ANNEXURE: I

TECHNICAL BID PROFORMA

Item Name: High Framerate open Ultrasound Platform with Low Level Data and Control Access

1.0 Bidder Eligibility Criteria:

I	**Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)**	**Class I / Class II**	**Local Content value**	**Reference, Page No.**
I	Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16th September 2020 and other subsequent orders issued therein.			
2.0	**Bidder Eligibility Criteria-II**	**Compliance (Yes/No)**	**Reference Page No.**	**Remarks, If any**
1	The bidder/OEM should have supplied at least 2 similar items to IITs, NITs, IISERs, CSIR Labs or other R&D organizations or institutions in India or abroad in the last 5 years, PO copies or installation certificates along with contact details of end user need to be submitted as the proof of supply. IIT Madras reserves its right to verify the claims submitted by the bidder and the feedback from the previous customers will be part of technical evaluation.			

3.0 Technical Compliance:

Technical specifications required for one unit of High Framerate open Ultrasound Platform with Low Level Data and Control Access:- 1 Unit

Sno	Descriptions	Compliance (Yes/No)	Reference Page No.
1	System must be a state-of-the-art model & have all digital beam former technology with super computer processing and clinically proven imaging technologies and should provide GPU for parallel processing.		
2	The transmit beamformer should be highly configurable and programmable.		
3	System must be offered with frequency compounding facility. Other equivalent technology can also be offered. The recording time should be ideal, i.e. the device should record automatically the signals at least for ~20 minutes, without operator induced comprising of signal fidelity.		
4	System must be offered with Speckle Reduction Imaging: - image processing technique to remove speckles & clutter artefacts.		
5	The system should provide higher data throughput (250 MB/s raw per-lane data rate)		
6	The system should provide RF access from all channels (pre-beamforming and post-beamforming) and IQ data for doppler flow		

7	System must be offered with various imaging modes including: A-mode, B-mode, M-line mode, plane wave imaging, spectral Doppler, Colour M-mode, Colour flow, Pulse Wave Doppler, and Colour Power Doppler, and also have features to enable harmonic imaging, pulse inversion, shear wave visualization.		
8	The system should have at least 30 user programmable parameters and 1200 s storage facility.		
9	The system should be handy, and portable and should be fit to deploy in a normal lab setting.		
10	Along with the system, development SDK, driver files and example scripts should be provided.		
11	In addition to the above, the open ultrasound platform supplied should conform to the detailed specifications as listed below		

Probe type	Linear
Frequency	7-15 MHz
Depth	20-70 mm
Field of view	40 mm
No. of Channels	128
Frame rate (non-interleaved acquisition)	10,000 Hz
Data transfer rate	> 3.5 Gbps
Product type	Open Ultrasound Platform and SDK
Per channel buffer	8000 samples

Sl.No.	Other Requirements	Compliance (Yes/No)	Reference Page No.
1	Warranty should be 12 months from the date of installation.		

(Note: It is mandatory for the bidders to provide the compliance statement in tabular column format along with catalogue page number (comply/not comply) for the above points with document proof as required. Failing which bidders will be technically disqualified)

SIGNATURE OF BIDDER ALONG WITH SEAL OF THE COMPANY WITH DATE