Questions and Answers for SuperTools BAA (IARPA-BAA-16-03)

1. Q: Would any GFI information be available before the submission deadline? We would be particularly interested in gate, analog/mixed signal, or logic circuits.

   A: No. GFI will be provided during the program kick-off meeting(s).

2. Q: Could you elaborate on your meaning for "layout equivalence check"? Particularly, how does this differ from layout-vs-schematic? Was this term meant to be "logic equivalence checking" or "formal equivalence checking"?

   A: The "Layout equivalence check" tools refer to a class of post-layout verification software to determine whether the layout is equivalent to the intent of design (e.g., schematic, circuit diagram, functions, gate netlist, etc.). While 'layout-versus-schematic', with or without 'formal equivalence checking', is commonly deployed in the CMOS design process, the SuperTools program is open to other approaches for physical design verification.

3. Q: Does the Combined Synopsis/Solicitation under solicitation number IARPA-BAA-16-03 contain requirements similar to a current contract? If possible, please provide the current contract number. Or, is this a new requirement for the government?

   A: No, IARPA-BAA-16-03 is a new requirement and is not similar to a current IARPA contract.

4. Q: How many government-furnished foundries (GFF) will be made available for SuperTools? Which foundries will be used for this program?

   A: The tools developed under the program will be agnostic to specific foundries. There will be at least one (1) government-sponsored foundry to provide Government Furnished Information (GFI). The details of GFI will be provided at the program kickoff meeting(s). The Government will not provide direct fabrication services from government-sponsored foundries during initial phase of the program.

5. Q: Will the GFF make all fabrication information necessary for the development of a generic SuperTools Library available?

   A: Yes. Generic SuperTools Libraries are intended to facilitate demonstrations of the tools developed in the program, and are not tied to a specific foundry. The Government will provide information that the Government deems necessary for the development of generic libraries. The

development of any application-specific cell library and process design kit (PDK) for a specific foundry is beyond the scope of the SuperTools program, and will be left to the end users (circuit designers) of EDA and TCAD tools, and their partnering foundries.

6. Q: Can we expect the GFF be capable of producing test circuits that meet the design complexity objectives outlined in this BAA?

   A: The tools developed in the program shall not tie to specific foundries or technology nodes. There could be multiple design approaches (e.g., number of metal layers) to meet the design complexity requirements targeted in the program. Some design approaches may go beyond near-term capabilities of government-sponsored foundries. Innovative approaches to support more than one design method to achieve the program objectives are expected.

7. Q: Will the design rules of the GFF be capable of meeting the complexity and scaling requirements of the SuperTools BAA? If not, will the government accept a design into a virtual Design Rule Manual?

   A: The tools developed in the program will be agnostic to design rules of specific foundries. The hardware implementation of program objectives (e.g., 32/64-bit microprocessors) may go beyond the near-term capabilities of existing government-sponsored foundries, but such implementation is beyond the scope of the SuperTools program. Proposals are expected to propose innovative approaches that support design rules to meet or exceed the program objectives.

8. Q: Please clarify what is meant by "set of primitives". Is it standard cell level, analog compact model, layout primitives, etc.?

   A: The Government Furnished Information (GFI) will include models and layouts of primitive cells (e.g., XOR, AND, OR, etc.). These primitive cells from the GFI are only to serve as initial examples for establishing SuperTools Library standards, and to facilitate the development of generic SuperTools Libraries for demonstrations of Electronic Design Automation (EDA) tools. Please note that these examples will not cover all logic families or technology nodes.

9. Q: How are the target values and the criteria set for model accuracy?

   A: The target values and the criteria for model accuracy are to be determined by the Government using test data and/or simulation results of test structures, whichever method is most feasible. The details of test cases will be provided at the program kickoff meeting(s). In the BAA, please refer to "Table 2 – SuperTools Metrics" for an initial set of criteria.   We encourage

proposing measurable figures of merit appropriate to the proposed logic families and approaches.

10. Q: Section 4.A.1 of the BAA indicates that proposal information will be disclosed to the identified contractors who are subject to non-disclosure agreements. Will IARPA make these non-disclosure agreement terms available to proposers to allow proposers to assess the non-disclosure obligations before providing any information that may be exposed to these contractors?

A: IARPA's practice is not to release its non-disclosure agreements (NDAs). The general terms of IARPA NDAs with contractors prohibit contractor recipients of the Government's non-public information and third parties' proprietary information from disclosing this information to anyone without the IARPA Program Manager's authorization. Contractors must return all Government non-public information and third party proprietary information upon termination of their IARPA duties.

11. Q: The BAA does not specify any required legend. Is it sufficient for purposes of Section 6.B.1 to use standard company markings for confidential/proprietary information?

A: Standard company markings should suffice. It is the offeror's responsibility to clearly define to the Government and clearly mark what the offeror considers proprietary data.

12. Q: In Section 1.C.4 of the BAA, "Offerors are required to grant the government full software access to conduct test and evaluation on deliverables." What does "full software access" mean in this context?

A: The term "full software access" means all access that IARPA and its test and evaluation (T&E) team need to perform the T&E of the deliverable software. IARPA's T&E team will perform the T&E activities using the test beds described in the BAA. The T&E team will require sufficient access to the deliverable software to ensure it properly interfaces with, and executes on, the test beds. The T&E team will also need to be able to execute the deliverable software to perform the tests on the test beds.

13. Q: The BAA identifies the Phases of the work to be as follows: Phase I (24 months), Phase II (24 months) and Phase III (12 months). The contract is proposed to be awarded as a one-year contract with four (4) 1-year options. Will IARPA consider modifying the BAA to align the contract award to a base period of 24 months with a 24-month option and a 12-month option so that the work contemplated in each Phase aligns with the initial base period and the option periods?

A: IARPA will not consider modifying the BAA. The contract is proposed to be awarded as a one-year contract with four (4) 1-year options.

14. Q: Will IARPA consider awarding a contract under FAR Part 12 to commercial companies proposing commercial services and commercial products that meet the definition of "commercial item" in FAR 2.101?

A: In principle, IARPA would not rule out awarding a FAR Part 12 commercial contract. However, IARPA's SuperTools program seeks unique and innovative solutions to what it believes are unsolved problems. Therefore, IARPA does not anticipate awarding a FAR Part 12 commercial contract.