

## **BRIEF OF THE CASE**

**Case Reference:** CF.No/ Air HQ/C 18488/55/DAD

1. **Service:** Indian Air Force
2. **Nodal Directorate at SHQ:** Directorate of Ops (Off)
3. **Name of the Case:** Indigenous Design, Development and Manufacturing of **High Altitude Pseudo Satellite (HAPS)** through private defence production Industry.
4. **Case Brief.** Surveillance over an area is necessity for long term weapons planning, assessment of target area and providing coverage over own forces in both offensive and defensive posture. At present no technology exists to achieve long term sustained surveillance over an area. High Altitude Pseudo Satellite (HAPS) is a high altitude solar powered unmanned aircraft system that can maintain over an area for long duration, remain above troposphere and carry sensors for the mission. This system will be of direct use to IAF in carrying out its primary task and generate target/ mission critical data.
5. **Proposal.** IAF intends to partner with indigenous defence production industry to undertake design, development and manufacture of **High Altitude Pseudo Satellite (HAPS)** under the **Make-I (Government Funded)** procedure as per Chapter III of DAP 2020.
6. **The Broad Technical Parameters.** The broad preliminary technical parameters of the equipment is attached as **Appendix A**. Detailed project specifications and Preliminary Service Quality Requirements (PSQRs) will be developed after industry interactions and feasibility study.
7. **Indigenous Content (IC)/ Categorisation.** Successful development under **Make-I** category would result in acquisition from successful Development Agency (DA) through the **Buy Indian (IDDM)** category with indigenous design and development and a **minimum IC of 50%**.
8. **Industry Attributes:-**
  - (a) Should be an Indian entity (as per provisions of Para 20, Chapter I of DAP 2020, including additional conditions at sub paragraphs (a) and (b)). (**Essential**)

**Note:** A copy of DAP 2020 is available on website of Ministry of Defence.

(b) Experience in manufacturing, maintenance, logistics, aviation related MRO (Maintenance, Repair & Overhaul) (**desirable**).

(c) Familiarity with QA processes of DGAQA and certification processes of CEMILAC (Centre for Military Airworthiness Certification) (**desirable**).

9. Interested **Indian** vendors may send their proposals by 30 Sep 23. It is requested that, answers to questions at **Appendix B** may also be dovetailed by the industry in their response.

10. Interested respondents are also urged to read the provisions of "Make-I" given in Chapter III of DAP 2020 as the project will be progressed as per these provisions.

11. **Contact Details.** Any queries/further details of the case may be obtained from the Nodal Dte at Air Headquarters (Vayu Bhavan). Interested Indian vendors may forward their responses through letter/fax/email to the Nodal Directorate as follows:-

**Nodal Directorate**

Air Cmde Ops (Wpn)  
Room No 560, Air HQ (VB)  
Rafi Marg, New Delhi – 110 106  
Tele : 011-23015104  
Email: [bullseye@gov.in](mailto:bullseye@gov.in)

12. A copy of all communication should also be addressed to:-

Make PMU (AF); Directorate of Aerospace Design  
Room No 803; Air HQ (VB);  
'A' Block, Defence Office Complex  
KG Marg, New Delhi-110001  
Tele: 011-23074031  
Email: [aero.design@gov.in](mailto:aero.design@gov.in)

**BROAD TECHNICAL PARAMETERS:**  
**HIGH ALTITUDE PSEUDO SATELLITE (HAPS)**

1. Board parameters of High Altitude Pseudo Satellite (HAPS) are as follows:-
  - (a) HAPS should be capable of carrying out aerial surveillance of a large area with upto three months loiter time.
  - (b) HAPS should have the capability of target identification, change detection and on-board sensors for EO, ESM, Communication and data link.
  - (c) Undertake satellite equivalent tasking for ISR missions for continuous observation beyond borders and plug gaps for want of satellites.
  - (d) Long term (Months) sustained surveillance over a designated area.
  - (e) Should be able to operate above the troposphere.

**QUESTIONNAIRE:**  
**HIGH ALTITUDE PSEUDO SATELLITE (HAPS)**

1. Whether the company/Association of Persons (AoP) is eligible as per provisions of DAP 2020? (Eligibility of Participation: Indian vendors only).
2. Please provide a brief account of vendor assessment of its capability (Financial and Technical) to undertake the project? Please state the list of documentation can be provided for verification?
3. Please provide summary of essential financials (annual turn-over, net worth, credit rating).
4. Please provide details of available manufacturing infrastructure.
5. Please provide details of major contracts undertaken in past. Also indicate special achievements to demonstrate in-house design capability, production capability or project management.
6. Details of components which will be manufactured in-house and which will be outsourced (through domestic vendors as well as foreign vendors– indicate separately).
7. Please provide details of resources/capability of the firm to undertake indigenous design, development and testing.
8. Whether 50% Indigenous Composition (IC) can be ensured