

PROJECT BRIEF

1. **Case Reference:-** CF No/ Air HQ/C 18488/66/DAD.
2. **Service:-** Indian Air Force.
3. **Nodal Directorate at SHQ:-** D Ops (Remote).
4. **Name of the Case.** Design, development and Manufacture of **Air-Dropped Canisterised - Swarm (ADC-S)** under Make-II Category of DAP-2020.
5. **Case Brief.** Development of an indigenised Air Dropped Canisterised - Swarm (ADC-S), to enhance the range, flexibility and operational reach of IAF, utilising the potent multiuse swarm munition systems. These would be air dropped or jettisoned from a transport class of aircraft (like C-295 or C-130 or C-17 etc.), as per the Op requirement. A cost effective solution which would ensure range and precision strike with desired effect. The proposed system would significantly enhance IAF's capability to engage time-sensitive, high-value targets especially in a contested environment.
6. **Proposal.** IAF intends to partner with Indian defence production industry to undertake design & development of **Air-Dropped Canisterised - Swarm (ADC-S)** under the **Make-II** procedure as per Chapter III of DAP 2020.
7. **Broad Technical Parameters.** The broad preliminary technical parameters of the equipment is attached as **Enclosure A**. Detailed project specifications and Preliminary Service Qualitative Requirements (PSQRs) shall be formulated industry interactions and feasibility study.
8. **Indigenous Content (IC)/ Categorisation.** Successful development under **Make-II** 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. Familiarity with QA processes of DGAQA and certification processes of CEMILAC (Centre for Military Airworthiness Certification) (**desirable**).
10. Interested **Indian** industries 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-II" 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 & 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

ENCLOSURE A
(Refers to Para 7 of Brief)

BROAD TECHNICAL PARAMETERS IRO MAKE-II PROJECT FOR AIR-DROPPED CANISTERISED SWARM (ADC-S)

1. Broad parameters of Air-Dropped Canisterised Swarm (ADC-S) are as follows: -
 - 1.1. The ADC-S would give the advantage of having an enhanced range of min 500 km approx. from the airdropped point. Final figure will be finalised after the feasibility study.
 - 1.2. The deployment method should be based on palletised weapon airdrop system compatible with transport class of aircraft (like C-295 or C-130 or C-17 etc.). The system would be developed with modularity, interoperability, ease of deployment and operations as the key factor in shaping the end goal.
 - 1.3. Each canister may house at least six to eight (approx.) or more of such swarm munitions, capable of cruise speed of min. 350 to 400 kmph (approx.) and carrying at least 30 kg munition. It should have the capability of carrying sensors/payloads in addition to the munition payload. The final figures may be arrived at by the Project Facilitation Team (PFT) or during the course of development of the technology.
 - 1.4. The ADC-S system should have swarm features, AI and autonomy, capability to carry sensors and payloads as per the operational requirement. It should have autonomous capability for navigation, search, detect, identify target and decision making along with terminal guidance especially in GNSS denied and contested environment, so as to carry out precision strike with CEP \leq 5m.
2. **Quantities.** Approximate MOQ **1000** to **2000**. Exact figure will be arrived at based on the Feasibility Study recommendations.

ENCLOSURE B

(Refers to Para 10 of Brief)

QUESTIONNAIRE FOR RESPONSE AIR-DROPPED CANISTERISED - SWARM (ADC-S)

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 industries as well as foreign OEMs– 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 Air-Dropped Canisterised - Swarm (ADC-S).
11. Please provide other relevant and applicable details. (Indicative of information on parts, assembly, testing, etc).
12. Any other relevant information for the case.