

HR001119S0074

**Intent-Defined Adaptive Software (IDAS)  
Frequently Asked Questions**

**As of August 15, 2019**

**Q16. Is DARPA comfortable with getting a sophisticated, expensive, nearly-AI-complete proposal? Or is the expectation that the objective can be achieved with a relatively modest tool?**

A16. IDAS is looking for ways to capture intent from a human developer in a way that adds as little additional overhead as possible. There are no restrictions in the BAA about what approaches (including AI) could be proposed to extract these intentions.

**Q15. The Volume 1, Technical and Management Proposal, instructions do not include an Executive Summary section: i. Cover Sheet; ii. Table of Contents; iii. Innovative Claims and Deliverables; iv. Technical Plan; v. ... Please let us know if the BAA volume 1 instructions are correct and an Executive Summary section is not required.**

A15. Per the BAA, there is no requirement for an executive summary.

**Q14. For TA4, Phase 4's intent is to "to support transition, at a scale of 1.5 FTE for 12 months." Should we propose a transition or will this be directed?**

A14. Yes, TA1 and TA4 performers should propose a Phase 4 for transition partner – funded efforts. Phase 4 will be an option and if performance is required, the option will be exercised.

**Q13. The BAA says "Over the course of the program the eight evaluation exercises that increase in complexity, scale (ranging from one to four months in duration, worked from performer locations). The question is which performer? Our first assumption was that the locations were our location as a TA4 performer, but it is possible the evaluation exercises could be at any performer location. Which interpretation should we use for travel assumptions?"**

A13. This will be worked from each performers' own location, using virtual means to share requirements and artifacts for TA3 evaluation.

**As of August 12, 2019**

**Q12. Technologies developed by TA1 generate evidence that the generated code meets requirements. Who is the target audience for this evidence (e.g., for whom does it need to be convincing), and to what extent does it have to be in a specific format such as that of an assurance case?**

A12. The audience is assumed to be technical. There is no specific format required, but showing how it would be familiar to today's systems engineers or accreditation authorities would be preferred.

**As of July 9, 2019**

**Q11. Can an organization be prime on one TA and sub on another?**

A11. Yes, see the BAA for COI/proposal guidance.

**Q10. Are top-down or bottom-up approaches preferred (e.g., restrict developer's search space vs. improve unrestricted logic)?**

A10. No restrictions other than feasibility of adoption.

**Q9. Is DARPA willing to allow proposals or portions of proposals to be fundamental research, or is all of this research covered by export control restrictions?**

A9. The answer ultimately depends on the nature of the research conducted. See the BAA and the IDAS CUI Guide. CUI guide will clarify what's potentially CUI/CTI.

**Q8. What IP rights are held by TA2 or TA4 performers?**

A8. It is the responsibility of the proposer to determine what IP rights assertions to include in its proposal. Under TA2, the program intends for the problem sets to be fully releasable to the public, but the Government desires at a minimum GPR rights to achieve the program's goals. See BAA for guidance and Associate Contractor Agreements (ACAs) are planned.

**Q7. Can you describe some aspects of prior work in this area (shortcomings, etc.) you'd like the IDAS program to investigate?**

A7. As exemplified in the BAA, scalability, adoption – why are we not using any of those today. These are only a few examples and not an inclusive list of investigative areas.

**Q6. Are approaches expected to address all aspects of software engineering that contribute toward cost of maintenance and how will approaches that are more targeted be evaluated?**

A6. Approaches could address all or some, but will be evaluated based on total reduction in FTE effort, so a compelling rationale for how targeting narrow aspects of software engineering will result in a large ROI.

**Q5. Is it expected that requirements can also be expressed in natural language?**

A5. Yes, TA2 should be able to represent the requirement in any reasonable format.

**Q4. For TA1, are there any requirements/preferences on programming languages for software synthesis?**

A4. No, other than ease of adoption.

**Q3. What is meant by importance of verification in demonstrating TA1 capabilities and what are examples of evidence/assurance generation?**

A3. Evidence can have a range; formal proofs are not required, but TA1 should be able to explain how their evidence will improve trust.

**Q2. TA2 is asked to provide challenges that simulate the size of real-world software while not putting a burden on TA1/4s budget. Does TA2 have to follow a clean-slate doctrine, where TA1/TA4 must implement software from scratch, or can TA2 ask TA1/TA4 to start from existing code?**

A2. Clean slate, though existing libraries will almost certainly be used

**Q1. For TA1, are we to assume that there will always be some original program source code from which we'll infer intent and for which we'll generate adaptations? Or might we only initially be given requirements with no code and we'd need to infer constraints/intent?**

A1. Clean slate, though existing libraries will almost certainly be used