BROAD DETAILS OF PROCUREMENT CASE:
UPGRADED LONG RANGE SYSTEM

1. Acceptance of Necessity (AoN) for procurement of **Upgraded Long Range System** has been accorded by the Competent Authority as per details given below :-

(a) **Quantity**. Approximately 44 (Forty Four).

(b) **Category**. 'Buy (Indian)' in accordance with Chapter-II and Chapter-V of DAP – 2020.

(c) **Mode**. Open Tender Enquiry.

2. In order to maximize participation, broad details of procurement case are being published on Indian Army Website (**www.indianarmy.nic.in**) and Ministry of Defence Website (**www.mod.gov.in**).

3. **Tentative date of issue of RFP is by 15 Oct 2022**. The broad details are being mentioned as an early information for interested vendors to plan and coordinate. The details mentioned are tentative and the final specifications alongwith the other procurement aspects will be listed in the RFP.

4. Interested OEMs/ Vendors are requested to forward detailed information on the product which they can offer by **10 Oct 2022** on the undermentioned address:-

Directorate General of Artillery (Arty-9)
General Staff Branch
Integrated HQ of MoD (Army)
Room No. 300A
'C' Wing, Sena Bhawan
New Delhi – 110 105

E-mail : **aproc@nic.in**

Broad Details

5. Upgraded Long Range System is a day and night surveillance system mounted on a Pan Tilt Head. The system will be an effective reconnaissance, observation and surveillance equipment to be employed in various terrains.

6. The broad details in respect of **'Upgraded Long Range System'** is as under: -

System Configuration. The proposed surveillance system should comprise the following components:- (a) Day Camera (Colour, Black/White) (b) Thermal Imager (c) Short Wave Infra Red (SWIR) Camera (d) Control Display Unit (CDU) (e) Laser Range Finder (f) Tripod (g) Inbuilt Global Position System (h) Motion Control System/ Pan and Tilt Unit

OP Reqmt							
Range		**Human (In Kms)**			**Vehicle (In Kms)**		
		Day	**Thermal**	**SWIR**	**Day**	**Night**	**SWIR**
	Detection	**≥ 15**	**≥ 12**	**≥ 15**	**≥ 20**	**≥ 15**	**≥ 20**
	Recognition	**≥ 10**	**≥ 06**	**≥ 08**	**≥ 12**	**≥ 12**	**≥ 15**
Thermal Channel							
Resolution	640 x 512 pixel						
Field of View	Wide : ≥ 12° x 10° & Narrow : ≤ 0.6° x 0.5°						
Magnification & Zoom	18X (Continuous Optical zoom), 2X (Digital Zoom).						
Day Channel							
Sensor Resolution	1920 x 1080 pixels.						
Field of View	Wide : ≥ 13° x 10° & Narrow : ≤ 0.8° x 0.6°						
Magnification & Zoom	28X (Continuous Optical zoom), 4X (Digital Zoom).						
SWIR Channel							
Resolution	640 x 512 pixel or better.						
Field of View	Wide - ≥ 12° x 10° & Narrow - ≤ 0.8° x 0.6°						
Optical Zoom	19X (Continuous zoom) and 4X (Digital Zoom).						
Laser Range Finder							
Range Resolution	Minimum : ≤ 100 meter, Maximum : ≥ 20 Km						
Accuracy	± 5m						
Lase Safety Class	Eye-Safe Class 1M according to IEC-60825-1 (2014).						
Other System Features							
Digital Magnetic Compass (DMC)	(a) Inbuilt DMC for auto Northing. (b) Accuracy ≤ ± 1.0°						
Satellite Based Positioning and Navigational System	(a) "Satellite Based Positioning and Navigational System" with WGS 84 projection system. It must provide own position as well as target position MGRS (Military Grid Reference System). (b) It should be compatible with **Defence Series Maps** and **IRNSS**. (c) Inbuilt GPS to provide own position during initialization. Accuracy better than 10 meters.						
Control & Display Unit (CDU)							
Display Type	19" LED Backlight display (Sunlight Readable), Windows X/latest version, Intel Core i7 – Series Processor, RAM ≥ 8 GB, 1TB HDD						
Control Keys	Rugged QWERTY Keyboard with Touchpad/ Trackball.						
Video Recording Capability	Capable of recording video of not less than 8 Hours.						
External Interface	(a) Digital HDMI output, USB & DVD. (b) CDU should have DVD/CD ROM to facilitate loading/uploading of digital maps (**Raster & Vector formats**).						
Pan and Tilt							
Type	Motorized Azimuth and Elevation; **Azimuth Range** – N x 360°						
Elevation Range (Tilt)	± 40° and **Stabilization**: Gyro Stabilization Facility						
Environmental Specification							
Operating Temperature	Minimum Temperature : Minus 20°C to Minus 10°C Maximum Temperature: Between 40°C and 45°C						

Technical Parameters	
Weight	Total weight of the equipment not be more than 200 (Two hundred) kgs individual Components - ≤25 Kgs
Environmental Conditions	The system and all sub assemblies should comply with relevant aspect of JSS 55555:2012, Rev No- 3 / Latest for electronic component and JSS 5855 for optical instruments.
Power Supply	
Generator	A generator producing the desired voltage to power all the components as well as charging of batteries.
Battery Type	(a) Lithium Ion Phosphate Batteries with charging/ discharging temperature range of -20° C to +60°C. (b) Time required for charging the batteries should not exceed four (04) hours. (c) Service life of the batteries should be minimum 4000 hours.