

## DARPA-BAA-16-48: Competition Architecture Frequently Asked Questions

Q1: In development mode, will competitors be able to specify environmental characteristics for their nodes in the Colosseum?

A1: DARPA plans to allow competitors to select from a subset of the overall scenarios for development purposes.

Q2: Who defines the locations of radio nodes in a scenario?

A2: DARPA and the scenario designers will define the locations of radio nodes. Competitors have no control over node location or node motion.

Q3: Will a mobile node in the Colosseum change its location along a continuous path or will it pop up in randomly generated locations (especially during an ongoing transmission/reception)?

A3: If a node is moving in a scenario it will move along a continuous path.

Q4: Does the Colosseum testbed support realistic RF feedback / coupling between the two MIMO RF ports on the same node? (i.e.: can one port listen to the other port with realistic/short delay)?

A4: Yes. The specific latency is TBD.

Q5: TA1: Should scoring design ensure that inter-competitor attacks are never profitable or just generally disincentivized?

A5: Disincentivized.

Q6: Can the scope and types of supported channel models and traffic models progress between Phases? That is, increase in complexity and/or difficulty.

A6: Yes.

Q7: The solicitation calls for TA2 proposers to include the motion of CIR nodes in each scenario. Will the SRN nodes physically move?

A7: No. Any motion of the SRN will be emulated using the channel emulator.

Q8: How does the Colosseum Channel Emulator interface to the Standard Radio Nodes?

A8: The only interface between the channel emulator and the standard radio node is via wired RF coaxial cable.

Q9: Can two different proposers (company A, company B) have an \*individual\* in common if proposer A is selected for award on TA3 and company B is selected for award on TA1 or TA2?

A9: No.

Q10: Can the architecture teams (TA1/TA2) test scenarios on the Colosseum as part of scenario and scoring development?

A10: Yes.

Q11: Is there a limit to the amount of colosseum time available for TA1/TA2 developers?

A11: Yes, however TA1/TA2 developers will have priority access at times.

Q12: TA2: Is there an existing desired file format in which scenarios should be rendered, or should defining the file rendering format collaboratively with the Colosseum team be planned as an early Phase 1 activity?

A12: No format has been specified. This is an early Phase 1 activity

Q13: TA2: Are there existing plans on how IP traffic will be connected to radios in the Colosseum (e.g., with software or hardware sources and sinks)?

A13: Colosseum is planned to have allocated computers designated for traffic generation.

Q14: TA2: Can TA2 responders propose how IP traffic should be generated in addition to proposing how model information would be defined?

A14: The Colosseum developers will take inputs from TA2 performers in developing the IP traffic modeling hardware and software requirements

Q15: TA2: Has it been determined what waveforms the non-competitor radios in the Colosseum will support?

A15: No, waveform selection will be determined collaboratively by the government team post award.

Q16: To clarify, the TA2 team is not responsible for providing the code for non-competitor radios and will only be responsible with providing a description of desired operation?

A16: TA2 teams are not responsible for providing any radio code.

Q17: What's the desired proposal validity period?

A17: Proposal validity period should be sufficient to allow for the estimate contract award date.

Q18: If a proposer is a non-traditional and wants a contract award via the DARPA OTA, is there specific language we should use in our cost volume to indicated desire to use the OTA and our non-traditional status?

A18: Item (10) of the Volume II, Cost Proposal cover sheet is where the requested award instrument type should be indicated. In the coversheet, all that is required is identification of the desired award instrument type (CPFF Contract, FFP Contract, TIA OT, OT for Prototype, etc.). Regarding indicating "non-traditional" status, it is important to keep in mind that this term applies only to OT for Prototypes, not to Technology Investment Agreements (TIAs) - so it would be important for the proposer to include a discussion in the cost proposal, if seeking such an instrument, that: 1) defines the "prototype" that will result from the proposed research project, and 2) that clearly indicates that the proposer meets the statutory definition of a non-traditional defense contractor. Currently, a "non-traditional defense contractor" is defined as (10 U.S. Code § 2302, see also 10 U.S. Code § 2371b): An entity that is not currently performing and has not performed, for at least the one-year period preceding the solicitation of sources by the Department of Defense for the procurement or transaction, any contract or subcontract for the Department of Defense that is subject to the full coverage under the cost accounting standards prescribed pursuant to Section 1502 of title 41 and the regulations implementing such section.

Q19: If a proposer is a non-traditional and wants a contract award via the DARPA OTA, is there a specific format for our costing that is specific to an OTA submission?

A19: There is no specific format for cost proposals when seeking an OT for Prototype (emphasized since the question mentions non-traditional defense contractor). However, the cost information called for in Part II(IV)(B)(3)(b), "Volume II, Cost Proposal," should be provided to the maximum extent practicable so that cost realism can be assessed.