HR001126S0007 MARRS
Frequently Asked Questions (FAQs)
as of 1/22/2026

17Q: Should we consider Q (energy in/energy out), or just gravimetric neutron rate (n/s per g)?

17A: The MARRS program is interested in rates (reactions/s/g), and demonstrating a path to high Q.

16Q: Are we interested in laser-driven fusion?

16A: Yes, if it can meet the program metrics.

15Q: What computational modeling efforts would benefit this program?

15A: All efforts that lead teams to meet the metrics would benefit the program, including computational modeling (together with theory and experiments)

14Q: Can you give some guidance about the dollar amount for a typical award?

14A: The level of funding for individual awards made under this BAA will depend on the quality of the proposals received and the availability of funds. Awards will be made to proposers whose proposals are determined to be the most advantageous to the Government, all evaluation factors considered. Proposed costs should reflect the resources necessary to accomplish your proposed work.

13Q: The solicitation states “Fusion reactions can occur spontaneously, or reactions in host materials can be excited with internal and external stimuli, including beams of photons or particles or other forms of electromagnetic radiation. Specifically excluded are experiments with deuterium ion beams (or other ions from species participating in fusion reactions) as the main fusion reaction trigger; however, control experiments can use these beams.” I would like to check about the eligibility of an ion beam source here. So, if we use an ion beam source to test the other mechanisms (e.g. “Host materials”), is that acceptable, or is using an ion beam disqualifying?

13A: Deuterium ion beams can be used but not as the main “trigger”. KeV deuterium beams are widely used in electronic neutron generators and are specifically excluded as “triggers”. Deuterium and other beams can be used for control experiments.

12Q: Can research laboratories such as the Naval Research Lab apply for this? Can they act as the "prime". Can we team with private industry?

12A: Yes, they can team with private industry, universities, FFRDCs, UARCs, and other Research laboratories. Please refer to page 13 of the BAA for additional details.

11Q: Are we limited to fusion of the isotopes of hydrogen?

11A: No

10Q: What is the difference between the Other Transaction (OT) and Cooperative Agreement?

10A: Other Transaction for Research – A legally binding instrument other than a procurement contract, grant, or cooperative agreement for performing basic, applied, or advanced research and development. Typically milestone payments for a broad scientific problem.

Cooperative Agreement – A legally binding instrument used to transfer a thing of value to the Government or other recipient to carry out a public purpose of support of stimulation instead of acquiring property or services for the direct benefit or use of the Government. Substantial involvement between the Government and the recipient is expected when carrying out the activity contemplated by the cooperative agreement. Typically, fixed sum for basic research for a state-of-the art problem.

9Q: Is the Cooperative Agreement the best option for a university?

9A: It is up to the organization to decide which contract vehicle works best for them. If the performer is a university, it is recommended that they work with their Office of Sponsored Research (or equivalent).

8Q: Can deuteron beams below 1 keV be used as part of experiments?

8A: Yes, but not as the main or only "trigger."

7Q: How many awards are anticipated at this time?

7A: Multiple awards are expected and will depend on the quality of proposals received and availability of funding

6Q: Is the purpose of the abstract solely to receive feedback, and/or does it factor into the final decision on the proposal? How set-in-stone does the abstract need to be in relation to the final proposal?

6A: Proposers are strongly encouraged to first submit an abstract. This process allows a proposer to ascertain whether the proposed concept is (1) applicable to the MARRS BAA and (2) currently of interest. DARPA will review all conforming full proposals using the published evaluation criteria and without regard to any comments resulting from the review of an abstract. Proposers should note that a favorable response to an abstract is not a guarantee that a proposal based on the abstract will ultimately be selected for award negotiation.

5Q: How do I find the right team to join, if I have ideas to contribute regarding one of the three areas (Ue, N, v)?

5A: We encourage you to contact others who might have complementary capabilities for teaming.

4Q: Does MARRS hope to achieve gain?

4A: Achieving gain in the long-term vision, but not a metric of the program. MARRS hopes to analyze a potential path to gain.

3Q: Can the proposed approach achieve the metrics through brute force?

3A: Yes, if the proposal successfully addresses the efficiency of triggers, as well as the potential for scaling to achieve gain.

2Q: If a proposal does not use a high-energy beam, would it still be considered?

2A: Yes.

1Q: Should we consider a theoretical component?

1A: Yes, proposers are encouraged to form teams with varying capabilities, including theory, modeling/simulations, and experiments.