Department of Electrical Engineering
Indian Institute of Technology, Delhi
Hauz Khas, New Delhi 110016

Date: **June 19, 2024**
Ref: FITT-BEEN/FT/2023/11/15

Notice inviting quotations for ICD and software development for detection and tracking using custom seeker

Quotations are invited for ICD and software development for detection and tracking using custom seeker. The required specifications are given below. Complete technical information should be provided along with the Technical bid. Email bids are also acceptable. Please refer to the last page on Terms and Conditions for details on how and when to submit Technical and Financial bids.

Required Specifications for the optical software for custom image capture and processing toll

1. high performance GUI for image capture from custom seeker. The captured images will include both EO as well as thermal. The images from the custom seeker is to be captured using custom interfaces like USB/CameraLink/PCI-e. Provision for all type of interface for effective data capture is to be designed. The interface should be bi-directional.

2. the object must be automatically detected by the AI based object detection algorithm SSD DetectNet or advanced algorithms trained for the object class like tanks. The algorithm must be trained for multiple classes and object types. Provision for selecting the target by clicking on the object should also be made. The false detection rate must be lower in all conditions like occlusion, Background clutters, Illumination Conditions. Teh accuracy must be larger than 80%.

3. object tracking is to be done using the MOSSE (Minimum Output Sum of Squared Error) tracker or better algorithm with high robustness and tracking speed. The tracker accuracy must be higher than 80%

4. software support for the duration of the licence must be provide.

Terms and Conditions

1. The quote should reach the following address on or before **25.06.2024, 10 AM**.

   Dr. M. Sarkar
   Electrical Engineering Department
   Block II, Room 333
   IIT Delhi, Hauz Khas
   New Delhi, 110016
   msarkar@ee.iitd.ac.in

2. Please quote prices for FOB New Delhi, inclusive of all taxes and duties.

3. Quote should be in Indian Rupees for agents of Indian manufacturers, or in foreign currency, for agents of foreign manufacturers, and needs to be valid for at least three months.

4. Attach all the technical literature and a list of similar installations done in India.

5. If the quote is being submitted by a representative of the manufacturer, a valid agency-ship or dealership certificate authorizing the agent to quote to IIT Delhi on behalf of the manufacturers should be enclosed.**The principal and the vendor, both, are not allowed to quote for the same product.**

6. Complete set of manuals for the operation of the equipment should be given.

7. Please specify all of your terms and conditions clearly, including delivery period.

8. Mode of payment for purchases in foreign currency are through irrevocable letter of credit, or through wire transfer on delivery. Only bank charges within India are payable by IIT Delhi, all bank charges outside India are the responsibility of the seller. For purchases in INR, payment is on delivery.

9. The Institute reserves the right to accept or reject any or all quotations without assigning any reasons thereof.