

## PROJECT BRIEF

1. **Project Reference:-** CF No/ Air HQ/C 18488/68/DADCD BM-I.
2. **Service:-** Indian Air Force.
3. **Nodal Directorate at IAF:-** D Ops (Remote).
4. **Name of the Project:** Design, Development and Manufacture of Medium Altitude Heavy Lift Airship under Make-I Category of DAP-2020.
5. **Project Brief.** Proposed solution is a multi utility/ multi payload Airship platform, preferably operating on Hydrogen. The platform would be utilised towards carrying out persistent ISR, communication akin to airborne radars like AWACS and AEW&C, and having capability to operate special payloads as well as act as a launch base/ platform for projectiles or drones. Hydrogen is preferred as it is lighter than air, cheap and non-toxic gas, abundantly available having high energy density and clean combustion product (only water vapour).
6. **Proposal.** IAF intends to partner with indigenous defence production industry to undertake design, development of **Medium Altitude Heavy Lift Airship** under **Make-I** sub-category as per Chapter III of DAP 2020.
7. **Broad Technical Specifications** The broad preliminary technical parameters of the equipment is attached as **Enclosure A**. Detailed project specifications and Preliminary Service Quality Requirements (PSQRs) will be formulated after industry interactions and feasibility study.
8. **Indigenous Content (IC)/ Categorisation.** Successful development under **Make-I** category would result in acquisition from successful Development Agency (DA) through the (**Buy Indian-IDD**) category with indigenous design and development and a **minimum IC of 50%**.
9. **Industry Attributes:-**
  - 9.1. 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.
  - 9.2. Experience in manufacturing, maintenance, logistics, aviation related MRO (Maintenance, Repair & Overhaul) (**desirable**).
  - 9.3. Familiarity with QA processes of DGAQA and certification processes of CEMILAC (Centre for Military Airworthiness Certification) (**desirable**).
10. Interested **Indian** vendors may send their proposals by **30 Apr 26**. It is requested that, answers to questions at **Enclosure B** may also be dovetailed by the industry in their response.
11. 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.

12. **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**

Dte of Ops (Remote)

Air HQ (VB)

Rafi Marg, New Delhi-110106

Tele: 011-23792110

Email: [indian.ironman@gov.in](mailto:indian.ironman@gov.in) & [meharbaba.info@gov.in](mailto:meharbaba.info@gov.in)

13. 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: [makeind.af@gov.in](mailto:makeind.af@gov.in)

**ENCLOSURE A**  
(Refers to Para 7 of Brief)

**BROAD TECHNICAL PARAMETERS:  
MEDIUM ALTITUDE HEAVY LIFT AIRSHIP**

1. Board parameters of Medium Altitude Heavy Lift Airship are as follows: -
  - 1.1. Lift and propulsion – Hybrid solution (preferably Hydrogen fuel based) supported by Solar Power, Battery/ fuel cell/ any other technology.
  - 1.2. Operating altitude from Sea level to 10,000 ft. AMSL (up to 30000 ft. AMSL **Desirable**).
  - 1.3. Payload at least **2000 kg** (up to 5000 kg **Desirable**).
  - 1.4. Endurance **Min 10 days** with payload (30 days **Desirable**).
  - 1.5. Envisaged use cases: Persistent ISR platform (primarily with Radar, and additionally EO & IR, SAR, SIGINT), Communication relay. In future, launch platform for projectiles / drones etc.
  - 1.6. Ability to generate maximum TAS of 100 kts.
  - 1.7. Capability to auto launch and recover from prepared and unprepared surface.
  - 1.8. Communication – LoS at least 250km or SATCOM.
  - 1.9. Capability to operate in GNSS, IRNSS, NAVIC and GNSS denied environment.
2. **Quantities.** Approximate MOQ **10**. Exact figure will be arrived at based on the Feasibility Study recommendations.

## **ENCLOSURE B**

(Refers to Para 10 of Brief)

### **QUESTIONNAIRE FOR RESPONSE MEDIUM ALTITUDE HEAVY LIFT AIRSHIP**

1. Whether the company/Association of Persons (AoP) is eligible as per the provisions of Para 20 of Chapter I and Para 6 of Chapter III of DAP 2020.
2. Please provide a brief account of industry assessment of its capability (Financial and Technical) to undertake the project? Please state the list of documentation that can be provided for verification?
3. Please provide summary of essential financials (annual turn-over for last three financial years, 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/critical technologies 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 minimum 50% Indigenous Composition (IC) can be ensured. Please mentioned the breakdown of IC for material/component/software manufactured in India.
9. Please provide previous experiences in projects of similar domain, if any.
10. Please indicate plan/status for QA qualification, testing and certification of the Medium Altitude Heavy Lift Airship.
11. Please provide other relevant and applicable details. (Indicative of information on parts, assembly, testing, etc).
12. Any other relevant information for the case.