

**BROAD DETAILS OF PROCUREMENT CASE: RUNWAY INDEPENDENT (RWI)
REMOTEY PILOTED AIRCRAFT SYSTEM**

1. Acceptance of Necessity (AoN) for procurement of **Runway Independent (RWI) Remotely Piloted Aircraft System** has been accorded by the Competent Authority as per details given below :-

(a) **Quantity.** Approximately 10 (Ten).

(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 (Artillery-9)
General Staff Branch
Integrated HQ of MoD (Army)
Room No- 300A, 'C' Wing
Sena Bhawan
New Delhi-110105**

Email : aproc@nic.in

Broad Details

5. Runway Independent (RWI) Remotely Piloted Aircraft System is ideal for a dynamic sensor-shooter linkage, reducing fixed-wing launch and recovery challenges while freeing troops from stationary runway constraints.

6. The broad details in respect of '**Runway Independent (RWI) Remotely Piloted Aircraft System**' is given as succeeding paras.

7. **System Configuration.** The Tac RPAS (RWI) system should consist of the following sub-systems:-

- (a) Aerial Vehicle (AV).
- (b) Sensor package/ Payloads (Day and Night).
- (c) Ground Control Station (GCS) to include power source/generator.
- (d) Remote Video Terminals (RVT).
- (e) Inter and intra communication system.
- (f) Facility to transmit imagery in real time/ near real time to the end user.

8. **Geo Reference.** Indian Military Grid Reference should be based on **Defence Series Maps** (DSM) and the equipment display console should be able to simultaneously read out 10 figure Grid Reference as well as Geographical coordinates in degree-minutes-seconds format.

9. **Launch and Recovery.** The RPAS should be capable of Vertical Take Off and Landing (VTOL).

10. **Altitude (With Payload).**

- (a) Operating Altitude : Upto 4000 M (13000ft) Above Mean Sea Level.
- (b) Altitude Ceiling : Upto 5000 M (16000 ft) Above Mean Sea Level.

11. **Endurance.** With maximum All Up Weight (AUW) should be **4 hours** or more (from take-off to landing).

12. **Operating Range (At all Operating Altitude).** The direct Line of Sight control range from GCS should be minimum **50Km**.

13. **Speed (for mid fuel weight).**

- (a) Maximum Speed : **75 Km/h or more.**
- (b) Operating Speed : **Upto 60 - 120 Km/h.**

14. **Navigation System.** The system should be compatible with GPS, GLONASS and **IRNSS**.

15. **Payloads.** The system should cater for operation of Electro Optical Payloads:-

- (a) **Optical Sensor (Day Video Camera, Night Camera, Medium Wave Infra-Red (MWIR) Camera and Laser Range Finder (LRF).** The RPAS should have established Gimbal Payload Assembly (GPA) to house the CCD camera (colour) and MWIR.

16. **Ground Control Station (GCS).** The GCS should be ruggedized and of modular design and capable of rapid deployment the GCS should be **veh based**.

17. **Remote Video Terminal (RVT).** The RVT should be capable of being remotely located within the communication range of the AV of minimum 20 Km and be tuned to the AV's downlink frequency. It should be ruggedized portable computer based with a resolution of minimum 1280 x 780 pixels, screen size of ≥ 13 inches.
18. **Data Link Frequency Management.** The RPAS should have a suitable uplink and downlink with the GCS in S/C Band (2 GHz to 6 GHz) secured with **256** bit AES encryption **or higher standards**. The transmission must be digital.
19. **Environment Conditions.** The RPAS and payload should be capable of satisfying the environmental requirements as relevant paragraphs of MIL-STD-810 G and JSS-55555. The RPAS should withstand exposure to rainfall rate of 15 mm per hour and wind conditions up to 25 Knots.