

Q: Is an organization allowed to submit 2 different proposals?

A: Organizations may participate as a prime or subcontractor in more than one submission to the BAA. However, if multiple submissions to the BAA which include a common team member are selected, such common team members shall not receive duplicative funding (i.e., no one entity can be paid twice to perform the same task). Furthermore, to be eligible to receive multiple awards, proposed techniques for each award shall be distinct and the proposed personnel sufficiently different to achieve the necessary level of effort to complete the work.

Q: What is the total funding level of the program?

A: IARPA will not answer that question.

Q: Is there a preference for an academic or industrial organization as the prime.

A: There is no preference on who is prime.

Q: Is there an abstract portion of BAA wherein we submit our approach and you provide feedback on whether we should submit a full proposal?

A: We are requesting full technical proposals from the start. Abstracts or white papers are not requested.

Q: You indicated spherical antennas are of lower interest. Are hemispherical antennas of greater interest? Especially if they operate over a ground plane? Are planar solutions preferred?

A: Hemispherical antennas are not of greater interest. Planar solutions are preferred. Per the draft BAA: "In recognition of this tendency, EQuAL-P expresses a preference for techniques that are consistent with radiating elements over or close to ground planes. Additionally, many operations do not afford space for antennas with spherical geometries or aspect ratios close to one."

Q: You used phrase "ESA" several times. Is the assumption correct you expect beam steerable solutions?

A: No. ESA stands for electrically small antennas.

Q: Will all aspects of size, weight, power, be weighted equally? In other words, if a proposed design predicts 10 dB improvement with low mass and power, but size is still ~inches, is this a desirable demonstration?

A: The only specification is that antennas need to be electrically small by the Chu definition.

Q: Small antennas/apertures pose a significant challenge for HF (3.0 MHz). If a proposed design predicts 10 dB improvement in both VHF and UHF, is it still a desirable demonstration? Without same performance at HF?

A: Yes. Please refer to the final BAA.

Q: What if proposed work is an offshoot of SBIR/STTR funded research, still in progress?

A: The answer to this question will be incorporated into the final version of the BAA.

Q: Is there a minimum entrance and/or exit TRL?

A: No. You are required to deliver according to the metrics.

Q: Are Title 10 CONOPS viewed as just as important as Title 50 or IC only CONOPS?

A: Please refer to the final BAA.

Q: Transmitter prime power required, i.e. (k) VA, required to generate radiated power, i.e., (k)W to create a “useful” transmitter can greatly limit innovations that can be applied. How will this be viewed as part proposed eval?

A: We encourage relevant transmit powers in the bands of interest as defined in the draft BAA. Offerors should address issues of performance stability due to changes in the environment and the ability to work over a wide range of transmit power and background noise.

Q: Regarding comparison between LTI and non-LTI antennas: how will this be evaluated if the non-LTI system uses a qualitatively different modulation scheme than what is typical for LTI systems?

A: While such narrowly applicable techniques are of interest, techniques that can be applied with high fidelity to a broad set of modulation schemes or at least to very common ones are preferred. Phase modulation is one important modulation type. The ability to reconfigure the modulation in real-time operation just like a “normal” antenna would react to whatever modulation is presented at its input would be acceptable. Offerors should address these issues in their proposal.

Q: Will guidelines for the required letter of consent for academic institutions be provided?

A: Guidelines will be provided in the final BAA.

Q: Are there any requirements on non-U.S. citizens (students in particular) participating in the program?

A: No.

Q: Is there a preference for a commercialization partner (or transition partner) to be included?

A: No.

Q: Is a tech transition plan required?

A: No.

Q: Are there any specific transmit power or operational range requirements?

A: We encourage relevant operational ranges in the bands of interest as defined in the BAA. Offerors should address issues of performance stability due to changes in the environment and the ability to work over a wide operational range.

Q: Are there any specific standards or protocols around which the systems should be designed or evaluated?

A: Please refer to previous answers.

Q: Is there any advantage to eliminating an RF source to be replaced with a DC power?

A: IARPA takes no position on the proposed approach. What is important is that any proposed approach meet the program metrics.

Q: On RX, is there any preference among the following capabilities?

- Instantaneous sensing of many narrowband signals spread out over a broad BW
- Instantaneous reception (all the way to getting data) of many NB signals over a broad BW

A: Please refer to the final BAA.

Q: Modulation techniques proposed/demonstrated can have a significant impact on technologies to solve challenges. Can you spend a little time discussing the possibility of proposals that limit modulation schemes and how they will be viewed as part of the proposal eval?

A: This question was previously answered and discussed in the draft BAA on page 2.

Q: The draft BAA provided more details on technologies outside the scope of EQuAL-P (e.g., non-Foster). Does this mean non-Foster active approaches can't be any part of the solutions of that it can't be exclusively non-Foster?

A: Approaches based **strictly** on this principle will not be considered.

Q: If the prototype needs external RF Clocks do we need to include the efficiency of the clock sources in our computation for  $\eta$ ? Or do we just count the amount of RF power?

A: Please refer to page 5 of the draft BAA.

Q: As part of the BAA will there be an abstract (prior to full proposal)?

A: No.

Q: Will government T&E procedures be standardized across all Performers? Since the program requirements are fairly broad, it seems that the same testing approach may not apply to all performers.

A: Procedures will be approach dependent.

Q: Do proposals need to point toward or demonstrate specific applications or use-cases?

A: No.