

**INVITATION FOR EXPRESSION OF INTEREST (EoI) FOR DRONE BASED MINE
DETECTION AND DIFFUSION SYSTEM (DBMD&DS)**

References : Defence Acquisition Procedure 2020.

Appendices:

- Appendix A :** Preliminary Service Qualitative Requirements for DBMD&DS (Not attached & will be issued to interested vendors).
- Appendix B :** Commercial Evaluation Criteria.
- Appendix C :** Technical Evaluation Criteria (Not attached & will be issued to interested vendors).
- Appendix D :** Information Performa.
- Appendix E :** Confidentiality Agreement.
- Appendix F :** Correctness Certificate.
- Appendix G :** EoI Compliance Certificate.

1. **Introduction.** Current breaching methods of minefields include manual breaching and mechanical methods such as trawls/ plough based breaching. While the manual methods are time consuming and cumbersome, mechanical methods involve heavy track based vehicles resulting in mobilization of resources. Also, there are safety issues during breaching operations. The Indian Army prefers a combination of breaching methods and would endeavor to possess different breaching equipment in its inventory for optimal output during operations as well as for redundancy. Drone Based Minefield Detection and Diffusion System (DBMD&DS), based on niche technology, will offer an alternative to manual and mechanical breaching, presently in vogue, with requisite safety and accuracy.

2. **Objective.** The objective of this invitation of Expression of Interest (EoI) is to seek willingness of Indian Vendors to participate in the Make II Project listed below, in accordance with provision of DAP 2020 (reference Chapter III). Indian Vendors meeting the Technical, Commercial and Project Requirements laid out in the EoI as the next step, will be issued a 'Project Sanction Order' (PSO) to develop a prototype as per provisions of Chapter III of DAP 2020.

3. **Layout.** The EoI has been covered under following parts.

- 3.1 Part I : General Information.
- 3.2 Part II : Scope of the Project.
- 3.3 Part III: Evaluation Criteria.
- 3.4 Part IV: Procedure for submission of response to the EoI
- 3.5 Part V : Miscellaneous.



PART I: GENERAL INFORMATION

4. **Nomenclature.** Drone Based Mine Detection and Diffusion System (DBMD&DS).
5. The nodal officer for this project for all queries/ clarifications/ coordination will be the **Secretary, Project Facilitation Team (PFT), Drone Based Minefield Detection and Diffusion System (DBMD&DS)**. Address and contact details are given at Para 32 of EoI.
6. **Make-II Procedure.** Make-II Procedure duly available at Chapter III of DAP 2020, will be referred to hereinafter in the case and a copy of the same is available on MoD website. The Project Facilitation Team (PFT) of Indian Army/ MoD constituted will act as interface between Indian Army and Industry during the Design and Development stage of the project. **No reimbursement of development cost is permissible under Make-II scheme.**

PART II : SCOPE OF THE PROJECT

7. **Scope.** DBMD&DS is an equipment envisaged to enable to detect and diffuse mines. It is based on a two drone concept and Ground control system (GCS) to control both the drones remotely. The project is aimed at meeting this requirement indigenously by design, development & manufacturing by Indian industry.
8. **Categorisation** 'Make II' (Industry funded) under the provisions of Chapter III of DAP 2020 and amendments thereof. The project is further categorised as under:-
 - 8.1 **Prototype Development Phase.** 'Make-II (Industry Funded)' in accordance with Para 5(b) (i) of Chapter III of DAP 2020.
 - 8.2 **Procurement Phase.** 'Buy (Indian-IDDMM)' with minimum 50% Indigenous Content (IC) in accordance with Para 6 (d) of Chapter III of DAP 2020 & amendments thereof.
9. **Indigenous Content (IC).** The product indigenously designed, developed and manufactured should have minimum of 50% of overall IC (minimum 50% of overall IC to be in the form of material/ component/ software) that are manufactured in India. The IC will be at the Base contract price as specified in amended DAP 2020 & amendments thereof, in conjunction with additional specific requirement, if any mentioned in RFP.
10. **Quantities.** The quantities sought for the project are:-
 - 10.1 **Prototype Development Phase** One prototype per DA consisting of one Mapping drone, one Detonator drone, One Ground Control Station (GCS), 168 explosive/ demolition charges (42 numbers for Anti-Tank mines and 126 numbers for Anti-Personnel mines) and accessories per DA would be required for trials.
 - 10.2 **Procurement Phase.** Quantity 74 sets consisting of 74 Mapping drones, 74 Detonator drones, 74 Ground Control Stations (GCS), 18,648 explosive/ demolition charges (4662 numbers for Anti-Tank mines and 13,986 numbers for Anti-Personnel mines) and accessories are proposed for procurement to meet essential requirement of Indian Army.

11. **Preliminary Service Qualitative Requirements (PSQR) of the Proposed System.** PSQR of the DBMD&DS is attached as **Appendix A**

Time Lines and Milestones

12. **Time Lines.**

<u>Ser No</u>	<u>Activity</u>	<u>Timelines</u>
12.1	Prototype development	48 weeks from the date of issue of Project Sanction Order.
12.2	Production of 74 Sets of DBMD&DS in procurement phase	24 Months from the date of issue of Supply Order.

13. **Milestones.** Major activities in the procurement are given below:-

<u>Ser No</u>	<u>Activity</u>	<u>Remarks</u>	<u>Timelines</u>
13.1	Issue of EoI	By PFT	T ₀
13.2	Pre EoI Response Meeting	By PFT with EoI respondents	T ₀ + 3 weeks
13.3	EoI Responses Submission	By EoI respondents (Indian Vendors)	T ₀ + 8 weeks
13.4	EoI Responses Evaluation	By PFT	T ₀ + 14 weeks
13.5	Issue of Project Sanction Order for Development of Prototype	To selected DAs, those meeting evaluation criteria	T ₀ + 16 weeks
13.6	Design and Development of Prototype	Selected DAs will develop the prototype	T ₀ + 64 weeks
13.7	Design and Development of Prototype and Confirmation of Prototype Development (CoPD)	(i) Design and Development of Prototype. (ii) CoPD by PFT to ensure matching of development of product as per PSQR. (iii) More than one review may be conducted, on required basis. Dates will be promulgated by the PFT, as per progress of the project.	T ₀ + 16 weeks to T ₀ + 64 weeks
13.8	Single Stage Composite Trials, Conversion of PSQR to GSQR, Issue of Commercial RFP till Contract	As per DAP 2020 and amendment thereof as applicable. Sequence of activity after development of prototype up to signing of contract will be amplified in PSO.	-



Development of Prototype and Trials

14. Prototype will be developed by the selected vendors after the issue of PSO. Confirmation of Prototype Development by the PFT to ensure matching of development of product as per PSQR will be carried out. All possible and reasonable assistance and any clarification related to functional or operational aspect of development as sought by DAs will be provided by Project Facilitation Team.

Solicitation of Commercial Offer

15. A commercial Request for Proposal (RFP) for 'Buy (Indian-IDDM)' phase would be issued to DA(s) for soliciting their commercial offers. Sequence of activity after development of prototype up to signing of contract will be amplified in the PSO. **Additional technical information/ documentation, as may be necessary including those related to indigenous Content and IPRs would also be required to be provided by the vendor prior to the issue of Commercial RFP.**

Deliverables

16. The project is envisaged to have the following deliverables:-

16.1 **Prototype Development Stage.** One prototype per DA consisting of one Mapping drone, one detonator drone, One Ground Control Station (GCS), 168 explosive/ demolition charges (42 numbers for Anti-Tank mines and 126 numbers for Anti-Personnel mines) and accessories per DA would be required for trials..

16.2 **Procurement Stage.** Quantity 74 sets consisting of 74 Mapping drones, 74 Detonator drones, 74 Ground Control Stations (GCS), 18,648 explosive/ demolition charges (4662 numbers for Anti-Tank mines and 13,986 numbers for Anti-Personnel mines) and accessories are proposed for procurement to meet essential requirement of Indian Army.

16.3 **Warranty.** The goods supplied shall carry a warranty for Two years from the date of acceptance of Joint Receipt Inspection (JRI). Details will be further amplified in the RFP.

16.4 An appropriate Engineering Support Package (ESP) will be required for utilisation & maintenance of the equipment to include Manufacturer Recommended Spares, SMT, STEs, Test Jigs & Fixture, Training Aggregates, Technical literature and Training involving User training as well as Training on maintenance & repairs of 'O' & 'I' levels will be required. These will be provided with the equipment during the procurement phase. Details will be further amplified in the Request for Proposal (RFP).

Details of Trials/ Assistance to be Provided

17. The following trials will be conducted/ assistance will be provided:-

17.1 **Single Stage Composite Trials (SSCT).** The SSCT will be conducted by SHQ, post confirmation of development of prototype of DBMD&DS by the vendor to the PFT, to evaluate the performance of DBMD&DS to meet requirements stated in the PSQR. Detailed trial methodology will be formulated in consultation with the vendor(s) and all stakeholders during the course of development of the prototype and the same will be issued before commencement of SSCT.

17.2 **Assistance to be Provided.** Assistance to Development Agencies (DAs) will be provided by provision of ranges for carrying out trials. Range will be provided for a duration of 10 days in two blocks of 5 days each on sharing basis. Additional assistance if any will lie solely at the discretion of the Project Facilitation Team. In case of any damage occurring to equipment/ property/ personnel resulting from the testing of the job of private entity, the private entity is liable to bear the expenses of repair/replacement of the facility and all necessary insurance coverage for the job shall be the responsibility of the private entity.

Multiple Technology Solutions

18. Multiple technology solutions are not acceptable.

19. **Intellectual Property Rights (IPRs).** As per provisions of para 59, Chapter III of DAP 2020, DA shall retain title or ownership and all other rights in intellectual property generated during the development of project. Further, **based on development of the prototype a comprehensive list of design documents (to be informed subsequently) will need to be submitted by the DA for verification by the PFT.** The Government shall have ' March-in rights' under which the government can ask the DA to grant or may itself grant license for, inter alia, the following reasons:-

19.1 Where health and safety requirements so require the Government to act in public interest.

19.2 For National Security Reasons.

19.3 To meet requirements for public use not reasonably satisfied by the contractor.

19.4 For failure of the contractor to substantially manufacture the products embodying the subject invention in India; or

19.5 For failure of the contractor to comply with any of the requirements laid down under these guidelines.

PART III : EVALUATION CRITERIA

Eligibility Criteria

20. Eligible for Indian vendor defined at **Paragraph 20** including additional conditions at **Paragraph 20 (a)** and **Paragraph 20 (b)** of Chapter-I of DAP 2020.

21. This EoI is being published on MoD/ DDP website inviting companies to participate in the Make-II project and also issued to the potential vendors who have indicated willingness during the Feasibility Study to participate in the development of DBMD&DS.

22. EoI respondents will furnish their responses to the Vendor Evaluation Criteria as per **Appendix B** enclosed.



Technical Evaluation Criteria

23. **Technical Specifications.** The respondents to this EoI are required to furnish information about their Technical Capability as per **Appendix C**. Compliance/ information as per **Annexure I to Appendix C** is also required to be submitted as per the proposed solution offered by the DA against PSQR of the equipment.

24. **Indigenous Content (IC).** Post successful development of prototype(s), further procurement will be as per the Buy (Indian IDDM) procedure. The product indigenously designed, developed and manufactured should have minimum of 50% of overall IC (minimum 50% of overall IC to be in the form of material/ component/ software) that are manufactured in India. The IC will be at the Base contract price as specified in amended DAP 2020, in conjunction with additional specific requirement, if any mentioned in RFP.

25. **Foreign Collaboration.** If the DA is collaborating / plans to collaborate with a foreign technology provider, the nature of such collaboration and the technology areas being transferred must be stated in the response (please refer paragraphs 16 & 17 of **Appendix D**).

26. **Additional Information.** Additional information required to be furnished as part of the EoI response is given at **Appendix D**.

PART IV: PROCEDURE FOR SUBMISSION OF RESPONSE TO THE EoI

27. The response to the EoI shall be submitted as per formats given at **Appendix 'B'** to **Appendix 'G'**.

28. Guidelines for Submitting EoI Responses.

28.1 The response should be submitted strictly as per the formats given in respective Appendices. Should a vendor need to mention any other information, a separate column/ row may be added.

28.2 All responses and Appendices should be submitted in a single file/ folder. Supporting documents/ additional references should be submitted in a separate folder with proper reference mentioned against each parameter/ sub parameter in respective appendices.

28.3 Any supporting document/ evidence without any reference to specific parameter of criteria will not form part of the assessment.

29. **Rejection Criteria for Selection as DAs.** The following may lead to rejection of EoI response:-

29.1 Failure to meet Eligibility Criteria given at **Appendix 'B'**.

29.2 Failure to meet / comply with the Technical Evaluation Criteria specifications given at **Appendix C**.

29.3 Failure to offer compliance to any of the terms and conditions given in the EoI.



29.4 Failure to submit certificates/ details as mentioned in **Appendix 'D'** to **Appendix 'G'** of the Eol.

29.5 Any other parameter of the response considered inadequate by the MoD, Government of India.

30. **Foreclosure Criteria.** As per provisions of Para 20, Chapter III of DAP 2020, no government funding is given for Make II projects. No foreclosure of the projects will be done after issue of PSO other than reasons for default / non adherence to PSO by Vendors or delay by DA to produce prototype for trials.

31. The Eol respondent shall submit three (03) copies of response to the Eol, clearly marking one copy as '**Original Copy**' and second & third as '**Duplicate Copy and Triplicate Copy**'. In the event of any discrepancy between them, the original copy shall govern/ prevail. Each page of the response will bear the signatures of the authorized signatory of the company. The DA shall also submit a soft copy of the response to this Eol in a CD/ DVD.

32. **The envelopes shall be addressed as under:-**

Secretary, Project Facilitation Team
Drone Based Minefield Detection and Diffusion System
Combat Engineers Directorate,
Engineer-in-Chief's Branch,
Room No 91, Kashmir House, Integrated HQ of MoD (Army),
Rajaji Marg, New Delhi-110011
Email id: cobrahills.10@gov.in
Tele No: 9818831238

33. The responses to this Eol must be submitted by **28 Sep 2025** at the above mentioned address.

34. The company will be required to sign and honour the 'Confidentiality Agreement' with MoD Govt of India. The 'Confidentiality Agreement' will be furnished by each Eol respondent at the time of submission of Eol responses as per format given at **Appendix E**.

PART V: MISCELLANEOUS

35. **Pre Eol Responses Meeting.** A pre-response meeting will be held on **18 Aug 2025 at 1100hrs** in Combat Engrs Directorate, Engineer-in-Chief's Branch, New Delhi-110011. Vendors are required to submit their queries / clarifications / amplifications in writing to this office by **12 Aug 2025**.

36. Guidelines for penalties in business dealings with entities as promulgated by Government from time to time, will be applicable on procurement process & bidders.

37. The Pre-contract Integrity Pact (PCIP), listed as detailed in paragraph 119 of Chapter II of DAP 2020, shall apply mutatis mutandis to the 'Buy (Indian-IDDM)' phase of 'Make' Project.



38. Respondent would be subject to disqualifications if they make false, incorrect, or misleading claims in their response to this EoI. A **'Correctness Certificate'** as per the format at **Appendix F** will be furnished as part of the response.

39. An EoI **Compliance Certificate** will be submitted as per **Appendix G**.

40. Interested Vendors responding to the EOI published on MoD /DDP website and who had not indicated willingness during the feasibility study can physically collect Appendix A and Appendix C from the address given at Para 32. For collection of Appendix A & Appendix C the vendor needs to confirm their willingness to participate through a company head signed letter. Also, carry an authority letter for collection of the said documents and have a valid individual identification document.

41. Please acknowledge the receipt of this invitation for EoI.

File No : 71621/AMD/CE-5(A)

Dated : 01 Aug 2025

Enclosures: **Appendices A to G**
(Appendix A & C not enclosed
for online publication)



(Akshat Pandey)
Lt Col
GSO-1, CE-5(A)
DBMDD&DS Project

COMMERCIAL EVALUATION CRITERIA

Commercial Evaluation Criteria

1. Name of the Vendor.
2. Evaluation Criteria

<u>Ser No</u>	<u>Criteria</u>	<u>Vendor Submission</u>	<u>Remarks (if Any)</u>
2.1	Nature of the Company (refer Para 6(b) of Chapter III of DAP-2020)	Indian / Joint Venture	Supporting documents
2.2	Ownership status (refer Para 6(b) of Chapter III of DAP-2020)	Compliant / Non compliant	
2.3	Category of Industry	Large / Medium / Small / Micro / OFB / Start Up	
2.4	Registration Details (MSMES to provide UDYAM certificates, Startups to provide DIPP license, others to provide Registration Certificates as applicable)	Yes / No	
2.5	Credit Rating		
2.6	Minimum average turnover for last three financial years from date of issue of EoI.	Average more than _____ Cr/ Less than _____ Cr	Supporting documents
2.7	Net worth of previous financial year ending 31 Mar 2025.	Positive/ Negative	
2.8	Defence Industrial License details	Yes / Applied for / Being applied for	Supporting documents

Station :

Signature

Company Seal

Date :
Note :

1. All submissions must be on printed copy of Appendix as uploaded on MoD website and should be supported by referenced documents duly authenticated.
2. Any input with incorrect or missing reference will not assessed.



INFORMATION PROFORMA

1. Name of the Company.
2. Name of CEO with Designation.
3. Address of the Registered Office.
4. Address of the Factory / Factories.
5. Company Website(s).
6. Date of Incorporation.
7. Brief History of the Company.
8. Category of Industry (Large / Medium / Small / Micro).
9. Nature of Company (Public Limited/ Private Limited).
10. **General Information of Company.**
 - 10.1 CIN
 - 10.2 Shareholding pattern.
 - 10.3 Details of ISO, Quality Assurance and other Certification.
11. **Financial Information:-**
 - 11.1 Revenue and Net Profit during the last three Financial Years.
 - 11.2 Present Net Worth of the Company.
 - 11.3 Credit Rating/*s from RBI/SEBI approved agencies.
12. Nature of Business (Manufacture / Trader/ Sole selling or Authorised Agent/ Dealer/ Assembler/ Processor/ Re packer/ Service Provider). Please give broad product range as applicable.
13. Details of Current Products:-
 - 13.1 Type / Description.
 - 13.2 Licensed / Installed Capacity.
 - 13.3 Annual Production for Preceding 3 Years.
14. Credit Rating.



15. Details of IPRs if any.
16. Details of Foreign Collaborations if any planned for execution of project.
17. Technology Received from abroad and assimilated / planned for execution of project.
18. Products Already Supplied:-
 - 18.1 To Indian Army / Air Force / Navy.
 - 18.2 PSUs.
 - 18.3 DRDO and its Laboratories.
 - 18.4 Ordnance Factories.
 - 18.5 Any other Defence Organisation.
 - 18.6 To other Principal Customers.
19. Details of Developmental Facilities:-
 - 19.1 R&D Facilities Available.
 - 19.2 Number of Technical Manpower.
 - 19.3 Percentage of Total Turn-Over Spent on R&D during the Last Three Years.
20. Turn-Over during the last three financial years.
21. Any other relevant information.
22. Contact Details of the Executive nominated to co-ordinate with the Project Facilitation Team (Please provide telephone, mobile and e-mail address).



Appendix 'E'
(Refer Para 33 of Eol)

CONFIDENTIALITY AGREEMENT

1. It is certified that Expression of Interest document for the project of Drone Based Mine Detection and Diffusion System will not be shared with any agency in part or full any other agency. Only relevant details, as applicable, will be shared with technology partners including foreign technology partners. However, the Eol document itself will not be shared with any technology partners.
2. The company understands the security sensitivity of such an operational systems and any information pertaining to deployment and usage of the system including system scaling will not be discussed with third party without a written permission from the Project Facilitation Team. The company understands that failure to observe this agreement will lead to disqualification from the project.

Signature with Company Seal

Note :

1. All submissions must be on printed copy of Appendix as uploaded on MoD website and should be supported by referenced documents duly authenticated.
2. Any input with incorrect or missing reference will not assessed.



Appendix 'F'
(Refer Para 37 of EoI)

CORRECTNESS CERTIFICATE

It is certified that information submitted in the documents as part of the response to Expression of Interest for the project of Drone Based Mine Detection and Diffusion System is correct and complete in all respects. It is acknowledged that the company will be disqualified from further participation if any information provided is found to be incorrect.

Signature with Company Seal

Note :

1. All submissions must be on printed copy of Appendix as uploaded on MoD website and should be supported by referenced documents duly authenticated.
2. Any input with incorrect or missing reference will not assessed.



Appendix G

(Refers to Para 38 of EoI)

EoI COMPLIANCE CERTIFICATE

It is certified that all the aspects mentioned in the Expression of Interest for the procurement of Drone Based Mine Detection and Diffusion System project are being complied to. It is acknowledged that the company will be disqualified from further participation if any aspect mentioned in Expression of Interest is not complied with.

Signature with Company Seal

Note :

1. All submissions must be on printed copy of Appendix as uploaded on MoD website and should be supported by referenced documents duly authenticated.
2. Any input with incorrect or missing reference will not assessed.

