permissible.

5.0. Preparation of evaluation report and award of tenders:

- (a) **The officer evaluating the tender will prepare detailed evaluation report which will be considered by the Departmental Purchase Advisory Board (DPAB) who will place its recommendation before Government for final approval.**
- (b) As soon as the Tenderer qualified to perform the contract is identified and accepted for award of contract, order of acceptance will be communicated to the successful Tenderer.
- (c). Within such reasonable time as may be indicated in the tender documents, the Tenderer whose tender has been accepted will be required to execute a contract agreement in the prescribed format given in Annexure-III.
- (d) In case the successful Tenderer fails to execute necessary agreement as prescribed, within the period specified, then his Earnest Money Deposit shall be forfeited and his tender held as non-responsive.

6.0. Price Bid Format:

The Price Bid Format is given below and Bidder is required to fill this up correctly with full details:

Sl No	Description	Unit price	GST	Custom duty	Any other tax/duties/ Discounts	Overall unit price	Qty	Total price	Remarks
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- (a) Basic cost of the item/items :
- (b) Any other item :
- (c) Is Excise Duty extra? :
- (d) If yes, mention the following:
- (i). Total value of items on which Excise Duty is leviable :
- (ii). Rate of Excise duty (item wise if different ED is applicable) :
- (iii). Surcharge on Excise duty, if applicable :
- (iv). Total value of excise duty payable :
- (v). Is Excise Duty Exemption (EDE) required :
- (vi). If yes, then mention and enclose the following :
- (vii). Excise notification number under which EDE can be given :
- (e). Is GST extra? : YES/NO
- (f). If yes, then mention the following:
- (i) Total value on which GST is leviable :
- (ii) Rate of GST :
- (iii) Total value of GST leviable :
- (g). Is Custom Duty Exemption (CDE) required? : YES/NO
- If yes, then mention the following:
- (i). Custom notification number under which CDE can be given (Enclose a copy) :
- (ii). CIF value of stores to be imported :
- (iii). Rate of Customs Duty payable :
- (iv) Total amount of Customs Duty payable :
- (h). Any other Taxes / Duties / Overheads / Other costs :
- (i). Grand Total :

All the financial details are to be mentioned in the Financial Bid only. Anything mentioned in any other part of the submitted documents having a financial bearing will not be considered.

Annexure-I

DETAILED TECHNICAL SPECIFICATION OF FIXED BASE FLIGHT SIMULATOR

- 1.0. Supply, Installation, Testing & Commissioning of, a fixed base flight simulator Trainer to operate on 230V AC supply. Visual LED monitor for simulation of outside world view. Cockpit Instrument display, continuously adjustable pitch, roll and yaw controls, with brakes and engine controls for Cessna 172 & Add on Control Stick of Zenair. With operational physical controls such as, switches, trim Wheel, Gauge Control, Speakers. External Instructor Operating Station, Dual Seat piloting & base platform and other accessories like keyboard/mouse etc. as mentioned in detail below.
- 2.0. The system will be modular to enable expansion. Open architecture will be followed to enable future up gradations as well as networking with other compatible type of simulators. The simulator shall broadly consist of:
 - (i) Cockpit Module
 - (ii) Instructor's operating Station
 - (iii) Visual Display System
 - (iv) Sound System
 - (v) Computing System
 - (vi) Remote Cockpit Stations

3.0. **GENERAL SPECIFICATIONS:**

The Fixed Base Simulator shall have a flight deck that is a full size replica of the cockpit including glare shield with switches and controls (guarded, spring loaded etc.), equipment (displays and control panels etc.), observable flight deck indicators, and replicating the aircraft. Dimensions and man-machine interface geometry shall be same as in the aircraft.

Control Stick, Throttles, Rudder pedals and other controls shall be faithfully replicated. The direction of movement of controls and switches must be identical to the aircraft. Actual LRUs installed may/ may not be used in the simulator along with original aircraft controls.

Aircrew seats must allow the occupant to achieve the design "eye position" established for the aircraft.

The system shall be modular to enable expansion. Open architecture shall be followed to enable future up-gradations as well as for networking with other compatible types of simulators and provisions to be made for incorporating future upgrades and changes in instrumentation.

The simulator shall be able to perform the following roles:

- Realistic familiarization and management of aircraft systems
- Optimized to meet the training requirements for flying skills in all the phases of flight
- Capable of training ab-initio pilots

4.0. EQUIPMENT OPERATION:

Aircraft systems must operate as they operate under normal, abnormal, and emergency operating conditions on the ground and in the flight.

The simulator shall provide pilot controls with spring forces and control travel that corresponds to the aircraft. The simulator shall have an option to change the spring forces to control forces simulated as per the aircraft aerodynamics. The simulator shall also react in the same manner as in the aircraft under the same flight conditions.

5.0. INSTRUCTOR'S OPERATING STATION (IOS):

The Instructor station should recreate on one screen the Primary Flight Display with a Moving Map to show the aircrafts position. On other screen should be the controls of Instructor Station allowing:

- Shall enable the instructor to control the simulation and utilize it as an administration station.
- Shall have a user friendly interface.
- External Instructor Operating Station (IOS) shall have at least two monitor one of which the Instruments should be replicated along with the map and other should provide control.
- Control Monitor shall have touch sensitive screen, programmed for all actions that require quick change of the simulator scenario.
- Monitors/system to provide an intuitive interface based on a system of icons and soft key.
- Setting of
 - Aircraft Position
 - Weather
 - Simulator Start-up and Shutdown
 - Program or Set Aircraft System & Create Failures,
 - Fuel and Load
- Record Flight Data for future analysis and Plot Graphically in real time with Ability to export Flight data to commercially available geo-maps
- Use Saved Flight Scenarios for various types of training activities.
- Option for pause and spontaneous playback
- IOT Enabled for Remote Diagnostics and Troubleshooting
- Training Scenario Management - Creation & Delivery
- Navigation Database Manager
- Lateral Profile with 2D Moving Map with Terrain & Vertical Profile with terrain elevation
- Approach View (Lateral & Vertical profile) and real time plot using approach plates or data driven charts
- Scenario Based Training - Single click setup for scenarios applicable to FAA prescribed PPL and IFR training with performance reporting
- Diagnostics - Real time health monitoring (sub systems) & dashboard for easy maintenance

6.0. VISUAL SYSTEM:

- The simulator must have a visual system providing an out-of-the-flight deck view.
- The simulator Out of the Window (OTW) display shall be a continuous display providing field-of-view of at least 130° horizontally (azimuth) and ±20° vertically (elevation).

- Parameters of contrast, image distortion, brightness and resolution shall ensure a high fidelity image and horizon definition. All visual imagery shall be integrated with appropriate acoustic and tactile simulation.
- The illumination shall cause no strain to the eyes of the trainees/aircrew.
- The visual system shall be free from optical discontinuities and artifacts that create non-realistic cues.
- The simulator shall have operational landing lights for night, dusk and twilight scenes.
- The simulator shall provide for accurate portrayal of the visual environment relating to the simulator attitude.
- The system shall display the following:-
 - Aircraft Attitude with reference to ground objects and horizon during all parked, taxing and in-flight conditions.
 - Simulation of various lighting condition such as day, night, twilight, dusk, moonlight and dark night and low visibility conditions.
 - System to provide simulation of other traffic.
- System Image resolution shall be minimum 1280 x 1024 pixels and a minimum refresh rate of 40 frames per second.
- Worldwide terrain elevation model, scenery database, major and airports and airfields and weather effects of Visibility and RVR, Day/Night, Cloud layers, Rain/Snow/Hail, Icing conditions & Wind and turbulences.
- Visual imagery shall include airfields and ground features with all appropriate visual cues, radio/NAV aids, airfield and approach lighting system
- The Visual System should be made up of Minimum 27" HD Display.

7.0. SOUND SYSTEM:

The sound system shall be able to generate accurate and realistic external as well as Internal sounds e.g. the sound of precipitation, and other significant aircraft noises viz. aural warnings, voice communications, Morse code, noise during starting and running of engine, noises occurring during take-off run, landing run, taxiing and aerodynamic noises during flight, noises associated with changes of configuration (undercarriage/Flaps operation) and approach to stall/stall, surge etc. perceptible to the pilot during normal and abnormal operations, and include the sound of a crash (when the simulator is landed in an unusual attitude or in excess of the structural gear limitations);

- The sound system shall be able to record voice communication between the instructors & trainees on the intercom.
- To give an actual feel of the ground run, provision to create the sound using speakers is to be provided.

8.0. SIMULATOR COMPUTING MODULE:

- The simulator computing module hardware shall primarily be based on 'commercial-off-the shelf equipment' based on open architecture to allow addition/alteration/deletion at a later date.

- The audio visual generation module shall allow easy scene creation by the user for both geo-typical and geo-specific data bases.
- All aircraft performance and flight characteristic (take-off, climb, range and endurance, stability and control, fuel consumption etc.) shall be accurately simulated.
- The Computing module should use a suitable authentic license for all the software's.

9.0. MECHANICAL STRUCTURE:

The mechanical structure needs to replicate aircraft cockpit from inside. The full simulator structure should be on a raised platform.

sure of high quality finish, maintenance friendly provide the confinement of cockpit and aesthetics of the aircraft. The material to be used for the shell/enclosure can be metallic/composite/ wood but should be designed and manufactured to withstand normal operational stress. The structure should be corrosion resistant in its operating environment, should have a high quality finish, maintenance friendly.

Provisioning of light inside the cockpit is to be done without the filament of light source being visible so that the switches are clearly visible without putting glare on the eye.

10.0. SIMULATED AIRCRAFT:

The Fixed based Simulator should be based on the Cessna 172 with an add on stick of Zenair Micro Lights operated by the NCC Units.

11.0. INSTRUMENT PANEL:

The cockpit instruments consisting of all the dials and gauges, it should replicate the actual aircraft simulated. The panel should be made up of material to handle the normal operating stress and not deform over usage period. The instrument panel should be backlit to allow for night time flying capability.

12.0. SWITCH & KNOBS:

The panel should have real tactile switches for operating the lights and all essential avionics functions on board the aircraft with the keys replicating the engine starter (Switch Types).

These switches, knobs should be of high quality rating for use in Aviation should conform to quality standards of Avionics, they should be made of corrosion resistant material, shielded for Interference and Rotary Encoders, should be properly de-bounced while being assured for long life/durability.

13.0. SIMULATION ENGINE AND AERODYNAMIC FIDELITY:

The Simulation Engine should be licensed for professional usage at NCC, with an exact aerodynamic model, with option to tweak these models for fine tuning.

The vendor should be able to produce documentary evidence for satisfactory performance of simulated aircraft compared to the real aircraft flight performance.

14.0. AVIONICS (RADIOS AND INDICATORS):

The simulator should be able to simulate different types of standard equipment on board

the aircraft and an option to simulate latest Glass Cockpit as per aircraft's capability.

15.0. FLIGHT CONTROLS:

(i) Control Stick :

The flight controls must be built with high quality and finish. Dual connected control for Cessna Style yoke for the two pilot seat and a Control Stick in the flight simulator should be a replica of NCC operated Zenair Micro lights with spring loading to provide force feel. The simulator should be capable of upgrading or changing the flight control to of another design. There should be a switch to choose the control type as the input to the simulator. The controls should also have an option to allow for an addition of a Force feedback System (Control Loading).

(ii) Rudder Pedal with Toe brake:

Complete Rudder Axis Control with range and motion similar to the controls on actual aircraft, Variable friction/load Levels for pilot ease and scenario, Independent left & right toe brake axis motion, self cantering. The rudder for the two pilots should be mechanically coupled and should have provisions for addition of Force Feedback (Control Loading) System.

(iii) Pitch Trim:

The user should have control to relive pressure from yoke by the use of pitch trim as in the aircraft.

(iv) Throttle Control Lever with Electrical and Mechanical provision:

Accurate 1:1 throttle control as on the actual aircraft, idle locking system, Adjustable friction system. It should ideally have options for controlling throttle from the two sides; else one side controls should be sufficient. The vendor should mention the controls offered in detail and emphasize.

(v) Flaps Lever:

Accurate 1:1 flap control lever as on the actual aircraft.



16.0. SEATS:

The Simulator should have 2 seats, the seats should allow for lateral movement to let the user adjust for leg length and a reclining back for ease of use. The simulator should have ample space for users to easily occupy the seats and exit.

17.0. TWO HEADSET INTERCOM WITH PLAYBACK:

The device shall allow two users to talk to each other using the headsets and provide an option of recording the communication for playback. The device should also allow a minimum of one channel for an observer to only listen to the conversation between the instructor and the student.

18.0. INDIGENOUS MANUFACTURING:

Preference be given to supplier with maximum local content as per the Public Procurement (Preference to Make in India), Order 2017 of the policy of the Government of India to encourage 'Make in India' and promote manufacturing and production of goods and services in India with a view to enhancing income and employment.

http://dipp.nic.in/sites/default/files/publicProcurement_MakeinIndia_15June2017.pdf

Vendors are required to furnish the percentage of local content in the system in the following -Flight Deck (20%), Controls (20%), Panels (20%), SW (IOS, Sim Engine, Aerodynamics)(20%), Visual System(20%)Provision of Cooling/Ventilation: Provisions should be made to dissipate the heat generated by the Equipment. Provisions to be made to maintain the cockpit environment well ventilated.

19.0. REMOTE COCKPITS:

A provision of remote cockpit should be provided; the remote cockpit software should connect/interface with the simulator and duplicate the simulated instrument panel and limited outside displays when connected on same network as the simulator.

20.0. EQUIPMENT DOCUMENTATION:

One set of all the relevant documentation, including maintenance related hardware manuals, software guides, maintenance drawings, and system schematics shall be provided on hard and soft copies.

The broad categories of Documents and Technical publications shall consist of the following:

- Operator Manuals
- Technical Manuals
- Technical Data Manual
- Maintenance Manual
- Maintenance Drawings and Recommended Spares Parts List (RSPL)
- Acceptance Test Manuals

21.0. OPERATING ENVIRONMENT:

The simulator shall be continuously operational within room temperature of 20 to 30°C and humidity of 85% at 25°C.

A Suitable UPS of 2KVA and 6 Maintenance Free Batteries of 26Ah with a rack for the device for safe operation for 15 minutes and provide enough backup to power down the simulator properly should also be supplied along with the Flight Simulator

22.0. FACILITY REQUIREMENT:

The infrastructure required for set-up of simulator and its associated stations/modules shall be shared by the Vendor. It should mention a detailed Facility Requirement Document (FRD) that shall comprise requisite infrastructure requirements like building and power supply etc.

23.0. INSTALLATION & COMMISSIONING:

The simulator shall be installed in full functionality and handed over in full functional condition to NCC at the location designated for delivery. NCC Unit shall ensure the location for such installation is ready as per the Facility Requirement Document which is shared by the vendor at the time of Contract Award

24.0. QUALIFICATION TEST GUIDE:

No certification is intended from DGCA but to prove that the aircraft has been truthfully recreated the a Qualification Test Document as mention in CAR Section 7 series D Part VI should be prepared and submitted. The vendor must supply supporting QTG and carry out at least 25% of the test after Installation to ensure the reliability.

25.0. SUPPLY, INSTALLATION AND COMMISSIONING:

The Simulator shall be supplied, installed, commissioned and handed over in full functional condition to NCC at the location designated for delivery.

26.0. OPERATOR & TECHNICAL TRAINING:

Operation and Maintenance Training shall be provided for instructors, operators and system administrator or technicians after installation of the simulation system.

The training shall enable the following groups to carry out various functions as indicated against each:

- Instructor & Operator Training: To operate the Simulation Training System proficiently
- System Administrator and Technical Training: To manage the complete simulation system for day to day operation
- Maintenance Training: To carry out first level of maintenance & fault finding and repair procedure in accordance with the existing maintenance philosophy

27.0. MAINTENANCE:

NCC Unit will nominate 2 (two) people for a thorough training by the vendor to carry out necessary maintenance and troubleshooting. They will also work with the vendor as a point of contact for remote diagnostics using the internet and minor fixes and repair activities. For any major repair the vendor will send its authorized personnel to fix the system.

28.0. WARRANTY:

During the warranty period, any un-serviceability in the simulator has to be attended to and rectified by cost and transportation cost during warranty period will be fully borne by the Seller at the installation site anywhere within India. All Repair/Replacement/Spares, any damage to the device due to non-safe operation, and not due to wear and tear with normal operation will be paid to the vendor on a case to case basis.

Appendix - II
RFP COMPLIANCE

Sl No.	RFP Clause/Section /Paragraph	Requirement	Vendor Compliance	Vendors Comments (if any)
1	1	230V AC Powered Fixed Base Flight Simulator for Zenair	Yes / No	
2	3	The simulator shall be able to perform the following roles: <ul style="list-style-type: none"> • Realistic familiarization and management of aircraft systems • Optimized to meet the training requirements for flying skills in all the phases of flight. • Capable of training ab-initio pilots 	Yes / No	
3	4	Aircraft systems must operate as they operate under normal, abnormal, and emergency operating conditions on the ground and in the flight.	Yes / No	
4	5	Instructor Station: Dual Screen Based system	Yes / No	
5	5	Instructor Station: One screen Replicated Flight Display Along with Map & Other for Instructors Control	Yes / No	
6	5	Instructor Station: Setting of Aircraft Position Weather Simulator Start-up and Shutdown Program or Set Aircraft System & Create Failures Fuel and Load	Yes / No	
7	5	Instructor Station: Record Flight Data for future analysis and Plot Graphically in real time with Ability to export Flight data to commercially available geo-maps	Yes / No	
8	5	Instructor Station: Use Saved Flight Scenarios for various types of training activities.	Yes / No	
9	5	Instructor Station: Option for pause and spontaneous playback	Yes / No	
10	5	Instructor Station: IOT Enabled for Remote Diagnostics and Troubleshooting	Yes / No	
11	5	Instructor Station: Training Scenario Management - Creation & Delivery	Yes / No	
12	5	Instructor Station: Lateral Profile with 2D Moving Map with Terrain & Vertical Profile with terrain elevation	Yes / No	

13	5	Instructor Station: Approach View (Lateral & Vertical profile) and real time plot using approach plates or data driven charts	Yes / No	
14	5	Instructor Station: Scenario Based Training - Single click setup for scenarios applicable to FAA prescribed PPL and IFR training with performance reporting	Yes / No	
15	5	Instructor Station: Diagnostics - Real time health monitoring & dashboard for easy maintenance	Yes / No	
16	6	Visual System: The simulator Out of the Window (OTW) display shall be a continuous display providing field-of-view of at least 130° horizontally (azimuth) and ±20° vertically (elevation).	Yes / No	
17	6	Visual System: Parameters of contrast, image distortion, brightness and resolution shall ensure a high fidelity image and horizon definition. All visual imagery shall be integrated with appropriate acoustic and tactile simulation.	Yes / No	
18	6	Visual System: The illumination shall cause no strain to the eyes of the trainees/aircrew; free from optical discontinuities	Yes / No	
19	6	Visual System: The simulator shall have operational landing lights for night, dusk and twilight scenes; portrayal of the visual environment relating to the simulator attitude; horizon during all parked, taxing and in-flight conditions.	Yes / No	
20	6	Visual System: Simulation of various lighting condition such as day, night, twilight, dusk, moonlight and dark night and low visibility conditions & other traffic.	Yes / No	
21	6	Visual System: System Image resolution minimum of 1280 x 1024 and a minimum refresh rate of 40 frames per second.	Yes / No	
22	6	Visual System: Worldwide terrain elevation model, scenery database, major and airports and airfields and weather effects of Visibility and RVR, Day/Night, Cloud layers, Rain/Snow/Hail, Icing conditions & Wind and turbulences.	Yes / No	
23	6	Visual System: Minimum 27" HD Display.	Yes / No	
24	7	The sound system shall be able to generate accurate and realistic external as well as internal sounds	Yes / No	

25	8	The simulator computing module hardware based on 'commercial-off-the-shelf equipment' & open architecture to allow addition/alteration/deletion at a later date.	Yes / No	
26	8	Accurately simulate aircraft performance and flight characteristic	Yes / No	
27	9	The mechanical structure needs to replicate aircraft cockpit from inside; on a raised platform.	Yes / No	
28	9	Shell/Enclosure of high quality finish, maintenance friendly provide the confinement of cockpit and aesthetics of the aircraft	Yes / No	
29	11	Instrument Panel consisting of all the dials and gauges as in the aircraft	Yes / No	
30	11	Instrument Panel to be backlit to allow for night time flying capability.	Yes / No	
31	12	Real tactile switches & Knobs of aviation quality	Yes / No	
32	13	Suitably licensed software's for professional usage at NCC	Yes / No	
33	13	Documentary evidence for satisfactory performance of simulated aircraft compared to the real aircraft flight performance.	Yes / No	
34	14	Simulate different types of standard equipment on board	Yes / No	
35	14	Simulate latest Glass Cockpit	Yes / No	
36	15 . (i)	Flight Controls: Control Stick of Zenair & Dual Connected Cessna 172 Yoke	Yes / No	
37	15 . (i)	Flight Controls: Option for addition of a Force feedback System	Yes / No	
38	15 . (ii)	Flight Controls: Dual Connected Rudder Pedal with Toe brake	Yes / No	
39	15 . (ii)	Flight Controls: Independent left & right toe brake	Yes / No	
40	15 . (ii)	Flight Controls: Mechanically coupled Rudders & provisions for addition of Force Feedback System	Yes / No	
41	15 . (iii)	Flight Controls: Pitch Trim Button & Indicator	Yes / No	
42	15 . (iv)	Flight Controls: Throttle Control Lever with Friction Nut & Idle Locking System	Yes / No	
43	15 . (iv)	Flight Controls: Throttle Control Lever Dual and Coupled system	Yes / No	
44	15 . (v)	Flight Controls: Flaps Lever as on the actual aircraft.	Yes / No	
45	16	2 seats, with lateral movement and a reclining back	Yes / No	

46	17	Two Headset Intercom with Playback	Yes / No	
47	18	Indigenous Manufacturing Content Breakup	Yes / No	
48	19	Remote Cockpit: duplicate the simulated instrument panel and limited outside view	Yes / No	
49	20	Equipment Documentation: Operator Technical Maintenance Manual Maintenance Drawings and Acceptance Test Manuals	Yes / No	
50	21	Operating Environment: temperature of 20 to 30°C and humidity of 85% at 25°C.	Yes / No	
51	21	UPS: 2KVA and 6 Maintenance Free Batteries of 26Ah	Yes / No	
52	22	Facility Requirements	Yes / No	
53	24	Qualification Test Guide	Yes / No	
54	25	Supply, Installation And Commissioning At NCC Location	Yes / No	
55	26	Operator & Technical Training	Yes / No	
56	28	Annual Maintenance Contract For 4 Years	Yes / No	

SIGNATURE & SEAL OF TENDERER

**Appendix - III
COST STRUCTURE (In Rs.p)**

Sl No	Description (a)	Qty	Unit / Basic Price in Rs	GST		Any other Taxes		Discount (if any)		TOTAL
		(b)	(c)	(d)		(e)		(f)		(h)
				%	Value	%	Value	%	Value	Value
A	Cost Breakup:									
1	Fixed base flight Simulator									
2	Instructor Station for Supervisory Control and Data Acquisition									
3	Remote Cockpit Desktop for Large Audience									
4	Installation / Commissioning									
5	Training, Technical Literature, Deliverable									
6	UPS									
7	Extended Warranty									
	Total:									
B.	Net Present Value (NPV) of AMC									
	Grand Total (A-B):									

(In Words: _____)

SIGNATURE & SEAL OF TENDERER

Annexure-III

DEED OF AGREEMENT

for

Supply and Installation of one Fixed-base Flight Simulator

THIS AGREEMENT made on this day at Aizawl on the _____th of _____, 2017 between the Government of Mizoram through **Sports and Youth Services Department**, having its principal office at New Capital Complex, Khatla, Aizawl – 796001, hereinafter called the '**Buyer**' (and the term 'Buyer' shall mean and include its administrators, executors and assignees), on the **FIRST PART**.

AND

_____, hereinafter called the '**Seller**' (and the term the 'Seller' shall mean and include its administrators, successors and assignees) on the **SECOND PART**.

Whereas, the Seller on the other part, has submitted his/her/their offer to the Government of Mizoram, Department of Sports and Youth Services, for Supply and Installation of Fixed-base Flight Simulator, at the rate offered by the Seller and approved by the Government;

NOW, IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES HERETO AS UNDER:

1. Within 14 (Fourteen) days of issue Letter of Award and 7 (Seven) days after signing of agreement, the successful bidder shall deliver a Security Deposit of the value of 5 % (Five percent) of the actual cost in the form of a Bank Draft drawn in favour of Director, Sports and Youth Services Department payable at Aizawl, as Security /Performance Guarantee Deposit. Failure to comply with any of the clauses of this agreement will entail forfeiture of the Security / Performance Guarantee Deposit.
2. The Seller shall complete the work at approved cost as per approved technical specifications and shall be wholly, solely and fully responsible for completion and ensure completion within the stipulated period.
3. Liability for all defects in the equipment shall rest with the seller for a period of twelve months from the date of its acceptance by the Buyer. The Seller shall be responsible for satisfactory rectification of defects during the warranty period.
4. The Buyer shall have the right to deduct or set off the expenses incurred by it in rectifying the defects as aforesaid from or against any amount due and payable or becoming due and payable by the Buyer to the Seller under this agreement. The Buyer shall be entitled to claim the balance due with interest and recover the same from the Executing Agency, if the amount claimed is not paid on demand.
5. The Seller shall be fully responsible for acts or omissions committed by it.

6. The date of starting of the work i.e delivery, installation and training, shall be reckoned from the 15th day after signing of the agreement.
7. The work shall be completed in all respect within a period of 90 (Ninety) days from the 15th day after signing the agreement.
8. Seller shall be required to complete delivery and installation within the stipulated period and at the place of delivery specified in the Supply Order. In case of delay which may occur due to reasons beyond the control of the Seller, Seller will approach the Buyer with full details for extension of time limit for completion.. In case of delay due to sole default on part of Seller, the Seller shall be liable to pay to the Buyer compensation (Not amounting to penalty) at the rate of not exceeding ¼ % (One quarter percent) of the total anticipated Seller charges per week of delay subject to maximum of 10% (Ten percent) of the total cost. However, the Buyer may reduce the same at its sole discretion. The Buyer will be the sole authority to decide on the nature and cause of delay and its decision will be final.
9. The Buyer could terminate the Contract Agreement, by giving prior notice to the Seller, on account of failure on the part of the Seller to complete the work as per time schedule indicated in the RFP.
10. The Seller shall not assign or transfer or part with any of the rights, duties or obligations, wholly or in part, under this agreement without the previous consent in writing of the Buyer, except as provided under the agreement.
11. 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 construction or performance, which cannot be settled amicably, shall be resolved by arbitration. (In this case Governor, State of Mizoram will be final arbitrator). The place of such arbitration shall be at Aizawl, Mizoram.
12. The Seller shall supply the Fixed-base Flight Simulator as specified quality in the RFP. The Government shall have the authority to reject the commodity in whole or in part, if it is not in conformity with specified quality.
13. The Seller shall bear the cost of Supply and Installation of Fixed-base Flight Simulator and its transportation including loading/unloading charges, to the destination specified in the supply order.
14. The Seller shall furnish a Performance/Security Deposit amounting to Rs._____ being 5 % (Five percent) of price of supply and installation of Fixed-base Flight Simulator allotted for supply in the form of Demand Draft / Banker's Cheque / irrevocable Bank Guarantee through a public sector bank, duly pledged in the name of the Director, Department of Sports and Youth Services, Government of Mizoram. The Security deposit shall be liable to forfeiture in whole or in part in the event of default or lapses on the part of the Seller or for breach of any terms and conditions of this agreement. The Government is the sole authority to determine as to whether there has been default/lapses/breach on the part of the Seller.

15. The Security Deposit shall be released after fulfilment of supply to the full satisfaction of the Government.
16. The Seller shall abide by instructions that may be issued by the Government or the Director, Department of Sports and Youth Services, Government of Mizoram, as the case may be, from time to time.
10. The award of contract for Supply and Installation of Fixed-base Flight Simulator shall not be transferred to any other person/persons without prior permission of the Government. No power of attorney will be accepted.
11. The rate offered by the Seller in his/her/their tender bid and approved by the Government shall not be varied.
17. All terms and conditions stated in the Request For Proposal shall wholly form part of this agreement.

For and on behalf of Government

For and on behalf of Seller

(_____)
Secretary to the Government of Mizoram
Sports and Youth Services Department.

Name: _____
Address: _____

Signed in the presence of:

1. _____

1. _____

2. _____

2. _____

