## DARPA-PA-24-04-04 Emon Frequently Asked Questions (FAQs) as of 1/9/2025

17Q: Are the metrics for 3dB increase in RCS and 2X Rayleigh resolution inclusive, or can they be demonstrated in separate cases?

17A: Demonstrating these can be accomplished in different test cases. That is, they do not need to be simultaneous.

16Q: Can you clarify what is meant by demonstrating > 2 simultaneous modes, does this mean instantaneous transmission of multiple modes, or can this be achieved through time stepping?

16A: This goal is intended to result in proposals that use electronic rather than mechanical means of generating the spatial modes. For a particular spatial waveform technique, we expect transmission and reception of at least modes simultaneously via, for example, multiple-input multiple output (MIMO) waveform techniques.

15Q: Please clarify whether the budget needs to be broken down by task. On the first page of the Volume 2 Price Proposal Template it states:

Prices must be traceable between the prime proposer and all subawardees/consultants, as well as between the Price Volume and the Task Description Document (TDD). This includes ensuring a consistent task structure across all proposal documents. Price information must be provided in sufficient detail to substantiate the proposed prices.

However, on page 3 under price details there is no mention of providing the cost breakdown by task as is typical for other DARPA program budgets. Please advise on whether the budget needs to be broken down by task.

15A: This Disruption Opportunity call does not require that the cost breakdown be by task, although proposers are welcome to do so. If a breakdown by task is included, please also ensure that this information is consistent across proposal documents. Also ensure that pricing still rolls up to the milestone structure that has been established in the Schedule of Milestones and Payments, since that is ultimately how payments will be made.

14Q: May we have an extension for the proposal submission?

14A: DARPA is not extending the Emon submission deadline to ensure that DARPA achieves the Disruptioneering goal of an award within 120 calendar days from the posting date.

13Q: The Emon Disruption Opportunity calls for far-field utility but also aims to explore the use of beams such as Laguerre-Gauss, orbital angular momentum, and Hankel beams in radar. However, these beams exist in the Fresnel zone, that is, at distances shorter than the far-field distance. Are radar systems that operate in the Fresnel zone within the technical scope of the Emon program?

13A: Note that there are "long range" solutions to the wave equation that can also be referred to as Laguerre-Gauss, OAM, etc., and so exist beyond the Fresnel region (i.e., propagate into the far field). As mentioned, such solutions clearly exist also in the

radiative near field and could exhibit interesting/useful properties there. All principled inquiry into these phenomena is encouraged at this stage.

- 12Q: Will the viewgraphs for the information session be posted? 12A: The slides from the Information Session are posted here: https://www.darpa.mil/research/programs/emon
- 11Q: May we submit a proposal that contains controlled unclassified information? 11A: Please see the Program Announcement (PA) DARPA-PA-24-04, Section 8.2.2, regarding controlled unclassified information. Proprietary information, as described in Section 5.5, is considered controlled unclassified information and within DARPA are protected as such per Section 6.2. Submission of Controlled Technical Information (CTI), one type of CUI, is not precluded, and must be in accordance with Section 8.2.2. The program was defined to avoid requiring research considered CTI or Export Controlled (EXPT), another CUI category information.
- 10Q: We missed the original live stream of the information session. Can we access the video? 10A: Send a request to <u>emon@darpa.mil</u> and indicate whether you are a U.S. person or not. Non-U.S. persons or foreign nationals must fill out and submit a DARPA Form 60 for review prior to being provided access.

9Q: Are federally funded research and development centers (FFRDC) or university affiliated research centers (UARC) allowed to submit?

9A: Per the PA, Section 7.1.1, "Federally Funded Research and Development Centers (FFRDCs), University Affiliated Research Centers (UARCs), and Government entities that are interested in participating in a Disruption Opportunity due to specific expertise or core competencies should contact the Agency Point of Contact (POC) listed in the specific DO prior to submitting an Abstract (if applicable) or Proposal to discuss related opportunities."

- 8Q: Can we meet to discuss our proposal prior to the submission? 8A: The Program Manager will not be holding meetings with proposers.
- 7Q: How many awards does DARPA expect?7A: Per the PA, Section 4.1, "The Government reserves the right to select for negotiation all, some, one, or none of the proposals received in response to a DO issued under this PA."
- 6Q: Can you please clarify the total budget for the program? 6A: We will not be publishing the total program budget.

5Q: Please clarify whether the \$2,000,000 award value is the total for the program as a whole or if it is the potential award to each proposer.

5A: The \$2,000,000 figure mentioned is the maximum value for each award.

4Q: Is the solicitation open to similar aspects that occur in 2-D propagation such as that experienced in surface plasmon or polaritons?

4A: The preference is 3-D propagation, but surface interactions such as creeping waves and other surface interactions are likely to be important in understanding the interaction of even canonical targets with these novel fields.

3Q: The frequency range that we simulate and then perform measurements can matter. Can we do simulation over a broader frequency range than we use in our experiments? Is there a preferred experimental frequency range?

3A: The experimental data collection is intended to show that simulations and analysis are grounded in reality. Agreement between measurements and analysis does not need to be over the full range that the analysis was performed over. The experimental data collection is assumed to be tailored to the proposer's capabilities, resources such as test chambers, and the proposed experimental system design approach.

2Q: Are foreign nationals allowed to propose to or participate in this solicitation?

2A: Per the PA, Section 7.1.1, "Non-U.S. organizations and/or individuals may participate to the extent that such participants comply with any necessary nondisclosure agreements, security regulations, export control laws, and other governing statutes applicable under the circumstances."

The program was defined to avoid setting program goals that would cross export control thresholds.

1Q: Our team will be in a location that can be difficult to visit. The solicitation requires us to host a review. Will our location be a problem?

1A: If there is difficulty in arranging for an in-person review we will work with the selected performer to determine an alternate approach to holding the review.