Needed Equipment Names & Quantity & Specifications

S.N	Equipment Name	Quantity (or) Sets	Specifications
1	**Black box analytic gadget – driver face recognition, emotion recognition, traffic analytic view**	2	Black Box Analytic gadget – interfaces driver face recognition, emotion recognition and traffic analytic view **SYSTEM HARDWARE SPECS AND SOFTWARE :** - CPU - Processor Intel i3 4th gen, RAM DDR3 4 GB, Zebronics Mother board, 320 GB HDD. And additional hardware accessories with a manual. (or) Equivalent Raspberry pi hardware for easy and portable usage with power supply and other pi specific accessories and a manual - GPS with resolution of one second to 2.5 second frequency - Camera of inbuilt with Raspberry pi and one CC TV camera/ video camera compatible to Computer vision - Analytics to characterize the traffic of opposite and tracking the gadget fixed vehicle mobility characteristic - AI, Deep learning compatible programming to match with computer vision - Triune power compatible system like working with solar panel, battery and grid based – solar interfaced system Deliverable: driver behavior, perceptive and emotion reactions, opposite traffic mobility behavior, geometric deficiencies and impact of land use display. Accident or risk generating points will be identified through this gadget. Accident causes can be tracked.
2	**Computer vision and AI based vehicle speed and composition recognition**	2	Objective is to track the traffic characteristics like vehicle speed and traffic volume and traffic composition **SYSTEM HARDWARE SPECS:** CPU

			1. Processor Intel i3 4th gen 2. RAM DDR3 4 GB 3. Zebronics Motherboard 4. 320 GB HDD And additional hardware accessories with a manual. (or) Equivalent Raspberry pi hardware for easy and portable usage with power supply and other pi specific accessories and a manual - CCTV camera or high resolution video camera - Computer vision interface software - AI based data of trained get compatible to characterize traffic - Traffic analytics to identify level of service - Solar interfaced system coordinated with grid power, battery operated system with charge controller Solar panels with compatible battery, charge controller

3	**Deep learning and CV based licence plate recognition which will track traffic violators**	2	**LICENCE PLATE RECOGNITION** Objective is to develop an approach with Deep Learning and CV based licence plate recognition which will track the traffic violators. **SYSTEM HARDWARE SPECS:** - CPU 1. Processor Intel i3 4th gen 2. RAM DDR3 4 GB 3. Zebronics Motherboard 4. 320 GB HDD And additional hardware accessories with a manual. (or) Equivalent Raspberry pi hardware for easy and portable usage with power supply and other pi specific accessories and a manual - High resolution camera to track traffic characteristics with reference to mobility levels - Deep learning interface to identify the traffic characteristic violation - AI concept to train the date to recognize the vehicle identity - Computer vision technology and interface to identify violators - Solar interfaced system coordinated with grid power, battery operated system with charge controller - Solar panels with compatible battery, charge controller - Stand to fix camera

4	**CV / Sensor based pedestrian signal activation to improve pedestrian safety in cross walk**	2	**PEDESTRIAN SIGNAL ACTIVATION** CV/Sensor based Pedestrian signal activation to improve pedestrian safety in cross walk **SYSTEM HARDWARE SPECS:** CPU 1. Processor Intel i3 4th gen 2. RAM DDR3 4 GB 3. Zebronics Motherboard 4. 320 GB HDD And additional hardware accessories with a manual. (or) Equivalent Raspberry pi hardware for easy and portable usage with power supply and other pi specific accessories and a manual - High resolution camera to track pedestrians with reference to mobility levels - Deep learning interface to identify the pedestrian density - AI concept to train the date to recognize the pedestrian count - Computer vision technology and interface - Solar interfaced system coordinated with grid power, battery operated system with charge controller - Solar panels with compatible battery, charge controller - Stand to install camera

5	**Traffic signal synchronization to enhance level of service – 1 set covering multiple intersecting points**	1	**TRAFFIC SIGNAL SYNCHRONIZATION** Traffic signal synchronization to enhance level of service covering multiple intersecting points **SYSTEM HARDWARE SPECS:** CPU 1. Processor Intel i3 4th gen 2. RAM DDR3 4 GB 3. Zebronics Motherboard 4. 320 GB HDD And additional hardware accessories with a manual. (or) Equivalent Raspberry pi hardware for easy and portable usage with power supply and other pi specific accessories and a manual - High resolution camera of four setups to track traffic characteristics with reference to mobility levels - Deep learning interface to identify the traffic characteristics - AI concept to train the date to recognize the vehicle identity - Computer vision technology and or sensor interface to identify traffic entry - Synchronizing the four traffic signal set ups rather for four junctions - Solar interfaced system coordinated with grid power, battery operated system with charge controller - Solar panels with compatible battery, charge controller - Four stands for signals and camera stands - Compatible communication LORA or compatible

6	**Traffic signal sensitization with AI and CV for effective traffic mobility**	1	**TRAFFIC SIGNAL SENSITIZATION** Traffic signal sensitization with AI and CV for effective traffics mobility **SYSTEM HARDWARE SPECS:** CPU 1. Processor Intel i3 4th gen 2. RAM DDR3 4 GB 3. Zebronics Motherboard 4. 320 GB HDD And additional hardware accessories with a manual. (or) Equivalent Raspberry pi hardware for easy and portable usage with power supply and other pi specific accessories and a manual - High resolution camera of four setups to track traffic characteristics with reference to mobility levels - Deep learning interface to identify the traffic characteristics - AI concept to train the date to recognize the vehicle identity - Computer vision technology and or sensor interface to identify traffic entry – 4 set ups - Sensitizing the four traffic signal set ups rather for four legs in a junction - Solar interfaced system coordinated with grid power, battery operated system with charge controller -4 set ups - Solar panels with compatible battery, charge controller - Signal and camera stand ups of 4 sets - Compatible communication LORA or compatible

7	**Alert systems at black spots when geometrics are non cooperative with vehicle speed**	2	**SYSTEM HARDWARE SPECS:** CPU 1. Processor Intel i3 4th gen 2. RAM DDR3 4 GB 3. Zebronics Motherboard 4. 320 GB HDD And additional hardware accessories with a manual. (or) Equivalent Raspberry pi hardware for easy and portable usage with power supply and other pi specific accessories and a manual - High resolution camera to track pedestrians with reference to mobility levels - Deep learning interface to identify the pedestrian density - AI concept to train the date to recognize the pedestrian count - Computer vision technology and interface - Solar interfaced system coordinated with grid power, battery operated system with charge controller - Solar panels with compatible battery, charge controller - Stand to install camera - LED strips of red and amber flashers of 5 meter with micro controller and lora or compatible communication with solar interface

Details are needed from Firms

Supplier Name:

Address:

State:

City:

Pin Code:

Name of Representative:

Contact Number:

Email Id:

GST Number:

TAN Number:

TAX Number:

PAN Number: