ANNEXURE: I

TECHNICAL BID PROFORMA
Item Name: Connected four-wheeler

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 service center should be within Chennai, Tamilnadu. Proof of facility registration, location & contact details to be provided along with technical bid.			

3.0 Technical Compliance:

S.no	**Technical Specification**	**Complied/not complied**	**Refrence pg no.**
A	Quotations are invited to provide a connected car with an OBD2 port to collect the in-built sensor data and communicate with surrounding vehicles (V2V) with such capabilities. List of variables to be collected include:		
	• Ignition status		
□	• Accelerator pedal input		
	• Brake pedal input		
□	• Clutch pedal input		
	• Gear position		
□	• Engine speed		
	• Longitudinal acceleration		
□	• Lateral acceleration		
	• Wheel speed (4 wheels)		
□	• Brake pressure (4 wheels)		
□	• Tire pressure (4 tires)		
□	• Fuel consumed		
□	• Odometer information		
□	• Vehicle speed		
□	• ABS activation		
□	• Steering wheel input		
□	• Estimates of road friction coefficient and road gradient		
□	• Parking brake engagement		
□	• Cumulative wheel rotations		
□	• Emissions data from sensors		
□	• Battery condition		

B	The bidders should provide decoding rules to decode the CAN frames into scaled engineering values or physical values. For this, the following information is to be provided to use in: physical_value = offset + scale * raw_value_decimal.		
	•Bit start: Bit at which the signal starts		
	•Bit length: Length of the signal in bits		
	•Offset: Signal offset value		
	•Scale: Signal multiplier value		
C	Name of each physical value with clear explanation should also be provided.		
D	The car shall have a provision to communicate the selected data in real time to an on-board data logger or cloud or to remote server (with access to the buyer) at a minimal data logging frequency of 100 Hz. It should allow the integration of external sensor modules (e.g. LIDAR) with the CAN bus. The car should allow access to the on-board display device (if available) to display custom built third party algorithms. It should communicate with neighbouring vehicles with connecting capabilities to transfer information.		
Additional Terms and Conditions			
1	Warranty – 1 Year		

(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