BRIEF OF THE CASE

Case Reference: CF.No/ Air HQ/C 18488/58/DAD

1. <u>Service</u>: Indian Air Force

2. Nodal Directorate at SHQ: Directorate of Ops (Off)

3. <u>Name of the Case</u>: Indigenous Design, Development and Manufacturing of **Collaborative Long Range Target Saturation/Destruction System** through private defence production Industry.

4. **Case Brief.** Swarm drones have capability to bring mass and numbers to enemy airfields, AD systems and radars. A swarm drone system consisting of multiple drones capable of operating in dense EW environment with autonomy in navigation, target selection and evasion is required to undertake missions at long range from launch based (1000 km+). The swarm to have at least 80% swarm to carry warhead, navigation, avoidance, sensor capability provided by rest 20% members. The swarm to have innovative launch techniques of multiple area launch, limited area. The attack profiles must be novel to provide maximum attrition. The development required is to enable lower cost per launch. This enabling technologies are to be developed and complete solution delivered for achieving airfield denial and saturation of AD systems.

5. **Proposal**. IAF intends to partner with indigenous defence production industry to undertake design, development and manufacture of **Collaborative Long Range Target Saturation/Destruction System** under the **Make-II** procedure as per Chapter III of DAP 2020.

6. <u>Broad Technical Parameters</u> 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. <u>Indigenous Content (IC)/ Categorisation</u>. Successful development under **Make-II** 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-II" procedure given in Chapter III of DAP 2020 as the project will be progressed as per these provisions.

11. <u>Contact Details</u>. Any queries/further details of the case may be obtained from the Nodal Directorate 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: 23015104 Email: <u>bulls.eye@gov.in</u>

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

Appendix A (Refers to Para 6 of Brief)

BROAD TECHNICAL PARAMETERS: COLLABORATIVE LONG RANGE TARGET SATURATION/DESTRUCTION SYSTEM

1. Board parameters of Collaborative Long Range Target Saturation/Destruction System are as follows:-

(a) The system consists of multiple drones capable of operating in dense EW environment with autonomy in navigation, target selection and evasion.

(b) The drones are required to undertake missions at long range from launch base (1000 km+).

(c) The system should have the capability to disrupt complete enemy airfield system like runway, aircraft shelters, fuel storage, antenna structures, power control systems etc.

(d) The swarm to have at least 80% with multiple types of warhead, navigation, avoidance while the rest 20% members to provide distributed intelligence with various sensor capabilities like Digital Scene Matching Area Correlator (DSMAC), Data link, etc.

(e) It should possess capability for long range regrouping, selected targeting and shared intelligence for target selection.

(f) The swarm to have innovative launch techniques of launch from multiple locations as well as from single location.

(g) The attack profiles must be novel to provide maximum attrition like high speed top attack, spiral loiter, shelter entry, electrical grid disruption etc.

Appendix B (Refers to Para 9 of Brief)

QUESTIONNAIRE: COLLABORATIVE LONG RANGE TARGET SATURATION/ DESTRUCTION SYSTEM

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