

HR001126S0007 MARRS
Frequently Asked Questions (FAQs)
as of 2/26/2026

30Q: What are the steps to create a BAAT account?

30A: To create an account for BAAT follow the steps below.

1. Go to <https://baa.darpa.mil>,
2. Select the “Create New Account” button or <https://baa-registration.darpa.mil/>
3. Fill out the “Submitters Registration” form and submit, do not enter any punctuation in the Organization field to register with the DARPA Extranet account process.
4. You will receive 2 emails, the first from DARPA immediately, the second from Okta will take around 70 minutes to receive and will most likely end up in your Junk/Spam folder.
5. The Okta email will contain your Username (please make a note of it) and an “Account Activation” button
6. Select the Account Activation button, you will be asked to create a Password, Security Question and select an MFA method. Once these things are done you will be granted access to <https://baa.darpa.mil>
7. Scroll to the bottom of the page and select the blue link to Register your Organization with BAAT.
8. Fill out the Organization information form and submit it.
9. You will then be able to upload proposals to the DARPA BAAT application.

29Q: As we are assisting with preparing the Budget, we noticed that in Attachment F-Total Amount tab-Cell K50, is adding Overhead twice (K49 and J27). In addition, as a university, we will be utilizing MTDC which does not include graduate students’ tuition. I want to confirm that we can modify just these two formulas in the Template F.

29A: Yes, please make these corrections as you see fit.

28Q: Temporal Synchronization: To establish a causal link between external excitation triggers and detected fusion events, would the development of high-precision synchronization systems be considered responsive to the requirement for "improved and more sensitive metrologies"?

28A: Cost of instrumentation required to meet metrics can be included in the proposal.

27Q: Domestic Sourcing and Subcontracting: Beyond standard FAR/DFARS requirements, are there specific restrictions regarding the use of domestic small-business subcontractors for specialized system elements, ?

27A: There are no special restrictions on Domestic Sourcing and Subcontracting.

26Q: Proposal Structure: Will standalone proposals focused specifically on improving metrology systems be considered, or must metrology be integrated into broader teaming agreements?

26A: In MARRS we are looking for integrated teams that can show a path to reaching the metrics. Component development can be part of a team.

25Q: R&D Scope for Metrology: Given the Phase 1 goal of detecting fusion rates as low as 0.1 counts/hour, managing the Signal-to-Noise Ratio (SNR) against environmental and cosmic backgrounds is a significant challenge. Does DARPA consider the R&D and optimization of advanced metrology deliverables—specifically custom hardware, FPGA-based firmware for real-time pulse shape analysis, and associated software—to be a responsive and allowable research expense within Technical Area 2?

25A: Cost of instrumentation required to meet metrics should be included in the proposal.

24Q: Page 5 of the BAA states: "Performers must implement State-of-the-Art (SOA) particle detection technologies and data acquisition systems to accurately and reliably detect fusion reaction products such as protons, neutrons, and gammas. Detection of heat (calorimetry) and other signatures of nuclear processes can complement particle detection; calorimetry alone is not sufficient."

What methods of detection are included in the phrase, "other signatures of nuclear processes"?

24A: Proposers can pick their favorite detection schemes for nuclear signatures to complement particle detection to meet the MARRS metrics, following the hypotheses expressed in their proposals.

23Q: The base period of 18 months spans three of our FYs. Can we edit the Attachment F to include additional Contractor FYs?

23A: Yes.

22Q: When mapping costs to Fiscal Years, do the sub-awardees use the Prime contractor's Fiscal Year for better alignment? Or do they need to break costs out in each sub-awardee's Fiscal Year calendars? The cost guide PDF states, "...your organization's fiscal year," but I am unsure which organization it refers.

22A: Please use the Prime's fiscal year.

21Q: The feedback we received was that the budget was too high. We proposed two sets of experiments). If there was only budget for one set of experiments, which is preferable to DARPA?

21A: Proposers are encouraged to pick their most promising approach.

-----↑↑↑New Q/A↑↑↑-----

20Q: We did not submit an abstract. Can we still submit a proposal to the MARRS program?

20A: A proposal can be submitted without having submitted an abstract.

19Q: If we chose to measure the fusion rate by measuring the flux of a reaction product, can we multiply the measured rate by 4π / solid angle subtended by the detector or do we need to measure over the full 4π steradians?

19A: You can multiply the measured rate by 4π / solid angle subtended by the detector.

18Q: Are foreign institutions eligible to propose? Is the process different?

18A: All responsible sources capable of satisfying the Government's needs, including both U.S. and non-U.S. sources, may submit a proposal that shall be considered by DARPA.

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.