

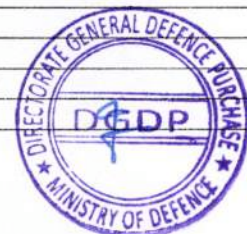
**TECHNICAL SPECIFICATION OF NIV PORTABLE VEH UNDER SURVEILLANCE SCANNER (DP-5)**

| Ser                                    | Description                                                                                         | Required Technical Specification                                                                                                                                                                   | To be filled up by the manufacture/ principal |
|----------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| (a)                                    | (b)                                                                                                 | (c)                                                                                                                                                                                                | (d)                                           |
| <b>Part – 1: General Specification</b> |                                                                                                     |                                                                                                                                                                                                    |                                               |
| 1.                                     | <b>Nomenclature</b>                                                                                 | <b>Portable Veh Under Surveillance Scanner</b>                                                                                                                                                     |                                               |
| 2.                                     | Brand                                                                                               | To be mentioned                                                                                                                                                                                    |                                               |
| 3.                                     | Model                                                                                               | To be mentioned                                                                                                                                                                                    |                                               |
| 4.                                     | <b>Country of Origin</b>                                                                            | <b>Group A and B Countries</b>                                                                                                                                                                     |                                               |
| 5.                                     | <b>Country of manufacture</b>                                                                       | <b>Group A and B Countries</b>                                                                                                                                                                     |                                               |
| 6.                                     | <b>Country of assembly</b>                                                                          | <b>Group A and B Countries</b>                                                                                                                                                                     |                                               |
| 7.                                     | Name of Manufacturer with complete address (Office address, Telephone, Fax, E-mail and web address) | Details to be mentioned                                                                                                                                                                            |                                               |
| 8.                                     | Name of Principal with complete address (Office address, Telephone, Fax, E-mail and web address)    | Details to be mentioned                                                                                                                                                                            |                                               |
| 9.                                     | Name of Local agent with complete address (Office address, Telephone, Fax, E-mail and web address)  | Details to be mentioned                                                                                                                                                                            |                                               |
| 10.                                    | RMA facility of the Supplier                                                                        | The supplier must have their after-sales service center in Bangladesh. Contact details of the after-sales service center with Telephone/ mobile number and email address must be submitted         |                                               |
| 11.                                    | Year of Production                                                                                  | Brand new and year of production not before the calendar year of contract                                                                                                                          |                                               |
| 12.                                    | <b>Model validity</b>                                                                               | <b>Minimum 10 years</b>                                                                                                                                                                            |                                               |
| 13.                                    | <b>Warranty duration</b>                                                                            | <b>Minimum 3 years</b>                                                                                                                                                                             |                                               |
| 14.                                    | <b>Duration of after sales service support</b>                                                      | <b>Minimum 10 years</b>                                                                                                                                                                            |                                               |
| 15.                                    | Response Times for Troubleshooting and Repairs.                                                     | Within 3 Working Days (Free of cost upto warranty period and thereafter with payment).                                                                                                             |                                               |
| <b>Part-2: Technical Specification</b> |                                                                                                     |                                                                                                                                                                                                    |                                               |
| 16.                                    | Performance & General description                                                                   | Stable performance, water proof, can operate in all-weather condition, can perform in medium to high speed of vehicle, portability and mobility, illumination optimized for vehicle undercarriage. |                                               |
| 17.                                    | <b>Characteristics.</b>                                                                             |                                                                                                                                                                                                    |                                               |
|                                        | a. Imaging Method                                                                                   | Details to be mentioned.                                                                                                                                                                           |                                               |
|                                        | b. Scanning Method                                                                                  | Fully automatic (area scan with induction loop or external trigger)                                                                                                                                |                                               |
|                                        | c. Camera resolution                                                                                | Minimum 4096x2160 Pixels                                                                                                                                                                           |                                               |
|                                        | d. Capture Accuracy                                                                                 | To be mentioned                                                                                                                                                                                    |                                               |
|                                        | e. Vehicle Speed Limit for UVSS and ANPR                                                            | Min 30 Km/h for UVSS and 60 Km/h for Automatic License Plate Recognition (ALPR): To be mentioned.                                                                                                  |                                               |
|                                        | f. Effective Field of View (FOV)                                                                    | Min 170° or higher                                                                                                                                                                                 |                                               |
|                                        | g. Width of Viewing Angle                                                                           | Min 170°                                                                                                                                                                                           |                                               |
|                                        | h. Image capture capability at night/ low light                                                     | To be available. Details to be mentioned.                                                                                                                                                          |                                               |
|                                        | j. Vehicle Chassis Width                                                                            | Minimum and Maximum limit to be mentioned.                                                                                                                                                         |                                               |
|                                        | k. Vehicle Chassis Height                                                                           | Minimum and Maximum limit to be mentioned.                                                                                                                                                         |                                               |
|                                        | l. Load Bearing Capacity                                                                            | Minimum 40 Ton                                                                                                                                                                                     |                                               |
|                                        | m. Data Support Interface                                                                           | Must have USB, RS232, HDMI, VGA and Audio.                                                                                                                                                         |                                               |
|                                        | n. Data Storage Capacity                                                                            | Minimum 6 TB                                                                                                                                                                                       |                                               |



**FOR OFFICIAL USE ONLY**

| Ser | Description                                                        | Required Technical Specification                                                                                                                                | To be filled up by the manufacture/ principal |
|-----|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| (a) | (b)                                                                | (c)                                                                                                                                                             | (d)                                           |
|     | p. Vehicle Number Plate Capture                                    | Capable of capturing Bangladesh Road Transport Authority (BRTA) vehicle, Military vehicle, Scooter (CNG) and Motorcycle number plate during day-night and rain. |                                               |
|     | q. Vehicle Number Plate Capture with Night Vision Capability       | To be available. Details to be mentioned and ANPR camera brand needs to be same with UVSS brand                                                                 |                                               |
|     |                                                                    | (1) Image Sensor: Min 1/1.8" CMOS supported                                                                                                                     |                                               |
|     |                                                                    | (2) Focal Length: Min 2.77 mm up to 12 mm or higher                                                                                                             |                                               |
|     |                                                                    | (3) Detection speed: Min 60 Km/h for ALPR and min 30 Km/h for UVSS.                                                                                             |                                               |
|     |                                                                    | (4) RAM and ROM: Min 2 GB or higher                                                                                                                             |                                               |
|     |                                                                    | (5) Interoperability: Must be supported ONVIF (Profile S/Profile G/Profile T), CGI, ITSAPI, P2P                                                                 |                                               |
|     | r. Cloud Integration/ remote access                                | To be available. Details to be mentioned                                                                                                                        |                                               |
|     | s. Noise Reduction Capability                                      | To be available.                                                                                                                                                |                                               |
|     | t. Image Storage                                                   | Data of 30 Days.                                                                                                                                                |                                               |
|     | u. Picture Format                                                  | JPEG.                                                                                                                                                           |                                               |
|     | v. Image quality adjustment function                               | It can adjust the saturation, contrast, balance and sharpening of the image of the vehicle bottom or license plate.                                             |                                               |
|     | w. System Host Server and Display                                  | (1) Display: Minimum 24-inch LCD/ LED display. (Display and UVSS brand should be same)                                                                          |                                               |
|     |                                                                    | (2) CPU: Core i5 series, 14 <sup>th</sup> Generation or better.                                                                                                 |                                               |
|     |                                                                    | (3) Motherboard: To be mentioned (Reputed brand).                                                                                                               |                                               |
|     |                                                                    | (4) RAM: DDR4, Min 16 GB.                                                                                                                                       |                                               |
|     |                                                                    | (5) Storage: SSD (1 TB for OS) and 2x 6 TB (RAID 1).                                                                                                            |                                               |
|     |                                                                    | (6) Graphics: 6 GB (Dedicated).                                                                                                                                 |                                               |
|     |                                                                    | (7) OS: Windows 11 Pro (64 Bit) licensed.                                                                                                                       |                                               |
|     |                                                                    | (8) Other Software: Perpetual.                                                                                                                                  |                                               |
|     |                                                                    | (9) Keyboard, Mouse and other accessories to be provided.                                                                                                       |                                               |
|     | x. Power Supply (The system to be operated AC and DC power source) | (1) Can be operated by available electricity source of Bangladesh (220 V AC $\pm$ 10%, 50 Hz)                                                                   |                                               |
|     |                                                                    | (2) Battery backup system to be provided. Following details are to be mentioned:                                                                                |                                               |
|     |                                                                    | (a) Brand and model: To be mentioned                                                                                                                            |                                               |
|     |                                                                    | (b) Battery type: To be mentioned.                                                                                                                              |                                               |
|     |                                                                    | (c) Country of manufacturer of battery: To be mentioned.                                                                                                        |                                               |
|     |                                                                    | (d) Capacity (Ah): To be mentioned.                                                                                                                             |                                               |
|     |                                                                    | (e) Battery quantity: To be mentioned.                                                                                                                          |                                               |
|     |                                                                    | (f) Backup time: Minimum 4 hours (Power consumption calculation need to be submitted).                                                                          |                                               |
|     |                                                                    | (g) Charging facility by 220 V AC $\pm$ 10%, 50 Hz: To be provided.                                                                                             |                                               |
|     |                                                                    | (h) Necessary adapter/ inverter/ plug/ cable etc: To be provided.                                                                                               |                                               |
|     | y. <b>Physical Parameters.</b>                                     |                                                                                                                                                                 |                                               |
|     | (1) Overall dimension                                              | To be mentioned                                                                                                                                                 |                                               |
|     | (2) Weight of Complete Set                                         | To be mentioned                                                                                                                                                 |                                               |
| 17. | Environmental Capability.                                          |                                                                                                                                                                 |                                               |
|     | a. Operating Temperature                                           | Minimum -30° C to +70° C                                                                                                                                        |                                               |
|     | b. Storage Temperature                                             | Minimum -30° C to +70° C                                                                                                                                        |                                               |



**FOR OFFICIAL USE ONLY**

| Ser                                                                   | Description                                                                                                           | Required Technical Specification                                                                                                                                                             | To be filled up by the manufacture/ principal |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| (a)                                                                   | (b)                                                                                                                   | (c)                                                                                                                                                                                          | (d)                                           |
|                                                                       | c. Relative Humidity                                                                                                  | Minimum 93% (RH) and non-condensing                                                                                                                                                          |                                               |
|                                                                       | d. Shock Proof                                                                                                        | To be available.                                                                                                                                                                             |                                               |
|                                                                       | e. Degree of Protection (Dust and Water proof)                                                                        | Minimum IP68 for VUSS                                                                                                                                                                        |                                               |
| 18.                                                                   | List of Standard Accessories for full range of operation/ use                                                         | List to be submitted                                                                                                                                                                         |                                               |
| 19.                                                                   | List of Optional Accessories (if any)                                                                                 | List to be submitted                                                                                                                                                                         |                                               |
| 20.                                                                   | Any other                                                                                                             | Any other items/ accessories not mentioned above but require for full range of operation/use of the offered Portable Under Vehicle Surveillance System to be mentioned and must be supplied. |                                               |
| <b>Part-3: Training Requirement</b>                                   |                                                                                                                       |                                                                                                                                                                                              |                                               |
| 21.                                                                   | Operation/User Training                                                                                               | 20 Personnel (01 Week)                                                                                                                                                                       |                                               |
| 22.                                                                   | Repair, Maintenance and Troubleshooting Training (if require)                                                         | To be provided (As per requirement of EME Dte)                                                                                                                                               |                                               |
| 23.                                                                   | Inventory Control and Equipment Management Training (if require)                                                      | Not required                                                                                                                                                                                 |                                               |
| 24.                                                                   | Orientation and Quality Control Management Training (if require)                                                      | Not required                                                                                                                                                                                 |                                               |
| <b>Part-4: Repair and Maintenance Requirement Less List of Spares</b> |                                                                                                                       |                                                                                                                                                                                              |                                               |
| 25.                                                                   | a. SST/measuring & testing/fault finding and diagnostic set (if require)                                              | Not required                                                                                                                                                                                 |                                               |
|                                                                       | b. Special Service Materials (if require)                                                                             | Not required                                                                                                                                                                                 |                                               |
|                                                                       | c. Books and publication.                                                                                             |                                                                                                                                                                                              |                                               |
|                                                                       | (1) Owners/Operators manual in English (Book Type) including CD/DVD (if require)                                      | To be provided (As per requirement of EME Dte)                                                                                                                                               |                                               |
|                                                                       | (2) Workshop/Repair manual in English (Book Type) including CD/DVD (if require)                                       | To be provided (As per requirement of EME Dte)                                                                                                                                               |                                               |
|                                                                       | (3) 100% Updated Master spare parts catalogue in English (Book Type) including CD/DVD (if require)                    | To be provided (As per requirement of EME Dte)                                                                                                                                               |                                               |
|                                                                       | (4) Complete and Updated Master spare parts price Catalogue/List in English (Book Type) including CD/DVD (if require) | To be provided (As per requirement of EME Dte)                                                                                                                                               |                                               |
| <b>Part-5: List of Spares</b>                                         |                                                                                                                       |                                                                                                                                                                                              |                                               |
| 26.                                                                   | List of spare (if require)                                                                                            | To be provided (As per requirement of EME Dte)                                                                                                                                               |                                               |
| <b>Part-6: Tool List for Different Level of Maintenance</b>           |                                                                                                                       |                                                                                                                                                                                              |                                               |
| 27.                                                                   | Tool list for different level of maintenance (if require)                                                             | To be provided (As per requirement of EME Dte)                                                                                                                                               |                                               |

