

Question and Answers for IARPA-BAA-15-09

17 July 2015

13. Question: Are Subject Matter Experts considered Key Personnel for the purpose of determining level of effort in the SCITE management plan.

Answer Q13: The list of key personnel is determined by the offeror. There is no requirement that a Subject Matter Expert be included in the list of key personnel. If a Subject Matter Expert is designated as “key personnel” then as stated in Section 4.B.1.3 of the BAA “Participation by key personnel and significant contributors is expected to exceed 25% of their time. A compelling explanation of any variation from this figure is required.”

14. Question: Is there an approximate anticipated funding range per year or overall for this BAA?

Answer Q14: As stated in Section 2 of the BAA “The amount of resources made available under this BAA will depend on the quality of the proposals received and the availability of funds.”

15. Question: Will there be just one forecast question for each redacted challenge problem?

Answer Q15: No. As stated in Section 1.B.2 “Each challenge problem will provide a redacted description of a subset of the automated portion of a real-life, operational insider threat detection system, sometimes with proposed enhancements to the system, along with a set of performance forecast questions.” Some questions will relate to the proportion of potential threats that will be detected. Other questions may relate to detection performance for specific indicators. Yet others may relate to the incremental impact of specific detectors. The performer’s inference enterprise model for a challenge problem will provide answers for all of the forecast questions.

16. Question: Can a performer submit multiple answers (one for each inference enterprise model being developed) for each challenge problem?

Answer Q16: This question implies that a performer may have more than one inference enterprise model for a single challenge problem. If this is the case then the answer is “Yes” the performer can submit multiple sets of answers. However the performer will need to designate one of their answer sets as their preferred answers.

17. Question: What information will IARPA provide about the quality of the answer for each challenge problem? For example, a minimal response will be the correct answer for question 1 was inside the 60% certainty interval you provided. The most informative answer would be to provide the answer to the question so we can assess where it fits in our probability distribution. There are several intermediate responses between these two extremes?

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Answer Q17: For each challenge problem an independent estimate of the answer to each question will be generated using the stratified sampling on the inference method described in Section 1.B.2 of the BAA. This is a statistical method that will provide point estimates and confidence intervals for each forecast question and other elements of a challenge problem. All performers will receive these independent estimates. Each performer can then compare their forecasts to these independent estimates. This should provide performers with rich feedback on the accuracy of their model forecasts.

18. Question: If a performer asks for some additional information regarding a challenge problem, and that information is provided, will that information be shared with all of the performers?

Answer Q18: Yes. Section 1.B.2 of the BAA states that “Performers will be allowed to request additional information and request how that information should be collected (e.g., protocols for asking subject matter experts for their probability judgments). The Government team will provide this additional information to the extent feasible.” The Government anticipates that multiple performers will have overlapping information requests along with overlapping requests for how that additional information should be acquired. The Government team will compile these individual requests into an aggregated information request and answer, as feasible, this aggregated request. All performers will see the results of the aggregated information collection.

19. Question: Will any of the challenge problem data include temporal information about dynamic or sequential processes for insider behavior and detector/indicator data? For example, 30% of the staff work between 10 pm and 4 am at least once a month, and 40% of the staff working between these hours print large jobs while working between these hours. Or, 80% of staff download large files at least once a month, 40% of staff print large files at least once a month, and 10% of staff delete large downloaded files after having printed them.

Answer Q19: Yes. The Section 1.B.2 of the BAA states “...In some cases the quantitative information will include time series data ...” Consequently, parameters that are temporally scoped will be included in some of the challenge problems. As with all parameters in the redacted challenge problems the values that are provided may be the result of “... surveys, expert judgments, data drawn from insider threat monitoring system, experimental testing of detectors, or other data ...”

20. Question: IARPA is going to be providing information about quantitative information detectors/indicators. Will this information always include false positive and false negative information? Will this information include gradations of this type: 90% of employees do not trigger this indicator in a given year, 8% trigger it once, 1.5% trigger it twice, and 0.5% trigger it more than twice?

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Answer Q20: The degree of completeness, specificity or gradation of parameter values will vary across challenge problems and across indicators and detectors within a challenge problem.

21. Question: Will the quantitative information provided in each challenge problem be complete and consistent?

Answer Q21: Section 1.B.2 of the BAA states that sources of quantitative information may include "... surveys, expert judgments, data drawn from insider threat monitoring system, experimental testing of detectors, or other data ..." Performers should not assume that the varying sources of quantitative information are either complete or consistent. For example, survey data may be used to provide information on the marginal frequencies of certain personality traits, physical data counts may provide information on the marginal frequencies of certain keystroke behaviors, and expert judgment may be used to estimate the conditional probabilities of keystroke behaviors given different personality traits. When combined the conditional probabilities and marginal frequencies may be mathematically inconsistent, the categories of personality traits may be different for the survey data and expert judgments, and the expert judgments may only extend to some of the personality traits. As further described in the metrics and milestones portion of Section 1.B.2, performer inference enterprise models should provide the best point estimates possible given the information provided and then provide certainty intervals that reflect the quality of the information that is provided.

22. Question: Will any of the challenge problems include active indicators.

Answer Q22: As described in Section 1.B.2, Phase II challenge problems will introduce new indicators. The offeror should assume that some of these new indicators may be active indicators.

23. Question: Will there be a requirement for an additional government review step (by HRPO or other office) after any SCITE human subjects protocols have been approved by local IRBs? If so, what is the estimated length of time necessary for this government review step?

Answer Q23: Section 6.B.5 of the BAA identifies the requirements a performer must satisfy before initiating any human subjects research; including approval from a performer's Institutional Review Board (IRB) that meets all identified requirements. Once a performer meets all of these requirements, no additional government review step will occur.